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As filed with the Securities and Exchange Commission on November 6, 2006

Registration No. 333-135760

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

Amendment No. 4

FORM S-1

REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

METABOLIX, INC.

(Exact Name of Registrant as Specified in its Charter)

Delaware	**8731**	**04-3158289**
(State or Other Jurisdiction of Incorporation or Organization)	(Primary Standard Industrial Classification Code Number)	(I.R.S. Employer Identification No.)

21 Erie Street
Cambridge, MA 02139
(617) 492-0505
(Address, including zip code, and telephone number, including area code, of Registrant's principal executive office)

James J. Barber
Chief Executive Officer
Metabolix, Inc.
21 Erie Street
Cambridge, MA 02139
(617) 492-0505
(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

John M. Mutkoski, Esq. **Christopher J. Denn, Esq.** **Robert E. Puopolo, Esq.** **Goodwin Procter LLP** **Exchange Place** **Boston, Massachusetts 02109** **(617) 570-1000**	**Charles Ruck** **Joshua Tinkelman** **Latham & Watkins LLP** **885 Third Avenue** **Suite 1000** **New York, NY 10022** **(212) 906-1200**

Approximate date of commencement of proposed sale to the public: As soon as practicable after this registration statement becomes effective.

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, check the following box. o

If this form is filed to register additional securities for an offering pursuant to Rule 462(b) 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. o

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. o

If this form is a post-effective amendment filed pursuant to Rule 462(d) 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. o

The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the

Securities Act of 1933, as amended, or until the registration statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), shall determine.

Subject to completion, dated November 6, 2006

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

5,800,000 Shares

METABOLIX, INC.

Common Stock

$ per share

- Metabolix, Inc. is offering 5,800,000 shares.
- We anticipate that the initial public offering price will be between $12.00 and $14.00 per share.
- This is our initial public offering and no public market currently exists for our shares.
- Trading symbol: NASDAQ Global Market — MBLX

Archer Daniels Midland Company, our collaborative partner and an existing stockholder, has agreed to purchase $7.5 million of our shares of common stock in a private placement concurrent with this offering at a price per share equal to the price to the public above. The sale of such shares of common stock will not be registered in this offering. See "Certain Relationships and Related Party Transactions."

This investment involves risk. See "Risk Factors" beginning on page 8.

	Per Share	Total
Initial public offering price	$	$
Underwriting discount	$	$
Proceeds, before expenses, to Metabolix, Inc.	$	$

The underwriters have a 30-day option to purchase up to 870,000 additional shares of common stock from us to cover over-allotments, if any.

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

Piper Jaffray

Jefferies & Company **Thomas Weisel Partners LLC**

Ardour Capital Investments, LLC

The date of this prospectus is , 2006.

The Metabolix-ADM Natural Plastic Solution

Metabolix ADM *PHA Natural Plastic* starts with a renewable resource from nature, corn sugar. Through our proprietary process the corn sugar is turned into *PHA Natural Plastic*, and then made into pellets to produce products with the same performance features as traditional plastic. Our *PHA Natural Plastic* will then harmlessly biodegrade back to nature at the end of its life.

Printed on recycled paper (10% post consumer) with soy inks.

METABOLIX

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This prospectus is not an offer to sell, nor is it seeking an offer to buy, these securities in any state where the offer or sale is not permitted. The information in this prospectus is complete and accurate as of the date on the front cover, but the information may have changed since that date.

PROSPECTUS SUMMARY

The items in the following summary are described in more detail later in this prospectus. This summary provides an overview of selected information and does not contain all of the information you should consider before investing in our common stock. Therefore, you should also read the more detailed information set out in this prospectus, including the financial statements and the related notes appearing elsewhere in this prospectus. References in this prospectus to "we," "us" and "our" refer to Metabolix, Inc.

Metabolix, Inc.

We are a biotechnology company that develops and plans to commercialize environmentally sustainable, economically attractive alternatives to petrochemical-based plastics, fuels and chemicals. Our strategy is to develop technology platforms that integrate advanced biotechnology with current industrial practice and to commercialize these platforms with industry leading strategic partners. From our founding in 1992, we have been engaged solely in research and development activities and have not had significant sales of *PHA Natural Plastics*. We are currently producing and selling pre-commercial quantities of *PHA Natural Plastics* at a pilot plant for market development.

Our first platform, which we will be commercializing through a strategic alliance with Archer Daniels Midland Company, or ADM, is a proprietary, large-scale fermentation system for producing a versatile family of naturally occurring polymers known as polyhydroxyalkanoates, which we call *PHA Natural Plastics*. Through the alliance with ADM, we intend to sell these polymers as environmentally friendly, but functionally equivalent alternatives to petrochemical-based plastics in a wide range of commercial applications, including disposable goods, packaging, agricultural products, consumer goods and electronics. Also, as part of the strategic alliance with ADM, we have announced plans to build a 50,000 ton annual capacity commercial scale plant, or Commercial Manufacturing Facility, that will produce biodegradable *PHA Natural Plastics* out of corn sugar, an abundant agriculturally-produced renewable resource. We are currently producing pre-commercial quantities of *PHA Natural Plastics* jointly with ADM at a pilot plant having a capacity of 8 tons per month.

Our second technology platform, which is in an early stage, is a system using switchgrass to co-produce both *PHA Natural Plastics* and biomass feedstock for the production of ethanol. We believe that using switchgrass to co-produce these products can offer superior economic value and productivity as compared to single product systems that produce them individually. We have already achieved significant milestones in this program and can produce small amounts of *PHA Natural Plastics* in switchgrass. Our goals for this program are to have commercially viable switchgrass varieties in pilot field trials within four years and to establish strategic alliances with attractive partners to commercially exploit this platform. Since our switchgrass program is still in the research and development stage, we have not yet determined a commercialization strategy for this program, which would include a business plan for procuring commercial quantities of switchgrass.

The markets for petrochemical-based plastics, fuels and chemicals are among the largest in the global economy. While these markets encompass a diverse array of products, they are all derived from fossil fuels, particularly petroleum and natural gas. The prolonged broad use of these petrochemical-based products has created several economic, social and environmental issues, including plastic waste management and pollution, rising fossil fuel prices, energy security and climate change. These issues have resulted in rising levels of interest in product alternatives that are renewable, sustainable and not dependent on fossil fuels.

We believe that the widespread use of renewable agricultural feedstocks as manufacturing inputs can address many of the issues associated with petrochemical-based products. Our goal is to become the leader in discovering, developing and commercializing economically attractive, environmentally sustainable alternatives for petrochemical-based plastics, fuels and chemicals. To achieve this goal, we are building a portfolio of programs that we believe will provide not only an attractive slate of commercial opportunities but also will generate leading and competitive intellectual property positions in the field.

Business Strategy

Key elements of our strategy include:

- **Establishing Production of *PHA Natural Plastics***. We have put into operation an 8 ton per month capacity pilot manufacturing facility to produce *PHA Natural Plastics* to seed the market, and as part of our strategic alliance, ADM and Metabolix have announced plans to build a 50,000 ton annual capacity Commercial Manufacturing Facility to produce *PHA Natural Plastics.* We anticipate that commercial production will commence in 2008.

- **Market Positioning and Sales**. We are building a marketing and sales team to educate and develop our prospective customer base. This team will focus on positioning *PHA Natural Plastics* as premium priced, specialty materials that are environmentally attractive alternatives to petrochemical-based plastics. We intend to build a brand around *PHA Natural Plastics* consistent with this positioning and will seek to co-brand *PHA Natural Plastics* with our customers.

- **Continuing Fermentation Research and Process Development.** We have identified opportunities to improve our production strains and our fermentation and recovery processes. We believe that significant reductions in the cost to manufacture *PHA Natural Plastics* can occur as we successfully exploit these opportunities.

- **Biology and Genetic Engineering.** For our fermentation system, we have modified bacteria by inserting specific genes into the bacteria to biologically convert sugar into *PHA Natural Plastics* all within the bacteria itself. In our switchgrass program, we are modifying certain plants, such as switchgrass, to produce and aggregate *PHA Natural Plastics* within the leaves and stems which we can harvest. Continued developments in genetic engineering and transferring to new plants or production processes are important for our success.

- **Developing Applications for *PHA Natural Plastics***. We have developed formulations of our polymer suitable for various applications, including injection molding, casting film and sheet, molded film and paper coating. These grades will be refined further to tailor them for specific customer performance requirements, and additional grades will be developed for other applications.

- **Advancing Switchgrass Research and Other Plant Strains**. Our switchgrass platform is currently in the research phase. In order to achieve a commercially attractive system, we intend to further improve our plant strains to achieve high levels of *PHA Natural Plastics* content by weight. We also intend to research introducing traits to increase crop yields in terms of tons per acre, and enhance processability for the production of ethanol.

- **Partnering our Switchgrass Program**. We will seek to leverage our technology and establish strategic partnerships with one or more industry leading companies that can provide access to resources and infrastructure valuable for commercializing this platform.

- **Building Governmental Awareness of Our Approach.** We intend to continue to build our governmental affairs initiatives. We believe that higher awareness of our solution may result in opportunities to obtain additional funding or legislative support that can facilitate and accelerate the adoption of our products.

- **Extending Our Technology to Sustainable Production of Large Volume Chemicals and Intermediates.** Our technical capabilities can be applied to produce a number of important commercial chemicals and chemical intermediates through biological conversion of sustainable feedstocks such as sugars.

- **Furthering our Leading and Competitive Intellectual Property Position.** We have built an intellectual property portfolio around our platform technologies and a variety of inventions relevant to the commercialization of *PHA Natural Plastics*. We are extending this intellectual property portfolio within our core business as well as to other commercial opportunities in the area of bio-based plastics, fuels and chemicals.

ADM Agreement to Purchase Shares

ADM has agreed to purchase $7.5 million of our shares of common stock in a private placement concurrent with this offering at a price per share equal to the price to the public in this offering.

Risks Associated with Our Business

Our business is subject to numerous risks and uncertainties, as more fully described under "Risk Factors" beginning on page 8, which you should carefully consider prior to deciding whether to invest in our common stock. For example:

- From our founding in 1992, we have been engaged solely in research and development activities and have not had significant sales of *PHA Natural Plastics*.

- We may not be able to manufacture *PHA Natural Plastics* at commercial scale in a timely or economical manner. ADM has yet to begin construction of the commercial manufacturing facility.

- We may not be successful in the development of our products, including *PHA Natural Plastics* in switchgrass.

- We have limited sales and marketing experience and capabilities which may make the commercialization of our products difficult.

- We may not achieve market acceptance of our products.

- We rely heavily on ADM and will rely heavily on future collaborative partners. We and ADM each have the ability to terminate the Commercial Alliance Agreement with 30 days notice in the case of a change in circumstances that are not reasonably within the control of the other party which makes the anticipated financial return from the project inadequate or too uncertain and 90 days notice in the case of a breach by the other party.

If ADM or any of our future collaborative partners terminate our agreements with them, then, in order to continue commercializing that program, we will need to find another collaborative partner or continue commercializing on our own.

- Our success will be influenced by the price of petroleum, the primary ingredient in conventional petrochemical-based plastics, relative to the price of corn sugar, the primary ingredient in our products.

- With respect to our major research and development programs, we are unable to estimate the costs incurred to date, the anticipated completion dates and the period in which material net cash inflows from significant projects are expected to commence.

- We have had net losses of approximately $54.5 million since being founded in 1992 and our future profitability is uncertain.

- We will have broad discretion to use the proceeds of this offering.

Corporate Information

We were incorporated in Massachusetts in June 1992 under the name of Metabolix, Inc. In September 1998, we reincorporated in Delaware.

Our principal executive offices are located at 21 Erie Street, Cambridge, Massachusetts 02139, and our telephone number is (617) 492-0505. Our worldwide web address is *www.metabolix.com*. The information on our web site is not incorporated by reference into this prospectus and should not be considered to be part of this prospectus.

Metabolix, *Biopol* and *Where Nature Performs* are our registered trademarks. This prospectus also includes other registered and unregistered trademarks of ours. All other trademarks, tradenames and service marks appearing in this prospectus are the property of their respective owners.

THE OFFERING

Common stock offered by us	5,800,000 shares
Common stock to be outstanding after this offering	18,435,639 shares
Offering price	$ per share
Use of proceeds	We intend to use the proceeds from this offering to make investments in equipment for pilot manufacturing and commercial formulation and to fund our working capital needs, including for pre-commercial manufacturing and marketing activities with ADM, for switchgrass biorefinery program research and development, for hiring of additional personnel, for other research and development and for general corporate purposes. See "Use of Proceeds."
NASDAQ Global Market symbol	"MBLX"

The number of shares of common stock that will be outstanding after this offering is based on 12,058,716 shares outstanding as of September 30, 2006, and assumes the issuance of 576,923 shares to ADM (the "ADM Shares") in a concurrent private placement and excludes:

- 2,305,598 shares of common stock issuable upon exercise of options outstanding as of September 30, 2006;
- 1,773,369 shares of common stock issuable upon exercise of warrants outstanding as of September 30, 2006; and
- 280,519 shares of common stock reserved as of September 30, 2006 for future issuance under our stock-based compensation plans.

Except as otherwise indicated, all information in this prospectus assumes:

- a 0.8173-for-1 reverse stock split of our common stock which will be effective immediately prior to the effectiveness of the registration statement relating to this offering;
- the conversion of all outstanding shares of our preferred stock into 9,992,041 shares of common stock immediately prior to the closing of this offering;
- the issuance in a private placement of 576,923 shares to ADM at an assumed initial public offering price of $13.00 per share (an increase (decrease) in the assumed initial public offering price of $13.00 would (decrease) increase the number of shares sold to ADM as ADM has agreed to purchase $7.5 million in stock at the initial public offering price);
- the filing of our amended and restated certificate of incorporation immediately prior to the closing of this offering; and
- no exercise of the underwriters' over-allotment option.

SUMMARY FINANCIAL DATA

The following tables present summary historical and pro forma as adjusted financial data. We derived the summary statements of operations data for the years ended December 31, 2003, 2004 and 2005 and the summary balance sheet data as of December 31, 2003, 2004 and 2005 from our audited financial statements and related notes included elsewhere in this prospectus. You should read this data together with our financial statements and related notes, "Selected Financial Data," and "Management's Discussion and Analysis of Financial Condition and Results of Operations" included elsewhere in this prospectus.

The selected condensed consolidated statement of operations data for the six months ended June 30, 2005 and 2006 and the selected condensed consolidated balance sheet data as of June 30, 2006 have been derived from our unaudited condensed consolidated financial statements included elsewhere in this prospectus. Our unaudited condensed consolidated financial statements have been prepared on the same basis as the audited consolidated financial statements and notes thereto, which include, in the opinion of our management, all adjustments (consisting of normal recurring adjustments), necessary for a fair statement of the information for the unaudited interim period. Our historical results for any prior or interim period are not necessarily indicative of results to be expected for a full fiscal year or for any future period.

	Year ended December 31,			Six months ended June 30,	
	2003	2004	2005	2005	2006
					(restated)[3]
					(unaudited)
	(in thousands except share and per share data)				
Statements of Operations Data:					
Total revenue	$ 2,383	$ 3,678	$ 2,781	$ 1,509	$ 3,810
Operating expenses:					
Research and development expenses, including cost of revenue	6,204	5,427	5,980	2,824	4,669
General and administrative expenses	2,692	3,252	3,825	2,078	3,816
Total operating expenses	8,896	8,679	9,805	4,902	8,485
Loss from operations	(6,513)	(5,001)	(7,024)	(3,393)	(4,675)
Interest income and (expense), net	(128)	(54)	99	32	340
Loss on investment in related party	—	—	(700)[1]	—	—
Net loss	$ (6,641)	$ (5,055)	$ (7,625)	$ (3,361)	$ (4,335)
Net loss per share Basic and Diluted	$ (3.33)	$ (1.68)	$ (2.56)	$ (1.13)	$ (1.45)
Number of shares used in per share calculations Basic and Diluted	1,991,106	3,009,137	2,975,116	2,973,441	2,987,860
Pro forma net loss per share Basic and Diluted (unaudited)[2]			$ (0.73)		$ (0.34)
Pro forma number of shares used in per share calculation Basic and Diluted (unaudited)[2]			10,391,929		12,729,420

(1) At December 31, 2005, we determined that the fair value of our preferred stock investment in Tepha, Inc. was impaired and recorded an asset impairment charge as to our entire investment in Tepha, Inc.

footnotes continued on following page

(2) We have computed the pro forma basic and diluted net loss per common share and the shares used to compute pro forma basic and diluted net loss per common share included in the statement of operations data to reflect the conversion of all of our outstanding preferred stock into 9,992,043 shares of our common stock as we describe in Note 3 of the notes to our consolidated financial statements.

(3) See Note 2 to our consolidated financial statements with regard to restating our consolidated financial statements as of and for the six months ended June 30, 2006 for stock-based compensation.

The summary consolidated balance sheet data as of June 30, 2006 is presented:

- on an actual basis; and
- on a pro forma as adjusted basis to reflect:
- the conversion of all of our outstanding preferred stock into 9,992,043 shares of our common stock;
- the receipt by us of net proceeds of $67.8 million from the sale of the 5,800,000 shares of common stock offered by us in this offering at an assumed public offering price of $13.00 per share, less underwriting discounts and commissions and estimated offering expenses payable by us; and
- the receipt by us of proceeds of $7.5 million from the sale of the 576,923 ADM Shares in a concurrent private placement at an assumed price of $13.00 per share.

	As of December 31,			As of June 30, 2006	
	2003	2004	2005	Actual	Pro forma as adjusted
				(restated)(2)	
				(unaudited)	
			(in thousands)		
Balance Sheet Information:					
Cash and short-term investments(1)	$ 1,495	$ 4,455	$ 3,174	$ 15,872	$ 91,194
Total assets(1)	3,331	7,510	7,325	22,044	97,366
Long-term obligations	266	1,440	1,280	1,199	1,199
Long-term deferred revenue	—	3,000	5,621	6,258	6,258
Total liabilities	4,546	7,246	9,874	10,361	10,361
Redeemable, convertible preferred stock	32,640	39,235	44,009	61,442	—
Accumulated deficit	(37,495)	(42,549)	(50,175)	(54,510)	(54,510)
Total stockholders' equity (deficit)(1)	(33,855)	(38,971)	(46,558)	(49,759)	87,005

(1) A $1.00 increase (decrease) in the assumed public offering price of $13.00 would increase (decrease) each of cash and short-term investments, total assets, and total stockholders' equity (deficit) by $5.4 million, assuming the number of shares offered by us, as set forth on the cover of this prospectus, remains the same after deducting the underwriting discounts and commissions and estimated offering expenses payable by us.

(2) See Note 2 to our consolidated financial statements with regard to restating our consolidated financial statements as of and for the six months ended June 30, 2006 for stock-based compensation.

RISK FACTORS

Investing in our common stock involves a high degree of risk. You should carefully consider the following risks and other information in this prospectus, including our financial statements and related notes appearing elsewhere in this prospectus, before you decide to invest in shares of our common stock. If any of the events described below actually occurs, our business, financial condition and operating results could be harmed. In such an event, the market price of our common stock would likely decline and you could lose part or all of your investment in our common stock.

Risks Related to Our Business

We may not be able to successfully manufacture *PHA Natural Plastics* at commercial scale in a timely or economical manner.

We are currently producing *PHA Natural Plastics* using our fermentation platform in relatively small quantities, at pilot scale, for use in marketing activities. The current and anticipated methods for manufacturing *PHA Natural Plastics*, both by fermentation and in crops, and the anticipated methods for producing fuels, are highly complex processes in which a variety of difficulties may arise. We may not be able to resolve any such difficulties in a timely or cost effective fashion, if at all. We are currently developing methods for producing *PHA Natural Plastics* in plants, namely switchgrass, though we are only operating at research scale. We cannot predict the cost of producing *PHA Natural Plastics* at commercial scale by fermentation or in switchgrass given the stage of development of this program. We cannot assure you that we will be able to successfully manufacture *PHA Natural Plastics* at a commercial scale in a timely or economical manner using either of our technology platforms.

PHA Natural Plastics can be produced in a large number of different formulations. Each formulation results in a material that has different performance attributes, such as flexibility, hardness or clarity. As such, different formulations will have utility in different commercial applications. Formulation development is a time-consuming and expensive activity. The development of new formulations requires significant and lengthy product development efforts, including planning, designing, developing and testing at the technological, product and manufacturing-process levels. These activities require us to make significant investments. Although there are many potential applications for *PHA Natural Plastics*, our resource constraints require us to focus on specific formulations and to forgo other opportunities. We expect that one or more of the potential formulations we choose to develop will not be technologically feasible or will not achieve commercial acceptance, and we cannot predict which, if any, of our formulations we will successfully develop or commercialize.

Since ADM has yet to begin construction of the Commercial Manufacturing Facility, manufacturing costs at such facility are unknown and may ultimately be higher than we expect. While we believe that manufacturing costs will be reduced over time as we gain manufacturing know-how, we cannot be sure that we can manufacture *PHA Natural Plastics* in an economical manner. If we, in connection with our alliance with ADM, fail to commence production in a timely manner or to develop manufacturing capacity and experience, fail to continue to contract for manufacturing on acceptable terms, or fail to manufacture *PHA Natural Plastics* economically on a commercial scale or in commercial volumes, our commercialization of *PHA Natural Plastics* and our business, financial condition and results of operations will be materially adversely affected.

We may not be successful in the development of our products, including *PHA Natural Plastics* in switchgrass.

In addition to our development and scale-up work to produce *PHA Natural Plastics* through fermentation, we are also at an early stage of development of technology and a process to produce *PHA Natural Plastics* in crops. We are currently focused on the genetic and process engineering required in connection with such programs. Because we will be funding much, or perhaps all, of the development of such programs, there is a risk that we may not be able to continue to fund such programs to completion or to provide the support necessary to distribute, market and sell resulting products, if any, on a worldwide basis. These development programs will consume substantial resources.

To date our efforts to produce *PHA Natural Plastics* in crops has focused primarily on the genetic engineering required to cause the crops to aggregate *PHA Natural Plastics* in the plant mass during the life cycle of the plant. We have not yet achieved a high enough concentration of *PHA Natural Plastic* in commercial crops to make the current technology and process economically feasible at a commercial scale. If we are able to complete the genetic engineering work that leads to such aggregation at acceptable levels, we will also need to perform additional process engineering so that *PHA Natural Plastics* can be recovered from the harvested crops, processed and formulated as required to constitute a marketable product. Such engineering work may not be successful and we may not have the financial resources to fund such work.

In connection with these efforts, we are acquiring know-how and developing technology internally that will be useful in efforts to engineer the crops so that upon completion of the harvest and recovery of *PHA Natural Plastics*, the residual material, or biomass, can be readily converted into fuel through, for example, burning the biomass with coal or other conventional fuels or by converting the biomass into a liquid fuel such as ethanol. These development efforts are at a very early stage. The technological challenges associated with these programs are extraordinary and we may not be able to overcome these challenges. We will be required to invest a significant amount over a long period of time to complete such development work, if it can be completed at all.

If ADM does not successfully build the Commercial Manufacturing Facility on time and on budget, our revenues and the distribution of profits, if any, to us will be delayed.

The cost of planning, designing, constructing and operating the Commercial Manufacturing Facility being developed to serve the alliance with ADM Polymer Corp., a wholly-owned subsidiary of ADM, and the cost of ancillary facilities and services related to the production of *PHA Natural Plastics* by the Joint Sales Company, will be very significant. Although the final costs of construction have not been determined, we estimate that our portion of these expenses will be between $25 and $35 million. ADM will be advancing a disproportionate share of the financial capital needed for such activities and as such, all profits, after payment of all royalties, reimbursements and fees, from the Joint Sales Company will first be distributed to ADM until ADM's disproportionate investment in the Joint Sales Company has been returned. If there are difficulties, delays or other unforeseen issues with such activities, the cost of such activities will almost certainly increase and the revenue from sales, if any, of *PHA Natural Plastics* and the distribution of profits, if any, to us will be delayed.

We may not be able to develop manufacturing capacity sufficient to meet demand in an economical manner or at all.

If demand for *PHA Natural Plastics* increases beyond the scope of the Commercial Manufacturing Facility being built to serve the Joint Sales Company, we may incur significant expenses in the

expansion and/or construction of manufacturing facilities and increases in personnel in order to increase manufacturing capacity. To finance the expansion of a commercial-scale manufacturing facility is complex and expensive. We cannot assure you that we will have the necessary funds to finance the development of the Commercial Manufacturing Facility or that ADM will pay its share of the joint venture, or that we will be able to develop this manufacturing infrastructure in a timely or economical manner, or at all. Our collaborative partners could experience financial or other setbacks unrelated to our collaboration that could, nevertheless, adversely affect us.

We may not achieve market acceptance of our products.

We do not currently have customers for any of our products. Market acceptance of our products will depend on numerous factors, many of which are outside of our control, including among others:

- public acceptance of such products;
- ability to produce products that offer functionality comparable or superior to existing or new polymer products;
- our ability to produce products fit for their intended purpose, *e.g.*, the ability of *PHA Natural Plastics* to resist biodegradation for a certain period of time in particular environments;
- the willingness and speed at which potential customers qualify *PHA Natural Plastics* for use in their products;
- pricing of our products compared to competitive products;
- the strategic reaction of companies that market competitive products;
- our reliance on third parties who support or control distribution channels; and
- general market conditions.

Our customer prospects are currently evaluating and performing tests on our plastics prior to making any purchase decisions. We may not be able to successfully demonstrate that our plastics have properties comparable or superior to those of environmentally sustainable competitors or similar to conventional petrochemical-based plastics. There can be no assurance that products based on our technologies will be perceived as being comparable or superior to existing products or new products being developed by competing companies or that such products will otherwise be accepted by consumers. The market for our products may not be willing to support premium prices to purchase environmentally sustainable plastics. If there is not broad market acceptance of our products, we may not generate significant revenues.

We have limited marketing and sales experience and capabilities, which may make the commercialization of our products difficult.

We currently have limited marketing and sales experience and capabilities and virtually no distribution experience or capabilities. We have recently hired a Vice President, Sales and Marketing and a Vice President, Chief Brand Officer to add to those capabilities. We cannot assure you that we will be able to identify or hire additional individuals or that such individuals will perform to the level required. We will, in some instances, rely significantly on sales, marketing and distribution arrangements with our

collaborative partners and other third parties. For example, we will rely on ADM Polymer to participate in and execute important aspects of the distribution of *PHA Natural Plastics* manufactured by ADM and we will use the ADM client base for marketing purposes. Our future revenues will be materially dependent upon the success of the efforts of these third parties and our ability to augment our own resources by identifying and hiring new employees. If we are unable to develop or obtain access to sales and marketing expertise, sales of our products, if any, may be adversely affected.

We rely heavily on ADM and will rely heavily on future collaborative partners.

An important component of our current business plan is to enter into strategic partnerships with large corporations:

- to provide capital, equipment and facilities,
- to provide expertise in performing certain manufacturing and logistical activities,
- to provide funding for research and development programs, product development programs and commercialization activities,
- to provide access to raw materials, and
- to support or provide sales and marketing services.

The strategic alliance with ADM is an example of our implementation of this strategy. These arrangements with collaborative partners are, and will continue to be, critical to our success in manufacturing our products and selling such products profitably. ADM Polymer, a subsidiary of ADM, and, we anticipate, our other future collaborative partners, will be permitted by contract to terminate their agreements with us for no reason and on limited notice. We and ADM have the ability to terminate the Commercial Alliance Agreement with 30 days notice if, based upon a change in circumstances beyond the reasonable control of the other party, the projected financial return from the commercial alliance is deemed by the other party to be either too uncertain or inadequate. We and ADM also have the ability to terminate the Commercial Alliance Agreement with 90 days notice in the case of a breach by the other party. We cannot guarantee that any of these relationships will be entered into, or if entered into, will continue. Failure to make or maintain these arrangements or a delay or failure in a collaborative partner's performance under any such arrangements would materially adversely affect our business and financial condition.

We cannot control our collaborative partners' performance or the resources they devote to our programs. We may not always agree with our partners nor will we have control of our partners' activities on behalf of any alliance. The performance of our programs may be adversely affected and programs may be delayed or terminated or we may have to use funds, personnel, equipment, facilities and other resources that we have not budgeted to undertake certain activities on our own as a result of these disagreements. Performance issues, program delay or termination or unbudgeted use of our resources may materially adversely affect our business and financial condition.

Disputes may arise between us and a collaborative partner and may involve the issue of which of us owns the technology and other intellectual property that is developed during a collaboration or other issues arising out of the collaborative agreements. Such a dispute could delay the program on which we are working or could prevent us from obtaining the right to commercially exploit such developments. It could also result in expensive arbitration or litigation, which may not be resolved in our favor.

Our collaborative partners could merge with or be acquired by another company or experience financial or other setbacks unrelated to our collaboration that could, nevertheless, adversely affect us. For example, our collaboration with BP was recently terminated after the division with which we were collaborating was sold to a third party buyer who was not interested in continuing the collaboration.

Our success will be influenced by the price of petroleum, the primary ingredient in conventional petrochemical-based plastics, relative to corn sugar, the primary ingredient in our products.

Our success will be influenced by the cost of *PHA Natural Plastics* relative to petrochemical-based plastics. The cost of petrochemical-based plastic is in part based on the price of petroleum. Our products are primarily manufactured using corn sugar, an agricultural feedstock. ADM currently supplies all required agricultural feedstock as part of our strategic alliance. Over the past 32 years, the prices of petroleum and corn have diverged dramatically with the increase in petroleum price being approximately eight times whereas the price of corn has remained relatively flat over the same period. If the price of corn or corn sugar were to dramatically increase while the price of petroleum decreased, we may not be able to produce *PHA Natural Plastics* on a cost effective basis relative to petrochemical-based plastics. While we expect to be able to command a premium price for our environmentally sustainable products, a material decrease in the cost of conventional petrochemical-based plastics may require a reduction in the prices of our products for them to remain attractive in the marketplace. In such instance, if corn prices remain stable or increase, we may be required to price our products at a level that causes us to operate at a loss.

Our future profitability is uncertain, and we have a limited operating history on which you can base your evaluation of our business.

We have had net operating losses since being founded in 1992. At June 30, 2006, our accumulated deficit was approximately $54.5 million. Since 1992, we have been engaged solely in research and development activities. As a part of our strategic alliance, ADM Polymer has yet to begin construction of the commercial scale Commercial Manufacturing Facility for *PHA Natural Plastics*. We currently expect the Commercial Manufacturing Facility to become operational in 2008, and until such time, our revenues from sales of *PHA Natural Plastics* will be limited. Because we have a limited history at commercial operations and we operate in a rapidly evolving industry, we cannot be certain that we will generate sufficient revenue to operate our business and become profitable.

Our product revenue will be dependent on the successful completion of the scale-up and commercialization of *PHA Natural Plastics* through our strategic alliance with ADM, through other partnerships or joint ventures, if any, with third parties and separately for our own account. In addition, if we are unable to develop, commercialize and further advance technologies relating to the production of *PHA Natural Plastics* in crops and other products, or if sales of such *PHA Natural Plastic*s or products are not significant, we could have significant losses in the future due to ongoing expenses to perform research and product development and our inability to obtain additional research and development funding in connection with such products.

In addition, the amount we spend will impact our ability to become profitable and this will depend, in part, on:

- the progress of our research and development programs for the production of *PHA Natural Plastics* in crops and other products;
- the cost of building, operating and maintaining manufacturing and research facilities;

- the number of products that we attempt to develop;
- the time and expense required to prosecute, enforce and/or challenge patent and other intellectual property rights;
- how competing technological and market developments affect our proposed products; and
- the cost of obtaining licenses required to use technology owned by others for proprietary products and otherwise.

We may not achieve any or all of these goals and, thus, we cannot provide assurances that we will ever be profitable or achieve significant revenues. If we fail to achieve profitability or significant revenues, the market price of our common stock will likely decrease.

We may need to secure additional funding and may be unable to raise additional capital on favorable terms or at all.

We have consumed substantial amounts of capital since our inception in 1992 for our research and development activities. For the year ended December 31, 2005 we used $6.3 million in cash, cash equivalents and investment securities to fund our operating and investing activities. Although we believe our existing cash resources of $16.6 million as of August 31, 2006 plus the proceeds of this offering and the sale of the ADM Shares and anticipated payments from the strategic alliance with ADM of $1.57 million per calendar quarter will be sufficient to fund our anticipated cash requirements for at least the next 24 months, we may require significant additional financing in the future to fund our operations. We cannot assure you that additional financing will be available on terms acceptable to us, or at all. Until we can generate significant continuing revenues, we expect to satisfy our future cash needs through strategic collaborations, private or public sales of our securities, debt financings, governmental research grants, or by licensing all or a portion of our programs or technology. If funds are not available, we may be required to delay, reduce the scope of, or eliminate one or more of our research or development programs or our commercialization efforts. Further, additional funding may significantly dilute existing stockholders.

If we lose key personnel or are unable to attract and retain necessary talent, we may be unable to develop or commercialize our products under development.

We are highly dependent on James Barber, our President and Chief Executive Officer, Oliver Peoples, our Chief Scientific Officer and Johan van Walsem, our VP of Manufacturing, Development and Operations. Dr. Barber possesses unique talent and experience relating to our business and the markets in which we operate. Dr. Peoples and Mr. van Walsem possess unique information related to our research and manufacturing operations. Dr. Peoples was one of our founders and has led and directed all of our scientific research and development programs. Dr. Peoples has such particular knowledge in the research, development and intellectual property aspects in connection with the production of *PHA Natural Plastics*, that in the case of the loss of his services we would be unable to readily find a suitable replacement with comparable knowledge and experience necessary to further our research and development programs. Mr. van Walsem directs our manufacturing operation and has been instrumental in developing manufacturing know-how sufficient to operate our pilot scale manufacturing plant. Mr. van Walsem has also been directing the design of the commercial scale Commercial Manufacturing Facility with ADM. The loss of Mr. van Walsem's services to us would be difficult to readily replace and may adversely impact the achievement of our objectives.

Our success depends largely upon the continued service of our management and scientific staff and our ability to attract, retain and motivate highly skilled technical, scientific, management, regulatory compliance and marketing and sales personnel. Because of the unique talents and experience of many of our scientific, engineering and technical staff, competition for our personnel is intense. The loss of key personnel or our inability to hire and retain personnel who have required expertise and skills could materially adversely affect our research and development efforts and our business.

Confidentiality agreements with employees and others may not adequately prevent disclosure of our trade secrets and other proprietary information and may not adequately protect our intellectual property, which could limit our ability to compete.

Because we operate in the highly technical field of biotechnology discovery and development, we rely in part on trade secret protection in order to protect our proprietary technology and processes. However, trade secrets are difficult to protect. We enter into confidentiality and intellectual property assignment agreements with our employees, consultants, outside scientific collaborators, and other advisors. These agreements generally require that the other party keep confidential and not disclose to third parties all confidential information developed by the party or made known to the party by us during the course of the party's relationship with us. These agreements also generally provide that inventions conceived by the party in the course of rendering services to us will be our exclusive property. However, these agreements may not be honored and may not effectively assign intellectual property rights to us. Enforcing a claim that a party illegally obtained and is using our trade secrets is difficult, expensive and time consuming and the outcome is unpredictable. In addition, courts outside the United States may be less willing to protect trade secrets. The failure to obtain or maintain trade secret protection could adversely affect our competitive position.

Patent protection for our products is important and uncertain.

Our commercial success will depend in part on our obtaining and maintaining patent, trade secret and trademark protection of our technologies in the United States and other jurisdictions, as well as successfully enforcing this intellectual property and defending this intellectual property against third-party challenges. We will only be able to protect our technologies from unauthorized use by third parties by keeping them as trade secrets or to the extent that valid and enforceable intellectual property protections, such as patents, cover them. In particular, we place considerable emphasis on obtaining patent protection for significant new technologies, products and processes in the United States and in foreign jurisdictions where we plan to use such technologies. Legal means may afford only limited protection and may not adequately protect our rights or permit us to gain or keep our competitive advantage. Foreign jurisdictions may not afford the same protections as U.S. law, and we cannot ensure that foreign patent applications will have the same scope of the U.S. patents.

Our patent position involves complex legal and factual questions. Accordingly, we cannot predict the breadth of claims that may be allowed or enforced in our patents or in third-party patents. For example:

- we or our licensors might not have been the first to make the inventions covered by each of our pending patent applications and issued patents;
- we or our licensors might not have been the first to file patent applications for these inventions;
- others may independently develop similar or alternative technologies not encompassed by our patents;

- our issued patents and issued patents of our licensors may not provide us with any competitive advantages, or may be challenged and invalidated by third parties; and

- we may not develop additional proprietary technologies that are patentable.

Patents may not be issued for any pending or future pending patent applications owned by or licensed to us, and claims allowed under any issued patent or future issued patent owned or licensed by us may not be valid or sufficiently broad to protect our technologies. Moreover, we may be unable to protect certain of our intellectual property in the United States or in foreign countries. Any issued patents owned by or licensed to us now or in the future may be challenged, invalidated, or circumvented, and the rights under such patents may not provide us with competitive advantages. For example, P&G filed a nullity action in the Federal Patent Court in Munich, Germany, against the German equivalent of one of our patents covering the method of use of producing biopolymers. In addition, competitors may design around our technology or develop competing technologies. We could incur substantial costs to bring suits in which we may assert our patent rights against others or defend ourselves in suits brought against us. An unfavorable outcome of any such litigation could have a material adverse effect on our business and results of operations.

We also rely on trade secrets to protect our technology, especially where we believe patent protection is not appropriate or obtainable. However, trade secrets are difficult to protect. We vigorously pursue confidentiality agreements and contractual provisions with our collaborators, potential customers, employees, and consultants to protect our trade secrets and proprietary know-how. These agreements may be breached and we may not have adequate remedies for such breach. While we use reasonable efforts to protect our trade secrets, our employees, consultants, contractors or scientific and other advisors, our potential customers, or our strategic partners may unintentionally or willfully disclose our proprietary information to competitors. If we were to enforce a claim that a third party had illegally obtained and was using our trade secrets, our enforcement efforts would be expensive and time consuming, and the outcome would be unpredictable. In addition, courts outside the United States are sometimes unwilling to protect trade secrets. Moreover, if our competitors independently develop equivalent knowledge, methods and know-how, it will be more difficult for us to enforce our rights and our business could be harmed.

If we are not able to defend the patent or trade secret protection position of our technologies, then we will not be able to exclude competitors from developing or marketing competing technologies, and we may not generate enough revenues from product sales to justify the cost of development of our technologies and to achieve or maintain profitability.

We also rely on trademarks to establish a market identity for our products. We currently have five registered trademarks in the United States and three pending trademark applications filed with the U.S. Patent and Trademark Office and we expect to file additional applications as new trademarks are selected for our products. To maintain the value of our trademarks, we might have to file lawsuits against third parties to prevent them from using trademarks confusingly similar to or dilutive of our registered or unregistered trademarks. Also, we might not obtain registrations for our pending or future trademark applications, and might have to defend our registered trademark and pending trademark applications from challenge by third parties. Enforcing or defending our registered and unregistered trademarks might result in significant litigation costs and damages, including the inability to continue using certain trademarks. In the event that we are unable to continue using certain trademarks, we may be forced to rebrand our products, which could result in the loss of brand recognition, and could require us to devote resources to advertise and market brands.

A substantial portion of the technology used in our business is owned by or subject to retained rights of third parties.

We often enter into research and development agreements with academic institutions that retain rights to the developed intellectual property. The academic institutions generally retain ownership rights over the technology for use in non-commercial academic and research fields, including in some cases the right to license the technology to third parties for use in those fields. It is difficult to monitor and enforce such noncommercial academic and research uses, and we cannot predict whether the third party licensees would comply with the use restrictions of these licenses. We could incur substantial expenses to enforce our rights against such licensees. In addition, even though the rights that academic institutions obtain are generally limited to the noncommercial academic and research fields, they may obtain rights to commercially exploit developed intellectual property in limited instances. Furthermore, under research and development agreements with academic institutions, our rights to intellectual property developed thereunder is not always certain, but instead may be in the form of an option to obtain license rights to such intellectual property. If we fail to timely exercise our option rights and/or we are unable to negotiate a license agreement, the academic institution may offer a license to the developed intellectual property to third parties for commercial purposes. Any such commercial exploitation could adversely affect our competitive position and have a material adverse effect on our business.

A substantial portion of our core technology is protected by patents that are owned by Massachusetts Institute of Technology, or MIT, and exclusively licensed to us for the life of the patents. The MIT license covers 11 issued U.S. patents, one U.S. application and numerous foreign counterparts. We cannot be certain that our right to use these patents will continue. MIT has the right to terminate this exclusive license for our nonpayment of royalties or our material breach which remains uncured. Although no material licenses are due to expire in the near future, the expiration of patents licensed from third parties or the termination of those licenses could have a material adverse effect on our business.

Some of our patents may cover inventions that were conceived or first reduced to practice under, or in connection with, U.S. government contracts or other federal funding agreements. With respect to inventions conceived or first reduced to practice under such federal funding agreements, the U.S. government may retain a nonexclusive, non-transferable, irrevocable, paid-up license to practice or have practiced for or on behalf of the United States the invention throughout the world. In addition, if we fail to comply with our reporting obligations or to adequately exploit the developed intellectual property under these federal funding agreements, the U.S. government may obtain additional rights to the developed intellectual property, including the right to take title to any patents filed by us or to permit others to commercially exploit the intellectual property itself. Furthermore, our ability to exclusively license or assign the intellectual property developed under these federal funding agreements to third parties may be limited or subject to the U.S. government's approval or oversight. These limitations could have a significant impact on the commercial value of the developed intellectual property.

Third parties may claim that we infringe their intellectual property, and we could suffer significant litigation or licensing expense as a result.

Various U.S. and foreign issued patents and pending patent applications, which are owned by third parties, exist in areas relevant to *PHA Natural Plastics* and fuels, their compositions, formulations and uses, and processes for their production. Such third parties may claim that we infringe their patents. Because patent applications are maintained in secrecy for a period of time after they are filed, there may be currently pending applications, unknown to us, which may later result in issued patents that

our technologies may infringe. For example, we are aware of competitors with patents relating to *PHA Natural Plastic*. Such competitors may allege that we infringe these patents. There could also be existing patents of which we are not aware that our technologies may inadvertently infringe. If third parties assert claims against us alleging that we infringe their patents or other intellectual property rights, we could incur substantial costs and diversion of management resources in defending these claims, and the defense of these claims could have a material adverse effect on our business. In addition, if third parties assert claims against us and we are unsuccessful in defending against these claims, these third parties may be awarded substantial damages, as well as injunctive or other equitable relief against us, which could effectively block our ability to make, use, sell, distribute, or market our products and services in the United States or abroad. We cannot currently predict whether a third party will assert a claim against us, or pursue infringement litigation against us; nor can we predict the ultimate outcome of any such potential claims or litigation.

In the event that a claim relating to intellectual property is asserted against us, or third parties not affiliated with us hold pending or issued patents that relate to our products or technology, we may seek licenses to such intellectual property or challenge those patents. However, we may be unable to obtain these licenses on acceptable terms, if at all, and our challenge of the patents may be unsuccessful. Our failure to obtain the necessary licenses or other rights could prevent the sale, manufacture, or distribution of some of our products and, therefore, could have a material adverse effect on our business.

If we are unable to manage our growth effectively, our business could be adversely affected.

While historically we have focused the majority of our efforts on research and development of processes to produce *PHA Natural Plastics* using our fermentation platform, we plan to grow by allocating additional resources to developing marketing and sales expertise and resources, entering into additional collaborations with strategic partners, adding personnel with specific technological experience, and developing and commercializing additional products, such as *PHA Natural Plastics* using our switchgrass technology platform, and biological production of other chemicals and chemical intermediates from renewable resources. Our ability to grow in this manner will require that we manage a diverse range of relationships and projects, expand our personnel resources and perhaps broaden our geographic presence. Our inability to do any of these could prevent us from successfully implementing our growth strategy, and our business could be adversely affected.

We believe that sustained growth at a higher rate will place a strain on our management, as well as on our other human resources. To manage this growth, we must continue to attract and retain qualified management, professional, scientific and technical and operating personnel. If we are unable to do so, we may be unable to staff and manage projects adequately, which may slow the development process, result in the commercialization of fewer products or compromise the quality of our work.

We may not be successful in identifying market needs for new technologies and developing new products to meet those needs.

The success of our business model depends on our ability to correctly identify market opportunities for biologically produced plastics, fuels and chemicals. We intend to identify new market needs, but we may not always have success in doing so, in part because customers may perceive risks in adopting new materials, like *PHA Natural Plastics*, for use with existing products and because the markets for new materials and other products are not well-developed.

The materials and manufacturing technologies we research and develop are new and are steadily changing and advancing. The products that are derived from these technologies may not be applicable or compatible with the demands in existing markets. Our existing products and technologies may become uncompetitive or obsolete if our competitors adapt more quickly than we do to new technologies and changes in customers' requirements. Furthermore, we may not be able to identify new opportunities as they arise for our products since future applications of any given product may not be readily determinable, and we cannot reasonably estimate the size of any markets that may develop. If we are not able to successfully develop new products, we may be unable to increase our product revenues.

Our products are made using genetically modified products which may be, or may be perceived as being, harmful to human health or the environment.

PHA Natural Plastics are new materials produced from genetically-engineered microbes and in the future may be produced in genetically-engineered crops. Some countries have adopted regulations prohibiting or limiting the production of genetically-engineered crops. Regulations or prohibitions on the production of genetically-engineered crops could harm our business and impair our ability to produce *PHA Natural Plastics* in that manner.

The subject of genetic engineering of crops and other species has received negative publicity and has aroused public debate. Government authorities could, for social or other purposes, prohibit or regulate the development and use of genetically-engineered organisms. Social concerns could adversely affect acceptance of our potential products. Governmental regulation or negative publicity could reduce or eliminate market demand for our products which could have a material adverse effect on our results of operations and financial condition.

We face and will face substantial competition in several different markets that may adversely affect our results of operations.

The plastics, fuels and chemicals that we have developed or plan to develop will compete with other technologically innovative products as well as conventional petrochemical-based plastics, materials and fuels. We face and will face substantial competition from a variety of companies in the biodegradable, renewable resource based plastic segment, within which there are three distinct technologies: PHA, PLA and starch based biodegradables. While some of our competitors' existing products that are produced from renewable feedstocks do not have the range of properties that *PHA Natural Plastics* offer, such products are, nonetheless, suitable for use in a range of products at a price which may be lower than our premium priced product offerings. Other companies active in the PHA plastic segment include Kaneka. Our other competitors include, but are not limited to, key players in PLA and starch based biodegradables, Cargill, Mitsui Chemical, Toyota, Novamont and Stanelco, as well as all of the producers of petrochemical-based plastics.

Many of our competitors have longer operating histories, greater name recognition, larger customer bases and significantly greater financial, sales and marketing, manufacturing, distribution, technical and other resources than we do. These competitors may be able to adapt more quickly to new or emerging technologies and changes in customer requirements. In addition, current and potential competitors have established or may establish financial or strategic relationships among themselves or with existing or potential customers or other third parties. Accordingly, new competitors or alliances among competitors could emerge and rapidly acquire significant market share. We cannot assure you that we will be able to compete successfully against current or new competitors.

We are subject to significant foreign and domestic government regulations, including environmental and health and safety regulations, and failure to comply with these regulations could harm our business.

Our current and planned activities involve the use of a broad range of materials that are, or may be, considered hazardous under applicable laws and regulations. Accordingly, we are subject to a number of foreign, federal, state, and local laws and regulations relating to health and safety, protection of the environment, and the storage, use, disposal of, and exposure to, hazardous materials and wastes. We could incur costs, fines and civil and criminal penalties, personal injury and third party property damage claims, or could be required to incur substantial investigation or remediation costs if we were to violate or become liable under environmental, health and safety laws. Moreover, a failure to comply with environmental laws could result in fines and the revocation of environmental permits, which

could prevent us, or our strategic partners, from conducting business. Liability under environmental laws can be joint and several and without regard to fault. There can be no assurance that violations of environmental health and safety laws will not occur in the future as a result of the inability to obtain permits, human error, equipment failure or other causes. Environmental laws could become more stringent over time, imposing greater compliance costs and increasing risks and penalties associated with violations, which could harm our business. Accordingly, violations of present and future environmental laws could restrict our ability to expand facilities, pursue certain technologies, and could require us to acquire costly equipment, or to incur potentially significant costs to comply with environmental regulations.

Compliance with foreign, federal, state and local environmental laws and regulations represents a small part of our present budget. If we fail to comply with any such laws or regulations, however, a government entity may levy a fine on us or require us to take costly measures to ensure compliance. Any such fine or expenditure may adversely affect our business activities, financial condition or results of operations. We cannot predict the extent to which future legislation and regulation could cause us to incur additional operating expenses, capital expenditures, or restrictions and delays in the development of our products and properties.

Our government grants may subject us to government audits, which could materially harm our business and results of operations.

We may be subject to audits by the U.S. federal government as part of routine audits of our activities funded by our government grants. As part of an audit, these agencies may review our performance, cost structures and compliance with applicable laws, regulations and standards. If any of our costs are found to be allocated improperly, the costs may not be reimbursed and any costs already reimbursed for such contract may have to be refunded. Accordingly, an audit could result in a material adjustment to our revenue and results of operations. Moreover, if an audit uncovers improper or illegal activities, we may be subject to civil and criminal penalties and administrative sanctions.

We face risks associated with our international business.

We expect to establish, and to expand over time, international commercial operations and activities. Such international business operations are subject to a variety of risks associated with conducting business internationally, including:

- changes in or interpretations of foreign regulations that may adversely affect our ability to sell our products, perform services or repatriate profits to the United States;
- the imposition of tariffs;
- economic or political instability in foreign countries;
- imposition of limitations on or increase of withholding and other taxes on remittances and other payments by foreign subsidiaries or joint ventures;
- conducting business in places where business practices and customs are unfamiliar and unknown;
- the imposition of restrictive trade policies;
- the imposition of inconsistent laws or regulations;

- imposition of limitations on genetically-engineered crops and organisms and the production or sale of products therefrom in foreign countries;
- the imposition or increase of investment requirements and other restrictions or requirements by foreign governments;
- uncertainties relating to foreign laws and legal proceedings;
- having to comply with a variety of U.S. laws, including the Foreign Corrupt Practices Act;
- having to comply with U.S. export control regulations and policies that restrict our ability to communicate with non-U.S. employees and supply foreign affiliates and customers; and
- having to comply with licensing requirements.

We do not know the impact that these regulatory, geopolitical and other factors may have on our international business in the future.

If we are unable to develop, implement and maintain appropriate internal controls we will not be able to comply with applicable regulatory requirements imposed on reporting companies.

Beginning with our annual report for the year ending December 31, 2007, Section 404 of the Sarbanes-Oxley Act of 2002 requires us to include an internal control report with our annual report on Form 10-K. That report must include management's assessment of the effectiveness of our internal control over financial reporting as of the end of the fiscal year. Additionally, under the current rules, our independent registered public accounting firm will be required to issue a report on management's assessment of our internal control over financial reporting and a report on their evaluation of the operating effectiveness of our internal control over financial reporting.

Our business operations are relatively small and, as a result, we have operated with very limited staffing of key accounting and administrative functions. Such limited staffing made it difficult for us to segregate certain accounting functions. As our business matures from solely research and development into commercial operations and we become a registered public company, we will need additional accounting and finance staffing to support our expanding business operations and to comply with the additional reporting and regulatory requirements of being a public company. We plan on hiring additional personnel in our accounting and finance function in order to have sufficient staffing levels. Our development, implementation and maintenance of appropriate internal controls will depend materially on our successful hiring and retention of key senior accounting personnel with appropriate technical accounting expertise.

We continue to informally evaluate our existing internal control over financial reporting against the standards adopted by the Public Company Accounting Oversight Board, or PCAOB. In addition, we have not yet begun a formal evaluation, documentation and analysis of our internal controls. During the course of our ongoing informal evaluation of the internal controls, or once we begin the formal evaluation, documentation and testing of our internal controls, we may identify areas requiring improvement, and may have to design enhanced processes and controls to address issues identified through this review. Remedying any deficiencies, significant deficiencies or material weaknesses that we or our independent registered public accounting firm may identify may require us to incur significant costs and expend significant time and management resources. While we believe that we will be able to successfully implement internal controls, we cannot assure you that any of the measures we implement to remedy any such deficiencies will effectively mitigate or remedy such deficiencies or weaknesses. Investors could lose confidence in our financial reports, and our stock price may be adversely affected, if our internal control over financial reporting is found not to be effective by management or by an

independent registered public accounting firm or if we make disclosure of existing or potential significant deficiencies or material weaknesses in those controls.

Changes in, or interpretations of, accounting rules and regulations, such as revenue recognition and expensing of stock options, could result in unfavorable accounting treatment or require us to change our compensation policies.

Accounting methods and policies, including policies governing revenue recognition, expenses, and accounting for stock options are subject to further review, interpretation and guidance from relevant accounting authorities, including the SEC. Changes to, or interpretations of, accounting methods or policies in the future may require us to reclassify, restate or otherwise change or revise our financial statements, including those contained in this prospectus.

Prior to January 1, 2006, we were not required to record stock-based compensation charges if the employee's stock option exercise price equaled or exceeded the fair market value of our common stock at the date of grant. As permitted by SFAS No. 123, we accounted for share-based payments to employees through December 31, 2005 using APB Opinion No. 25's intrinsic value method and, as such, generally recognized no compensation cost for employee stock options. Accordingly, the adoption of SFAS No. 123R's fair value method will have a material adverse impact on our results of operations, although it will have no impact on our overall financial position. The effect of adopting SFAS No. 123R on the six-months ended June 30, 2006 was an increase in net loss by $187,000 and the total compensation cost related to these options not yet recognized in the financial statements is approximately $1,648,000 to be expensed over the next 3.74 years. The actual impact of SFAS No. 123R in future periods will depend on levels of share-based payments granted in the future and the assumptions for the variables which impact the computation.

We rely heavily on stock options to motivate existing employees and to attract new employees. Since we are now required to expense stock options, we may then choose to reduce our reliance on stock options as employee compensation. If we reduce our use of stock options, it may be more difficult for us to attract and retain qualified employees. If we do not reduce our reliance on stock options, our reported losses will increase.

Our pilot manufacturing recovery operations are currently conducted at a single location which makes us susceptible to disasters.

Our pilot manufacturing recovery operations are currently conducted at a single location in Fort Mill, South Carolina. As part of the strategic alliance with ADM, ADM intends to construct a Commercial Manufacturing Facility at a single location in Clinton, Iowa, where we will initially conduct all of our commercial manufacturing operations. Our headquarters and research and development operations are located at a single facility in Cambridge, Massachusetts. We take precautions to safeguard our facilities, including insurance, health and safety protocols, and off-site storage of critical research results and of computer data. However, a natural disaster, such as a fire, flood or earthquake, could cause substantial delays in our operations, damage or destroy our manufacturing equipment, inventory or development projects, and cause us to incur additional expenses. The insurance we maintain against fires, floods, earthquakes and other natural disasters may not be adequate to cover our losses in any particular case.

Risks Related to This Offering

There is no existing market for our common stock, and we do not know if one will develop to provide you with adequate liquidity. If the stock price fluctuates after this offering, you could lose a significant part of your investment.

Prior to this offering, there has been no public market for our common stock. An active public trading market may not develop after completion of this offering or, if developed, may not be sustained. The initial public offering price for our common stock will be determined by negotiations between us and the underwriters and may not be indicative of prices that will prevail in the open market following this offering. The public trading price for our common stock after this offering will be affected by a number of factors, including:

- reported progress of our business and technology development, including construction of the commercial plant relative to investor expectations;
- changes in earnings estimates, investors' perceptions, recommendations by securities analysts or our failure to achieve analysts' earning estimates;
- quarterly variations in our or our competitors' results of operations;
- general market conditions and other factors unrelated to our operating performance or the operating performance of our competitors;
- future sales of our common stock;
- announcements by us, or our competitors, of acquisitions, new products, significant contracts, commercial relationships or capital commitments;
- commencement of, or involvement in, litigation;
- any major change in our board of directors or management;
- changes in governmental regulations or in the status of our regulatory approvals;
- announcements related to patents issued to us or our competitors and to litigation involving our intellectual property;
- a lack of, limited or negative industry or security analyst coverage;
- developments in our industry and general economic conditions; and
- the other factors described elsewhere in these "Risk Factors."

As a result of these factors, you may not be able to resell your shares at, or above, the initial offering price. In addition, the stock prices of many technology companies have experienced wide fluctuations that have often been unrelated to the operating performance of those companies. These factors may materially and adversely affect the market price of our common stock.

New investors in our common stock will experience immediate and substantial dilution.

Our initial public offering price is substantially higher than the book value per share of our common stock. If you purchase common stock in this offering, you will incur immediate dilution of $8.28 in net tangible book value per share of common stock, based on an assumed initial public offering price

of $13.00 per share, the mid-point of the range on the front cover of this prospectus and assuming the underwriters do not exercise their overallotment option. In addition, the number of shares available for issuance under our stock plans may increase annually without further stockholder approval. Investors will incur additional dilution upon the exercise of stock options and warrants. See "Dilution."

If a substantial number of shares become available for sale and are sold in a short period of time, the market price of our common stock could decline.

If our existing stockholders sell a large number of shares of our common stock or the public market perceives that these sales may occur, the market price of our common stock could decline. Upon the closing of this offering and the sale of the ADM Shares, assuming no outstanding options or warrants are exercised prior to the closing of this offering, we will have approximately 18,435,639 shares of common stock outstanding. The 5,800,000 shares to be sold under this prospectus will be freely tradable without restriction or further registration under the federal securities laws, unless purchased by our affiliates. Taking into consideration the effect of the 180-day lock-up agreements that have been entered into by certain of our stockholders, we estimate that the remaining 12,635,639 shares of our common stock outstanding upon the closing of this offering will be available for sale pursuant to Rule 144, Rule 144(k) and Rule 701, as follows:

Number of Shares	
213,552	shares will be immediately eligible for sale in the public market without restriction pursuant to Rule 144(k);
127,492	additional shares will be eligible for sale in the public market under Rule 144 or Rule 701 beginning 90 days after the date of this prospectus, subject to volume, manner of sale, and other limitations under those rules;
11,713,763	additional shares will become eligible for sale, subject to the provisions of Rule 144, Rule 144(k) or Rule 701, beginning 180 days after the date of this prospectus, upon the expiration of agreements not to sell such shares entered into between the underwriters and such stockholders; and
580,832	additional shares will be eligible for sale from time to time thereafter upon expiration of their respective one-year holding periods, but could be sold earlier if the holders exercise any available registration rights.

Existing stockholders holding an aggregate of 14,023,579 shares of common stock (including shares of our common stock issuable upon conversion of our preferred stock or purchasable pursuant to warrants to purchase our common stock and the issuance of the ADM Shares in the concurrent private placement), based on shares outstanding as of September 30, 2006, have rights with respect to the registration of these shares of common stock with the SEC. See "Description of Capital Stock — Registration Rights." If we register these shares of common stock, these holders will be able to sell immediately those shares in the public market.

Piper Jaffray, on behalf of the underwriters, may in its sole discretion, at any time without notice, agree to release all or any portion of the shares subject to the lock-up agreements, which would result in more shares being available for sale in the public market at earlier dates. Sales of common stock by existing stockholders in the public market, the availability of these shares for sale, our issuance of securities or the perception that any of these events might occur could materially and adversely affect the market price of our common stock.

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

Our management will have broad discretion to use the net proceeds from this offering, and you will have to rely on the judgment of our management regarding the application of these proceeds. Our management might not apply the net proceeds of this offering in ways that increase the value of your investment. We expect to use the net proceeds from this offering to make investments in equipment and operations for formulating *PHA Natural Plastics* to their final form for commercial sale and to finance our working capital needs, including:

- to develop pilot plant manufacturing, marketing and sales and other pre-commercial activities related to our alliance with ADM,
- the hiring of additional personnel for expansion of our switchgrass research and development program,
- for conduct of research and development for new opportunities in, for example, the biological production of key chemicals and chemical intermediates for renewable resources, and
- for general corporate purposes.

We have not allocated these net proceeds for any specific purposes. Our management might not be able to yield a significant return, if any, on any investment of these net proceeds.

Our directors and management will collectively control approximately 32.04% of our outstanding common stock.

Immediately after this offering, our directors and executive officers and their affiliates will collectively control approximately 32.04% of our outstanding common stock or approximately 30.69% if the underwriters exercise their over-allotment option in full. As a result, these stockholders, if they act together, will be able to influence our management and affairs and all matters requiring stockholder approval, including the election of directors and approval of significant corporate transactions. You and other stockholders will have minimal influence over these actions. This concentration of ownership may have the effect of delaying or preventing a change in control of our company and might adversely affect the market price of our common stock.

Our financial results may vary significantly from period to period which may reduce our stock price.

Our financial results may fluctuate as a result of a number of factors, many of which are outside of our control, which may cause the market price of our common stock to fall. For these reasons, comparing our operating results on a period-to-period basis may not be meaningful, and you should not rely on our past results as an indication of our future performance. Our financial results may be negatively affected by any of the risk factors listed in this "Risk Factors" section and, in particular, the following risks:

- failure to estimate or control contract costs;
- adverse judgments or settlements in legal disputes;
- expenses related to acquisitions, mergers or joint ventures;
- other one-time financial charges;

- fluctuations due to revenue recognition under strategic alliance agreements. See "Management's Discussion and Analysis of Financial Condition and Results of Operations";
- failure to produce commercialized products or to find customers for these products; and
- that some of our programs are supported by government funding, which is inherently unpredictable.

Provisions in our certificate of incorporation and by-laws and Delaware law might discourage, delay or prevent a change of control of our company or changes in our management and, therefore, depress the trading price of our common stock.

Provisions of our certificate of incorporation and by-laws and Delaware law may discourage, delay or prevent a merger, acquisition or other change in control that stockholders may consider favorable, including transactions in which you might otherwise receive a premium for your shares of our common stock. These provisions may also prevent or frustrate attempts by our stockholders to replace or remove our management. These provisions include:

- limitations on the removal of directors;
- a classified board of directors so that not all members of our board are elected at one time;
- advance notice requirements for stockholder proposals and nominations;
- the inability of stockholders to act by written consent or to call special meetings;
- the ability of our board of directors to make, alter or repeal our by-laws;
- a supermajority stockholder vote requirement for amending certain provisions of our amended and restated certificate of incorporation and bylaws; and
- the ability of our board of directors to designate the terms of and issue new series of preferred stock without stockholder approval.

The affirmative vote of the holders of at least 75% of our shares of capital stock entitled to vote is necessary to amend or repeal the above provisions of our certificate of incorporation. In addition, absent approval of our board of directors, our by-laws may only be amended or repealed by the affirmative vote of the holders of at least 75% of our shares of capital stock entitled to vote.

In addition, Section 203 of the Delaware General Corporation Law prohibits a publicly-held Delaware corporation from engaging in a business combination with an interested stockholder, generally a person which together with its affiliates owns, or within the last three years has owned, 15% of our voting stock, for a period of three years after the date of the transaction in which the person became an interested stockholder, unless the business combination is approved in a prescribed manner.

The existence of the foregoing provisions and anti-takeover measures could limit the price that investors might be willing to pay in the future for shares of our common stock. They could also deter potential acquirers of our company, thereby reducing the likelihood that you could receive a premium for your common stock in an acquisition.

We do not currently intend to pay dividends on our common stock and, consequently, your ability to achieve a return on your investment will depend on appreciation in the price of our common stock.

We have never declared or paid any cash dividends on our common stock and do not currently intend to do so for the foreseeable future. We currently intend to invest our future earnings, if any, to fund our growth. Therefore, you are not likely to receive any dividends on your common stock for the foreseeable future.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus contains forward-looking statements. All statements other than statements of historical facts contained in this prospectus, including statements regarding our future results of operations and financial position, business strategy and plans prospects, projected revenue or costs and objectives of management for future research, development or operations, are forward-looking statements. These statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements, although not all forward-looking statements contain these identifying terms. We have identified below some important factors that could cause our forward-looking statements to differ materially from actual results, performance or financial conditions:

- our ability to become profitable;
- the ability of our products to achieve market acceptance;
- our ability to successfully manufacture *PHA Natural Plastics* at commercial scale in a timely or economical manner;
- our reliance on ADM and on future collaborative partners;
- our inability to effectively protect our intellectual property and not infringe on the intellectual property of others;
- our inability to raise sufficient capital when necessary or at satisfactory valuations;
- our ability to successfully develop platforms and products other than our fermentation system for producing *PHA Natural Plastics*;
- the loss of key personnel; and
- other factors discussed elsewhere in this prospectus.

In some cases, you can identify forward-looking statements by terms such as "may," "will," "should," "expects," "plans," "anticipates," "could," "intends," "target," "projects," "contemplates," "believes," "estimates," "predicts," "potential" or "continue" or the negative of these terms or other similar words, although not all forward-looking statements contain these identifying terms. These statements are only predictions. We have based these forward-looking statements largely on our current expectations and projections about future events and trends that we believe may affect our business, financial condition and results of operations. We discuss many of the risks in greater detail under the heading "Risk Factors." Also, these forward-looking statements represent our estimates and assumptions only as of the date of this prospectus. Except as required by law, we assume no obligation to update any forward-looking statements after the date of this prospectus.

This prospectus also contains estimates and other statistical data made by independent parties and by us relating to market size and growth, commodity prices and other industry data. This data involves a number of assumptions and limitations, and you are cautioned not to give undue weight to such estimates. In addition, projections, assumptions and estimates of our future performance and the future performance of the industries in which we operate are necessarily subject to a high degree of uncertainty and risk due to a variety of factors, including those described in "Risk Factors," "Management's Discussion and Analysis of Financial Condition and Results of Operations" and elsewhere in this prospectus. These and other factors could cause results to differ materially from those expressed in the estimates made by the independent parties and by us.

USE OF PROCEEDS

We estimate that the net proceeds to us of the sale of the common stock that we are offering including the sale of the ADM Shares, will be approximately $75.3 million or approximately $85.8 million if the underwriters exercise their over-allotment option in full, assuming an initial public offering price of $13.00 per share, which is the midpoint of the range listed on the cover page of this prospectus, and after deducting estimated underwriting discounts and commissions and estimated offering expenses that we must pay. A $1.00 increase (decrease) in the assumed initial public offering price of $13.00 would increase (decrease) the net proceeds to us from this offering by $5.4 million, assuming the number of shares offered by us, as set forth on the cover of this prospectus, remains the same and after deducting the underwriting discounts and commissions and estimated offering expenses payable by us. An increase or decrease in the assumed initial public offering price of $13.00 will not change the proceeds we receive from the sale of ADM Shares.

We intend to use the net proceeds of this offering as follows:

- approximately $10 to $15 million will be used to acquire plant and equipment for pilot manufacturing operations and for formulation operations related to the Commercial Manufacturing Facility;
- approximately $15 to $20 million will be used to conduct pilot manufacturing, sales and marketing activities related to developing the market for *PHA Natural Plastics* prior to operations commencing at the Commercial Manufacturing Facility;
- approximately $35 million will be used for continued research and development related to: the ADM alliance, expansion of our switchgrass biomass biorefinery program and the initiation of new programs to extend our platform technology (for example to the production of certain key chemicals and chemical intermediates); and
- the balance of the funds will be used for administrative expenses related to the expansion of our commercial and research and development activities noted above and costs related to being a publicly traded company as well as for working capital and other general corporate purposes.

We may also use a portion of the net proceeds to us to expand our current business through strategic alliances with, or acquisitions of, other businesses, products, intellectual properties or technologies. We currently have no agreements or commitments for any specific acquisitions at this time.

This expected use of the net proceeds of this offering represents our current intentions based upon our present plans and business condition. The amounts and timing of our actual expenditures will depend upon numerous factors, including cash flows from operations and the anticipated growth of our business. We will retain broad discretion in the allocation and use of our net proceeds. See "Risk Factors — Risks Related to This Offering — Our management will have broad discretion over the use of proceeds to us from this offering and might not apply the proceeds of this offering in ways that increase the value of your investment."

Pending any use, as described above, we plan to invest the net proceeds in investment-grade, short-term, interest-bearing securities.

DIVIDEND POLICY

We have never declared or paid any cash dividends on our capital stock and do not expect to pay any cash dividends for the foreseeable future. We intend to use future earnings, if any, in the operation and expansion of our business. Any future determination relating to our dividend policy will be made at the discretion of our board of directors, based on our financial condition, results of operations, contractual restrictions, capital requirements, business properties, restrictions imposed by applicable law and other factors our board of directors may deem relevant.

CAPITALIZATION

The following table sets forth our capitalization as of June 30, 2006, as follows:

- on an actual basis; and
- on a pro forma as adjusted basis to give effect to the conversion of all of our convertible preferred stock into shares of our common stock, and to reflect receipt by us of net proceeds of $67.8 million from the sale of shares of common stock that we are offering at an assumed initial public offering price of $13.00 per share, which is the midpoint of the range listed on the cover page of this prospectus, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us, and to reflect the receipt by us of $7.5 million from the sale of 576,923 ADM Shares at an assumed initial public offering price of $13.00 per share.

You should read the following table in conjunction with our financial statements and related notes and the sections entitled "Selected Financial Data" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" appearing elsewhere in this prospectus.

	As of June 30, 2006	
	(restated)[2] Actual	Pro forma as adjusted
	(In thousands, except share and per share amounts)	
Cash and cash equivalents[1]	$ 15,225	$ 90,547
Short term investment	647	647
Preferred stock	61,442	—
Stockholders' equity (deficit):		
Common stock, $.01 par value; 26,500,000 shares authorized, 2,073,390 shares issued, and 2,062,766 shares outstanding, actual; 100,000,000 shares authorized, 18,442,356 shares issued and 18,431,732 outstanding, pro forma as adjusted;	21	185
Treasury stock (at cost), 10,624 shares	(35)	(35)
Additional paid-in capital[1]	4,870	141,470
Deferred compensation	(105)	(105)
Accumulated deficit	(54,510)	(54,510)
Total stockholders' equity (deficit)[1]	(49,759)	87,005
Total capitalization[1]	$ 11,683	$ 87,005

(1) A $1.00 increase (decrease) in the assumed initial public offering price of $13.00 would increase (decrease) each of cash and cash equivalents, common stock, additional paid-in capital, total stockholders' equity (deficit) and total capitalization by $5.4 million, assuming the number of shares offered by us, as set forth on the cover of this prospectus, remains the same and after deducting the underwriting discounts and commissions and estimated offering expenses payable by us.

(2) See Note 2 to our financial statements with regard to restating our financial statements as of and for the six months ended June 30, 2006 for stock-based compensation.

DILUTION

Our net tangible book value as of June 30, 2006, was $11.7 million, or $0.97 per share of common stock. Net tangible book value per share represents the amount of our total tangible assets less our total liabilities, divided by the number of shares of common stock outstanding as of June 30, 2006 after giving effect to the assumed conversion of all of our convertible preferred stock.

After giving effect to the sale by us of 5,800,000 shares of common stock in this offering at an assumed initial public offering price of $13.00 per share, which is the midpoint of the range listed on the cover page of this prospectus, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us, and after giving effect to the receipt by us of $7.5 million from the sale by us of the 576,923 ADM Shares at an assumed initial public offering price of $13.00, our adjusted net tangible book value as of June 30, 2006 would have been approximately $87 million, or approximately $4.72 per share. This amount represents an immediate increase in net tangible book value of $3.75 per share to our existing stockholders and an immediate dilution in net tangible book value of approximately $8.28 per share to new investors purchasing shares of common stock in this offering at the assumed initial public offering price. Assuming the underwriters exercise their over-allotment option, our adjusted net tangible book value as of June 30, 2006 would have been approximately $97.5 million, or approximately $5.05 per share. This amount represents an immediate increase in net tangible book value of $4.08 per share to our existing stockholders and an immediate dilution in net tangible book value of approximately $7.95 per share to new investors purchasing shares of common stock in this offering at the assumed initial public offering price. We determine dilution by subtracting the adjusted net tangible book value per share after this offering from the amount of cash that a new investor paid for a share of common stock. The following table illustrates this dilution on a per share basis:

Assumed initial public offering price per share		$ 13.00
Historical net tangible book value (deficit) per share as of June 30, 2006	$ (24.12)	
Increase per share attributable to pro forma conversion of preferred stock	25.09	
Pro forma net tangible book value per share before this offering	0.97	
Increase per share attributable to this offering	$ 3.75	
Pro forma net tangible book value per share after this offering		4.72
Dilution per share to new investors		$ 8.28

The following table summarizes, as of June 30, 2006, the differences between the number of shares purchased from us, the total consideration paid to us in cash and the average price per share that existing stockholders and new investors paid. The following table also reflects the consideration to be paid to us in connection with the exercise of outstanding options and warrants held by officers, directors and affiliates. The following table does not reflect any non-cash consideration paid to us, or deemed to be paid to us, by our existing stockholders. The calculation below is based on an assumed initial public offering price of $13.00 per share, which is the midpoint of the range listed on the cover page of this prospectus, before deducting estimated underwriting discounts and commissions and estimated offering expenses that we must pay:

	Shares Purchased		Total Consideration		
	Number	Percent	Amount	Percent	Average Price Per Share
Existing stockholders	12,058,716	59%	$ 66,333,097	42%	$ 5.50
Shares underlying options and warrants held by officers, directors, and affiliates	1,960,253	10	9,286,438	6	4.74
New investors	6,376,923	31	82,900,000	52	13.00
Total	20,395,892	100%	$ 158,519,535	100%	$ 7.77

A $1.00 increase (decrease) in the assumed initial public offering price of $13.00 would result in no change to our pro forma net tangible book value per share after this offering, would increase (decrease) the pro forma as adjusted net tangible book value per share after this offering by $0.30 per share and would increase (decrease) the dilution in pro forma net tangible book value to new investors by $0.70 per share, assuming the number of shares offered by us, as set forth on the cover of this prospectus, remains the same and after deducting the estimated underwriting discounts and commissions and estimated offering expenses payable by us. These numbers assume the issuance of 576,923 shares to ADM at an assumed initial public offering price of $13.00. An increase or decrease in the assumed initial public offering price of $13.00 would decrease or increase the number of shares sold to ADM as ADM has agreed to purchase $7.5 million in stock at the initial public offering price.

As of September 30, 2006, we had outstanding options to purchase a total of 2,305,598 shares of common stock at a weighted average exercise price of $2.75 per share, and outstanding warrants to purchase a total of 1,773,369 shares of common stock at a weighted average exercise price of $6.23 per share. To the extent any of these options or warrants are exercised, there will be further dilution to new investors.

SELECTED FINANCIAL DATA

The selected condensed consolidated statement of operations data for the years ended December 31, 2003, 2004 and 2005 and balance sheet data as of December 31, 2004 and 2005 have been derived from our consolidated financial statements and related notes, which are included elsewhere in this prospectus, and have been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as indicated in their report. The selected condensed consolidated statement of operations data for the years ended December 31, 2001 and 2002 and the balance sheet data as of December 31, 2001, 2002 and 2003 have been derived from our audited financial statements that do not appear in this prospectus. The selected financial data set forth below should be read in conjunction with our financial statements, the related notes and "Management's Discussion and Analysis of Financial Condition and Results of Operations" included elsewhere in this prospectus. The historical results are not necessarily indicative of the results to be expected for any future period.

The selected condensed consolidated statement of operations data for the six months ended June 30, 2006 and 2005 and the selected condensed consolidated balance sheet data as of June 30, 2006 have been derived from our unaudited condensed consolidated financial statements included elsewhere in this prospectus. Our unaudited condensed consolidated financial statements have been prepared on the same basis as the audited consolidated financial statements and notes thereto, which include, in the opinion of our management, all adjustments (consisting of normal recurring adjustments), necessary for a fair statement of the information for the unaudited interim period. Our historical results for any prior or interim period are not necessarily indicative of results to be expected for a full fiscal year or for any future period.

	Year ended December 31,					Six months ended June 30,	
	2001	2002	2003	2004	2005	2005	2006
							(restated)[4]
						(unaudited)	
	(in thousands, except share and per share data)						
Statement of Operations Data:							
Total revenue	$ 441	$ 1,989	$ 2,383	$ 3,678	$ 2,781	$ 1,509	$ 3,810
Operating expenses:							
Research and development expenses, including cost of revenue	6,309[1]	4,409	6,204	5,427	5,980	2,824	4,669
General and administrative expenses	3,024	2,644	2,692	3,252	3,825	2,078	3,816
Total operating expenses	9,333	7,053	8,896	8,679	9,805	4,902	8,485
Loss from operations	(8,892)	(5,064)	(6,513)	(5,001)	(7,024)	(3,393)	(4,675)
Interest income and (expense), net	(44)	(124)	(128)	(54)	99	32	340
Loss on investment in related party	—	—	—	—	(700)[2]	—	—
Net loss	$ (8,936)	$ (5,188)	$ (6,641)	$ (5,055)	$ (7,625)	$ (3,361)	$ (4,335)
Net loss per share Basic and Diluted	$ (5.02)	$ (2.91)	$ (3.33)	$ (1.68)	$ (2.56)	$ (1.13)	$ (1.45)
Number of shares used in per share calculations Basic and Diluted	1,781,351	1,781,876	1,991,106	3,009,137	2,975,116	2,973,441	2,987,860
Pro forma net loss per share Basic and Diluted (unaudited)[3]					$ (0.73)		$ (0.34)
Pro forma number of shares used in per share calculation Basic and Diluted (unaudited)[3]					10,391,929		12,729,420

(1) Research and development expenses include the cost associated with acquired technology of $3,000.

(2) At December 31, 2005, we determined that the fair value of our preferred stock investment in Tepha, Inc. was impaired and recorded an asset impairment charge to our entire investment in Tepha, Inc.

(3) We have computed the pro forma basic and diluted net loss per common share and the shares used to compute pro forma basic and diluted net loss per common share included in the statement of operations data as we describe in Note 3 to our consolidated financial statements.

(4) See Note 2 to our consolidated financial statements with regard to restating our consolidated financial statements as of and for the six months ended June 30, 2006 for stock-based compensation.

The summary consolidated balance sheet data as of June 30, 2006 is presented:

- on an actual basis; and
- on a pro forma as adjusted basis to reflect:
- the conversion of all of our outstanding preferred stock into shares of our common stock;
- the receipt by us of net proceeds of $67.8 million from the sale of the 5,800,000 shares of common stock offered by us in this offering at an assumed public offering price of $13.00 per share, less underwriting discounts and commissions and estimated offering expenses payable by us; and
- the receipt by us of proceeds of $7.5 million from the sale of the 576,923 ADM Shares in a concurrent private placement at an assumed price of $13.00 per share.

	As of December 31,						
	2001	2002	2003	2004	2005	As of June 30, 2006	Pro forma as adjusted
						(restated)[2]	
						(unaudited)	
	(in thousands)						
Balance Sheet Information:							
Cash and short-term investments[1]	$ 298	$ 868	$ 1,495	$ 4,455	$ 3,174	$ 15,872	$ 91,194
Total assets[1]	1,202	2,561	3,331	7,510	7,325	22,044	97,366
Long-term obligations	1,455	857	266	1,440	1,280	1,199	1,199
Long-term deferred revenue	—	—	—	3,000	5,621	6,258	6,258
Total liabilities	3,972	3,588	4,546	7,246	9,874	10,361	10,361
Redeemable convertible preferred stock	22,490	27,764	32,640	39,235	44,009	61,442	—
Accumulated deficit	(25,666)	(30,855)	(37,495)	(42,549)	(50,175)	(54,510)	(54,510)
Total stockholders' equity (deficit)[1]	(25,259)	(28,791)	(33,855)	(38,971)	(46,558)	(49,759)	87,005

(1) A $1.00 increase (decrease) in the assumed public offering price of $13.00 would increase (decrease) each of cash and short-term investments, total assets, and total stockholders' equity (deficit) by $5.4 million, assuming the number of shares offered by us, as set forth on the cover of this prospectus, remains the same after deducting the underwriting discounts and commissions and estimated offering expenses payable by us.

(2) See Note 2 to our consolidated financial statements with regard to restating our consolidated financial statements as of and for the six months ended June 30, 2006 for stock-based compensation.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our financial statements and related notes that appear elsewhere in this prospectus. In addition to historical financial information, the following discussion contains forward-looking statements that reflect our plans, estimates and beliefs. Our actual results may differ materially from those discussed in the forward-looking statements. Factors that could cause or contribute to these differences include those discussed below and elsewhere in this prospectus, particularly in "Risk Factors."

Overview

We are a biotechnology company that develops and plans to commercialize environmentally sustainable, economically attractive alternatives to petrochemical-based plastics, fuels and chemicals. Our strategy is to develop technology platforms that integrate advanced biotechnology with current industrial practice and commercialize these platforms with industry leading strategic partners. Our first platform, which we will be commercializing through a strategic alliance with Archer Daniels Midland Company, or ADM, is a proprietary, large-scale microbial fermentation system for producing a versatile family of naturally occurring polymers known as polyhydroxyalkanoates, which we call *PHA Natural Plastics*. Our microbial fermentation system combines our proprietary engineered bacteria with corn sugar and other materials in a fermenter. The bacteria digests the corn sugar and produces *PHA Natural Plastics* inside of the bacteria. We separate the *PHA Natural Plastics* from the remainder of the bacteria and formulate the polymer into its final form for commercial sale. Through the alliance with ADM, we intend to sell these polymers as environmentally friendly, but functionally equivalent alternatives to petrochemical-based plastics in a wide range of commercial applications, including disposable goods, packaging, agricultural products, consumer goods and electronics. As part of the strategic alliance with ADM, we have announced plans to build a 50,000 ton annual capacity commercial scale plant, or the Commercial Manufacturing Facility, that will produce biodegradable *PHA Natural Plastics* out of corn sugar, an abundant agriculturally-produced renewable resource. We are currently producing pre-commercial quantities of *PHA Natural Plastics* jointly with ADM at a pilot plant having a capacity of 8 tons per month.

Our second technology platform, which is in an early stage, is a biomass biorefinery system using switchgrass to co-produce both *PHA Natural Plastics* and biomass feedstock for the production of ethanol or other biofuels. For this system, we are engineering switchgrass to produce *PHA Natural Plastics* in the leaf and stem of the plant. We intend to extract the polymer from switchgrass and use the remaining plant material as a biomass feedstock for the production of energy products including electricity and ethanol or other biofuels. Switchgrass is a commercially and ecologically attractive, non-food energy crop that is indigenous to North America and is generally considered to be a leading candidate for cellulose-derived production of ethanol and other biofuels. We believe that using switchgrass to co-produce these products can offer superior economic value and productivity as compared to single product systems that produce them individually. We have been working on our biomass biorefinery platform using switchgrass with support from the U.S. Department of Energy and the U.S. Department of Agriculture for several years, and we believe we are a scientific leader in this field. Our goals for this program are to have commercially viable switchgrass varieties in pilot field trials within four years and to establish strategic alliances with attractive partners to commercially exploit this platform.

To date, we have generated revenues primarily from government grants and to a lesser extent from license fees, royalty payments, and research and development revenue. We have funded our operations

primarily through the sale of equity securities, government grants and, more recently, from upfront and milestone payments from our collaborative partners.

In 2004, we entered into the Technology Alliance and Option Agreement with ADM Polymer Corporation, or ADM Polymer, a subsidiary of ADM. The goal of the Technology Alliance and Option Agreement was to demonstrate the capabilities of our fermentation and recovery technologies at commercial scale and to prepare a master plan and budget for the construction of a commercial facility with a 50,000 ton per year capacity. Upon achievement of such goals, ADM Polymer had the option to enter into a commercial alliance, by execution of the Commercial Alliance Agreement, for further research, development, manufacture, use and sale of *PHA Natural Plastics*. In November of 2004, we received a $3.0 million upfront payment from ADM, and in May 2006, we received $2.0 million in milestone payments associated with the achievement of certain goals. On July 12, 2006, ADM Polymer exercised its option under our Technology Alliance and Option Agreement and entered into a Commercial Alliance Agreement with us. Upon entering into the Commercial Alliance Agreement, the Technology Alliance and Option Agreement terminated pursuant to its terms. We anticipate our funding from commercial partners under collaborative arrangements to rise as the Commercial Alliance Agreement calls for up to 12 quarterly payments of $1.575 million during the construction period of the Commercial Manufacturing Facility. The first two such payments totaling $3.15 million were received in July 2006.

Since our inception in 1992, we have focused on the research of our platform technologies, the acquisition of patents to enhance these platforms, product development and pilot manufacturing of *PHA Natural Plastics*. Commercialization of *PHA Natural Plastics* will require significant additional expenditures, including research and development, pilot manufacturing, product development and sales and marketing organization development, and we expect these expenditures to increase in future years.

As of June 30, 2006, we had 43 full-time employees, of whom 31 are scientists specializing in *PHA Natural Plastics* production in microbial fermentation and plant technologies as well as extraction and manufacturing of *PHA Natural Plastics* from these technologies. We expect that we will add a significant number of employees throughout the remainder of 2006 and during 2007 to support our research, development, sales and marketing and to build the infrastructure necessary to operate as a public company.

We have incurred significant losses since our inception. As of June 30, 2006, our deficit accumulated from inception to date was $54.5 million (as restated, see note 2 to the financial statements) and total stockholders' deficit was $49.8 million. We recognized net losses of $7.6 million, $5.1 million and $6.6 million in 2005, 2004 and 2003, respectively and $4.3 million (as restated, see note 2 to the financial statements) and $3.4 million in the first six months of 2006 and 2005, respectively. We expect our net losses to increase in the next two years as we continue our pilot manufacturing development, expand our research and development and add the necessary infrastructure to support operating as a public company.

Collaborative Arrangements

Our strategy for collaborative arrangements is to retain substantial participation in the future economic value of our technology while receiving current cash payments to offset research and development costs and working capital needs. By their nature, these agreements are complex and have multiple elements that cover a variety of present and future activities. In addition, certain elements of these agreements are intrinsically difficult to separate and treat as separate units for accounting purposes. Consequently, we expect to defer recognizing most, if not all, of the payments we receive from partners as revenue until future years.

We entered into our alliance with ADM in November 2004 and a joint development arrangement with BP in February 2005. As of June 30, 2006, all payments received from ADM had been recorded as deferred revenue on our balance sheet. We expect that future payments from ADM, through at least the construction phase of the Commercial Alliance Agreement, including quarterly operating payments, and other payments will be classified as deferred revenue as well. The deferred revenue associated with the BP arrangement was recognized in full during the first quarter of 2006 when the alliance was terminated. We anticipate recognizing revenue for the payments received from ADM after the obligations under the multiple element arrangements are delivered.

We received the following payments from these arrangements to offset operating cash needs during 2004 and 2005 and first six months of 2006:

- upfront payment of $3.0 million from ADM in November 2004;
- milestone payment of $2.0 million from ADM in May 2006;
- cost sharing payments from ADM for pilot manufacturing plant construction and operations of $620,000 during 2005 and an additional $587,000 during the first six months ended June 30, 2006; and
- upfront payment of $1.0 million and three subsequent quarterly payments of $500,000 each, totaling $2.5 million in payments from BP during 2005 and 2006.

United States Government Contracts and Grants

As of June 30, 2006, gross proceeds of $3.13 million remained to be received under our various government contracts and grants, which include amounts for reimbursement to our subcontractors, as well as reimbursement for our employees' time and benefits and other expenses related to performance under the various contracts.

The status of our United States government contracts and grants is as follows:

Program Title	Funding Agency	Total government funds (in $M)	Total received through June 30, 2006 (in $M)	Remaining amount to be received as of June 30, 2006 (in $M)	Contract/Grant Expiration
Biomass Biorefinery for the Production of Polymers and Fuel	Department of Energy[1]	$ 7.48	$ 5.51	$ 1.83	Apr. 2007
Industrial Genome Engineering	Department of Commerce	$ 1.64	$ 1.64	$ —	Jul. 2005
Advanced Biorefinery Feedstocks	Department of Agriculture	$ 2.00	$ 1.79	$ 0.21	Oct. 2006
PHA Bioplastic Packaging Materials	SERDP[2]	$ 1.01	$ —	$ 1.01	Aug. 2008
Blow Molded Bioproducts from Natural Plastics	Department of Agriculture	$ 0.08	$ —	$ 0.08	Dec. 2006
Total		**$ 12.21**	**$ 8.94**	**$ 3.13**	

(1) Funding of these government contracts and grants beyond the United States government's current fiscal year is subject to annual congressional appropriations.

(2) Strategic Environmental Research and Development Program.

Revenues

Revenues for the years ended December 31, 2005, 2004 and 2003 were primarily derived from government grants and totaled $2.8 million, $3.7 million and $2.4 million, respectively. Revenues totaled $3.8 million and $1.5 million for the first six months ended June 30, 2006 and 2005, respectively. The six month 2006 amounts include $2.5 million of revenue associated with the termination of the BP joint development agreement. We expect the revenues from government grants to fluctuate due to availability of funding from the government, and the revenue from collaborative arrangements will be recognized as future obligations under the agreements are completed. We expect research and development revenue to decline for the remainder of 2006 as we are not anticipating any other revenue from collaborative agreements to be recognized.

Research and Development Expenses

Our operating expenses to date have substantially been for research and development activities. Research and development expenses consist of costs associated with research activities, as well as costs associated with our product development efforts, including pilot manufacturing costs. All research and development costs, including those funded by third parties, are expensed as incurred. Research and development expenses include:

- consultant and employee related expenses, which include salary and benefits;
- external research and development expenses incurred under agreements with third party organizations and universities; and
- facilities, depreciation and other allocated expenses, which include direct and allocated expenses for rent and maintenance of facilities, depreciation of leasehold improvements and equipment and laboratory and other supplies.

Research and development expenses for 2005, 2004 and 2003 were $6.0 million, $5.4 million and $6.2 million, respectively, and $4.7 million and $2.8 million in the first six months of 2006 (as restated, see note 2 to the financial statements) and 2005, respectively. These expenses are related to developing our platform technologies and *PHA Natural Plastics* pilot manufacturing production. We expect that our expenses will increase significantly during 2006 as we continue pilot manufacturing production and expand our research and development programs.

We have not reported our internal historical research and development costs or our personnel and personnel-related costs on a project-by-project basis. Our programs share a substantial amount of our common fixed costs such as facilities, depreciation, utilities and maintenance. Accordingly, we do not track our research and development costs by individual research and development program.

We expect to incur increasing research and development expenses in future periods as we continue our pilot manufacturing and product development trials for our product derived from microbial fermentation. The potential for commercial success of our *PHA Natural Plastics* may be impacted by numerous factors, including partnership continuance with ADM, product properties, manufacturing capability and commercial viability.

In addition, we expect research and development expenditures to grow as we advance our switchgrass program and explore other commercial opportunities our technology platform can be applied to. We cannot predict what it will cost to complete our research and development projects or when they will be completed and commercialized. The timing and cost of any project is dependent upon achieving technical objectives, which are inherently uncertain. In addition, our business strategy contemplates

entering into collaborative arrangements with third parties for one or more of our programs. In the event that third parties assume responsibility for certain research or development activities, the estimated completion dates of those activities will be under the control of the third party rather than with us. We cannot forecast with any certainty which programs if any, will be subject to future collaborative arrangements, in whole or in part, and how such arrangements would affect our research and development plans or capital requirements.

As a result of the uncertainties discussed above, we are unable to determine the duration and completion costs of our research and development projects or when and to what extent we will receive cash inflows from the commercialization and sale of products. Our inability to complete our research and development projects in a timely manner or our failure to enter into collaborative agreements, when appropriate, could significantly increase our capital requirements and could adversely impact our liquidity. These uncertainties could force us to seek additional, external sources of financing from time to time in order to continue with our strategy. Our inability to raise additional capital, or to do so on terms reasonably acceptable to us, would jeopardize the future success of our business.

General and Administrative Expenses

General and administrative expenses consist principally of salaries and related costs for personnel in executive, finance, accounting, marketing and sales, business development, information technology, legal and human resources functions. Other general and administrative expenses include patent related costs, facility costs not otherwise included in research and development expenses and professional fees for legal, consulting and accounting services.

General and administrative expenses were $3.8 million, $3.3 million and $2.7 million in 2005, 2004 and 2003, respectively, and $3.8 million and $2.1 million in the first six months of 2006 (as restated, see note 2 to the financial statements) and 2005, respectively. These expenses include patent protection fees for our extensive patent portfolio. We expect that our general and administrative expenses will increase as we expand our legal and accounting staff and marketing and sales staff, add infrastructure and incur additional costs related to operating as a public company, including directors' and officers' insurance, investor relations programs, increased director fees, increased professional fees and non-cash stock-based compensation expense.

Critical Accounting Estimates and Judgments

Our consolidated financial statements are prepared in accordance with accounting principles generally accepted in the United States of America. The preparation of these consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue, costs and expenses, and related disclosures. We evaluate our estimates and assumptions on an ongoing basis. Our actual results may differ from these estimates.

We believe that of our significant accounting policies, which are described in the notes to our consolidated financial statements, the following accounting policies involve a greater degree of judgment and complexity. Accordingly, we believe that the following accounting policies are the most critical to aid in fully understanding and evaluating our consolidated financial condition and results of operations.

Revenue Recognition

We recognize revenue under government research grants when the related expense is incurred and we have obtained governmental approval to use the grant funds for agreed upon budgeted expenses.

For revenue received under our arrangements with ADM and BP, we recognize revenue in accordance with the Staff Accounting Bulletin ("SAB") 104, *Revenue Recognition*, and Emerging Issues Task Force ("EITF") Issue No. 00-21, *Revenue Arrangements with Multiple Deliverables*.

Our arrangement with ADM contains multiple elements including obligations for us to provide future formulation services, sales and marketing services and certain research and development activities, amongst others. We have determined that these elements cannot be separated and accounted for individually as separate units of accounting. Therefore payments received from ADM have been classified as deferred revenue at the respective balance sheet dates and will be recognized in future periods after the commencement of product commercialization and as the final deliverables under the arrangements are being completed. More specifically, we believe revenue will commence approximately at the time of the first commercial sale of *PHA Natural Plastics* and amounts will be recognized proportionately over the period that the final services are provided, over the remaining term of the Commercial Alliance Agreement. As of June 30, 2006, payments received from ADM totaling $6.2 million have been recorded as deferred revenue, including non-refundable up-front payments totaling $3.0 million, $2.0 million in milestone payments and approximately $1.2 million in reimbursements related to pilot manufacturing construction and operating costs.

Under our joint development arrangement with BP, we received $2.0 million in 2005. Due to these amounts being applicable for determining BP's equity participation in a potential future joint venture between the parties, these amounts were recorded as deferred revenue at December 31, 2005. We recognized the revenue for this amount, plus an additional $0.5 million which became due in the first quarter of 2006, upon the termination notice from BP in January 2006, as we have been released from any future obligations under this agreement.

Fees to license the use of the Company's proprietary and licensed technologies are recognized only after both the license period has commenced and the technology has been delivered to the customer. Royalty revenue is recognized when it becomes determinable and collectibility is reasonably assured, otherwise the Company recognizes revenue upon receipt of payment.

Stock-Based Compensation

Effective January 1, 2006, we adopted *Statement of Financial Accounting Standards ("SFAS") No. 123-revised, Share-Based Payment* ("SFAS 123R"), which revises SFAS No. 123, *Accounting for Stock-Based Compensation* ("SFAS 123") and supersedes Accounting Principles Board ("APB") Opinion No. 25, *Accounting for Stock Issued to Employees* ("APB 25"). SFAS 123R requires that all stock-based compensation be recognized as an expense in the consolidated financial statements and that such expense be measured at the fair value of the award.

We adopted SFAS 123R using the prospective method of application, which requires us to recognize compensation expense on a prospective basis; therefore, prior period consolidated financial statements have not been restated. Compensation expense recognized includes the expense of stock options granted on and subsequent to January 1, 2006. Stock options granted by us prior to that time are specifically excluded from SFAS 123R and will continue to be accounted for in accordance with APB 25. These options were valued using the minimum value method.

Determining the appropriate fair value model and calculating the fair value of stock-based payment awards require the use of highly subjective assumptions, including the expected life of the stock-based payment awards and stock price volatility. In 2006, we began using the Black-Scholes option-pricing model to value our option grants and determine the related compensation expense. The assumptions used in calculating the fair value of stock-based payment awards represent management's best estimates, but the estimates involve inherent uncertainties and the application of management

judgment. As a result, if factors change and we use different assumptions, our stock-based compensation expense could be materially different in the future. Prior to the adoption of SFAS 123R, we had adopted SFAS 123, but in accordance with SFAS 123, we had elected not to apply fair value-based accounting for awards under our employee stock incentive plan through December 31, 2005. Instead, we measured compensation expense for our stock plans using the intrinsic value method prescribed by APB 25, and related interpretations and provided pro forma disclosures as permitted under SFAS No. 148, *Accounting for Stock-Based Compensation — Transition and Disclosure an amendment of SFAS 123*.

In 2006, we have employed the following key assumptions to determine fair values of option grants pursuant to the Black-Scholes option pricing model.

	June 30, 2006
Expected dividend yield	—
Risk-free interest rate	4.89%
Expected option term (in years)	6.1
Volatility	75%

To estimate expected volatility we reviewed the volatilities of publicly traded peer companies and adjusted for expected higher volatility associated with being a newly traded public company. Management believes that the historical volatility of the Company's stock price does not best represent the expected volatility of the stock price. We are currently a private company and therefore lack company-specific historical and implied volatility information. We intend to continue to consistently use the same group of publicly traded peer companies to determine volatility in the future until such time that sufficient information regarding the volatility of our share price becomes available or that the selected companies are no longer suitable for this purpose.

The risk-free interest rate used for each grant is equal to the U.S. Treasury yield curve in effect at the time of grant for instruments with a similar expected life.

For the period ended June 30, 2006, the expected term of the options granted was determined using the "simplified" method for "plain vanilla" options as permitted by Staff Accounting Bulletin No. 107. For stock options that are not considered "plain vanilla" and, as such, do not qualify for the simplified method, for example stock options with an exercise price below the related fair value of common stock on the date of grant, our estimate of expected term was based upon review of the expected terms of publicly traded peer companies with stock options that have similar characteristics.

The stock price volatility and expected terms utilized in the calculation of fair values involve management's best estimates at that time, both of which impact the fair value of the option calculated under the Black-Scholes methodology and, ultimately, the expense that will be recognized over the life of the option. SFAS 123R also requires that the Company recognize compensation expense for only the portion of options that are expected to vest. Therefore, the Company has estimated expected forfeitures of stock options with the adoption of SFAS 123R. In developing a forfeiture rate estimate, the Company considered its historical experience, its growing employee base and the limited liquidity of its common stock. If the actual number of forfeitures differs from those estimated by management, additional adjustments to compensation expense may be required in future periods.

We have historically granted stock options at exercise prices equivalent to the fair value of our common stock as estimated by our board of directors, with input from management, as of the date of grant. Because there has been no public market for our common stock, our board of directors determined the fair value of our common stock by considering a number of objective and subjective factors, including our operating and financial performance and corporate milestones, the prices at

which we sold shares of convertible preferred stock, the superior rights and preferences of securities senior to our common stock at the time of each grant and the risk and non-liquid nature of our common stock. In years prior to 2006, we have not historically obtained contemporaneous valuations by an unrelated valuation specialist because, at the time of the issuances of stock options, we believed our estimates of the fair value of our common stock to be reasonable based on the foregoing factors.

In anticipation of a potential public offering, we re-assessed the valuation of our common stock at December 31, 2005. There was an immaterial difference between the original estimated fair value and the re-assessed valuation of the common stock related to the grants made during December 2005. Therefore, we have not made any retrospective adjustments to our accounting for stock options.

In 2006, determining the fair value of our stock has required making complex and subjective judgments. Our approach to valuation of the enterprise is based on a discounted future cash flow approach that uses our estimates of revenue, driven by assumed market growth rates, and estimated costs as well as appropriate discount rates. These estimates are consistent with the plans and estimates that we use to manage the business. There is inherent uncertainty in making these estimates. The enterprise value as determined was allocated to preferred and common shares using the option-pricing method which involves making estimates of the anticipated timing of a potential liquidity event such as a sale of our company or an initial public offering, and estimates of the volatility of our equity securities. The anticipated timing is based on the plans of our board and management. Estimating the volatility of the share price of a privately held company is complex because there is no readily available market for the shares. We estimated the volatility of our stock based on available information on volatility of stocks of publicly traded companies in the industry. Had we used different estimates of volatility, the allocations between preferred and common shares would have been different.

During the six months ended June 30, 2006, we granted stock options to acquire 17,570 shares of common stock at an exercise price of $1.84, 112,376 shares of common stock at an exercise price of $3.36, and 185,116 shares of common stock at an exercise price of $5.14.

In connection with this offering, our board of directors determined to undertake a reassessment of the fair value of our common stock as of each of the 2006 grant dates. In connection with this undertaking, our board of directors considered the following:

- the valuation indicated by the January 2006 closing of our Series 05 convertible preferred stock financing, which included participation by investors who had not participated in prior financing rounds; and

- events leading up to the signing of our commercial alliance agreement with ADM in July 2006.

Following this reassessment, our board of directors, with input from management, determined that the exercise prices of stock option grants in 2006 were less than the respective fair values of our common stock on the grant dates for accounting purposes. We have therefore revised the Black-Scholes fair

value of these stock option grants to reflect the reassessed fair value of our common stock. The table below details the original and revised values associated with these grants.

Shares Granted	Exercise Price per Share	Reassessed Fair Value of Common Stock	Black-Scholes Fair Value as Determined on Grant Date	Black-Scholes Fair Value as Revised	Increase in Fair Value of Options Granted
185,116	$ 5.14	$ 9.86	$ 644,904	$ 1,402,488	$ 757,584
112,376	3.36	7.52	308,473	716,431	407,958
11,850	1.84	3.24	10,141	18,987	8,846

Of the options granted during the six months ended June 30, 2006, 272,155 are employee stock options that are accounted for under SFAS 123R. Pursuant to SFAS 123R, the Black-Scholes Fair Value of these grants will be recognized as compensation expense on a straight line basis over the vesting period of the options. Due to the reassessment of fair values, we have restated our SFAS 123R stock-based compensation expense during the period to increase it by $98,416 to $187,217 from $88,801. The compensation expense on unvested options at June 30, 2006 for the future years will be increased by $918,899 to $1,647,810 from $728,911 and will be recognized in future periods net of forfeitures as follows:

	2nd half 2006	2007	2008	2009	2010
123R Stock Based Compensation Charge	$ 211,696	$ 423,391	$ 423,391	$ 419,496	$ 169,836

We account for stock compensation arrangements with non-employees in accordance with Emerging Issues Task Force No. 96-18, or EITF No. 96-18, *Accounting for Equity Instruments That Are Issued to Other Than Employees for Acquiring, or in Conjunction with Selling, Goods or Services,* using a fair value approach. For stock options granted to non-employees, the fair value of the stock options is estimated using the Black-Scholes valuation model. Stock-based compensation expense is recognized over the period of expected service by the non-employee. As the service is performed, we are required to update these assumptions and periodically revalue unvested options and make adjustments to the stock-based compensation expense using the new valuation. These adjustments may result in additional or lesser stock-based compensation expense than originally estimated or recorded, with a corresponding increase or decrease in compensation expense in the statement of operations. Ultimately, the final compensation charge for each option grant to non-employees is unknown until those options have vested or services have been completed or the performance of services is completed.

Of the options granted during the six months ended June 30, 2006, 42,907 are stock options granted to non-employees. In addition to the options granted in 2006, there were options granted in 2005 that are accounted for in the same way. The reassessed values of common stock had the effect of increasing compensation charges related to both 2006 and prior years grants. We have restated our compensation expense related to these non-employees options during the period to increase it by $212,364 from $163,759 to $376,123. The actual expense we record in future periods may total to more or less than $450,922 as these options will be revalued in future periods.

During the six months ended June 30, 2006, 41,954 variable options granted to an officer of the company in 2005 were determined to be highly probable for meeting the performance condition. As a result compensation expense and deferred compensation was recorded during the period. Due to the reassessment of fair values, we have restated our stock compensation expense related to this vesting during the period to increase it by $136,227 from $95,289 to $231,516 . The deferred compensation

expense will be increased by $61,922 from $43,313 to $105,235 and will be recognized in future periods net of forfeitures.

Results of Operations

Comparison of the Six Months Ended June 30, 2006 and 2005

Revenue

Our revenue for the six months ended June 30, 2006 and 2005 was $3.8 million and $1.5 million, respectively. We recognized revenue from research and development services of $2.5 million and $31,000 during the first six months of 2006 and 2005, respectively. The increase was due to the recognition of $2.5 million in revenue from our joint development arrangement with BP in the first six months of 2006 upon the termination of the arrangement by BP in January 2006, as we have been released from any future performance obligations. We also recognized revenue for government grants of $1.1 million and $1.3 million during the first six months of 2006 and 2005, respectively. In the first six months of 2006, we recognized revenue of $190,000 from license fees and royalty income as compared to $134,000 in the same period for 2005.

Research and Development Expenses

Research and development expenses increased to approximately $4.7 million in the first six months of 2006 (as restated, see note 2 to the financial statements) from $2.8 million in the same period in 2005. The increase was due primarily to increased spending on pilot material production of *PHA Natural Plastics*, increased staffing and other personnel related costs to support our collaborative arrangements. We expect that research and development expenses for pilot manufacturing and testing of *PHA Natural Plastics* will continue to increase in later periods of 2006 as we prepare to develop, test and refine products to meet the product specification requirements of our customers. We expect that our staffing and personnel related costs will also increase to support the research programs for our microbial and plant programs. We incurred $22,000 in expense during the first six months of 2006 (as restated, see note 2 to the financial statements) due to the adoption of SFAS 123R on January 1, 2006, and we expect to record increased compensation expenses in future quarters of 2006 and future years.

General and Administrative Expenses

General and administrative expenses increased to $3.8 million in the first six months of 2006 (as restated, see note 2 to the financial statements) from $2.1 million in the first six months of 2005. This increase was primarily due to increased staffing in sales and marketing expenses and also staffing necessary to manage and support our preparation for going public. Our general and administrative expenses also increased due to stock based compensation charges of $764,000 (as restated, see note 2 to the financial statements) primarily due to a 2005 variable option grant and options granted to nonemployees and expenses associated with the adoption of SFAS 123R. Expenses during the first six months of 2006 (as restated, see note 2 to the financial statements) due to the adoption of SFAS 123R on January 1, 2006 totaled $165,000 and we expect to record increased compensation expenses in future quarters of 2006 and future years.

We expect that our general and administrative expenses will increase as we expand our legal and accounting staff and marketing and sales staff, add infrastructure and incur additional costs related to operating as a public company, including directors' and officers' insurance, investor relations programs, increased director fees, increased professional fees and non-cash stock-based compensation expense.

Comparison of the Years Ended December 31, 2005 and 2004

Revenue

Our revenue for 2005 and 2004 was $2.8 million and $3.7 million, respectively. We recognized revenue from government grants of $2.4 million during 2005 as compared to $3.2 million during 2004. The decrease of $0.8 million of government grant revenue was due to the expiration of a government grant in 2005. We expect that our grant revenue will fluctuate year to year depending on available funding from government agencies. We recorded approximately $2.6 million of payments from collaborative arrangements as deferred revenue. In 2005, we recognized revenue of $242,000 from license fees and related royalty payments as compared to $392,000 during 2004. The decrease was substantially due to a change in our assessment regarding the collectibility of certain license fees and royalty payments due from a related party which are now recognized on a cash basis. We also recognized $106,000 and $97,000 of research and development revenue during 2005 and 2004 respectively.

Research and Development Expenses

Research and development expenses increased to $6.0 million in 2005 from approximately $5.4 million in 2004. The increase was due primarily to increased rent for expanded facilities and related operating expenses, as well as increased staffing and other personnel related costs to support our collaborative arrangements in 2005. We expect that research and development expenses for pilot manufacturing and testing of *PHA Natural Plastics* will continue to increase in 2006 as we prepare to test and refine product to meet the product specification requirements of our customers. We expect that our staffing and personnel related costs will also increase to support the research programs for our microbial and plant programs.

General and Administrative Expenses

General and administrative expenses increased to $3.8 million in 2005 from $3.3 million in 2004. This increase was primarily due to increased patent costs for protecting our extensive and increasing patent portfolio, as well as some increased staffing necessary to manage and support our growth. We also expect to record additional compensation expenses related to the adoption of SFAS 123R in 2006 and future years.

We expect that our general and administrative expenses will increase as we expand our legal and accounting staff and marketing and sales staff, add infrastructure and incur additional costs related to operating as a public company, including directors' and officers' insurance, investor relations programs, increased director fees, increased professional fees and non-cash stock-based compensation expense.

Loss on investment in related party

During 2005 we recorded an asset impairment charge of $700,000 for an investment in Tepha, Inc., a related party. We do not expect to incur any additional such charges during 2006 as there is no remaining net book value. See Footnote 8 to our financial statements included in this prospectus.

Comparison of the Years Ended December 31, 2004 and 2003

Revenue

Our revenue for 2004 and 2003 was $3.7 million and $2.4 million, respectively. We recognized revenue from government grants of $3.2 million during 2004 as compared to $2.1 million during 2003. The increase of approximately $1.1 million of government grant revenue was due to the start of a new government grant in 2004 and the full year in operation of another multi-year grant received during 2003. We expect that our grant revenue will fluctuate year to year depending on available funding from government agencies. We recorded approximately $3.0 million of payments in 2004 from collaborative arrangements as deferred revenue and we recognized $234,000 of previously deferred government revenue. In 2004, we recognized revenue of $392,000 from license fees and related royalty payments as compared to $113,000 during 2003. The primary reason for this increase in royalties received was due to a licensing agreement with a related party. We also recognized $97,000 and $120,000 of research and development revenue during 2004 and 2003, respectively.

Research and Development Expenses

Research and development expenses decreased to $5.4 million in 2004 from $6.2 million in 2003. The higher expenses during 2003 were due primarily to increased contract spending of $0.5 million to test larger scale proof-of-concept production of *PHA Natural Plastics*.

General and Administrative Expenses

General and administrative expenses increased to $3.3 million in 2004 from $2.7 million in 2003. This increase was primarily due to increased professional fees incurred to negotiate and enter into agreements relating to our alliance with ADM concluded during 2004 and our joint development arrangement with BP in early 2005. We also incurred increased consultant costs to manage and support our growth.

Income Taxes

Since inception, we have incurred operating losses and, accordingly, have not recorded a provision for income taxes for any of the periods presented. As of December 31, 2005, we had net operating loss carryforwards for federal and state income tax purposes of $26.0 million and $16.8 million, respectively. As of December 31, 2005, we also had federal and state research and development tax credit carryforwards of $1.1 million and $0.9 million, respectively. If not utilized, the federal and state net operating loss carryforwards will begin expiring in 2008 and 2006, respectively and tax credit carryforwards will expire beginning in 2012. The annual limitation may result in the expiration of our net operating loss and tax credit carryforwards before they can be used and therefore we have fully reserved the associated tax asset. Utilization of net operating loss and credit carryforwards may be subject to a substantial annual limitation due to limitations provided by the Internal Revenue Code of 1986, as amended, that are applicable if we experience an "ownership change" that may occur, for example, as a result of this offering aggregated with certain other sales of our stock before or after this offering.

Liquidity and Capital Resources

Since inception, we have financed our operations primarily through private placements of equity securities, receiving aggregate net proceeds from such sales totaling $61.4 million, revenues primarily from government grants and our joint development arrangement with BP totaling $15.7 million and payments arising from our strategic alliance with ADM of $6.2 million as of June 30, 2006. As of June 30, 2006, we had $15.9 million in cash, cash equivalents and short-term investments. Our cash and investment balances are held in money market accounts and short-term instruments. Cash in excess of immediate requirements is invested in short-term instruments with regard to liquidity and capital preservation.

Net cash used in operating activities was $2.8 million and $2.7 million during the first six months in 2006 (as restated, see note 2 to the financial statements) and 2005, respectively and $4.4 million, $1.0 million and $5.1 million in 2005, 2004 and 2003 respectively. The net cash used in each of these periods primarily reflects net loss for these periods, offset in part by depreciation, non-cash stock-based compensation for non-employees and non-cash changes in operating assets and liabilities. During 2004 the landlord for our new research facilities provided lease incentives to offset our leasehold improvement costs of approximately $1.5 million and we also received $3.0 million in payments under the alliance agreement with ADM. During 2005 we received $2.0 million and $620,000 in payments from the joint development arrangement with BP and alliance agreement with ADM, respectively. During the first six months of 2006, we received a $500,000 final payment from the joint development arrangement with BP, and $2.0 million in milestone payments and $587,000 in reimbursements related to pilot manufacturing construction and operation costs from ADM in conjunction with our alliance agreement.

Net cash used in investing activities was $267,000 and $51,000 during the first six months in 2006 and 2005, respectively, and $1.9 million, $3.1 million and $35,000 in 2005, 2004 and 2003,

respectively. Investing activities consist primarily of purchases and sales of marketable securities and capital purchases. During 2005, we rolled over the certificate of deposit along with an additional amount of interest earned amounting to $36,000 and during 2004, we purchased a $1.3 million certificate of deposit. During the first six months in 2006 we purchased additional certificates of deposits for $16.2 million and a certificate of deposit for $1.3 million matured. Purchases of property and equipment were $958,000 and $54,000 during the first six months in 2006 and 2005, respectively, and $1.9 million, $1.3 million and $35,000 in 2005, 2004 and 2003, respectively. The majority of the purchase of property and equipment in 2004 related to our moving to a different location, mostly funded by the landlord through lease incentives. The primary increase in the purchase of property and equipment during 2005 was due to the construction costs of approximately $1.2 million for our pilot manufacturing facility for the pilot production of *PHA Natural Plastics*, co-funded through our alliance with ADM, and approximately $560,000 during 2005 and an additional $350,000 during the first six months of 2006 for the construction of a greenhouse to support our switchgrass program. We expect to make significant investments in the purchase of property and equipment to support our pilot manufacturing, formulating *PHA Natural Plastics* to their final form for commercial sale and other efforts. We estimate that we will use approximately $10 to $20 million of the proceeds of this offering to fund these investments.

Net cash provided by financing activities was $16.5 million and $4.5 million during the first six months in 2006 (as restated, see note 2 to the financial statements) and 2005, respectively, and $5.0 million in 2005 and $5.8 million in each of 2003 and 2004. Financing activities consist primarily of proceeds from the sale of our preferred stock and promissory notes. We received net proceeds from the issuance of preferred stock of $17.4 million and $4.8 million during the first six months in 2006 and 2005, respectively, and $4.8 million, $6.5 million and $6.3 million in 2005, 2004 and 2003, respectively. Payments on a convertible promissory note and capital lease obligations were each of $417,000, $721,000 and $521,000 during 2005, 2004 and 2003, respectively.

Operating Capital and Capital Expenditure Requirements

We anticipate commercializing our first product through our alliance with ADM during 2008. However, we anticipate that we will continue to incur net losses for the next several years as we incur expenses to commercialize our *PHA Natural Plastics*, and expand our marketing, sales, manufacturing and corporate infrastructure.

We believe that our cash, cash equivalents and short-term marketable securities balances, and the interest we earn on these balances, as well as cash expected from our ADM alliance plus the proceeds of this offering, will be sufficient to meet our anticipated cash requirements with respect to the initial commercial launch of our *PHA Natural Plastics* for at least the next 24 months. If our available cash, cash equivalents and short-term marketable securities are insufficient to satisfy our liquidity requirements, or if we develop additional products, we may seek to sell additional equity or debt securities or obtain a credit facility. The sale of additional equity and debt securities may result in additional dilution to our stockholders. If we raise additional funds through the issuance of debt securities or preferred stock, these securities could have rights senior to those of our common stock and could contain covenants that would restrict our operations. We may require additional capital beyond our currently forecasted amounts. Any such required additional capital may not be available on reasonable terms, if at all. If we are unable to obtain additional financing, we may be required to reduce the scope of, delay or eliminate some or all of our planned research, development and commercialization activities, which could harm our business.

Because of the numerous risks and uncertainties associated with plant construction and commercialization of *PHA Natural Plastics*, we are unable to estimate the exact amounts of our

capital and working capital requirements. We estimate our capital expenditures through completion of construction of the commercial manufacturing facility in 2008 to be in the range of $10 to $20 million to purchase property and equipment to support our pilot manufacturing and formulating *PHA Natural Plastics* to their final form for commercial sale and for research and development. Our future funding requirements will depend on many factors, including, but not limited to:

- continued funding and support payments from our key alliance agreement with ADM;
- the expenditures related to continued pilot production of *PHA Natural Plastics* during this period;
- costs related to the building of our formulation facility pursuant to the ADM alliance;
- successful commercialization commencement in 2008;
- our ability to scale our manufacturing operations to meet demand for *PHA Natural Plastics*;
- the revenue generated by sales of our *PHA Natural Plastics*;
- the expenses we incur in manufacturing, developing, marketing and selling our products;
- the costs and timing of additional regulatory approvals;
- the costs of filing, prosecuting, defending and enforcing any patent claims and other intellectual property rights;
- the rate of progress and cost of our product development activities;
- the requirements for the development and commercialization of *PHA Natural Plastics* produced in switchgrass and, perhaps, other crop platforms;
- the success of our research and development efforts;
- the emergence of competing or complementary technological developments;
- the terms and timing of any collaborative, licensing and other arrangements that we may establish; and
- the acquisition of businesses, products and technologies, although we currently have no commitments or agreements relating to any of these types of transactions.

Off-Balance Sheet Arrangement

As of June 30, 2006, we had no off-balance sheet arrangements as defined in Item 303(a)(4) of the Securities and Exchange Commission's Regulation S-K.

Contractual Obligations

Our future contractual obligations primarily for future rental payment obligations on the current office and lab space, including financing costs, at December 31, 2005 were as follows:

	Payment due by period				
Contractual Obligations	**Total**	**Less than 1 year**	**2-3 years**	**4-5 years**	**More than 5 years**
Operating lease obligations	$ 8,385	$ 988	$ 1,976	$ 1,977	$ 3,444
Capital lease obligations	$ 63	$ 63	$ 0	$ 0	$ 0
Purchase obligations	$ 250	$ 25	$ 50	$ 50	$ 125
Total	$ 8,698	$ 1,076	$ 2,026	$ 2,027	$ 3,569

Related Party Transactions

We have recorded license and royalty revenue from a related party and have an option grant to a related party. We also have various transactions with our alliance partner ADM, a related party. Additionally, the Company recorded as impairment charge on a related party investment. For a full description, see Note 8 to our notes to consolidated financial statements and the "Certain Relationships and Related Party Transactions."

Recent Accounting Pronouncements

In December 2004, the Financial Accounting Standards Board ("FASB") issued SFAS No. 123R, which replaces SFAS No. 123 and supersedes APB No. 25. SFAS No. 123R will require all share-based payments to employees, including grants of employee stock options, to be recognized in the statement of operations based on their fair values. The Company implemented SFAS No. 123R in the reporting period beginning January 1, 2006, which resulted in an increase to its stock compensation expense of $187,217 for the period ended June 30, 2006. The Company expects stock compensation expense to materially increase in future periods as a result of the adoption of this standard and future possible stock grant activity.

In April 2005, the FASB issued FASB Interpretation No. 47, *Accounting for Conditional Asset Retirement Obligations — an interpretation of FASB Statement No. 143* ("FIN No. 47"). FIN No. 47 expands on the accounting guidance of Statement of Financial Accounting Standards No. 143, *Accounting for Asset Retirement Obligations* ("SFAS No. 143"), providing clarification of the term, conditional asset retirement obligation, and guidelines for the timing of recording the obligation. The interpretation is effective for fiscal years ending after December 15, 2005. The Company adopted FIN No. 47 and has recorded a long-term liability for its asset retirement obligations of $66,218, and an associated non-current asset of $64,615, at December 31, 2005 which represents the contractual obligations associated with the potential removal of a leasehold addition constructed during 2005.

In May 2005, the FASB issued Statement of Financial Accounting Standards No. 154, *Accounting Changes and Error Corrections*, a replacement of APB Opinion No. 20, *Accounting Changes*, and FASB issued Statement of Financial Accounting Standards No. 3, *Reporting Accounting Changes in Interim Financial Statements* ("SFAS 154"). SFAS No. 154 requires retrospective application to prior period financial statements of changes in accounting principle, unless it is impracticable to determine either the period-specific effects or the cumulative effect of the change. This statement requires that retrospective application of a change in accounting principle be limited to the direct effects of a

change. SFAS 154 is effective for accounting changes and corrections of errors made in fiscal years beginning after December 15, 2005.

In July, 2006 the FASB issued Financial Accounting Standards Interpretation No. (FIN) 48, *Accounting for Uncertainty in Income Taxes*. FIN 48 clarifies the accounting for uncertainty in income taxes recognized in an enterprise's financial statements in accordance with SFAS No. 109. FIN 48 prescribes a recognition threshold and measurement attributable for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. FIN 48 also provides guidance on derecognition, classification, interest and penalties, accounting in interim periods, disclosures and transitions. FIN 48 is effective for fiscal years beginning after December 15, 2006. The adoption of this statement is not expected to have a material impact on our consolidated financial position or results of operations.

Quantitative and Qualitative Disclosures about Market Risk

We had unrestricted cash, cash equivalents, short-term investments and restricted cash totaling $16.4 million at June 30, 2006. The unrestricted cash and cash equivalents are held for working capital purposes. We do not enter into investments for trading or speculative purposes. Some of the securities in which we invest, however, may be subject to market risk. This means that a change in prevailing interest rates may cause the principal amount of the investment to fluctuate. To minimize this risk in the future, we intend to maintain our portfolio of cash equivalents and short-term investments in a variety of securities, including commercial paper, money market funds, debt securities and certificates of deposit. Due to the short-term nature of these investments, we believe that we do not have any material exposure to changes in the fair value of our investment portfolio as a result of changes in interest rates. As of June 30, 2006 all of our investments were held in money market accounts and short-term instruments.

BUSINESS

Overview

We are a biotechnology company that develops and plans to commercialize environmentally sustainable, economically attractive alternatives to petrochemical-based plastics, fuels and chemicals. Our strategy is to develop technology platforms that integrate advanced biotechnology with current industrial practice and to commercialize these platforms with industry leading strategic partners. Our first platform, which we will be commercializing through a strategic alliance with Archer Daniels Midland Company, or ADM, is a proprietary, large-scale microbial fermentation system for producing a versatile family of naturally occurring polymers known as polyhydroxyalkanoates, which we call *PHA Natural Plastics*. Our microbial fermentation system combines our proprietary engineered bacteria with corn sugar and other materials in a fermenter. The bacteria digests the corn sugar and produces *PHA Natural Plastics* inside of the bacteria. We separate the *PHA Natural Plastics* from the remainder of the bacteria and formulate the polymer into its final form for commercial sale. Through the alliance with ADM, we intend to sell these polymers as environmentally friendly, but functionally equivalent alternatives to petrochemical-based plastics in a wide range of commercial applications, including disposable goods, packaging, agricultural products, consumer goods and electronics. Also, as part of the strategic alliance with ADM, we have announced plans to build a 50,000 ton (100 million pounds) annual capacity commercial scale plant, or the Commercial Manufacturing Facility, that will produce biodegradable *PHA Natural Plastics* out of corn sugar, an abundant agriculturally-produced renewable resource. We are currently producing pre-commercial quantities of *PHA Natural Plastics* jointly with ADM at a pilot plant having a capacity of 8 tons per month. For a more detailed description of our relationship with ADM, see "Business — Fermentation Alliance with Archer Daniels Midland Company."

Our second technology platform, which is in an early stage, is a biomass biorefinery system using switchgrass to co-produce both *PHA Natural Plastics* and biomass feedstock for the production of ethanol or other biofuels. For this system, we are engineering switchgrass to produce *PHA Natural Plastics* in the leaf and stem of the plant. We intend to extract the polymer from switchgrass and use the remaining plant material as a biomass feedstock for the production of energy products including electricity and ethanol or other biofuels. Switchgrass is a commercially and ecologically attractive, non-food energy crop that is indigenous to North America and is generally considered to be a leading candidate for cellulose-derived production of ethanol and other biofuels. We believe that using switchgrass to co-produce these products can offer superior economic value and productivity as compared to single product systems that produce them individually. We have been working on our biomass biorefinery platform using switchgrass with support from the U.S. Department of Energy and the U.S. Department of Agriculture for several years, and we believe we are a scientific leader in this field. Our goals for this program are to have commercially viable switchgrass varieties in pilot field trials within four years and to establish strategic alliances with attractive partners to commercially exploit this platform.

As demonstrated by our first two technology platforms, we take an integrated systems approach to our technology development. We are focused on developing entire production systems from gene to end product as opposed to developing specific technologies (for example, gene sequencing, shuffling or directed evolution) or singular aspects of a product's production (for example, providing a key enzyme, catalyst or ingredient). We believe this systems approach optimizes manufacturing productivity and, when commercialized, will enable us to capture more economic value from any platform that we pursue. We have core capabilities in microbial genetics, fermentation process engineering, chemical engineering, polymer science, plant genetics and botanical science, and we have assembled these capabilities in a way that has allowed us to integrate biotechnology with chemical engineering and

industrial practice. We believe that our approach can be applied to other products and chemicals to help establish and grow an environmentally sustainable chemical industry.

We intend to explore the opportunities to apply our core capabilities in microbial engineering and plant transformation to develop biological routes to other chemicals and chemical intermediates and to research switchgrass varieties with improved traits for higher yields and greater ease of conversion to fuels such as ethanol.

To exploit our first technology platform, we are working with ADM to build the Commercial Manufacturing Facility in Clinton, Iowa, which we expect will commence commercial production of *PHA Natural Plastics* in 2008. The facility will produce *PHA Natural Plastics* which are highly versatile and range in properties from strong, moldable thermoplastics to highly elastic materials and soft, sticky compositions. They can be made as resins or as latex with excellent film-forming characteristics. These properties allow for a wide variety of commercial applications, offering an environmentally-friendly alternative to petroleum-derived synthetic materials which are not biodegradable. Through the strategic alliance with ADM we intend to initially position *PHA Natural Plastics* as premium priced specialty materials catering to customers who want to match the functionality of petrochemical-based plastic, but add the dimension of environmental responsibility to their products and brands.

With ADM we have initiated product and business development activities including pilot production of material at an 8 ton per month scale facility, working with potential customers, and initiation of qualification trials of our material for selected customer applications. We expect that our products will initially be sold to companies that are:

- establishing themselves as leaders of the emerging market trend toward environmentally responsible products and services;
- addressing current or anticipated regulatory pressure to shift to more sustainable industry; or
- selling products where biodegradability is a key functional requirement.

We own over 320 issued patents and 100 patent applications world wide, and have licensed an additional 60 issued patents and 32 patent applications world wide. These patents cover, among other things, the fundamental biotechnology needed to produce *PHA Natural Plastics* as well as compositions, processes and derived products.

Market Opportunity

Emerging Issues Surrounding Petrochemicals

The markets for petrochemical-based plastics, fuels and chemicals are among the largest in the global economy. While these markets encompass a diverse array of products, they are all derived from fossil fuels, particularly petroleum and natural gas. The prolonged broad use of these petrochemical-based products has created several economic, social and environmental issues, including plastic waste management and pollution, rising fossil fuel prices, energy security and climate change. These issues have resulted in rising levels of interest in product alternatives that are renewable, sustainable and not dependent on fossil fuels.

Plastic Waste Management and Pollution — According to the U.S. Environmental Protection Agency, 26.7 million tons of plastic solid waste was deposited into the U.S. municipal solid waste ("MSW") stream in 2003. Plastics are a rapidly growing contributor to U.S. MSW, having increased from less than 1% in 1960 to over 11% in 2003. In spite of intensive efforts to promote collection and recycling, only 1.4 million tons of plastic or 5.2% of plastic solid waste was recycled that year. While the balance is deposited in land fills and waste treatment facilities, many plastic items, particularly single use items such as bottles and caps, cups, lids and straws, and grocery bags become litter in the environment where they can become a significant problem. Plastic waste can create a significant monetary burden on state and local governments. This situation has led California to consider legislation banning the use of such plastic items or imposing significant taxes on them.

Moreover, current disposal methods may have adverse consequences to people's health, safety and the environment. Most wastes are placed in landfills or burned in incinerators. The burning process may produce dioxins and other hazardous substances that are released into the environment. In addition, landfills are filling up and requiring more land sources. Though attempts to slow the growth of landfills have been attempted through recycling legislation, it is still recognized that other solutions will need to be pursued to address the problem.

The threat that petrochemical-based plastics pose to the marine ecosystem has been well documented. Recent studies have noted that the world's oceans show increasing levels of persistent plastic particles of a size ingestible by marine creatures at the bottom of the food chain. Larger plastic items are also accumulating in large quantities in certain parts of the ocean and marine birds and mammals have been found killed by ingesting or getting tangled in plastic debris. Los Angeles County is now under court order to clean up the plastic waste in the Los Angeles River, at an estimated cost of $2-$3 billion.

The Rising Cost of Fossil Fuel — According to the U.S. Department of Energy's Report on International Energy Outlook dated July 2005, worldwide demand for oil is expected to rise by over 50% from 78 million barrels a day in 2002 to 119 million barrels a day in 2025. World oil prices have increased from an average of $36 per barrel in 2004 to over $70 per barrel during parts of 2006. Declining domestic production in the United States, higher demand in the developed world, rising demand in emerging markets, the increasing cost of drilling activities, underinvestment in infrastructure, and the increasing proportion of hydrocarbon reserves in politically unstable regions, are all stimulating an environment of rising and increasingly volatile oil and natural gas prices. The lack of substantial excess supply leaves the existing petrochemical market subject to the significant risk of supply disruptions or dramatically higher oil prices. According to the American Chemistry Council, approximately 9% of the oil and natural gas consumed in the United States is used in the production of plastics. Because fossil fuels are the primary feedstock for the plastics industry, polymer prices have also been experiencing increases in both level and volatility.

Energy Security — There is a growing view that developing alternatives to fossil fuel is a matter of national security. While the United States accounts for just 5% of the world's population and 2% of the world's oil reserves, the United States consumes 25% of world oil production. The majority of the U.S. oil needs are imported, with significant supplies coming from unstable parts of the world (the Middle East, Nigeria, Venezuela, and Russia), presenting risks to the economy and national security. Furthermore, oil is a finite resource, and there is growing evidence that the natural peak for production may occur within the next 20 years.

Climate Change — There is a growing scientific consensus that global climate change is occurring and that the rise in carbon dioxide emissions over the last 100 years has contributed to this situation. A significant source of CO_2 emissions comes from the use of fossil fuel. The broad acceptance of the

Kyoto protocol is evidence of the wide spread concern for global climate change in the industrialized world. In the United States, companies have started to account for carbon emissions, to prepare for carbon limits and credit trading schemes, and to seek solutions for reducing their carbon emission profile.

The Plastics Market

The plastics market is a large and global marketplace consisting of a broad range of polymer resins. The market includes several widely used, high volume commodity resins and numerous lower volume, higher performance resins targeting specialized end uses. Over the past forty years the plastics market has posted relatively consistent growth driven by a number of important fundamental factors including:

- Replacement of traditional materials (glass, steel, aluminum, paper) with lower weight, higher performance plastics;
- Increased health and safety requirements necessitating improved consumer packaging;
- Consumer demand for enhanced appearance and aesthetics which can be achieved with plastic materials; and
- Demand for more durable and functional materials in consumer durable and non durable products.

The growth in plastic use has generally been in line with overall economic growth as plastics have entered numerous new markets and product applications based on their functionality and ability to meet numerous user requirements. Plastics that perform well in extreme environment conditions and applications, offering good thermal and electrical insulating properties and corrosion resistance have been developed. By varying formulations and additive packages, plastic products can be produced in many shapes, sizes, colors and densities that satisfy specific application needs. Consequently, plastics are sold into a highly diverse set of markets including: electronics, automotive, furnishings, building and construction, textiles, packaging, and consumer products.

There are many different categories of plastics sold into the market today, but they are generally categorized into two broad groups: commodity polymers and specialty polymers. The most commonly known commodity polymers include polyethylene, polypropylene, polystyrene, PET and polyvinyl chloride. The commodity polymers are high volume resins which tend to be lower value added materials produced in volumes of tens of billions of pounds per year. According to SRI Consulting, in 2004, the total global consumption of commodity grade plastics constituted approximately 90% of the total plastics market on a volume basis and amounted to over 260 billion pounds. Specialty polymers fill niches within the broader plastics market by offering unique and tailored functionalities and characteristics that cannot be addressed by the commodity classes. In 2004 this category of plastic constituted just over ten percent of the total plastic market on a volume basis and amounted to over 35 billion pounds of consumed material. Some of the more widely known specialty polymers include polycarbonate, ABS (Acrylonitrile Butadiene Styrene), nylon and thermoplastic elastomers. Specialty polymer pricing varies widely based on the type of resin and the performance characteristics offered by the material. However, these resins are typically priced at a premium to commodity plastics and, according to Plastics Technology, were selling at values starting above $0.80 per pound and reaching as high, in some cases, as $3.60 per pound in June 2006. In contrast, the commodity grade resins were generally priced at less than $1.00 per pound at that time. Pricing has been volatile due to fluctuations in raw materials costs and supply/demand characteristics.

Fuels and Biofuels Markets

According to the U.S. Department of Energy's Report on International Energy Outlook July 2005, worldwide demand for oil is expected to rise by over 50% from 78 million barrels a day in 2002 to 119 million barrels a day in 2025. The issues surrounding petrochemicals discussed above have given rise to increasing demand for fuels produced from renewable sources. Biofuels such as ethanol and biodiesel are produced from renewable sources such as corn, sugar cane and rapeseed. In 2005, a record 4 billion gallons of ethanol was produced in the United States, an increase of 17% from 2004 and 126% since 2001. Even so, ethanol represented less than 3% of 140 billion gallons of gasoline consumed in the United States in 2005. In August 2005, the United States enacted the Energy Policy Act of 2005, creating a national Renewable Fuels Standard (RFS) to encourage increased usage of ethanol. With the enactment of the nationwide RFS, the United States has made a commitment to renewable fuels, such as ethanol and biodiesel. The Act establishes a baseline for renewable fuel use, beginning with 4 billion gallons per year in 2006 and expanding to 7.5 billion gallons by 2012. The vast majority of the renewable fuel used is expected to be ethanol, necessitating a doubling of the domestic ethanol industry in the next 6 years. In addition to rising gasoline and oil prices, other factors will contribute to increased demand for biofuels. Many states are considering legislation to capitalize on the environmental and energy security benefits of renewable fuels by requiring their use.

While ethanol is typically produced from starch contained in grains such as corn and grain sorghum, it can also be produced from cellulose. Cellulose is the main component of plant cell walls and is the most common organic compound on earth. The production of ethanol from corn is a mature technology that is not likely to see significant reductions in production cost. The ability to produce ethanol from low-cost biomass will be an important factor in making it competitive as a gasoline additive. The Energy Policy Act 2005 provides that beginning in 2013, a minimum of 250 million gallons a year of cellulosic derived ethanol must be included in the RFS. It also creates grant and loan guarantee programs for cellulose ethanol.

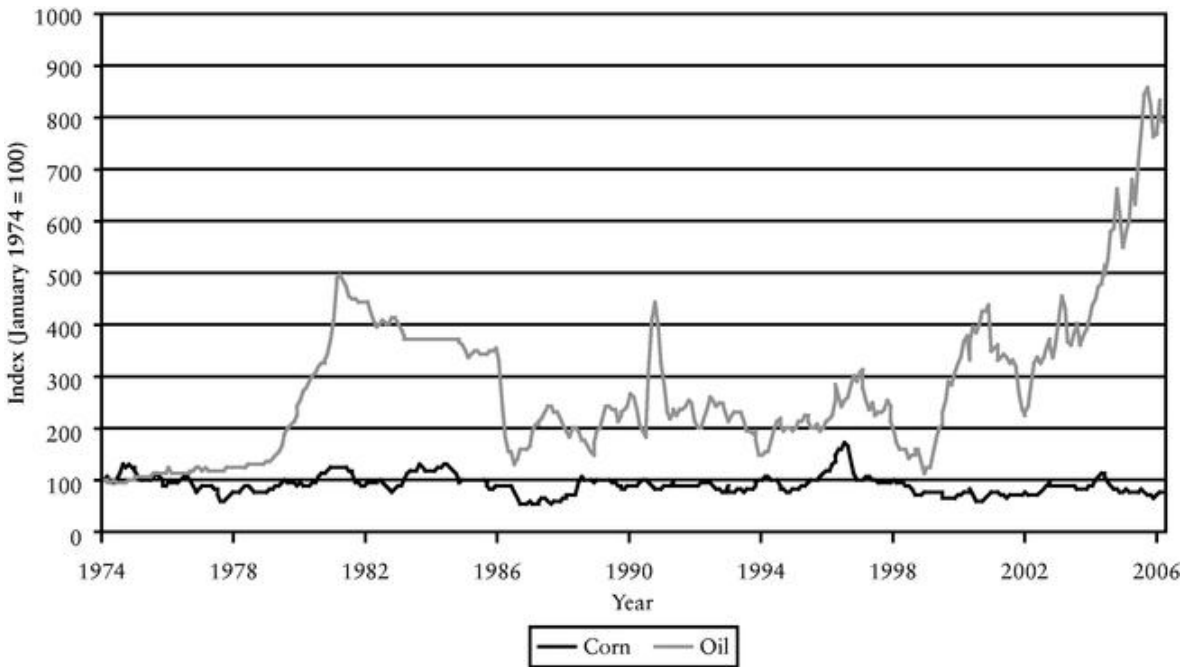
The Metabolix Solution

We have developed and plan to commercialize an economically attractive, environmentally sustainable alternative to petrochemical-based plastics that is both biodegradable and functionally equivalent to traditional petrochemical-based plastics. The use of a renewable agricultural feedstock as a manufacturing input and the biodegradability of *PHA Natural Plastics* can potentially address many of the issues associated with petrochemical-based products. In aerobic conditions, our *PHA Natural Plastics* degrade into water and carbon dioxide.

A Solution to Plastic Waste and Pollution from Persistent Plastics — *PHA Natural Plastics* are biodegradable under a wide variety of conditions and therefore offer new options for addressing the burdens of traditional plastic solid waste on the municipal waste stream and the dangers posed within the marine ecosystem. For example, *PHA Natural Plastics* will decompose in landfills where air, moisture and bacteria are present. They will also rapidly decompose in the biologically intense environment of a waste treatment facility and will degrade when flushed into household septic systems. They are recyclable and can be cleanly incinerated, and can also be degraded in industrial or backyard composting environments. *PHA Natural Plastics* will also biodegrade in aquatic environments, and so offer a solution to the hazard of persistent plastics in wetland, river, coastal, and ocean ecosystems. It is critical to note, however, that *PHA Natural Plastics* are functionally durable and do not spontaneously degrade in cold, hot or wet conditions.

Leveraging the Stability of Agricultural Commodity Pricing — Our use of corn sugar as a feedstock to produce *PHA Natural Plastics* reduces the reliance on fossil fuel as the primary input source, thus significantly addressing the effects of the increasing cost of fossil fuel. The prices of agricultural commodities, and corn in particular, have been relatively stable during the past few decades compared to the price of fossil fuel, which has significantly increased over the same period. We believe that polymers based on agricultural feedstocks, such as *PHA Natural Plastics*, may experience a more predictable cost structure and may become competitive to traditional petrochemical-based polymers over time. The chart below shows that over the past 32 years, the price of corn has remained relatively stable while the price of oil has been volatile and has risen by approximately eight times. Furthermore, even if pricing dynamics for corn and corn sugar change from past experience, we believe the volatility of oil prices will provide an incentive to diversify feedstocks.

Comparison of Oil and Corn Prices (January 1974 to March 2006)



Sources: Monthly Crude Oil Prices, January 1974 to March 2006; Energy Information Administration
Monthly Corn for Grain Prices, January 1974 to March 2006; USDA National Agricultural Statistic Service

Reducing Dependency on Foreign Energy — We believe the widespread use of our *PHA Natural Plastics* can help lower the United States' exposure to oil imported from politically unstable countries. In addition, we believe that the PHA-producing switchgrass which we intend to develop offers the United States an additional opportunity in biofuels production, which currently is focused primarily on corn-based ethanol. We estimate that an annual crop of 159 million tons of PHA-producing switchgrass could produce fuel equivalent to one million barrels of oil per day, approximately 5% of current U.S. oil consumption, as well as 15 million tons of polymer per year.

Decreasing Carbon Dioxide Emissions — We believe that the widespread use of our *PHA Natural Plastics* can not only decrease the use of fossil fuel but also can reduce the emission of carbon dioxide into the atmosphere. While the production of *PHA Natural Plastics* produces carbon dioxide, both the agricultural production of corn feedstock for microbial fermentation and the direct production of *PHA Natural Plastics* in plants such as switchgrass have the added benefit of removing carbon dioxide from

the environment through photosynthesis. While fermentation processes do require electricity which may be generated by carbon dioxide emitting sources, the increasing availability of clean power (such as biomass, wind or solar power) is an attractive alternative to employ as the business develops.

History of *PHA Natural Plastics* and Formation of Metabolix

Polymers are found in nature in a wide range of organisms including bacteria, plants and in some animals. Polyhydroxyalkanoates, or PHAs, which we call *PHA Natural Plastics*, also naturally occur within certain organisms, including bacteria. PHA was first isolated from *Bacillus megaterium* by Maurice Lemoigne at the Institute Pasteur in 1925. Lemoigne determined that these bacteria use PHA as a store of energy and consume it for food in times of famine. It is this characteristic that gives PHA its biodegradability in the environment.

Though PHA polymers are found in nature, their production in wild-type bacterial strains is inefficient and costly for commercial purposes. In 1981, Imperial Chemical Industries, or ICI, developed a controlled fermentation process using a wild-type bacterial strain to produce a PHA copolymer that they introduced under the trade name Biopol. While a handful of applications were developed for Biopol, the cost to produce the polymer was prohibitively high using the naturally occurring bacterial strains that were available at the time. Commercialization was not possible, but the Biopol assets remained largely intact and were eventually sold to Monsanto, Inc.

By the late 1980s, tools for genetic engineering had advanced substantially. Bacteria were already being genetically designed to produce various products, such as protein drugs. At the Massachusetts Institute of Technology, Dr. Oliver Peoples, our Chief Scientific Officer, working in the lab of Dr. Anthony Sinskey, a member of our Board of Directors, identified the key genes required for the biosynthesis of *PHA Natural Plastics* and invented and patented the first transgenic systems for their production. The use of genetically engineered production organisms, instead of wild-type strains, broadly expanded the number of compositions that could be made and enabled the tight level of control and high efficiency and productivity that are required for cost-effective industrial manufacturing.

We were formed in 1992 to exploit these discoveries. In order to fully capture the opportunity, we also acquired Monsanto's patent estate which relates to *PHA Natural Plastics*, which included the Biopol assets, in 2001. We have since fully developed an integrated manufacturing process including both transgenic strains and a proprietary recovery process that have been demonstrated to work in commercial equipment.

Business Strategy

Our goal is to be the leader in discovering, developing and commercializing economically attractive, environmentally sustainable alternatives to petrochemical-based plastics, fuels and chemicals. To achieve this goal, we are building a portfolio of programs that we believe will provide not only an attractive slate of commercial opportunities but also will generate leading and competitive intellectual property positions in the field. Key elements of our strategy include:

Establishing Production of PHA Natural Plastics — We have put into operation an 8 ton per month capacity pilot manufacturing facility to produce *PHA Natural Plastics* to seed the market, and as part of our strategic alliance, ADM and Metabolix have announced plans to build a 50,000 ton annual capacity Commercial Manufacturing Facility to produce *PHA Natural Plastics*. The ADM site in Clinton, Iowa is being designed, engineered and is expected to be built to accommodate significant

expansion beyond its initial capacity. We anticipate that commercial production will commence in 2008.

Market Positioning and Sales — We are building a marketing and sales team to educate and develop our prospective customer base. This team will focus on positioning *PHA Natural Plastics* as premium priced, specialty materials that are environmentally attractive alternatives to petrochemical-based plastics. We intend to build a brand around *PHA Natural Plastics* consistent with this positioning and will seek to co-brand *PHA Natural Plastics* with our customers. The focus of this effort will be to build a pipeline of approximately 100 customer prospects across a range of applications, and presently we have ongoing relationships with over 30 customer prospects for approximately 50 different applications. Our goal is to dedicate a substantial amount of our commercial production capacity to these customers before the Commercial Manufacturing Facility commences operations.

Continuing Microbial Research and Process Development — We have identified opportunities to improve our production strains and our fermentation and recovery processes. We believe that significant reductions in the cost to manufacture *PHA Natural Plastics* can occur as we successfully exploit these opportunities. We also believe that as we acquire more experience with manufacturing our products at commercial scale, we will identify further improvements we can make.

Developing Applications for PHA Natural Plastics — We have developed formulations of our polymer suitable for injection molding, casting film and sheet, thermoforming and paper coating. These grades will be refined further to tailor them for specific customer performance requirements and additional grades will be developed for other applications. In addition, we will develop new formulations and processing protocols to extend the applications into which we can sell our products. Specific areas of work will include: foam, blown film, blow molded bottles, stretch wrap and fiber.

Advancing Switchgrass Research and Other Plant Strains — We believe that we are pioneering the technical process of introducing traits into switchgrass for the production of *PHA Natural Plastics* directly in the plant. Our switchgrass platform is currently in the research phase. In order to achieve a commercially attractive system, we intend to further improve our plant strains to achieve high levels of *PHA Natural Plastics* content by weight. We also intend to research introducing traits to increase crop yields in terms of tons per acre, and enhance biomass processability for the production of ethanol.

We intend to explore additional crop varieties that offer attractive commercial opportunities. These may include rapeseed, which is suitable for northern climates and can co-produce *PHA Natural Plastics* along with bio-diesel feedstock, and sugar cane, which is suitable for tropical climates and can co-produce *PHA Natural Plastics* along with ethanol feedstock.

Partnering our Switchgrass Program — As we have done with ADM for our microbial fermentation platform, we will seek to leverage our technology and establish strategic partnerships with one or more industry leading companies that can provide access to resources and infrastructure valuable for commercializing this platform. At the same time, we will seek an arrangement that allows us to retain an attractive share of the economic value of the project. In order to fund continued development, we intend to actively pursue grants from the government for our switchgrass program.

Building Governmental Awareness of Our Approach — Policy makers are seeking opportunities to reduce dependence on imported fossil fuel, decrease carbon dioxide emission and address landfill and pollution issues. We intend to continue to build our governmental affairs initiatives. We believe that

higher awareness of our solution may result in opportunities to obtain additional funding or legislative support that can facilitate and accelerate the adoption of our products.

Extending Our Technology to Sustainable Production of Large Volume Chemicals and Intermediates — Our technical capabilities can be applied to produce a number of important commercial chemicals and chemical intermediates through biological conversion of sustainable feedstocks such as sugars.

Furthering our Leading and Competitive Intellectual Property Position — We have built a patent estate around our platform technologies and a variety of inventions relevant to the commercialization of *PHA Natural Plastics*. We are extending this patent estate within our core business as well as to other commercial opportunities in the area of bio-based plastics, fuels and chemicals. Some of the areas in which we may seek to establish leading and competitive intellectual property include:

- intermediates and chemicals produced by microbial fermentation;
- fermentation products for nutraceutical applications;
- alternate plant varieties to co-produce *PHA Natural Plastics* and fuels (ethanol and biodiesel); and
- switchgrass strains that optimize crop yields and processing traits for conversion to fuels.

Fermentation Alliance with Archer Daniels Midland Company

On November 3, 2004, we entered into a strategic alliance with ADM Polymer Corporation, a wholly-owned subsidiary of ADM, one of the largest agricultural processors in the world. The strategic alliance has three phases, which are described below and include: (i) a Technology Alliance Phase, (ii) a Commercial Alliance Phase and (iii) a Joint Venture Phase.

Technology Alliance Phase — The purpose of this phase, which has been achieved, was to determine whether our process for fermenting and recovering *PHA Natural Plastics* could achieve certain performance benchmarks in commercial scale equipment and to prepare a master plan and preliminary budget for the construction of the Commercial Manufacturing Facility. In November of 2004, we received a $3.0 million upfront payment from ADM, and in May 2006, we received $2.0 million in milestone payments associated with the achievement of Technology Alliance goals.

Commercial Alliance Phase — The purpose of this phase is to build the Commercial Manufacturing Facility, to market and sell *PHA Natural Plastics* through a separate legal entity owned equally by each of Metabolix and ADM Polymer, which we refer to as the Joint Sales Company, to make arrangements for the financing of the operation and to allocate distributions of cash flow. We anticipate that the Joint Sales Company will offer *PHA Natural Plastics* for sale in pellet form (for further processing and re-sale as finished goods or components by customers) and in other forms as may be determined by the Joint Sales Company (see "Product Applications").

On July 12, 2006, ADM exercised its option to enter into the Commercial Alliance. The Commercial Alliance Phase will last until the expiration of all patents relating to *PHA Natural Plastics* produced through fermenation (including patents licensed by us to the Joint Sales Company and patents claiming

inventions made during the strategic alliance with ADM Polymer), unless we and ADM convert the strategic alliance into a joint venture (as described below) or unless either party terminates the strategic alliance. During the Commercial Alliance Phase, ADM will take responsibility for and will finance construction of the Commercial Manufacturing Facility, which it will own and contract on a dedicated basis to the Joint Sales Company. In addition, ADM will finance the working capital requirements of the Joint Sales Company. We are responsible for formulation operations and investing in formulation equipment, and we will take responsibility for continuing research and development. In addition, we will lead the sales and marketing efforts on behalf of the Joint Sales Company until completion of the construction of the Commercial Manufacturing Facility. At that time, the Joint Sales Company will assume control of such activities. The Joint Sales Company will make up to twelve quarterly payments of $1.575 million to us to support these activities during the construction of the Commercial Manufacturing Facility. The first two such payments totaling $3.15 million were received in July 2006. Subsequent quarterly payments will become due and payable on the first business day of each successive calendar quarter during the construction of the Commercial Manufacturing Facility. In the event construction is completed and sale of commercial product commences prior to the Joint Sales Company making all twelve such payments, the quarterly payments will cease, and the Joint Sales Company will pay us a lump sum equal to the number of remaining unpaid payments multiplied by $250,000.

Upon the commencement of commercial sales, the Joint Sales Company will pay royalties to us for all *PHA Natural Plastic* sold by the Joint Sales Company. The Joint Sales Company will also pay manufacturing fees to ADM for production of *PHA Natural Plastics* and will pay formulation fees to us for certain formulation services. The Joint Sales Company will compensate ADM and us for services that we each may provide to the Joint Sales Company under separate service agreements. For example, we anticipate that we may provide research, development, marketing and sales services to the Joint Sales Company under such a service agreement.

ADM will construct, finance, own and operate the Commercial Manufacturing Facility through a manufacturing agreement with the Joint Sales Company. Even though the Joint Sales Company is a separate legal entity owned equally by each of Metabolix and ADM Polymer, ADM Polymer will disproportionately fund the activities of the Joint Sales Company subject to certain limitations. In order to rebalance the respective investments made by the parties, a preferential distribution of cash flow will be used, whereby all profits, after payment of all royalties, reimbursements and fees, from the Joint Sales Company will be distributed to ADM until ADM's disproportionate investment in the Joint Sales Company, and the costs of constructing the Commercial Manufacturing Facility, have been returned to ADM. Once ADM has recouped such amounts, the profits of the Joint Sales Company shall be distributed in equal amounts to the parties.

Our agreements with ADM limit ADM's and our right to work with other parties, or alone, in developing or commercializing *PHA Natural Plastics* through fermentation. These agreements do not, however, limit our right to develop, manufacture or sell *PHA Natural Plastics* produced through plants such as switchgrass (rather than through fermentation) outside of the Joint Sales Company.

These agreements also include detailed provisions setting out the rights and obligations of the parties in the event of a termination of the Commercial Alliance. These provisions include the right of the parties to terminate the Commercial Alliance upon a material default of a material obligation by the other party after a notice and cure period has expired. The parties are also permitted, under limited circumstances, to terminate the Commercial Alliance if a change in circumstances that is not reasonably within the control of a party makes the anticipated financial return from the project

inadequate or too uncertain. ADM and we have agreed that the following are examples of a change in circumstances beyond the reasonable control of ADM:

- a third party challenge to the validity or enforceability of our technology or patent rights relating to our fermentation program;
- the emergence of a third party's superior technology;
- an increase in the projected cost required to contruct the Commercial Manufacturing Facility or to manufacture *PHA Natural Plastics;* and
- a decrease in the projected sales volume of *PHA Natural Plastics.*

The agreement does not provide examples of a change in circumstances beyond our reasonable control. Finally, the parties have specific obligations to fulfill in the event of termination or if they file for bankruptcy protection. The obligations on termination are generally structured to permit the non-breaching party (in the event the strategic alliance is terminated due to a breach of the agreements) to continue to develop the business established by the Joint Sales Company. For example, on such a termination due to a breach by us, ADM would be permitted to continue to produce and sell *PHA Natural Plastics* (generally in limited quantities and subject to a royalty to us) and we would be required to perform formulation services for ADM for a period of time following the termination. Similarly, on a termination due to a breach by ADM, we would be permitted to continue to produce and sell *PHA Natural Platistics* and ADM would be required to perform fermentation services for us for a period of time following the termination.

Joint Venture Phase — When market demand exceeds the capacity of the Commercial Manufacturing Facility and the initial license granted by us, ADM has the option to form a new entity owned equally by each of Metabolix and ADM Polymer with us to build additional capacity and expand the commercial operation beyond the limits of the initial production capacity. Under certain circumstances, if ADM does not exercise its option, then Metabolix would have an opportunity to manufacture and sell *PHA Natural Plastics* outside of the Commercial Alliance.

License Agreement with Massachusetts Institute of Technology

On July 15, 1993 we entered into an exclusive license agreement with Massachusetts Institute of Technology. The license covered intellectual property rights claiming inventions relating to our core genetic engineering technology as described in several patent applications and invention disclosures. The MIT license has been amended three times to add or subtract specific patent applications to the rights licensed to us. The MIT license was amended a fourth time to clarify certain rights relating to the right to grant sublicenses.

The MIT license is a world wide exclusive license. The license does not expire until the expiration of the last patent within the licensed patent rights. Under the license, we are permitted to perform all services and manufacture and sell all products that are claimed by the patents licensed to us under the agreement. The license is subject to termination by either party upon an uncured material breach by the other party. On termination of the MIT license, all obligations of the parties on the date of termination remain in effect and all other rights and licenses under the agreement terminate. Under the agreement, we have an obligation to use diligent efforts to develop and market products that are subject to the license. Under the license, we paid a license issue fee to MIT and we are obligated to

pay an annual license fee to MIT if annual royalties are less than a specified amount. Under the license we are required to pay a royalty to MIT based on net sales of products or services covered by a patent that is subject to the license and to share proceeds received from third parties in connection with the grant of a sublicense of rights granted under the license. We believe that the economic terms of the MIT agreement are substantially consistent with the economic terms for early-stage university license deals.

The MIT license contains other terms that are customary for university licenses, including without limitation, provisions relating to reporting requirements, patent prosecution, and indemnification.

Metabolix *PHA Natural Plastics* Target Markets

We believe *PHA Natural Plastics* from fermentation is the first of several attractive opportunities we will pursue to meet the world's plastic, fuel and chemical needs through the biological conversion of renewable and sustainable agricultural feedstocks. We believe *PHA Natural Plastics* possess comparable functional properties to petrochemical polymers serving applications that cover as much as half of the global polymer market. Our strategy is to enter this market with premium priced products that address specialized segments that can be served competitively by *PHA Natural Plastics*' distinctive properties.

Market Segments

We initially intend to target three market segments: branded products, regulated markets and products requiring biodegradability as a key functional property.

Branded Products — The market for branded products and services with attributes of environmental responsibility and sustainability is an emerging business opportunity. We intend to brand *PHA Natural Plastics* and we expect that by co-branding with products that use our *PHA Natural Plastics* we and our customers will be able to jointly promote environmental sustainability. Numerous companies have begun to position themselves and their products as more environmentally responsible. Some recent and well publicized examples of this include:

- General Electric's "Ecomagination" initiative;
- Wal-Mart's 21st Century Leadership environmental initiative;
- Toyota's success with hybrid gasoline electric vehicles;
- General Motor's "Flex-Fuel" vehicle initiative;
- Hewlett Packard's decision to cease using plastics flame retarded with halogen-containing compounds; and
- Whole Foods Markets purchase of renewable energy certificates (REC) sufficient to be the first Fortune 500 company to be entirely green-powered.

We believe that producers are positioning products as environmentally responsible or superior to gain a competitive advantage as producers believe consumer preferences are shifting. We believe the use of

PHA Natural Plastics in branded products either directly or for packaging will facilitate and enhance our customers' efforts to exploit this trend.

Regulated Markets — Regulatory action, such as bans, taxes, subsidies, mandates and initiatives, to encourage substitution of renewable and sustainable materials for incumbents is rising. Examples of this can be found in the following jurisdictions:

- Taiwan and India have placed outright bans on plastic bags.
- Ireland has placed a 15 Euro cent tariff on plastic bags.
- Germany has a 1.30 Euro/kg levy on plastic packaging that is non-biodegradable. In addition, Europe requires original equipment manufacturers to take back certain products at the end of life and manage their disposal.
- In the United States, the federal government has been advancing bio-based material purchasing initiatives by government entities.
- In California, legislative action has been emerging to levy taxes on the use of disposable packaging.
- The U.S. government recently announced $150 million dollars of funding within the 2007 budget to build biomass biorefineries.

In the geographic segments where regulatory changes occur, our *PHA Natural Plastics* can meet requirements for bio-based content or biodegradability that favor *PHA Natural Plastics* over conventional petrochemical-based plastics. In addition, producers are now anticipating regulatory change and are initiating programs to introduce sustainable materials into their products prior to or in an attempt to forestall implementation of such regulation. We believe that as awareness of our practical and affordable alternative grows, the pace of regulatory change may accelerate.

Products Requiring Biodegradability — There are a number of applications for which biodegradability will be a key functional property. These markets consist largely of agricultural and construction applications, where the employment of implements and materials that decay naturally after use can increase efficiency, simplify cleanup and reduce disposal cost. While there are biodegradable offerings on the market today, we do not believe that existing products provide both the robust performance in use combined with the degradation in a variety of conditions that *PHA Natural Plastics* offer. For example, some materials break down quite rapidly when exposed to water and would not be durable enough if used in agricultural applications. Other materials will only degrade in hot compost environments. *PHA Natural Plastics*, however, can be engineered to provide months of use in the environment and then be plowed under the soil or left on-site to decompose over time in normal soil conditions where bacteria are present. Potential applications in this segment include:

- Mulch film;
- Erosion control netting;
- Single season irrigation devices;

- Stakes; and
- Plant pots.

Product Applications

To approach these market segments, we have developed four initial classes of functional formulations: injection molding, casting film and sheet, thermoforming and paper coating. We have begun product and business development activities, including working with potential customers to determine their specific needs, and we have begun the process of qualifying our material for a myriad of customer applications. Presently, we have ongoing relationships with over 30 customer prospects for approximately 50 different applications. We are actively developing additional customer prospects to qualify our products in the following application areas:

Segment	Examples of Application	
Single Use Disposables	• Hot cups (paper and plastic) • Lids • Dinnerware	• Single serve coffee packs • Utensils • Golf tees
Packaging	• Caps and closures • Food wrap • Detergent sachets • Food jars and tubs • Beverage cartons	• Cosmetics cases • Stretch wrap • Bags • Foam
Agriculture & Erosion Control	• Degradable stakes • Degradable erosion control netting	• Degradable mulch film • Degradable plant pots
Consumer Products	• Personal hygiene products	• Flushable household products
Electronics	• Cell phone housings	

To serve these market opportunities, we have developed formulations of *PHA Natural Plastics* that can be processed in conventional petrochemical-based plastics processing equipment for injection molding, casting film and sheet, thermoforming and paper coating. We have demonstrated our materials in prototyping trials internally and in some cases shared them with our customer prospects. We also have plans to develop additional formulations to address the market segments above. We are presently working on a $1.0 million contract awarded by the U.S. Department of Defense to develop formulations suitable for packaging foam and stretch pallet wrap. We also have plans to explore formulations for producing blown film, blow molded bottles and fiber.

Marketing and Sales

Initially, we will be leading the marketing and sales effort on behalf of the Joint Sales Company. Sales of *PHA Natural Plastics* will be highly technical in nature. Our expertise in polymer science combined with our familiarity with the properties of the PHA family of polymers will be essential to developing resin grades that meet specific customer requirements. We will also conduct joint marketing and sales efforts with ADM through the Joint Sales Company. ADM is a world leader in agricultural processing and fermentation technology and is one of the world's largest processors of corn, soybeans, wheat and

cocoa. ADM is also a leader in the production of ethanol and corn sweeteners. With a strong existing customer base, we expect that ADM will provide sales prospects for the alliance.

It is our goal to have established customer relationships to dedicate a substantial portion of the Commercial Manufacturing Facility's initial output before production starts in 2008. To this end, we are expanding our product development team and commencing efforts in applications development, pilot manufacturing, marketing and sales. At present, we have ongoing efforts with over 30 different customers for 50 different applications. We intend to build a pipeline of approximately 100 customer projects to maximize our production and marketing opportunities to fill the plant to capacity.

We are currently focusing our efforts on applications in the areas of injection molding, casting film and sheet, thermoforming and paper coating. We have developed prototype grades for each of these applications and have delivered small quantities of material to customer prospects for initial testing. If such tests are successful, we would expect some of our customer prospects to evaluate additional volumes of *PHA Natural Plastics* in larger scale product qualification trials and test marketing, which in turn may lead to product adoption and sales.

We intend to brand the *PHA Natural Plastics* and, where possible, to co-brand the materials with products that incorporate them. Prospective buyers of *PHA Natural Plastics* are seeking not only the functional properties they provide but also the progress toward sustainability, renewability and environmental responsibility they confer upon the products made or packaged with them. This will enable our customers to convey environmental responsibility to their end consumers by referencing our brand with their product. We have an ongoing effort to design branding ideas and conduct market research on them.

PHA Natural Plastics will initially be positioned as specialty materials that serve both a functional need (which petrochemical polymers may satisfy) and a social need (which petrochemical polymers cannot address). Consequently, we expect the Joint Sales Company to price *PHA Natural Plastics* as specialty products at a premium to the prices of large volume commodity polymers but comparable to a number of specialty polymers. The business model for positioning products with an environmental benefit at higher price points is increasingly prevalent with examples in several different industries ranging from retail food stores to gasoline-electric hybrid automobiles.

Through the strategic alliance with ADM, we intend to sell *PHA Natural Plastics* into markets around the globe. We intend to establish marketing and sales efforts either directly or through regional alliances with local firms in the Far East and Europe. We will also consider selected market development arrangements in certain discrete segments (fiber, for example) where there may be advantages to working exclusively with a market leader in that segment.

Our Technology and Product Development Process

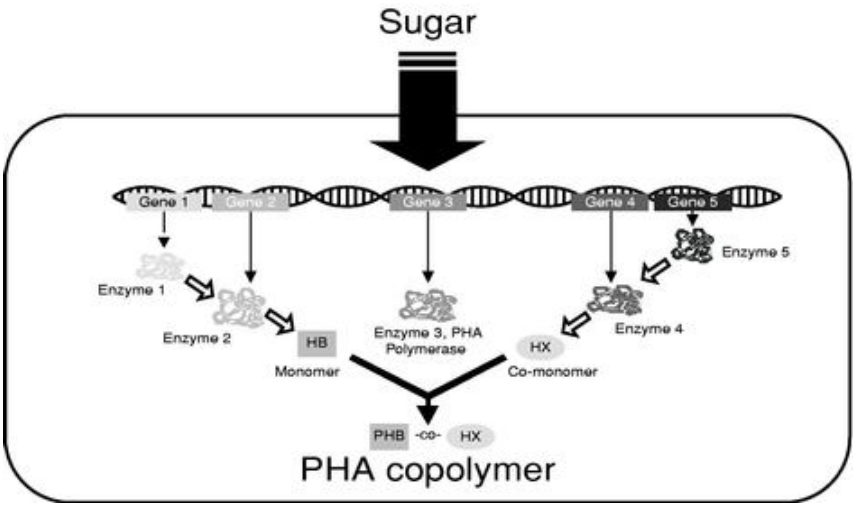
We believe we have one of the most advanced capabilities to perform metabolic pathway engineering in the world and that we are skilled in our ability to integrate the biotechnology we develop into large scale industrial production processes. We believe that our advanced capabilities will allow us to:

- design and engineer living organisms to perform a series of chemical reactions that convert a feedstock to an end product in a highly efficient and reliable manner;

- incorporate that organism into a reliable, large scale industrial process; and

- tailor our end product from that process to suit our customers' needs.

Biology and Genetic Engineering — Today, biotechnology is used extensively for the production of protein-based drugs and enzymes. To produce these materials, a new gene is inserted into the DNA of a host organism, usually *e-coli* bacteria, the workhorse of the pharmaceutical industry. When that gene is expressed (i.e., turned on) the cell will produce the desired protein that is associated with the inserted gene. We have taken this process several steps further. In order to convert sugar to a polymer, the sugar molecule must undergo not one but several chemical alterations to turn it into a monomer, the precursor to plastic. To execute all these reactions, we have encoded not one but several genes into the host DNA to produce each of the enzyme catalysts necessary for each step in the process. These genes come from multiple microbial sources and are selected for optimum performance using proprietary screening technology that we have developed. In addition to producing the monomer from sugar, depending on the kind of polymer desired, another feedstock may also be processed through a series of steps, requiring different genes and enzymes, to produce a different monomer. The two monomers are then joined together, or polymerized, by yet one more genetically produced enzyme. These are complex multi-gene systems, and we integrate them directly into the genome of the organism to enhance its stability under what are rigorous operating conditions. Our process creates a complete biological system where all of the reactions to convert feedstock into polymer take place within the cell, essentially creating a biofactory. So, while most biotechnology products today involve identifying a single gene to produce one protein, we have identified and chromosomally inserted a series of genes to produce several proteins and have done so in such a way that they are expressed in a concerted and harmonious fashion to execute the right reactions at the right times in a reliable way. We are not aware of other efforts in this field that have executed metabolic pathway engineering to this level of sophistication and with the level of success that we have experienced. The illustration below shows a schematic of our multi-gene system to produce *PHA Natural Plastics*.



Industrial Fermentation Process Engineering — We also have important capabilities in industrial fermentation process engineering that we incorporate into our technology development process. Simply engineering a bacterial strain to convert sugar to polymer is insufficient because the conditions present in a laboratory bench scale experiment are considerably different than those present in an industrial scale manufacturing operation. Not only are there variable operating conditions (such as temperature, pressure, oxygenation and distribution of nutrients), but also the microbe must grow and uniformly multiply over 400 billion times to fill up a 100,000 gallon industrial reactor. We have tightly integrated our fermentation scale-up research capabilities with our genetic engineering capabilities to create a feedback loop where data from fermentation experiments can readily influence microbial design and where microbial engineering approaches can guide the fermentation group to structure the optimal protocols (recipes) for running fermentations.

Chemical Process Engineering — The third element of our technology and product development process involves sophisticated process chemistry and chemical engineering to separate the polymer from the biological cell material once fermentation is complete. We have a dedicated team that has developed a proprietary process for *PHA Natural Plastics* recovery at the industrial scale. We have invented a process that achieves a high level of purity without damaging the polymer and that we believe can be implemented cost effectively at commercial scale. In work recently completed with ADM, we successfully demonstrated our ability to efficiently isolate polymer from the cell debris, clean and dry the polymer and prepare it for processing into pellets, its final form.

Polymer Science and Product Development — The final element of our product development involves tailoring the polymer to provide the product properties and meet the processing requirements for specific customer applications. Typically, this work involves establishing which combination and ratio of comonomers is best suited for the target application, modifying and blending individual polymer grades, blending the pure polymer with additives such as nucleating agents, plasticizers, fillers and other materials to optimize performance properties, and finally designing processing protocols to successfully convert the material to its target form. When the composition and blend is right, the material will flow, form, crystallize or otherwise process into its end state with the customer's desired properties at an attractive conversion cost. Our product development team has considerable expertise in polymer science and to date has developed blends suitable for injection molding, casting film and sheet, thermoforming and paper coating. In the future, we have plans to create formulations for blown film, blow molding, foam and fiber.

In sum, we have successfully integrated capabilities in biology, genetics, fermentation process engineering, chemical engineering and polymer science. We believe this integrated set of capabilities will be a source of competitive advantage. These same capabilities are being applied to our switchgrass program where we intend to develop an industrial system to produce not only *PHA Natural Plastics* but also cost advantaged biomass for ethanol production. We believe our capabilities can also be applied successfully to other bio-based plastics, fuels and chemicals projects.

Research & Development

We have a long standing and ongoing research and development program that is designed to exploit our systems approach to industrial biotechnology. While some biotechnology companies develop platform technologies (genomics, DNA synthesis, shuffling and directed evolution for example) or focus on singular aspects of a product's production (providing a key enzyme, catalyst or ingredient), we are focused on developing entire production systems from gene to end product. We believe that the technical challenges of successfully deploying biotechnology in industrial settings are high and that systems developed in an integrated and comprehensive environment will generate the optimum possible results and provide us with a competitive advantage. Furthermore, we believe fully developed,

commercially viable processes will command higher values from potential partners than individual components or technologies.

The primary goals of our research and development program are to:

- drive down the cost of producing *PHA Natural Plastics* by microbial fermentation;
- expand the market applications into which *PHA Natural Plastics* can be sold;
- introduce a switchgrass production system that can dramatically transform the markets for plastics and fuels;
- develop new opportunities to produce plastics, fuels and chemicals in either fermentation or plant based systems; and
- develop and acquire competitive intellectual property and know-how in bio-based plastics, fuels and chemicals that defines us as the leader in the field.

Our research and development efforts are presently focused in three critical areas:

Microbial Fermentation — We have ongoing strain development efforts to develop microbes that can produce higher yields of *PHA Natural Plastic* at lower cost than our current strains. We have identified specific projects that we believe will allow us to approach the maximum theoretical productivity of these systems. In addition, we are engaged in strain development work to facilitate production of other members of the PHA polymer family that will allow us to extend the range of market applications we can address. This work will be combined with our ongoing product development effort, which is broadening the range of formulations we can make with our lead polymer composition.

Polymer Producing Plants — We are developing a technology to produce *PHA Natural Plastics* directly in plants, specifically targeting switchgrass. This effort builds on our success in creating high productivity microbial biofactories and may enable the production of *PHA Natural Plastics* with economics that are as or more favorable than general purpose commodity plastics such as polyethylene, polypropylene, and polystyrene.

New Systems and Products — We plan to further apply our platform technologies to other commercial opportunities in the area of bio-based plastics, fuels and chemicals. We have an ongoing effort to evaluate new program opportunities in the following areas:

- Key chemicals and chemical intermediates based on fermentation or production in plants such as switchgrass;
- Fermentation products for nutraceutical applications;
- Alternate plant varieties for production of *PHA Natural Plastics* and fuels that are suitable for other geographic climate zones; and
- Enhancement of switchgrass strains to improve crop yields and processing traits for conversion to biofuels.

We currently employ 36 personnel conducting research and development for our programs. Among our research staff, 14 hold Ph.D.s and 19 hold masters or bachelors degrees in their respective disciplines. Our staff has expertise in the following areas: microbial genetics, bioinformatics, metabolic engineering, systems biology, plant genetic engineering, fermentation process engineering, chemical engineering, and polymer science and engineering.

We supplement our internal resources by collaborating with outside parties including universities for specific targeted projects and over the last several years have sponsored targeted research projects at these as well as other institutions:

University of Massachusetts at Lowell
University of Munster
University of Calgary
Oak Ridge National Laboratories and National Renewable Energy Laboratories

Switchgrass Biomass Biorefinery Program

We are developing a breakthrough technology to produce *PHA Natural Plastics* directly in plants. This effort builds on our success in creating high productivity microbial bio-factories and offers the potential to produce *PHA Natural Plastics* at comparable or lower costs than the current cost of producing commodity petrochemical-based plastics such as polyethylene, polypropylene, and polystyrene. We are presently focusing our efforts on switchgrass, a commercially and ecologically attractive, non-food energy crop that is indigenous to North America. We believe we can engineer a system that co-produces *PHA Natural Plastics* along with biomass for conversion to fuels (such as ethanol) or energy. We believe the co-production of *PHA Natural Plastics* with energy in one system will offer superior economic value and productivity to a single product system. We have received significant funding from the United States Government as well as from BP for these efforts. We have also performed work on rapeseed for co-production of *PHA Natural Plastics* along with biodiesel fuel.

Switchgrass is an attractive biomass to energy crop that is generally considered to be a leading candidate for cellulose-derived ethanol production. It is a high density perennial crop that can grow on marginal land and does not require substantial inputs in terms of water or fertilization. It has the capability of sequestering significant amounts of carbon dioxide from the atmosphere in its root systems. It was the dominant plant species over the Great Plains of the United States prior to the introduction of modern agriculture and sometimes referred to as prairie grass. Switchgrass is found from the eastern United States west to Montana and Arizona, Canada and Mexico.

We believe we are a leader in the science and technology related to the transformation of switchgrass. Precise insertion of novel pathways in switchgrass is challenging due to the tendency of plants to eliminate foreign genes and due to the lengthy time required for cross-breeding of plant generations having new genes. We have developed several proprietary approaches to more efficiently introduce complex, multi-gene, multi-step pathways into switchgrass and we expect that these approaches will have value outside of the PHA family of products. For example, we believe we can introduce traits into switchgrass that can improve the yield of switchgrass per acre as well as enhance its processability for conversion to fuel.

We have already achieved several significant milestones in this program and can produce small amounts of *PHA Natural Plastics* in switchgrass. Our research is currently focused on increasing *PHA Natural Plastic* production levels to amounts we believe would be commercially viable and our goal is to reach field trial demonstrations within the next four years.

We believe that our switchgrass biomass biorefinery program offers the potential to improve the economics of producing not only *PHA Natural Plastic* but also fuels, such as ethanol. Polymer production economics can be improved because the manufacture of the material will take place within the plant. With our current process, only the feedstock (i.e. corn sugar) is produced within the plant and considerable costs are incurred converting that feedstock to the polymer. Through direct production in switchgrass, we can eliminate those conversion costs and potentially achieve production economics comparable to those of general agricultural products, which are inexpensive. It is also commonplace within both the agricultural and the energy industries to produce a variety of co-products from raw materials to maximize value. As with a barrel of oil that is converted to both gasoline and plastic, or a bushel of corn that is converted to sweetener and other products, we believe that a variety of switchgrass that is convertible to both fuel and *PHA Natural Plastic* can have more value than one that is not.

While the cost of producing *PHA Natural Plastics* in switchgrass may be considerably lower than the cost of producing these materials by fermentation, we believe the introduction of plant based materials can significantly expand the market for fermentation based materials. The scale and complexity of agriculturally producing *PHA Natural Plastics* will limit the grades of material produced to just a few. Conversely, fermentation based manufacturing allows many grades to be produced with a variety of property sets. Together, low cost plant based material can be blended with fermentation material to achieve an optimal balance between cost and performance.

In 2001, the U.S. Department of Energy awarded us a $7.5 million, 5-year grant to develop production of *PHA Natural Plastics* directly in crops that can be used to generate energy. In 2003, the U.S. Department of Agriculture awarded us an additional $2.0 million for this program. This concept, called a "Biomass Biorefinery", is based on the coproduction of energy and higher value *PHA Natural Plastics*. It is analogous to today's energy/petrochemical industry where synthetic plastics are derivative value-adding products to the production of energy from petroleum and natural gas.

Competition

The plastics market is large with many established players. The market has grown around the chemical processing of oil and natural gas, and is concentrated in the conventional, non-biodegradable petrochemical-based segment. Metabolix is focused on the biological processing of agricultural feedstocks and the production of biodegradable, renewable resource-based plastics, fuels and chemicals.

The current plastics market is primarily based on oil and natural gas. Established players in this segment include Dow Chemical, DuPont, BASF, Bayer, General Electric, Mitsubishi Chemical and Huntsman Chemical, among many others. The price of conventional petrochemical-based plastic is volatile, as it is dependent on petrochemicals as a key manufacturing input. In addition, the non-biodegradability of conventional petrochemical-based plastics makes them persistent in and harmful to the environment and creates significant waste.

A few companies, such as DuPont, have taken steps toward plastics based on renewable resources, and are commercializing plastics that use building blocks derived from renewable resources as components. These products remain primarily fossil carbon based and are not biodegradable. Other producers of petrochemical-based plastics, including BASF, Mitsubishi Chemical, and DuPont, now produce certain petrochemical grades that are biodegraded in industrial compost environments, but are otherwise persistent in the environment and are still subject to the volatility of oil and natural gas prices.

Our most comparable competitors are in the biodegradable, renewable resource based plastic segment, within which there are three distinct technologies: PHA, PLA and starch-based biodegradables. Just as

a wide variety of different petrochemical-based plastics now serve the needs of the market, we believe that these three technologies are more complementary than competitive. We believe that of these three technologies, *PHA Natural Plastics* offer the broadest range of properties and processing options, and will address the largest proportion of opportunities as an environmentally attractive yet functionally equivalent alternative to conventional petrochemical-based plastics. Unlike PLA and most starch-based biodegradables, *PHA Natural Plastics* can:

- decompose in the natural environment, including the marine environment,
- decompose in hot composts,
- remain functional in a wide range of temperature settings, and
- not deteriorate in everyday use.

Other companies active in the PHA plastics segment include Kaneka and minor producers in Brazil and China. The key players in PLA and starch based biodegradables are Cargill, Mitsui Chemical, Toyota, Novamont and Stanelco.

Biodegradability	Fossil Carbon Based Plastics	Biomass Renewable Resource Based Plastics
Biodegradable	Synthetic Biodegradable Polyesters: - -Dow Chemical - -DuPont - -BASF - -Mitsubishi Chemical - -Showa Denko	PHA: - -**Metabolix' *PHA Natural Plastics*** - -Kaneka's "PHBH" PLA: - -Cargill's NatureWorks™ - -Mitsui Chemical's Lacea™ - -Toyota Starch-based Biodegradables: - -Novamont's MaterBi™ - -Stanelco's Starpol™
Non-Biodegradable	-Traditional petrochemical-based products	DuPont — Sorona™ (~30% bio-based) Dow Chemical — Soybean Polyurethanes Arkema — Nylon 11

We believe our *PHA Natural Plastics* products compare well against other biodegradable plastics when judged on the following factors:

- *Biodegradability — PHA Natural Plastics* will biodegrade due to the action of microbial agents in a wide variety of circumstances, including both cold and hot compost (certain "biodegradable" plastics only degrade in hot compost), soil, anaerobic environments such as found in municipal waste treatment facilities and septic systems, and marine, wetland, and fresh water environments;
- *Property Range — PHA Natural Plastics* possess a particularly broad range of functional properties, varying from stiff to flexible to rubbery;
- *Processability — PHA Natural Plastics* can be processed in many types of existing polymer conversion equipment;

- *Upper Service Temperature* — Some formulations of *PHA Natural Plastics* will withstand temperatures in excess of 100°C, i.e., the boiling point of water, an important threshold;

- *Resistance to Hydrolysis* — While *PHA Natural Plastics* will biodegrade in marine, wetland, and fresh water environments, they are resistant to reacting with even hot water over durations encountered in most applications.

We believe that the principal advantages of our products will be the use of renewable feedstocks and biodegradability combined with their performance when compared to our competitor's products. We believe that we compare favorably with these competitors and have more stable feedstock input costs than conventional petrochemical-based plastics manufacturers.

Our ability to remain competitive will depend to a great extent upon our ongoing performance in the areas of product development and product performance. We cannot assure you that our products will achieve market acceptance or that we will be successful in the face of increasing competition from new products by existing competitors or new competitors entering the markets in which we intend to sell our products.

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Intellectual Property

Our continued success depends in large part on our proprietary technology. We rely on a combination of patent, copyright, trademark and trade secret laws, as well as confidentiality agreements, to establish and protect our proprietary rights.

We own over 320 issued patents and 100 patent applications world wide, and we have licensed from third parties approximately 60 issued patents and over 30 patent applications world wide. All but 5 of these issued patents, and their foreign counterparts, relate to the technology in our current business plan. These patents cover, among other things, the fundamental biotechnology needed to produce *PHA Natural Plastics* as well as compositions, processes and derived products. Of the licensed patents and patent applications, many are owned by Massachusetts Institute of Technology and exclusively licensed to us. Under the MIT licensing agreement, we currently pay annual license fees. During the fiscal year ended December 31, 2005, these fees totaled approximately $25,000. In addition, under this licensing agreement, we are obligated to pay royalties on future sales of products, if any, covered by the licensed patents.

Our patents are directed to compositions of polymers, genes, vectors, expression systems in plants and bacteria, devices, coatings, films, as well as methods of manufacture and use. The terms of such patents are set to expire at various times between 2009 and 2022.

We will continue to file and prosecute patent applications when and where appropriate to attempt to protect our rights in our proprietary technologies. It is possible that our current patents, or patents which we may later acquire, may be successfully challenged or invalidated in whole or in part. It is also possible that we may not obtain issued patents for our pending patent applications or other inventions we seek to protect. In that regard, we sometimes permit certain intellectual property to lapse or go abandoned under appropriate circumstances and due to uncertainties inherent in prosecuting patent applications, sometimes patent applications are rejected and we subsequently abandon them. It is also possible that we may develop proprietary products or technologies in the future that are not patentable or that the patents of others will limit or altogether preclude our ability to do business. In addition, any patent issued to us may not provide us with any competitive advantages, in which event we may abandon such patent.

Our registered U.S. trademarks include *Metabolix*, *Biopol*, and *Where Nature Performs*. Our marks *Metabolix* and *Where Nature Performs* and certain other trademarks have also been registered in selected foreign countries.

Our means of protecting our proprietary rights may not be adequate and our competitors may independently develop technology that is similar to ours. Legal protections afford only limited protection for our technology. The laws of many countries do not protect our proprietary rights to as great an extent as do the laws of the United States. Despite our efforts to protect our proprietary rights, unauthorized parties have in the past attempted, and may in the future attempt, to copy aspects of our products or to obtain and use information that we regard as proprietary. Third parties may also design around our proprietary rights, which may render our protected products less valuable, if the design around is favorably received in the marketplace. In addition, if any of our products or the technology underlying our products is covered by third-party patents or other intellectual property rights, we could be subject to various legal actions. We cannot assure you that our products do not infringe patents held by others or that they will not in the future.

Litigation may be necessary to enforce our intellectual property rights, to protect our trade secrets, to determine the validity and scope of the proprietary rights of others, or to defend against claims of infringement or invalidity, misappropriation, or other claims. Any such litigation, including The Procter & Gamble Company, or P&G, nullity action filed in Federal Patent Court in Munich, Germany described below in "*Legal Proceedings*", could result in substantial costs and diversion of our resources. Moreover, any settlement of or adverse judgment resulting from such litigation could require us to obtain a license to continue to use the technology that is the subject of the claim, or otherwise restrict or prohibit our use of the technology. Any required licenses may not be available to us on acceptable terms, if at all.

Employees

As of September 30, 2006, we had 49 full-time employees located in Cambridge, Massachusetts, one in California and one in Fort Mill, South Carolina, of whom 36 are in research and development, 6 are in marketing, 1 is in government programs and 8 are in operations/general and administration. None of our employees are subject to a collective bargaining agreement. We consider our relationships with our employees to be good.

Facilities

We currently lease approximately 28,000 square feet of office and research and development space at 21 Erie Street, Cambridge, Massachusetts. Our lease for this facility expires in 2014, with an option to renew for two additional five year periods. We do not own any real property. We believe that our

leased facilities and additional and alternative space available to us will be adequate to meet our needs for the remainder of the year.

We have entered into an agreement with Nation Ford Chemical, or NFC, to act as a contract manufacturer and to operate an 8 ton per month recovery facility for pilot manufacturing in Fort Mill, South Carolina. We deliver raw materials to NFC for manufacturing and processing of *PHA Natural Plastics*, which is stored and then shipped at our instruction. The agreement terminates April 13, 2007, provided that the agreement will automatically be renewed for successive periods of 180 days, unless we or NFC give written notice of cancellation 30 days prior to the commencement of any such 180 day period. This plant is a model for the larger extraction assets to be employed at the Commercial Manufacturing Facility and the current processes, technology and systems will be replicated at a larger scale at the Commercial Manufacturing Facility.

Legal Proceedings

On March 8, 2005, P&G filed a nullity action in the Federal Patent Court in Munich, Germany, against the German equivalent of one of our patents covering the method of use of producing biopolymers. The patent at issue is licensed exclusively to us by MIT and will expire in July 2010. The nullity action alleges, among other things, extension of subject matter, insufficiency of disclosure, lack of novelty, and lack of inventive step. We are controlling the response to the nullity action with MIT's cooperation. We believe this nullity action is without merit and we intend to vigorously defend this action. However, the litigation process is inherently uncertain and there can be no assurance as to the ultimate outcome of this matter.

From time to time, we may be subject to other legal proceedings and claims arising in the ordinary course of business. We are not currently aware of any such proceedings or claims that we believe will have, individually or in the aggregate, a material adverse effect on our business, financial condition or results of operations.

MANAGEMENT

Executive Officers and Directors

The following table sets forth information regarding our executive officers and directors, including their ages and positions as of October 17, 2006:

Name	Age	Position
James J. Barber, Ph.D.	53	President and Chief Executive Officer, Director
Oliver P. Peoples, Ph.D.	48	Chief Scientific Officer, Vice President, Research, Director
Johan van Walsem	43	Vice President, Manufacturing, Development and Operations
Thomas G. Auchincloss, Jr.	45	Chief Financial Officer, Vice President, Finance and Corporate Development
Robert C. Findlen	44	Vice President, Marketing
Brian Igoe	53	Vice President, Chief Brand Officer
Edward M. Muller[(1)]	70	Chairman of the Board, Director
Edward M. Giles[(2)(3)]	70	Director
Jay Kouba, Ph.D.[(1)(3)]	54	Director
Jack W. Lasersohn[(2)(3)]	53	Director
Anthony J. Sinskey, Sc.D.[(2)(3)]	66	Director
Matthew Strobeck, Ph.D.[(2)]	33	Director
Robert L. Van Nostrand[(1)]	49	Director

(1) Member of the audit committee

(2) Member of the compensation committee

(3) Member of the nominating and corporate governance committee

James J. Barber, Ph.D. has served as our chief executive officer and as a director since joining Metabolix in January 2000. Prior to joining Metabolix, from September 1993 to January 2000, Dr. Barber was the global business director for the organometallics and catalysts business of Albemarle Corporation. From March 1992 to September 1993, Dr. Barber served as director, business development with Ethyl Corporation, a chemical manufacturing and supply company, where he was responsible for acquisitions and managed venture capital activities. Dr. Barber received a B.S. in Chemistry from Rensselaer Polytechnic Institute and a Ph.D. in Organic Chemistry from the Massachusetts Institute of Technology.

Oliver P. Peoples, Ph.D., a co-founder of Metabolix, has served as our chief scientific officer and vice president of research since January 2000, and was previously our director of research and vice president. Dr. Peoples has served as a director since June 1992. Prior to founding Metabolix, Dr. Peoples was a research scientist with the Department of Biology at the Massachusetts Institute of Technology where he emerged as a pioneer of the new field of metabolic pathway engineering and its applications in industrial biotechnology. The research carried out by Dr. Peoples at MIT established the fundamental tools and methods for engineering bacteria and plants to produce *PHA Natural Plastics*. Dr. Peoples has published numerous peer-reviewed academic papers and is an inventor of over 90 patents and patent applications worldwide. Dr. Peoples received a Ph.D. in Molecular Biology from the University of Aberdeen, Scotland.

Johan van Walsem has served as our vice president of manufacturing, development and operations since October 2003, and was previously our director of manufacturing and development from September 2001 to October 2003. Prior to joining Metabolix, from December 2000 to

September 2001, Mr. van Walsem was senior biochemical engineer with Montec Research, a division of Resodyn Corporation, where he was responsible for all fermentation technology development. Prior to that, Mr. von Walsem worked with AECI Bioproducts in South Africa in technology management and new product development, commercializing the first large scale biotechnology-based amino acid production in Africa. Mr. van Walsem received a master's degree in Chemical Engineering from the University of Pretoria (South Africa) and an M.B.A. from the University of South Africa.

Thomas G. Auchincloss, Jr. has served as our chief financial officer and vice president of finance and corporate development since May 2005. From April 2002 to May 2005, Mr. Auchincloss was a consultant to Metabolix, providing business development, financial and strategic consulting services. From 1994 to 2001, Mr. Auchincloss served in a variety of positions at Vertex Pharmaceuticals Incorporated, most recently as vice president, finance and treasurer. Prior to Vertex, Mr. Auchincloss served as an investment banker in the corporate finance department at Bear Stearns & Co. Inc. where he was responsible for executing a variety of transactions including public and private financings, mergers and acquisitions and financial advisory assignments. Mr. Auchincloss received a B.S. in Business Administration from Babson College and an M.B.A. in Finance from the Wharton School.

Robert C. Findlen has served as our vice president of marketing since June 2006. Prior to joining Metabolix, from March 2002 to June 2006, Mr. Findlen worked at GE Plastics, first from June 2003 to June 2006 as product market director, LNP Plastics, and then from March 2002 to May 2003 as vice president and director, LNP Americas Commercial Business. LNP Engineering Plastics was acquired by GE Plastics in March 2002. Prior to the acquisition, Mr. Findlen held a number of positions at LNP Engineering Plastics, most recently, from 1998 to 2003, as vice president of sales and marketing. Mr. Findlen received a B.S. in Plastics Engineering from University of Massachusetts at Lowell.

Brian Igoe has served as our vice president and chief brand officer since August 2006. Prior to joining Metabolix, from February 2005 to August 2006, Mr. Igoe was executive vice president and chief marketing officer of Oco, Inc., a managed software company. Prior to that, Mr. Igoe was vice president of Alloy Marketing and Promotions from February 2002 until January 2005, and from January 1993 to January 2002 he served as executive vice president of Target Marketing and Promotions (TMP) which was acquired by Alloy Marketing and Promotions. Prior to TMP, Mr. Igoe was the owner and president of Igoe Marketing and Development, where he worked with clients such as Canada Dry and ASICS Corporation. Prior to founding Igoe Marketing and Development, Mr. Igoe served as director of product development for the Keds Corporation from February 1990 to January 1992 and served as director of advanced technologies at Reebok International Ltd. from February 1984 to January 1990. He also worked in marketing and product development from January 1980 to January 1984 with Nike, Inc. Mr. Igoe received a B.S. in Hotel, Restaurant and Travel Administration and Marketing from the University of Massachusetts at Amherst.

Edward M. Muller has served as the chairman of the board of directors since November 1993 and was previously our president and chief executive officer from October 1993 to January 2000. Mr. Muller held a number of positions, including chief executive officer, while at Halcon-SD Group between 1961 and 1985. That company developed a number of key processes for the production of raw materials for the polyester, nylon, polystyrene, and polyurethane industries. Mr. Muller serves on the board of directors of Tepha, Inc. Mr. Muller received a B.Ch.E. from The Cooper Union and a M.B.A. in Finance and Economics from New York University.

Edward M. Giles has served as a director since November 1993. Mr. Giles has served as the chairman of The Vertical Group, Inc., an investment fund administration company since January 1989. Mr. Giles was previously President of F. Eberstadt & Co., Inc., a securities firm. Mr. Giles serves on the board of

directors as well as the audit committee of Ventana Medical Systems, Inc. Mr. Giles also serves on the board of directors of Tepha, Inc. Mr. Giles received a B.Ch.E. from Princeton University, and a S.M. in Industrial Management from the Massachusetts Institute of Technology.

Jay Kouba, Ph.D., has served as director since June 2006. Since January 2006, Dr. Kouba has served as the president of Ohio Consulting, a strategic management consulting firm. From January 1999 to December 2005, Dr. Kouba held several positions with BP's Petrochemicals Segment. From August 2004 to December 2005, Dr. Kouba served as senior vice president, strategy, marketing and technology for Innovene BP's olefins and polymers subsidiary, and earlier in 2004, as Vice President, Sales, Marketing and Logistics. Between 1999 and 2003, Dr. Kouba was Vice President, Technology. Dr. Kouba received a B.S. in Chemistry from Stanford University, a Ph.D. in Chemistry from Harvard University and a M.B.A. from University of Chicago.

Jack W. Lasersohn has served as a director since December 1999. Since 1989, Mr. Lasersohn has served as a general partner of The Vertical Group, L.P., a private venture capital firm. Mr. Lasersohn was a vice president and then director of the venture capital division of F. Eberstadt & Co., a securities firm, and Mr. Lasersohn serves as a director of Kyphon Inc., as well as several privately-held medical companies. Mr. Lasersohn received a B.S. in Physics from Tufts University, an M.A. from the Fletcher School of Law & Diplomacy at Tufts University and a J.D. from Yale University.

Anthony J. Sinskey, Sc.D., a co-founder of Metabolix, has served as a director since June 1992. From 1968 to present, Dr. Sinskey has been on the faculty of the Massachusetts Institute of Technology. Currently at M.I.T., he is Professor of Microbiology in the Department of Biology and Professor of Health Sciences and Technology in the Harvard-M.I.T. Health Sciences and Technology Program, as well as Co-Director of the Center for Biomedical Innovation. Dr. Sinskey serves on the board of directors of Tepha, Inc. Dr. Sinskey received a Sc.D. from Massachusetts Institute of Technology and a B.S. from the University of Illinois.

Matthew Strobeck, Ph.D., has served as director since September 2006. From May 2003 to the present, Dr. Strobeck has served as a senior investment analyst at Westfield Capital Management, specializing in healthcare and life sciences. Dr. Strobeck previously served as a consultant to the senior economic advisor to the commissioner of the Food and Drug Administration from August 2003 to May 2004. Prior to the Food and Drug Administration, Dr. Strobeck was a fellow in the Department of Biology at the Massachusetts Institute of Technology from December 2001 to June 2002. Dr. Strobeck received his B.S. from St. Lawrence University, a Ph.D. from the University of Cincinnati, a S.M. from Harvard University and a S.M. from the Massachusetts Institute of Technology Sloan School of Management.

Robert L. Van Nostrand has served as a director since October 2006. Since 2005, Mr. Van Nostrand has served as the Senior Vice President and Chief Compliance Officer of OSI Pharmaceuticals, Inc., a biotechnology company focused on developing therapeutics for cancer, eye disease and diabetes. Mr. Van Nostrand has been with OSI for almost twenty years, previously serving as the Vice President and Chief Financial Officer from 1996 through 2005. Mr. Van Nostrand also served as Vice President, Finance and Administration and OSI's Treasurer and Secretary. Mr. Van Nostrand joined OSI as Controller and Chief Accounting Officer in September 1986. Prior to joining OSI, Mr. Van Nostrand was in a managerial position with Touche Ross & Co. (currently Deloitte and Touche). Mr. Van Nostrand serves on the board of directors of Apex Bioventures, Inc., a special purpose acquisition company focused in life sciences, and upon Apex's initial public offering, Mr. Van Nostrand will serve as Chairman of its audit committee. Mr. Van Nostrand received a B.S. in Accounting from Long Island University, New York, and completed advanced management studies at the the Wharton School. Mr. Van Nostrand is a Certified Public Accountant.

Board Composition

We currently have nine directors, of whom Edward M. Giles and Jack W. Lasersohn were elected as directors under the board composition provisions of a stockholders agreement and our certificate of incorporation. The board composition provisions of the stockholders agreement and our certificate of incorporation will be terminated upon the closing of this offering. Upon the termination of these provisions, there will be no further contractual obligations regarding the election of our directors. Our directors hold office until their successors have been elected and qualified or until the earlier of their resignation or removal.

Following this offering, the board of directors will be divided into three classes with members of each class of directors serving for staggered three-year terms. The board of directors will consist of three Class I directors (currently Mr. Muller, Dr. Strobeck and Mr. Van Nostrand), three Class II directors (currently Mr. Lasersohn, Dr. Kouba and Dr. Peoples) and three Class III directors (currently Mr. Giles, Dr. Sinskey and Dr. Barber), whose initial terms will expire at the annual meetings of stockholders held in 2007, 2008 and 2009, respectively. Our classified board could have the effect of making it more difficult for a third party to acquire control of us.

Board Committees

Our board of directors has established an audit committee, a compensation committee and a nominating and corporate governance committee, each of which operates pursuant to a separate charter adopted by our board of directors. The composition and functioning of all of our committees will comply with all applicable requirements of the Sarbanes-Oxley Act of 2002, the NASDAQ Stock Market and the Securities and Exchange Commission rules and regulations.

Audit Committee. Robert Van Nostrand, Edward M. Muller, and Jay Kouba, Ph.D., currently serve on the audit committee. Mr. Van Nostrand is the chairman of our audit committee. The audit committee's responsibilities include:

- appointing, approving the compensation of, and assessing the independence of our independent registered public accounting firm;
- pre-approving auditing and permissible non-audit services, and the terms of such services, to be provided by our independent registered public accounting firm;
- reviewing and discussing with management and the independent registered public accounting firm our annual and quarterly financial statements and related disclosures;
- coordinating the oversight and reviewing the adequacy of our internal control over financial reporting;
- establishing policies and procedures for the receipt and retention of accounting related complaints and concerns; and
- preparing the audit committee report required by Securities and Exchange Commission rules to be included in our annual proxy statement.

Compensation Committee. Anthony J. Sinskey, Sc.D., Edward M. Giles, Jack W. Lasersohn and Matthew Strobeck currently serve on the compensation committee. Dr. Sinskey is the chairman of our compensation committee. The compensation committee's responsibilities include:

- annually reviewing and approving corporate goals and objectives relevant to compensation of our chief executive officer;
- evaluating the performance of our chief executive officer in light of such corporate goals and objectives and determining the compensation of our chief executive officer;
- reviewing and approving the compensation of our other executive officers;
- overseeing and administering our compensation, welfare, benefit and pension plans and similar plans; and
- reviewing and making recommendations to the board with respect to director compensation.

Nominating and Corporate Governance Committee. Jack W. Lasersohn, Edward M. Giles, Jay Kouba, and Anthony J. Sinskey currently serve on the nominating and corporate governance committee. Mr. Lasersohn is the chairman of our nominating and corporate governance committee. The nominating and corporate governance committee's responsibilities include:

- developing and recommending to the board criteria for board and committee membership;
- establishing procedures for identifying and evaluating director candidates including nominees recommended by stockholders;
- identifying individuals qualified to become board members;
- recommending to the board the persons to be nominated for election as directors and to each of the board's committees;
- developing and recommending to the board a code of business conduct and ethics and a set of corporate governance guidelines;
- serving as the Qualified Legal Compliance Committee in accordance with Section 307 of the Sarbanes-Oxley Act of 2002 and the rules and regulations promulgated thereunder; and
- overseeing the evaluation of the board and management.

Compensation of Directors

Upon completion of the proposed initial public offering, each non-employee member of our board of directors will be entitled to receive an annual retainer of $30,000. In addition, each non-employee director serving as a member but not chair of our audit committee, compensation committee and nominating and corporate governance committee will be entitled to an annual retainer of $5,000, and the chairs of the audit committee, compensation committee and nominating and corporate governance committee will be entitled to an additional annual retainer of $15,000, $10,000 and $10,000, respectively.

Under the 2006 Stock Plan, each non-employee member of our board of directors on the effective date of the proposed initial public offering will be granted a fully vested nonqualified stock option to acquire 20,000 shares of common stock, less the number of shares subject to outstanding stock options

held by such director on that date. Each non-employee director who is first elected to serve as a director after the initial public offering will be granted a fully vested nonqualified stock option to acquire 20,000 shares of stock. In addition, after each annual meeting of stockholders, beginning with the 2007 annual meeting, each non-employee director will automatically be granted a non-qualified stock option to acquire 10,000 shares of stock, which will vest one year after the date of grant. All of these non-employee director stock options will have an exercise price equal to the fair market value of the stock on the date the stock option is granted.

In June 2006, we granted Dr. Kouba an option to purchase 16,346 shares of our common stock as compensation for his service on our board of directors. This option has an exercise price of $5.14 per share and is fully vested and exercisable immediately. We have not otherwise paid separate compensation for services rendered as a director.

Compensation Committee Interlocks and Insider Participation

None of our executive officers serves as a member of the board of directors or compensation committee, or other committee serving an equivalent function, of any other entity that has one or more of its executive officers serving as a member of our board of directors or compensation committee.

Executive Officers

Each of our executive officers has been elected by our board of directors and serves until his or her successor is duly elected and qualified or until his or her earlier resignation or removal.

Executive Compensation

Compensation Earned

The following summarizes the compensation earned during the year ended December 31, 2005, by our chief executive officer and our three other most highly compensated executive officers who were serving as executive officers on December 31, 2005. We refer to these individuals as our "named executive officers." The compensation in this table does not include certain perquisites and other personal benefits received by the named executive officers that did not exceed the lesser of $50,000 or 10% of any officer's total compensation reported in this table.

Summary Compensation Table

Name and Principal Position	Annual Compensation		Long-Term Compensation	
	Salary	Bonus	Securities Underlying Options (#)	All Other Compensation($)
James J. Barber President and Chief Executive Officer	$ 235,000	—	324,658	$ 106,739[1]
Oliver P. Peoples Vice President, Research	$ 182,400	—	117,691	—
Johan van Walsem Vice President, Manufacturing, Development and Operations	$ 172,267	$ 10,000	179,806	—
Thomas G. Auchincloss, Jr. Chief Financial Officer	$ 155,600[2]	—	179,806	—

(1) Represents $75,000 of loan principal and $31,739 of interest on that loan forgiven by us during 2005.

(2) Represents Mr. Auchincloss's salary during the year ended 2005 from commencement of his employment with us on May 1, 2005, plus $40,000 in fees for consulting services rendered to us from January 1, 2005 to May 1, 2005.

Option Grants in Last Fiscal Year

The following table presents all grants of stock options during the year ended December 31, 2005 to each of the named executive officers. We have not granted any stock appreciation rights. The option grants listed below were made under our 1995 Stock Plan or 2005 Stock Plan at exercise prices equal to the fair market value of our common stock on the date of grant, as determined by our board of directors. The potential realizable value, if applicable, is calculated based on the term of the option at its time of grant, which is ten years. This value is net of exercise prices and before taxes, and is based on an assumed initial public offering price of $13.00 per share, the mid-point of the initial public offering price range, and the assumption that our common stock appreciates at the annual rate shown, compounded annually, from the date of grant until its expiration date. These numbers are calculated based on the Securities and Exchange Commission requirements and do not reflect our projection or estimatef of future stock price growth. Actual gains, if any, on stock option exercises will depend on the future performance of the common stock and the date on which the options are exercised.

The percentage of total options granted to employees in 2005 shown in the table below is based on options to purchase an aggregate of 1,224,083 shares of common stock granted to employees in 2005.

In general, options granted to new employees in 2005 vest in quarterly installments over four years.

Name	Individual Grants				Potential Realizable Value at Assumed Annual Rates of Stock Price Appreciation for Option Term	
	Number of Securities Underlying Options Granted (#)	Percent of Total Options Granted to Employees in Fiscal Year (%)	Exercise or Base Price ($/Share)	Expiration Date	5% ($)	10% ($)
James J. Barber	324,658[1]	26.5	1.84	12/14/15	6,278,989	10,351,182
Oliver P. Peoples	117,691	9.6	1.65	9/20/15	2,297,781	3,773,982
Johan van Walsem	179,806	14.7	1.65	9/20/15	3,510,505	5,765,816
Thomas G. Auchincloss, Jr.	179,806	14.7	1.65	9/20/15	3,510,505	5,765,816

(1) Includes 125,863 options that vest, in part, upon the attainment of specified performance and corporate financing milestones.

Option Exercises in Last Fiscal Year and Fiscal Year-End Option Values

The following table sets forth certain information concerning the number and value of options exercised by the named executive officers during 2005, if any, and the number and value of any exercised and unexercised options held by the named executive officers at December 31, 2005. There was no public market for our common stock as of December 31, 2005. Accordingly, the value of unexercised in-the-money options, if applicable, represents the total gain that would be realized if all in-the-money options held at December 31, 2005 were exercised, determined by multiplying the number of shares underlying the options by the difference between an assumed initial public offering price of $13.00 per share, the mid-point of the initial public offering price range, and the per share option exercise price.

Name	Shares Acquired on Exercise (#)	Value Realized($)	Number of Securities Underlying Unexercised Options at December 31, 2005		Value of Unexercised In-the-Money Options at December 31, 2005	
			Exercisable	Unexercisable	Exercisable	Unexercisable
James J. Barber	—	—	302,796	247,988	$ 2,558,973	$ 2,768,709
Oliver P. Peoples	—	—	173,265	112,789	$ 1,236,128	$ 1,259,704
Johan van Walsem	—	—	78,664	150,179	$ 287,276	$ 1,678,952
Thomas G. Auchincloss, Jr.	—	—	80,707	148,137	$ 778,828	$ 1,677,715

Employee Benefit Plans

1995 Stock Plan

Our 1995 Stock Plan was adopted by our board of directors and approved by our stockholders in June 1995 and amended in February 1998, September 1998, November 1998, November 1999, March 2000 and March 2003. Our 1995 Stock Plan is administered by the compensation committee of our board of directors. The compensation committee has the full authority and discretion to interpret the 1995 Stock Plan and to apply its provisions. Our 1995 Stock Plan permitted us to make grants of incentive and non-qualified stock options. The 1995 Stock Plan also permitted us to award both shares of our common stock and opportunities to make direct purchases of our common stock.

Stock options granted under our 1995 Stock Plan have a maximum term of ten years from the date of grant and incentive stock options have an exercise price of no less than the fair market value of our common stock on the date of grant. Awards granted under our 1995 Stock Plan are not transferable other than by will or the laws of descent and distribution. In the event of a change-in-control of the Company, our board of directors and the board of directors of the surviving or acquiring entity shall, as to outstanding awards under the 1995 Stock Plan, make appropriate provision for the continuation, assumption or other disposition of such awards.

Our 1995 Stock Plan was terminated in June 2005 and no further grants or awards have since been, or will be, made thereunder. Grants and awards that are outstanding under our 1995 Stock Plan continue to be governed by the terms of our 1995 Stock Plan and the agreements related to such grants and awards. As of September 30, 2006, there were outstanding options under our 1995 Stock Plan to purchase a total of 746,703 shares of our common stock.

2005 Stock Plan

Our 2005 Stock Plan was adopted by our board of directors and approved by our stockholders in June 2005. Our 2005 Stock Plan permits us to make grants of incentive stock options, non-qualified stock options, stock grants and other stock-based awards. We have initially reserved 1,838,925 shares of our common stock for the issuance of awards under the 2005 Stock Plan. This number is subject to adjustment in the event of a stock split, stock dividend or other change in our capitalization. Generally, shares that are forfeited or canceled from awards under the 2005 Stock Plan also will be available for future awards. In addition, awards returned to our 1995 Stock Plan as a result of their expiration, cancellation or termination are automatically made available for issuance under our 2005 Stock Plan. We do not intend to grant additional options under this plan after this offering and the aggregate number of shares to be issued under 2005 Stock Plan will be reduced to 1,558,895, which represents the total number of shares issuable upon exercise of outstanding options granted under the 2005 Stock Plan.

The 2005 Stock Plan is administered by our compensation committee. The compensation committee has full power and authority to select the participants to whom awards will be granted, to make any combination of awards to participants, to accelerate the exercisability or vesting of any award and to determine the specific terms and conditions of each award, subject to the provisions of our 2005 Stock Plan. All of our employees, directors and consultants are eligible to participate in the 2005 Stock Plan.

The exercise price of stock options awarded under our 2005 Stock Plan may not be less than the fair market value of our common stock on the date of the option grant and the term of each option granted under our 2005 Stock Plan may not exceed ten years from the date of grant. The compensation committee will determine at what time or times each option may be exercised (provided that in no event may it exceed ten years from the date of grant) and, subject to the provisions of our 2005 Stock Plan, the period of time, if any, after retirement, death, disability or other termination of employment during which options may be exercised.

Stock grants may also be awarded under our 2005 Stock Plan. Stock grants are awards of shares of our common stock that may be subject to restrictions or repurchase rights established by the compensation committee. The compensation committee may impose whatever conditions to vesting it determines to be appropriate in connection with such stock grants.

Other stock-based awards may also be granted under our 2005 Stock Plan. Other stock-based awards are awards based on our common stock having terms and conditions as the compensation committee may determine and could include the grant of shares based upon certain conditions, the grant of

securities convertible into shares of our common stock, and the grant of stock appreciation rights, phantom stock awards or stock units.

Unless the compensation committee provides otherwise, our 2005 Stock Plan does not generally allow for the transfer of awards and only the recipient of an award may exercise an award during his or her lifetime. In the event of a change-in-control of the Company, our board of directors and the board of directors of the surviving or acquiring entity shall, as to outstanding awards under the 2005 Stock Plan, make appropriate provision for the continuation, assumption or other disposition of such awards.

No awards may be granted under our 2005 Stock Plan after June 1, 2015 and we do not intend to grant any awards under our 2005 Stock Plan after this offering. In addition, our board of directors may amend or discontinue our 2005 Stock Plan at any time and the compensation committee may amend or cancel any outstanding award for the purpose of satisfying changes in law or for any other lawful purpose. Our stockholders may also vote to terminate the 2005 Stock Plan. No amendment may adversely affect the rights under any outstanding award without the holder's consent.

As of September 30, 2006, there were 1,558,895 outstanding options to purchase shares of our common stock under our 2005 Stock Plan and, assuming that no shares are returned to our 1995 Stock Plan and made available for issuance under our 2005 Stock Plan, 280,519 shares of our common stock are available for future issuance or grant under our 2005 Stock Plan.

2006 Stock Plan

Our 2006 Stock Option and Incentive Plan, or 2006 Option Plan, was adopted by our board of directors and approved by our stockholders in October 2006. The 2006 Option Plan permits us to make grants of incentive stock options, non-qualified stock options, stock appreciation rights, deferred stock awards, restricted stock awards, unrestricted stock awards, cash-based awards and dividend equivalent rights. We have initially reserved 2,500,000 shares of our common stock for the issuance of awards under the 2006 Option Plan. The 2006 Option Plan provides that the number of shares reserved and available for issuance under the plan will automatically increase each January 1, beginning in 2007, by 4.5% of the outstanding number of shares of common stock on the immediately preceding December 31; provided that the maximum aggregate number of shares reserved may not exceed 25% of the total number of outstanding shares of stock and provided further that not more than 10,000,000 shares will be issued under the plan. This number is subject to adjustment in the event of a stock split, stock dividend or other change in our capitalization. Generally, shares that are forfeited or canceled from awards, held back upon exercise of an award, or otherwise reacquired by the Company under the 2006 Option Plan also will be available for future awards. No awards have been granted under the 2006 Option Plan to date.

The 2006 Option Plan is administered by our compensation committee. The compensation committee has full power and authority to select the participants to whom awards will be granted, to make any combination of awards to participants, to accelerate the exercisability or vesting of any award and to determine the specific terms and conditions of each award, subject to the provisions of the 2006 Option Plan. All full-time and part-time officers, employees, directors and other key persons (including consultants and prospective employees) are eligible to participate in the 2006 Option Plan.

The exercise price of stock options awarded under the 2006 Option Plan may not be less than the fair market value of the common stock on the date of the option grant. The compensation committee will determine at what time or times each option may be exercised (provided that in no event may it exceed ten years from the date of grant) and, subject to the provisions of the 2006 Option Plan, the

period of time, if any, after retirement, death, disability or other termination of employment during which options may be exercised.

Stock appreciation rights may be granted under our 2006 Option Plan. Stock appreciation rights allow the recipient to receive the number of shares equal to the appreciation in the fair market value of our common stock between the exercise date and the date of grant. The compensation committee determines the terms of stock appreciation rights, including when such rights become exercisable.

Restricted stock, unrestricted stock, cash-based awards, deferred stock awards and dividend equivalent rights may also be granted under our 2006 Option Plan. Restricted stock awards are shares of our common stock that vest in accordance with terms and conditions established by the compensation committee. The compensation committee may impose whatever conditions to vesting it determines to be appropriate. Shares of restricted stock that do not vest are automatically subject to our right of repurchase or forfeiture. Unrestricted stock awards are awards of shares of stock that are free of any restrictions. The compensation committee may grant unrestricted stock awards in respect of past services or in lieu of other compensation. Cash-based awards are awards that entitle the recipient to receive a cash-denominated payment. The compensation committee shall establish the terms and conditions of cash-based awards, including the conditions upon which any such award will become vested or payable. Cash-based awards may be made in cash or shares of stock in the compensation committee's discretion. Deferred stock awards are units entitling the recipient to receive shares of stock paid out on a deferred basis, and subject to such restrictions and conditions, as the compensation committee shall determine. Dividend equivalent rights are the right to receive credits based on cash dividends that would have been paid on the shares of stock underlying the award and are subject to the terms and conditions specified by the compensation committee at the time of grant. The 2006 Option Plan also permits the compensation committee to grant awards that are intended to qualify as "performance-based compensation" under Section 162(m) of the Code. These awards are only payable upon the attainment of specified performance goals, as described in the 2006 Option Plan. The maximum performance- based award payable in any performance cycle to any one individual is 750,000 shares or $10,000,000 in the event of a performance-based award that is a cash-based award.

Under the 2006 Stock Plan, each person who is a non-employee member of our board of directors on the effective date of the proposed initial public offering will be granted a fully vested nonqualified stock option to acquire 20,000 shares of common stock, less the number of shares subject to outstanding stock options held by such director on that date. Each non-employee director who is first elected to serve as a director after the initial public offering will be granted a fully vested nonqualified stock option to acquire 20,000 shares of stock. In addition, after each annual meeting of stockholders, beginning with the 2007 annual meeting, each non-employee director will automatically be granted a non-qualified stock option to acquire 10,000 shares of stock, which will vest one year after the date of grant. All of these non-employee director stock options will have an exercise price equal to the fair market value of the stock on the date the stock option is granted.

Unless the compensation committee provides otherwise, our 2006 Option Plan does not generally allow for the transfer of awards and only the recipient of an award may exercise an award during his or her lifetime. In the event of a change-in-control of Metabolix, our board of directors and the board of directors of the surviving or acquiring entity shall, as to outstanding awards under the 2006 Option Plan, make appropriate provision for the continuation or assumption of such awards.

No awards may be granted under the 2006 Option Plan after the tenth anniversary of the Effective Date. In addition, our board of directors may amend or discontinue the 2006 Option Plan at any time and the compensation committee may amend or cancel any outstanding award for the purpose of satisfying changes in law or for any other lawful purpose. No such amendment may adversely affect

the rights under any outstanding award without the holder's consent. Other than in the event of a necessary adjustment in connection with a change in our stock or a merger or similar transaction, the compensation committee may not "reprice" or otherwise reduce the exercise price of outstanding stock options.

As of September 30, 2006, there were no outstanding options to purchase shares of our common stock under our 2006 Option Plan and, assuming that no shares are returned to our 1995 Stock Plan and 2005 Option Plan and made available for issuance under our 2006 Option Plan, 2,500,000 shares of our common stock are available for future issuance or grant under our 2006 Option Plan.

401(k) Plan

We maintain a tax-qualified retirement plan that provides all regular employees with an opportunity to save for retirement on a tax-advantaged basis. Under our 401(k) Plan, participants may elect to defer a portion of their compensation on a pre-tax basis and have it contributed to the plan subject to applicable annual Internal Revenue Code limits. Pre-tax contributions are allocated to each participant's individual account and are then invested in selected investment alternatives according to the participant's directions. Employee elective deferrals are 100% vested at all times. Our 401(k) Plan allows for discretionary matching contributions to be made by us. As a tax-qualified retirement plan, contributions to our 401(k) Plan and earnings on those contributions are not taxable to the employees until distributed from our 401(k) Plan and all contributions are deductible by us when made.

Employment, Severance and Non-Competition Arrangements

We have employment agreements with Dr. Barber, Dr. Peoples, Mr. van Walsem, Mr. Auchincloss, Mr. Findlen and Mr. Igoe.

Dr. Barber, our president and chief executive officer, entered into an employment agreement with us on December 14, 2005, which was amended and restated on September 19, 2006. The agreement entitles Dr. Barber to an annual base salary of $19,583 per month, subject to adjustment from time to time. In addition, we agreed to forgive a $75,000 loan made to Dr. Barber in 2000 in exchange for Dr. Barber's covenants under the agreement. Under the agreement, Dr. Barber was granted incentive stock options under our 2005 Stock Plan, with an exercise price of $1.84 per share, as follows: (i) an option to purchase 198,796 shares of our common stock, 18% of which vested as of the date of grant, the remainder to vest over a 4 year period, subject to the terms of the agreement; (ii) options to purchase 83,909 shares of our common stock, the vesting of such options to be contingent upon the occurrence of certain financing milestones; and (iii) an option to purchase 41,955 shares of our common stock, the vesting of such option to be contingent upon the advancement of our strategic alliance with ADM and certain financing milestones.

Dr. Peoples, our vice president, research, entered into an employment agreement with us on July 20, 2006. The agreement entitles Dr. Peoples to an annual base salary of $16,666 per month, subject to adjustment from time to time. Pursuant to the agreement, Dr. Peoples received a $75,000 bonus in July 2006, and he will receive an additional $75,000 bonus following completion of this offering. Pursuant to the terms of the agreement, if we terminate Dr. Peoples' employment without "cause" or if Dr. Peoples terminates his employment for "good reason" (each, as defined in the agreement), he will be entitled to a lump-sum cash payment equal to 24 months' base salary and a pro rata portion of the target bonus for the year in which termination occurs, plus payment of COBRA premiums for 24 months. If we terminate Dr. Peoples' employment without cause or if Dr. Peoples terminates his employment for "good reason" within the twenty-four month period immediately following, or the two month period immediately prior to, a "change of control" (as defined in the agreement), in addition to

any accrued obligations, and subject to certain conditions, Dr. Peoples will receive: (i) a lump-sum cash payment equal to two times the sum of his then-current base salary plus 50% of his then-current target bonus, (ii) payment of COBRA premiums for 24 months, and (iii) full vesting of his stock options. To the extent Dr. Peoples would be subject to tax under 4999 of the Code as a result of company payments and benefits, the payments and benefits will be reduced to maximize his total after-tax payments.

Mr. van Walsem, our vice president, manufacturing, development and operations, has entered into an employment agreement with us dated May 1, 2006, which was amended and restated on September 22, 2006, that provides for a base salary of $16,666 per month, subject to adjustment from time to time. Mr. Auchincloss, our chief financial officer, has entered into an employment agreement with us dated January 10, 2006, which was amended and restated on September 22, 2006 that provides for a base salary of $16,666 per month, subject to adjustment from time to time. Mr. Findlen, our vice president, marketing, has entered into an employment agreement with us dated May 24, 2006, which was amended and restated on September 22, 2006 that provides for a base salary of $16,666 per month, subject to adjustment from time to time. Mr. Brian Igoe, our vice president, chief brand officer, has entered into an employment agreement with us dated August 29, 2006, that provides for a base salary of $16,666 per month, subject to adjustment from time to time. Additionally, Mr. Findlen's employment agreement provides for a signing bonus of $60,000, payable in two installments and Mr. Igoe's employment agreement provides for a signing bonus of $20,000. Each of our executives will be eligible to receive annual bonuses under a bonus scheme to be established by us no later than December 31, 2006, based on individual and company performance, with an initial target bonus of 50% of base salary. Pursuant to the terms of the agreements with Dr. Barber, Mr. Van Walsem, Mr. Auchincloss, Mr. Findlen and Mr. Igoe, if we terminate the executive's employment without "cause" or if the executive terminates his employment for "good reason" (each, as defined in the agreement), in addition to any accrued obligations, and contingent on the executive's provision of a timely and complete release of claims against us, for the period of twelve months following the termination he will be entitled to continuation of his base salary and payment of COBRA premiums. In addition, if the award of a bonus has become customary, the executive will be entitled to a payment equal to the average of the bonuses paid to him in the two years preceding the termination. If we terminate the executive's employment without cause or if the executive terminates his employment for "good reason" within the twenty-four month period immediately following, or the two month period immediately prior to, a "change of control" (as defined in the agreement), in addition to any accrued obligations and subject to certain conditions: (i) for a period of twelve months following the termination, we will continue the executive's base salary and payment of COBRA premiums, (ii) if the award of a bonus has become customary, the executive will be entitled to a payment equal to the average of the bonuses paid to him in the two years preceding the termination, and (iii) all of the executive's stock options will be accelerated, subject to certain conditions. To the extent the executive would be subject to tax under 4999 of the Code as a result of company payments and benefits, the payments and benefits will be reduced to maximize his total after-tax payments.

Each of our executive officers has signed an employee noncompetition, nondisclosure and inventions agreement. These agreements include a provision prohibiting the executive, during his employment by us and for a period of two years thereafter, from engaging in certain business activities. Dr. Barber and Mr. van Walsem are restricted from business activities in the field of methods of production, application and use of PHAs, their derivatives and other related technology developed by us. Mr. Auchincloss, Dr. Peoples, Mr. Findlen and Mr. Igoe are restricted from business activities which are directly or indirectly in competition with the products or services being developed, manufactured, marketed, distributed, planned, sold or otherwise provided by us or which are in any way directly or indirectly detrimental to our business.

Limitation of Liability and Indemnification

As permitted by the Delaware General Corporation Law, we have adopted provisions in our certificate of incorporation and by-laws to be in effect at the closing of this offering that limit or eliminate the personal liability of our directors. Consequently, a director will not be personally liable to us or our stockholders for monetary damages or breach of fiduciary duty as a director, except for liability for:

- any breach of the director's duty of loyalty to us or our stockholders;
- any act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;
- any unlawful payments related to dividends or unlawful stock repurchases, redemptions or other distributions; or
- any transaction from which the director derived an improper personal benefit.

These limitations of liability do not alter director liability under the federal securities laws and do not affect the availability of equitable remedies such as an injunction or rescission.

In addition, our by-laws provide that:

- we will indemnify our directors, officers and, in the discretion of our board of directors, certain employees to the fullest extent permitted by the Delaware General Corporation Law; and
- we will advance expenses, including attorneys' fees, to our directors and, in the discretion of our board of directors, to our officers and certain employees, in connection with legal proceedings, subject to limited exceptions.

Contemporaneous with the completion of this offering, we intend to enter into indemnification agreements with each of our officers and directors. These agreements provide that we will indemnify each of our directors to the fullest extent permitted by law and advance expenses to each indemnitee in connection with any proceeding in which indemnification is available.

We intend to obtain, contemporaneously with the offering, director and officer liability insurance that covers certain liabilities of our directors and officers arising out of claims based on acts or omissions in their capacities as directors or officers, including liabilities under the Securities Act of 1933, as amended. Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers, or persons controlling the registrant pursuant to the foregoing provisions, we have been informed that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

These provisions may discourage stockholders from bringing a lawsuit against our directors for breach of their fiduciary duty. These provisions may also have the effect of reducing the likelihood of derivative litigation against directors and officers, even though such an action, if successful, might otherwise benefit us and our stockholders. Furthermore, a stockholder's investment may be adversely affected to the extent we pay the costs of settlement and damage awards against directors and officers pursuant to these indemnification provisions. We believe that these provisions, the indemnification agreements and the insurance are necessary to attract and retain talented and experienced directors and officers.

At present, there is no pending litigation or proceeding involving any of our directors or officers where indemnification will be required or permitted. We are not aware of any threatened litigation or proceeding that might result in a claim for such indemnification.

CERTAIN RELATIONSHIPS AND RELATED PARTY TRANSACTIONS

Other than compensation agreements and other arrangements which are described as required in "Management" and the transactions described below, since January 1, 2002, there has not been, and there is not currently proposed, any transaction or series of similar transactions to which we were or will be a party in which the amount involved exceeded or will exceed $60,000 and in which any director, executive officer, holder of five percent or more of any class of our capital stock or any member of their immediate family had or will have a direct or indirect material interest.

All of the transactions set forth below were approved by a majority of the board of directors, including a majority of the independent and disinterested members of the board of directors. We believe that we have executed all of the transactions set forth below on terms no less favorable to us than we could have obtained from unaffiliated third parties. It is our intention to ensure that all future transactions between us and our officers, directors and principal stockholders and their affiliates, are approved by a majority of the board of directors, including a majority of the independent and disinterested members of the board of directors, and are on terms no less favorable to us than those that we could obtain from unaffiliated third parties.

Private Placements of Securities

In April 2002 and May 2002, we issued and sold 637,461 shares of Series I convertible preferred stock at price of $10.80 per share. In connection with the issuance of Series I preferred stock during 2002, we issued warrants to purchase 520,990 shares of common stock at an exercise price of $13.21 per share. Also in April 2002 and May 2002, we exchanged 529,780 shares of Series H convertible preferred stock for 529,780 shares of Series I convertible preferred stock. Concurrently, we issued warrants to purchase 432,983 shares of common stock at an exercise price of $13.21 per share in connection with the exchange.

In June 2003, we issued 270,704 shares of Series I preferred stock at $10.80 per share. In conjunction with the issuance of the Series I preferred stock during 2003, we issued warrants to purchase 221,238 shares of common stock at an exercise price of $13.21 per share.

In November 2003, we issued 324,074 shares of Series J convertible preferred stock at $10.80 per share. In conjunction with the issuance of Series J preferred stock, shareholders of 1,208,880 shares of Series I preferred stock exercised their right to exchange the shares of Series I preferred stock for 1,208,880 shares of Series J preferred stock. Shareholders of 192,147 shares of Series I preferred stock who elected not to participate in the Series J preferred stock offering had their 192,147 shares of Series I preferred stock converted into 192,147 shares of Series I-1 convertible preferred stock. In connection with the issuance of Series J preferred stock, we issued warrants to purchase 264,865 shares of common stock at an exercise price of $0.12 per share. Concurrently, we issued warrants to purchase 988,004 shares of common stock at an exercise price of $0.12 per share in connection with the exchange of Series I preferred stock for Series J preferred stock. In addition, we cancelled warrants to purchase 348,386 shares of common stock at an exercise price of $13.21 per share. In January 2004, we issued an additional 57,370 shares of Series J preferred stock at $10.80 per share. In conjunction with the issuance of Series J preferred stock in 2004, the remaining shareholders of 36,918 shares of Series I preferred stock exercised their right to exchange the shares of Series I preferred stock for 36,918 shares of Series J preferred stock. In connection with the issuance of the Series J preferred stock during 2004, we issued warrants to purchase 46,881 shares of common stock at an exercise price of $0.12 per share. Concurrently, we issued warrants to purchase 30,173 shares of common stock at an exercise price of $0.12 per share in connection with the exchange of Series I preferred stock for Series J preferred stock.

In April through August 2004, we issued 1,100,766 shares of Series 04 convertible preferred stock at $5.40 per share. In conjunction with the issuance of Series 04 preferred stock, shareholders of 1,625,242 shares of Series J preferred stock exercised their right to exchange the shares of Series J preferred stock for 3,250,484 shares of Series 04 preferred stock. A holder of 2,000 shares of Series J preferred stock who elected not to participate in the Series 04 preferred stock offering had his 2,000 shares of Series J preferred stock converted into 2,000 shares of Series J-1 convertible preferred stock. In conjunction with the issuance of Series 04 preferred stock in 2004 and the exchange of the shares of Series J preferred stock, 155,041 warrants to purchase common stock were cancelled.

From March through May 2005, we issued 893,652 shares of Series 04 convertible preferred stock at $5.40 per share.

In January 2006, we issued 2,920,000 shares of Series 05 convertible preferred stock at $6.00 per share.

The following table summarizes, on a common stock equivalent basis, the participation by our five percent stockholders, officers and directors.

Purchaser[1]	Total Common Stock Equivalents	Aggregate Consideration Paid	Investment Participation
State Farm Mutual Automobile Insurance Co.	629,469	$ 5,970,207	Series I, J, 04 and 05
The Vertical Group, L.P.[2]	390,128	$ 3,775,269	Series I, J, 04 and 05
Archer Daniels Midland Company	681,083	$ 4,999,998	Series 05
Thomas G. Auchincloss, Jr.	10,630	$ 90,460	Series I, J, 04 and 05
Edward M. Muller	38,667	$ 510,959	Series I
Edward M. Giles[3]	217,393	$ 2,100,257	Series I, J, 04 and 05
Jack W. Lasersohn[2]	390,128	$ 3,775,269	Series I, J, 04 and 05
Anthony J. Sinskey	39,467	$ 336,559	Series I, J, 04 and 05
Matthew Strobeck[4]	544,865	$ 4,000,002	Series 05

(1) See "Principal Stockholders" for more detail on shares held by these purchasers.

(2) Represents the combined holdings of Vertical Fund I, L.P. and Vertical Fund II, L.P., the sole general partner of each of which is The Vertical Group, L.P. Mr. Lasersohn, who is one of our directors, is a general partner of Vertical Group, L.P. Mr. Lasersohn shares voting and investment power over shares held by Vertical Fund I. L.P. and Vertical Fund II, L.P.

(3) Mr. Giles, who is one of our directors, is limited partner of Vertical Fund I, L.P. Mr. Giles is the Chairman of the Board of The Vertical Group, Inc. Mr. Giles does not, directly or indirectly, have any voting or dispositive power over shares held by Vertical Fund I, L.P. or Vertical Fund II, L.P.

(4) Represents the combined holdings of Guggenheim Portfolio Company XIX, LLC, Westfield Life Sciences Fund II L.P., Westfield Life Sciences Fund L.P. and Westfield Microcap Fund L.P. Mr. Strobeck, who is one of our directors, is a senior investment analyst at Westfield Capital Management Company, LLC. Mr. Strobeck shares voting and investment power over shares held by Guggenheim Portfolio Company XIX, LLC, Westfield Life Sciences Fund II L.P., Westfield Life Sciences Fund L.P., and Westfield Microcap Fund L.P.

Transactions with Archer Daniels Midland Company

ADM has agreed to purchase $7.5 million of our shares of common stock in a private placement concurrent with this offering at a price per share equal to the initial public offering price. The sale of such shares to ADM will not be registered in this offering. ADM will have piggyback registration rights and one demand registration right with respect to such shares upon the expiration of the lock-up agreement.

On July 12, 2006, we and ADM Polymer, a wholly-owned subsidiary of ADM, entered into the Commercial Alliance Agreement and related agreements. We were also a party to a Technology Alliance and Option Agreement with ADM as part of our strategic alliance which terminated upon execution of the Commercial Alliance Agreement.

Transactions with our Executive Officers and Directors

We have employment agreements with Dr. Barber, Dr. Peoples, Mr. van Walsem, Mr. Auchincloss, Mr. Findlen and Mr. Igoe, which provide for certain salary, bonus, stock option and severance compensation. For more information regarding these agreements, see "Management — Employment, Severance and Non-Competition Arrangements."

Prior to completion of this offering, we intend to enter into indemnification agreements with each of our executive officers and directors, providing for indemnification against expenses and liabilities reasonably incurred in connection with their service for us on our behalf. For more information regarding these agreements, see "Management — Limitation of Liability and Indemnification."

In September 2005, we retained Dr. ChoKyun Rha, the spouse of our director, Dr. Sinskey, to serve as an advisor for the purpose of building and managing business relationships in Asia. In consideration for Dr. Rha's services, on September 20, 2005, we granted Dr. Rha a nonqualified stock option to purchase 16,346 shares of our common stock, with an exercise price of $1.65 per share, vesting over a period of four years.

In 1999, we entered into a sublicense agreement with Tepha, Inc. ("Tepha"), to sublicense certain technology to Tepha. Our directors Messrs. Muller and Giles and Dr. Sinskey serve on the board of directors of Tepha. The agreement with Tepha contains provisions for sublicense maintenance fees to be paid to us upon Tepha achieving certain financing milestones and for product related milestone payments. Under the agreement, we will also receive royalties on net sales of licensed products or sublicensing revenues received by Tepha, subject to a minimum payment each year.

In December 2002, we amended this agreement to provide that $800,000 of Tepha's payment obligation pursuant to the agreement became payable in both cash and equity. In October 2002, Tepha paid us $100,000 in cash, and the balance of the payment obligation was satisfied in December 2002 through the issuance of 648,149 shares of Tepha's Series A redeemable convertible preferred stock. We licensed or sublicensed additional technology to Tepha in 2003, 2004 and 2005. We recognized license and royalty revenues of $112,800, $316,880, $242,100 and $189,800 from Tepha for the years ended December 31, 2003, 2004, 2005 and for the six months ended June 30, 2006 respectively. We believe that the terms of the agreements with Tepha are no less favorable to us than license agreements that might be entered into with an independent third party.

In June 2000, in connection with his relocation to Massachusetts, we made a $75,000 loan to James J. Barber, our chief executive officer. The loan was evidenced by a promissory note bearing interest at the rate of 6.62% per annum. In December 2005 the loan principal of $75,000 and the outstanding interest balance of $106,739 were forgiven in full.

Stock Option Awards

For information regarding stock options and stock awards granted to our named executive officers and directors, see "Management — Compensation of Director" and "Management — Executive Compensation."

PRINCIPAL STOCKHOLDERS

The following table sets forth the beneficial ownership information of our common stock at September 30, 2006, and as adjusted to reflect the sale of the shares of common stock in this offering and the sale of the ADM Shares, for:

- each person known to us to be the beneficial owner of more than 5% of our common stock and another significant stockholder;
- each named executive officer;
- each of our directors; and
- all of our executive officers and directors as a group.

Unless otherwise noted below, the address of the persons and entities listed on the table is c/o Metabolix, Inc., 21 Erie Street, Cambridge, MA 02139. We have determined beneficial ownership in accordance with the rules of the SEC. Except as indicated by the footnotes below, we believe, based on the information furnished to us, that the persons and entities named in the table below have sole voting and investment power with respect to all shares of common stock reflected as beneficially owned, subject to applicable community property laws. We have based our calculation of the percentage of beneficial ownership on 12,058,716 shares of common stock outstanding on September 30, 2006, assuming the conversion of all of the outstanding convertible preferred stock, and 18,435,639 shares of common stock outstanding upon completion of this offering, which includes the sale of the ADM Shares.

In computing the number of shares of common stock beneficially owned by a person and the percentage ownership of that person, we deemed outstanding shares of common stock subject to options or warrants held by that person that are currently exercisable or exercisable within 60 days of September 30, 2006. We did not deem these shares outstanding, however, for the purpose of computing the percentage ownership of any other person. Beneficial ownership representing less than 1% is denoted with an asterisk (*).

Beneficial Owner	Shares Beneficially Owned Prior to this offering		Shares Beneficially Owned After this offering	
	Number	Percent	Number	Percent
5% Stockholders:				
The Vertical Group, L.P.[1] 25 DeForest Ave Summit, NJ 07901	1,699,983	13.94%	1,699,983	9.15%
State Farm Mutual[2] Automobile Insurance Co. One State Farm Plaza Bloomington, IL 61701	2,355,617	18.63%	2,355,617	12.38%
Archer Daniels Midland Company[3] 4666 Faries Parkway Decatur, IL 62526	681,083	5.65%	1,258,006	6.82%
Westfield Capital One Financial Center Boston, MA 02111	544,865	4.52%	544,865	2.96%
Directors and Named Executive Officers:				
James J. Barber[4]	376,824	3.03%	376,824	2.00%
Oliver P. Peoples[5]	627,684	5.11%	627,684	3.36%
Johan van Walsem[6]	134,853	1.11%	134,853	*
Thomas G. Auchincloss, Jr.[7]	155,285	1.27%	155,285	*
Robert C. Findlen	—	*	—	*
Brian Igoe	—	*	—	*
Edward M. Muller[8]	1,256,596	10.29%	1,256,596	6.76%
Edward M. Giles[1][9]	1,047,139	8.53%	1,047,139	5.62%
Jay Kouba[10]	16,346	*	16,346	*
Jack W. Lasersohn[1]	1,699,983	13.94%	1,699,983	9.15%
Anthony J. Sinskey[11]	492,217	4.08%	492,217	2.67%
Matthew Strobeck[12]	544,865	4.52%	544,865	2.96%
Robert L. Van Nostrand	—	*	—	*
All executive officers and directors as a group (13)	6,351,792	47.24%	6,351,792	32.04%

* less than 1%.

(1) Consists of 893,382 shares held by The Vertical Fund I, L.P. and 95,427 shares issuable to Vertical Fund I, L.P. upon exercise of warrants. Also consists of 666,542 shares held by Vertical Fund II, L.P. and 44,632 shares issuable to Vertical Fund II, L.P. upon exercise of warrants. Mr. Lasersohn is a General Partner of The Vertical Group, L.P., the sole general partner of each of Vertical Fund I, L.P. and Vertical Fund II, L.P., and may be deemed to share voting and investment power with respect to all shares held by those entities. Mr. Lasersohn disclaims beneficial ownership of such shares except to the extent of his pecuniary interest, if any. Mr. Giles is a limited partner of Vertical Fund I, L.P. and the Chairman of the Board of The Vertical Group, Inc. Mr. Giles does not have any direct or indirect voting and investment power with respect to the shares held by Vertical Fund I, L.P. and Vertical Fund II, L.P. Mr. Giles disclaims beneficial ownership of such shares except to the extent of his pecuniary interest, if any.

(2) Includes 585,833 shares issuable to State Farm Mutual Automobile Insurance Co. upon exercise of warrants.

footnotes continued on following page

(3) ADM has agreed to purchase $7.5 million of our shares of common stock in a private placement concurrent with this offering at a price per share equal to the price to the public. The sale of such shares of common stock will not be registered in this offering.

(4) Includes 363,482 shares issuable to Dr. Barber upon exercise of stock options.

(5) Includes 219,034 shares issuable to Dr. Peoples upon exercise of stock options. Also includes 16,346 shares held by the George Stormont Trust for the benefit of certain family members. Dr. Peoples disclaims beneficial ownership of such shares except to the extent of his pecuniary interest, if any.

(6) Represents shares issuable to Mr. van Walsem upon exercise of stock options.

(7) Includes 1,021 shares issuable to Mr. Auchincloss upon exercise of warrants. Also includes 138,941 shares issuable to Mr. Auchincloss upon exercise of stock options. Also includes 1,634 shares held on behalf of his minor children. Mr. Auchincloss disclaims beneficial ownership of such shares except to the extent of his pecuniary interest, if any.

(8) Includes 145,468 shares issuable to Mr. Muller upon exercise of warrants. Also includes 45,628 shares held by certain trusts for the benefit of family members and 4,764 shares issuable upon exercise of warrants held by such trusts. Mr. Muller disclaims beneficial ownership of such shares except to the extent of his pecuniary interest, if any.

(9) Includes 211,777 shares issuable to Mr. Giles upon exercise of warrants. Also includes 342,260 shares held by certain entities over which Mr. Giles may be deemed to share voting and investment power with respect to such shares. Mr. Giles disclaims beneficial ownership of such shares except to the extent of his pecuniary interest, if any.

(10) Represents shares issuable to Mr. Kouba upon exercise of stock options.

(11) Includes 8,442 shares issuable to Dr. Sinskey upon exercise of warrants. Also includes 4,086 shares issuable to Chokyun Rha, Dr. Sinskey's spouse, upon exercise of options, of which Dr. Sinskey disclaims beneficial ownership except to the extent of his pecuniary interest, if any.

(12) Consists of 40,865 shares held by Guggenheim Portfolio Company XIX, LLC, 382,987 held by Westfield Life Sciences Fund II L.P., 54,486 held by Westfield Microcap Fund L.P., and 67,427 held by Westfield Life Sciences Fund L.P. Mr. Strobeck is a senior investment analyst at Westfield Capital Management Company, LLC. Mr. Strobeck shares voting and investment power over shares held by Guggenheim Portfolio Company XIX, LLC, Westfield Life Science Fund II L.P., Westfield Life Science Fund L.P. and Westfield Microcap Fund L.P.

DESCRIPTION OF CAPITAL STOCK

General

Upon completion of this offering, our authorized capital stock will consist of 100,000,000 shares of common stock, par value $0.01 per share, and 5,000,000 shares of undesignated preferred stock, par value $0.01 per share. The following description of our capital stock is intended as a summary only. We refer in this section to our second amended and restated certificate of incorporation as our certificate of incorporation, and we refer to our amended and restated by-laws as our by-laws.

Common Stock

As of September 30, 2006, there were 12,058,716 shares of our common stock outstanding and held of record by approximately 121 stockholders, assuming conversion of all outstanding shares of preferred stock.

Holders of our common stock are entitled to one vote for each share of common stock held of record for the election of directors and on all matters submitted to a vote of stockholders. Holders of our common stock are entitled to receive dividends ratably, if any, as may be declared by our board of directors out of legally available funds, subject to any preferential dividend rights of any preferred stock then outstanding. Upon our dissolution, liquidation or winding up, holders of our common stock are entitled to share ratably in our net assets legally available after the payment of all our debts and other liabilities, subject to the preferential rights of any preferred stock then outstanding. Holders of our 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. Except as described below in "Provisions of our Certificate of Incorporation and By-Laws and Delaware Anti-Takeover Law," a majority vote of common stockholders is generally required to take action under our certificate of incorporation and by-laws.

Preferred Stock

Upon completion of this offering, our board of directors will be authorized, without action by the stockholders, to designate and issue up to an aggregate of 5,000,000 shares of preferred stock in one or more series. The board of directors can fix the rights, preferences and privileges of the shares of each series and any of its qualifications, limitations or restrictions. Our board of directors may authorize the issuance of preferred stock with voting or conversion rights that could adversely affect the voting power or other rights of the holders of common stock. The issuance of preferred stock, while providing flexibility in connection with possible future financings and acquisitions and other corporate purposes could, under certain circumstances, have the effect of delaying, deferring or preventing a change in control of our company and might harm the market price of our common stock.

Our board of directors will make any determination to issue such shares based on its judgment as to our company's best interests and the best interests of our stockholders. We have no current plans to issue any shares of preferred stock.

Warrants

As of September 30, 2006, warrants to purchase a total of 1,773,369 shares of our common stock were outstanding with exercise prices of $0.12 per share, $3.30 per share and $13.21 per share. These warrants expire on various dates through May 21, 2014.

Registration Rights

We entered into a stockholders' agreement, dated as of January 19, 2006, with the holders of shares of our common stock issuable upon conversion of the shares of preferred stock and other stockholders, including certain members of our management. Under this agreement, holders of shares having registration rights can demand that we file a registration statement or request that their shares be covered by a registration statement that we are otherwise filing. All of these registration rights are subject to conditions and limitations, including the right of the underwriters of an offering to limit the number of shares included in such registration and our right to postpone a requested registration for a period of no more than 180 days if we determine that this offering would be materially detrimental to us.

Demand Registration Rights. The holders of approximately 12,250,210 shares of common stock, after this offering, assuming the issuance of the ADM Shares, subject to exceptions, are entitled to certain demand registration rights, upon the request of holders of a certain percentage of such shares, pursuant to which they may require us to file a registration statement under the Securities Act at our expense with respect to their shares of common stock. We are required to use our best efforts to effect any such registration. In addition, we have granted ADM one demand registration right with respect to the ADM Shares.

Piggyback Registration Rights. If we propose to register any of our securities under the Securities Act for our own account or the account of any other holder, the holders of approximately 12,250,210 shares of common stock, after this offering, assuming the issuance of the ADM Shares, are entitled to notice of such registration and are entitled to include shares of their common stock therein. In addition, we have granted ADM piggyback registration rights with respect to the ADM Shares.

We will pay all registration expenses, other than underwriting discounts and commissions, related to any demand or piggyback registration. The stockholders' agreement contains customary cross- indemnification provisions, pursuant to which we are obligated to indemnify the selling stockholders in the event of material misstatements or omissions in the registration statement attributable to us, and they are obligated to indemnify us for material misstatements or omissions attributable to them.

Provisions of our Certificate of Incorporation and By-Laws and Delaware Anti-Takeover Law

Our certificate of incorporation and by-laws will, upon completion of this offering, include a number of provisions that may have the effect of encouraging persons considering unsolicited tender offers or other unilateral takeover proposals to negotiate with our board of directors rather than pursue non-negotiated takeover attempts. These provisions include the items described below.

Board Composition and Filling Vacancies. In accordance with our certificate of incorporation, our board is divided into three classes serving staggered three-year terms, with one class being elected each year. Our certificate of incorporation also provides that directors may be removed only for cause and then only by the affirmative vote of the holders of 75% or more of the shares then entitled to vote at an election of directors. Furthermore, any vacancy on our board of directors, however occurring,

including a vacancy resulting from an increase in the size of our board, may only be filled by the affirmative vote of a majority of our directors then in office even if less than a quorum.

No Written Consent of Stockholders. Our certificate of incorporation provides that all stockholder actions are required to be taken by a vote of the stockholders at an annual or special meeting, and that stockholders may not take any action by written consent in lieu of a meeting.

Meetings of Stockholders. Our by-laws provide that only a majority of the members of our board of directors then in office may call special meetings of stockholders and only those matters set forth in the notice of the special meeting may be considered or acted upon at a special meeting of stockholders. Our by-laws limit the business that may be conducted at an annual meeting of stockholders to those matters properly brought before the meeting.

Advance Notice Requirements. Our by-laws establish advance notice procedures with regard to stockholder proposals relating to the nomination of candidates for election as directors or new business to be brought before meetings of our stockholders. These procedures provide that notice of stockholder proposals must be timely given in writing to our corporate secretary prior to the meeting at which the action is to be taken. Generally, to be timely, notice must be received at our principal executive offices not less than 90 days nor more than 120 days prior to the first anniversary date of the annual meeting for the preceding year. The notice must contain certain information specified in the by-laws.

Amendment to By-Laws and Certificate of Incorporation. As required by the Delaware General Corporation Law, any amendment of our certificate of incorporation must first be approved by a majority of our board of directors and, if required by law or our certificate of incorporation, thereafter be approved by a majority of the outstanding shares entitled to vote on the amendment, and a majority of the outstanding shares of each class entitled to vote thereon as a class, except that the amendment of the provisions relating to stockholder action, directors, limitation of liability and the amendment of our by-laws and certificate of incorporation must be approved by not less than 75% of the outstanding shares entitled to vote on the amendment, and not less than 75% of the outstanding shares of each class entitled to vote thereon as a class. Our by-laws may be amended by the affirmative vote of a majority of the directors then in office, subject to any limitations set forth in the by-laws; and may also be amended by the affirmative vote of at least 75% of the outstanding shares entitled to vote on the amendment, or, if the board of directors recommends that the stockholders approve the amendment, by the affirmative vote of the majority of the outstanding shares entitled to vote on the amendment, in each case voting together as a single class.

Blank Check Preferred Stock. Our certificate of incorporation provides for 5,000,000 authorized shares of preferred stock. The existence of authorized but unissued shares of preferred stock may enable our board of directors to render more difficult or to discourage an attempt to obtain control of us by means of a merger, tender offer, proxy contest or otherwise. For example, if in the due exercise of its fiduciary obligations, our board of directors were to determine that a takeover proposal is not in the best interests of us or our stockholders, our board of directors could cause shares of preferred stock to be issued without stockholder approval in one or more private offerings or other transactions that might dilute the voting or other rights of the proposed acquirer or insurgent stockholder or stockholder group. In this regard, our certificate of incorporation grants our board of directors broad power to establish the rights and preferences of authorized and unissued shares of preferred stock. The issuance of shares of preferred stock could decrease the amount of earnings and assets available for distribution to holders of shares of common stock. The issuance may also adversely affect the rights and powers, including voting rights, of these holders and may have the effect of delaying, deterring or preventing a change in control of us.

Section 203 of the Delaware General Corporation Law

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

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

NASDAQ Stock Market Listing

Our common stock has been approved for quotation on the NASDAQ Global Market under the trading symbol MBLX.

Transfer Agent and Registrar

Upon completion of this offering, the transfer agent and registrar for our common stock will be American Stock Transfer & Trust Company.

SHARES ELIGIBLE FOR FUTURE SALE

Immediately prior to this offering, there was no public market for our common stock. Future sales of substantial amounts of common stock in the public market, or the perception that such sales may occur, could adversely affect the market price of our common stock. Although we have been approved for quotation on the NASDAQ Global Market, we cannot assure you that there will be an active public market for our common stock.

Upon completion of this offering, we will have outstanding an aggregate of 18,435,639 shares of common stock, assuming the issuance of 5,800,000 shares of common stock offered hereby, the issuance of the ADM Shares and no exercise of the underwriter's overallotment option and no exercise of outstanding options or warrants. Of these shares, 5,800,000 shares sold in this offering will be freely tradable without restriction or further registration under the Securities Act, except for any shares purchased by our "affiliates," as that term is defined in Rule 144 under the Securities Act, whose sales would be subject to certain limitations and restrictions described below.

All remaining 12,635,639 shares of common stock held by existing stockholders were issued and sold by us in reliance on exemptions from the registration requirements of the Securities Act. Of these shares, 12,294,595 shares will be subject to "lock-up" agreements with the underwriters or us described below on the effective date of this offering. On the effective date of this offering, there will be 225,967 shares that are not subject to lock-up agreements and eligible for sale pursuant to Rule 144(k). Upon expiration of the lock-up agreements 180 days after the effective date of this offering, 9,062,942 shares will become eligible for sale, subject in most cases to the limitations of Rule 144. In addition, holders of stock options could exercise such options and sell certain of the shares issued upon exercise as described below.

Days After Date of this Prospectus	Shares Eligible for Sale	Comment
Upon Effectiveness	5,800,000	Shares sold in this offering
Upon Effectiveness	213,552	Freely tradable shares saleable under Rule 144(k) that are not subject to the lock-up
90 Days	127,492	Shares saleable under Rules 144 and 701 that are not subject to a lock-up
180 Days	11,713,763	Lock-ups released, subject to extension; shares saleable under Rules 144 and 701
Thereafter	580,832	Restricted securities held for one year or less

Lock-up Agreements

We, each of our directors and executive officers, and certain of our other stockholders, who collectively own 12,294,595 shares of our common stock, including the issuance of the ADM shares, based on shares outstanding as of September 30, 2006, have agreed that, without the prior written consent of Piper Jaffray on behalf of the underwriters, we and they will not, subject to limited exceptions, during the period ending 180 days after the date of this prospectus, subject to extension in specified circumstances:

- offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend or

otherwise transfer or dispose of, directly or indirectly, any shares of our common stock or any securities convertible into or exercisable or exchangeable for common stock; or

- enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of our common stock,

whether any transaction described above is to be settled by delivery of our common stock or such other securities, in cash or otherwise. Any determination to release any shares subject to the lock-up agreements would be made on a case-by-case basis based on a number of factors at the time of determination, including the market price of the common stock, the liquidity of the trading market for the common stock, general market conditions, the number of shares proposed to be sold and the timing, purpose and terms of the proposed sale. Piper Jaffray on behalf of the underwriters will have discretion in determining if, and when, to release any shares subject to lock-up agreements.

The 180-day restricted period described in the preceding paragraph will be automatically extended if: (1) during the last 17 days of the 180-day restricted period we issue an earnings release or announce material news or a material event; or (2) prior to the expiration of the 180-day restricted period, we announce that we will release earnings results during the 15-day period following the last day of the 180-day period, in which case the restrictions described in the preceding paragraph will continue to apply until the expiration of the 18-day period beginning on the issuance of the earnings release of the announcement of the material news or material event.

We do not currently expect any release of shares subject to lock-up agreements prior to the expiration of the applicable lock-up periods. Upon the expiration of the applicable lock-up periods, substantially all of the shares subject to such lock-up restrictions will become eligible for sale, subject to the limitations discussed above.

Rule 144

In general, under Rule 144 as currently in effect, beginning 90 days after the date of this prospectus, a person who has beneficially owned shares of our common stock for at least one year, including an affiliate, would be entitled to sell in "broker's transactions" or to market makers, within any three-month period, a number of shares that does not exceed the greater of:

- 1% of the number of shares of our common stock then outstanding, which will equal approximately 184,356 shares immediately after this offering; or

- the average weekly trading volume in our common stock on the NASDAQ Global Market during the four calendar weeks preceding the filing of a notice on Form 144 with respect to such sale.

Sales under Rule 144 are generally subject to the availability of current public information about us.

Rule 144(k)

Under Rule 144(k), a person who is not deemed to have been an affiliate of ours at any time during the 90 days preceding a sale, and who has beneficially owned the shares proposed to be sold for at least two years, is entitled to sell such shares without having to comply with the manner of sale, public information, volume limitation or notice filing provisions of Rule 144. Therefore, unless otherwise restricted, "144(k) shares" may be sold immediately upon the completion of this offering.

Rule 701

In general, under Rule 701, any of our employees, directors, officers, consultants or advisors who purchased shares from us in connection with a compensatory stock or option plan or other written agreement before the effective date of this offering is entitled to sell such shares 90 days after the effective date of this offering in reliance on Rule 144, without having to comply with the holding period and notice filing requirements of Rule 144 and, in the case of non-affiliates, without having to comply with the public information, volume limitation or notice filing provisions of Rule 144.

The SEC has indicated that Rule 701 will apply to typical stock options granted by an issuer before it becomes subject to the reporting requirements of the Securities Exchange Act of 1934, as amended, along with the shares acquired upon exercise of such options, including exercises after the date of this prospectus. Securities issued in reliance on Rule 701 are restricted securities and subject to the contractual restrictions described above, beginning 90 days after the date of this prospectus, may be sold by persons other than affiliates subject only to the manner of sale provisions of Rule 144 and by affiliates without compliance with its one year minimum holding period requirements.

Stock Options

We intend to file one or more registration statements on Form S-8 under the Securities Act to register all shares of common stock subject to outstanding stock options and common stock issued or issuable under our stock plans. We expect to file the registration statement covering shares offered pursuant to our stock plans shortly after the date of this prospectus, permitting the resale of such shares by nonaffiliates in the public market without restriction under the Securities Act, but subject to the provisions of the lock-up agreements.

Registration Rights

Upon completion of this offering, the holders of approximately 11,673,287 shares of our common stock will be eligible to exercise certain rights with respect to the registration of such shares under the Securities Act. In addition, we have granted ADM registration rights with respect to the ADM Shares. See "Description of Capital Stock — Registration Rights." Upon the effectiveness of a registration statement covering these shares, the shares would become freely tradable.

UNDERWRITING

The underwriters named below have agreed to buy, subject to the terms of the purchase agreement, the number of shares listed opposite their names below. Piper Jaffray is acting as book-running manager for the offering and together with Jefferies & Company, Inc., Thomas Weisel Partners LLC and Ardour Capital Investments, LLC is acting as representative of the underwriters. The underwriters are committed to purchase and pay for all of the shares if any are purchased other than those shares covered by the over-allotment option described below.

Underwriters	Number of Shares
Piper Jaffray & Co.	
Jefferies & Company, Inc.	
Thomas Weisel Partners LLC	
Ardour Capital Investments, LLC	
Total	5,800,000

The underwriters have advised us that they propose to offer the shares to the public at $ per share. The underwriters propose to offer the shares to certain dealers at the same price less a concession of not more than $ per share. The underwriters may allow and the dealers may reallow a concession of not more than $ per share on sales to certain other brokers and dealers. After this offering, these figures may be changed by the underwriters.

We have granted to the underwriters an option to purchase up to an additional 870,000 shares of common stock from us, at the same price to the public, and with the same underwriting discount, as set forth in the table above. The underwriters may exercise this option any time during the 30-day period after the date of this prospectus, but only to cover over-allotments, if any. To the extent the underwriters exercise the option, each underwriter will become obligated, subject to certain conditions, to purchase approximately the same percentage of the additional shares as it was obligated to purchase under the purchase agreement.

We estimate that the total fees and expenses payable by us, excluding underwriting discounts and commissions will be approximately $2.3 million, which includes legal, accounting and printing costs and various other fees associated with registration and listing of our common stock. The following table shows the underwriting fees to be paid to the underwriters in connection with this offering. These amounts are shown assuming both no exercise and full exercise of the underwriters' over-allotment option.

	No Exercise	Full Exercise
Per share	$	$
Total	$	$

We have agreed to indemnify the underwriters against certain liabilities, including civil liabilities under the Securities Act, or to contribute to payments that the underwriters may be required to make in respect of those liabilities.

We and each of our directors, executive officers and certain of our shareholders have agreed to certain restrictions on our ability to sell additional shares of our common stock for a period of 180 days after the date of this prospectus. We have agreed not to directly or indirectly offer for sale, sell, contract to

sell, grant any option for the sale of, or otherwise issue or dispose of, any shares of common stock, options or warrants to acquire shares of common stock, or any related security or instrument, without the prior written consent of Piper Jaffray. The agreements provide exceptions for (1) sales to underwriters pursuant to the purchase agreement, (2) our sales in connection with the exercise of options granted and the granting of options to purchase shares under our existing stock option plans and (3) certain other exceptions.

The 180-day restricted period described in the preceding paragraph will be automatically extended if: (1) during the last 17 days of the 180-day restricted period we issue an earnings release or announce material news or a material event; or (2) prior to the expiration of the 180-day restricted period, we announce that we will release earnings results during the 16-day period following the last day of the 180-day period, in which case the restrictions described in the preceding paragraph will continue to apply until the expiration of the 18-day period beginning on the issuance of the earnings release of the announcement of the material news or material event.

Prior to this offering, there has been no established trading market for the common stock. The initial public offering price for the shares of common stock offered by this prospectus was negotiated by us and the underwriters. The factors considered in determining the initial public offering price include the history of and the prospects for the industry in which we compete, our past and present operations, our historical results of operations, our prospects for future earnings, the recent market prices of securities of generally comparable companies and the general condition of the securities markets at the time of this offering and other relevant factors. There can be no assurance that the initial public offering price of the common stock will correspond to the price at which the common stock will trade in the public market subsequent to this offering or that an active public market for the common stock will develop and continue after this offering.

To facilitate this offering, the underwriters may engage in transactions that stabilize, maintain or otherwise affect the price of the common stock during and after this offering. Specifically, the underwriters may over-allot or otherwise create a short position in the common stock for their own account by selling more shares of common stock than have been sold to them by us. The underwriters may elect to cover any such short position by purchasing shares of common stock in the open market or by exercising the over-allotment option granted to the underwriters. In addition, the underwriters may stabilize or maintain the price of the common stock by bidding for or purchasing shares of common stock 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 this offering are reclaimed if shares of common stock previously distributed in this 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 common stock at a level above that which might otherwise prevail in the open market. The imposition of a penalty bid may also effect the price of the common stock to the extent that it discourages resales of the common stock. The magnitude or effect of any stabilization or other transactions is uncertain. These transactions may be effected on the NASDAQ Global Market or otherwise and, if commenced, may be discontinued at any time.

In connection with this offering, some underwriters may also engage in passive market making transactions in the common stock on the NASDAQ Global Market. Passive market making consists of displaying bids on the NASDAQ Global Market limited by the prices of independent market makers and effecting purchases limited by those prices in response to order flow. Rule 103 of Regulation M promulgated by the SEC limits the amount of net purchases that each passive market maker may make and the displayed size of each bid. Passive market making may stabilize the market price of the common stock at a level above that which might otherwise prevail in the open market and, if commenced, may be discontinued at any time.

From time to time in the ordinary course of their respective businesses, certain of the underwriters and their affiliates may in the future engage in commercial banking or investment banking transactions with us and our affiliates. As of the date of this prospectus, certain affiliates of the underwriters are the beneficial owners in the aggregate of 68,835 shares of our preferred stock.

Directed Share Program

At our request, Piper Jaffray has reserved for sale as part of the underwritten offering, at the initial public offering price, up to 5% of the total number of shares offered by this prospectus, for our directors, officers, employees, business associates and other persons with whom we have a relationship. The number of shares of common stock available for sale to the general public will be reduced to the extent such persons purchase such reserved shares. Any reserved shares that are not so purchased will be offered by the underwriters to the general public on the same basis as the other shares offered in this prospectus.

Notice to Prospective Investors

In relation to each member state of the European Economic Area that has implemented the Prospectus Directive (each, a relevant member state), each underwriter has represented and agreed that with effect from and including the date on which the Prospectus Directive is implemented in that relevant member state, or the relevant implementation date, it has not made and will not make an offer of shares of our common stock to the public in this offering in that relevant member state prior to the publication of a prospectus in relation to such shares which have been approved by the competent authority in that relevant member state or, where appropriate, approved in another relevant member state and notified to the competent authority in that relevant member state, all in accordance with the Prospectus Directive, except that it may, with effect from and including the relevant implementation date, make an offer of our common stock to the public in that relevant member state at any time:

- to any legal entity that is authorized or regulated to operate in the financial markets or, if not so authorized or regulated, whose corporate purpose is solely to invest in securities;
- to any legal entity that has two or more of (1) an average of at least 250 employees during the last financial year; (2) a total balance sheet of more than €43,000,000 and (3) an annual net turnover of more than €50,000,000, as shown in its last annual or consolidated accounts;
- to fewer than 100 natural or legal persons (other than qualified investors as defined in the Prospectus Directive) subject to obtaining prior consent of the underwriters; or
- in any other circumstances that do not require the publication of a prospectus pursuant to Article 3 of the Prospectus Directive.

provided that no such offer of shares shall result in a requirement for the publication of a prospectus pursuant to Article 3 of the Prospectus Directive or any measure implementing the Prospectus Directive in a relevant member state and each person who initially acquires any share or to whom any offer is made under this offering will be deemed to have represented, acknowledged and agreed that it is a "qualified investor" within the meaning of Article 2(1)(e) of the Prospectus Directive.

For purposes of this provision, the expression an "offer to the public" in any relevant member state means the communication in any form and by any means of sufficient information on the terms of the offer and the securities to be offered so as to enable an investor to decide to purchase or subscribe the

securities, as the expression may be varied in that member state by any measure implementing the Prospectus Directive in that member state, and the expression "Prospectus Directive" means Directive 2003/71/EC and includes any relevant implementing measure in each relevant member state.

We have not authorized and do not authorize the making of any offer of our common stock through any financial intermediary on our behalf, other than offers made by the underwriters with a view to the final placement of the common stock as contemplated in this prospectus supplement. Accordingly, no purchaser of our common stock, other than the underwriters, is authorized to make any further offer of our common stock on behalf of the sellers or the underwriters.

The shares have not been and will not be offered to the public within the meaning of the German Sales Prospectus Act (Verkaufsprospektgesetz) or the German Investment Act (Investmentgesetz). The shares have not been and will not be listed on a German exchange. No sales prospectus pursuant to the German Sales Prospectus Act has been or will be published or circulated in Germany or filed with the German Federal Financial Supervisory Authority (Bundesanstalt für Finanzdienstleistungsaufsicht) or any other governmental or regulatory authority in Germany. This propectus does not constitute an offer to the public in Germany and it does not serve for public distribution of the shares in Germany. Neither this prospectus, not any other document issued in connection with this offering, may be issued or distributed to any person in Germany except under circumstances which do not constitute an offer to the public within the meaning of the German Sales Prospectus Act or the German Investment Act.

Each underwriter has represented, warranted and agreed that: (i) it has not offered or sold and, prior to the expiry of a period of six months from the closing date, will not offer or sell any shares to persons in the United Kingdom except to persons whose ordinary activities involve them in acquiring, holding, managing or disposing of investments (as principal or agent) for the purposes of their businesses or otherwise in circumstances which have not resulted and will not result in an offer to the public in the United Kingdom within the meaning of the Public Offers of Securities Regulations 1995; (ii) it has only communicated or caused to be communicated and will only communicate or cause to be communicated any invitation or inducement to engage in investment activity (within the meaning of section 21 of the Financial Services and Markets Act 2000, or FSMA) received by it in connection with the issue or sale of any shares in circumstances in which section 21(1) of the FSMA does not apply to our company and (iii) it has complied and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to the shares in, from or otherwise involving the United Kingdom.

The shares offered pursuant to this prospectus will not be offered, directly or indirectly, to the public in Switzerland and this prospectus does not constitute a public offering prospectus as that term is understood pursuant to Article 652a or Article 1156 of the Swiss Federal Code of Obligations. We have not applied for a listing of the shares being offered pursuant to this prospectus on the SWX Swiss Exchange or on any other regulated securities market, and consequently, the information presented in this prospectus does not necessarily comply with the information standards set out in the relevant listing rules. The shares being offered pursuant to this prospectus have not been registered with the Swiss Federal Banking Commission as foreign investment funds, and the investor protection afforded to acquirers of investment fund certificates does not extend to acquirers of securities.

If you purchase shares of common stock offered in this prospectus, you may be required to pay stamp taxes and other charges under the laws and practices of the country of purchase, in addition to the offering price listed on the cover page of this prospectus.

LEGAL MATTERS

Goodwin Procter LLP, Boston, Massachusetts, will pass upon the validity of the shares of common stock offered hereby. Latham & Watkins LLP, New York, New York, will pass upon certain legal matters relating to this offering for the underwriters. As at the date of this prospectus, Christopher J. Denn, a partner at Goodwin Procter LLP, is the beneficial owner of 4,387 shares of our common stock.

EXPERTS

The financial statements as of December 31, 2005 and 2004 and for each of the three years in the period ended December 31, 2005 included in this prospectus have been so included in reliance on the report of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of such firm as experts in auditing and accounting.

MARKET AND INDUSTRY DATA

Unless otherwise indicated, information contained in this prospectus concerning the plastics, fuels and biofuels markets and industries, including our general expectations and market position, market opportunity and market share, is based on information from independent industry analysts and third party sources and management estimates. Management estimates are derived from publicly available information released by independent industry analysts and third party sources, as well as data from our internal research, and are based on assumptions made by us based on such data and our knowledge of such industry and markets, which we believe to be reasonable. None of the sources cited in this prospectus has consented to the inclusion of any data from its reports, nor have we sought their consent. Our internal research has not been verified by any independent source, and we have not independently verified any third party information. In addition, while we believe the market position, market opportunity and market share information included in this prospectus is generally reliable, such data involves risks and uncertainties and are subject to change based on various factors, including those discussed under the heading "Risk Factors."

WHERE YOU CAN FIND MORE INFORMATION

We have filed a registration statement on Form S-1 with the SEC for the stock we are offering by this prospectus. This prospectus does not include all of the information contained in the registration statement. You should refer to the registration statement and its exhibits for additional information. Whenever we make reference in this prospectus to any of our contracts, agreements or other documents, the references are not necessarily complete and you should refer to the exhibits filed as part of the registration statement for copies of the actual contract, agreement or other document. After this offering, we will file annual, quarterly and special reports, proxy statements and other information with the SEC.

You can obtain copies of our SEC filings, including the registration statement, over the Internet at the SEC's web site at *www.sec.gov*. You may also read and copy any document we file with the SEC at its public reference facilities at 100 F Street, NE, Washington, DC 20549. You may also obtain copies of the documents at prescribed rates by writing to the Public Reference Section of the SEC at 100 F Street, NE, Washington, DC 20549. Please call the SEC at 1-800-SEC-0330 for further information on the operation of the public reference facilities.

You should rely on the information contained in this prospectus and in the registration statement as well as other information you deem relevant. We have not authorized anyone to provide you with

information different from that contained in this prospectus. This prospectus is an offer to sell, or a solicitation of offers to buy, securities only in jurisdictions where offers and sales are permitted. The information contained in this prospectus is accurate only as of the date of this prospectus, regardless of the time of delivery of this prospectus or any sale or exchange of securities. However, we have a duty to update that information while this prospectus is in use by you where, among other things, any facts or circumstances arise which, individually or in the aggregate, represent a fundamental change in the information contained in this prospectus or any material information with respect to the plan of distribution was not previously disclosed in the prospectus or there is any material change to such information in the prospectus. This prospectus does not offer to sell or solicit any offer to buy any securities other than the common stock to which it relates, nor does it offer to sell or solicit any offer to buy any of these securities in any jurisdiction to any person to whom it is unlawful to make such offer or solicitation in such jurisdiction.

METABOLIX, INC.

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of
Metabolix, Inc.

In our opinion, the accompanying consolidated balance sheets and the related consolidated statements of operations, stockholders' equity (deficit) and cash flows present fairly, in all material respects, the financial position of Metabolix, Inc. and its subsidiary at December 31, 2004 and 2005, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2005 in conformity with accounting principles generally accepted in the United States of America. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits of these statements in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

/s/ PricewaterhouseCoopers LLP

Boston, Massachusetts
June 26, 2006, except for Note 15,
as to which the date is November 3, 2006.

Metabolix, Inc.

Consolidated Balance Sheets

	December 31, 2004	December 31, 2005	June 30, 2006 (restated)	Pro Forma June 30, 2006
			(Unaudited)	
Assets				
Current assets				
Cash and cash equivalents	$ 3,151,673	$ 1,834,632	$ 15,224,914	$ 15,224,914
Short-term investments	1,302,906	1,339,015	646,665	646,665
Restricted cash	497,486	496,367	498,129	498,129
Accounts receivable	26,675	30,000	—	—
Unbilled receivable	399,334	430,873	956,917	956,917
Other current assets	47,855	123,709	274,206	274,206
Total current assets	5,425,929	4,254,596	17,600,831	17,600,831
Property and equipment, net	1,383,799	3,005,472	3,535,791	3,535,791
Other assets	—	64,526	907,473	907,473
Investment in related party	700,000	—	—	—
Total assets	$ 7,509,728	$ 7,324,594	$ 22,044,095	$ 22,044,095
Liabilities, Redeemable Convertible Preferred Stock and Stockholder' Equity (Deficit)				
Current liabilities				
Accounts payable	$ 1,494,883	$ 1,299,356	$ 1,300,529	$ 1,300,529
Accrued expenses	725,616	830,704	1,423,252	1,423,252
Advances on financing from investors	2,000	614,994	—	—
Current portion of capital lease obligations	118,929	62,571	14,117	14,117
Current portion of deferred rent	165,470	165,470	165,469	165,469
Convertible promissory note	299,731	—	—	—
Total current liabilities	2,806,629	2,973,095	2,903,367	2,903,367
Capital lease obligations	60,694	—	—	—
Deferred rent	1,378,911	1,213,443	1,130,708	1,130,708
Long-term deferred revenue	3,000,000	5,620,808	6,258,286	6,258,286
Other long-term liabilities	—	66,218	68,548	68,548
Total liabilities	7,246,234	9,873,564	10,360,909	10,360,909
Commitments and contingencies (Note 8)				
Redeemable convertible preferred stock (Note 10)	39,234,609	44,008,906	61,442,480	—
Stockholders' equity (deficit)				
Common stock ($0.01 par value per share); 23,000,000 shares authorized in 2004 and 2005 and 26,500,000 shares authorized in June 30, 2006; 1,808,641, 1,812,828 and 2,073,390 shares issued in 2004, 2005 and June 30, 2006, respectively; 1,798,017, 1,802,204 and 2,062,766 shares outstanding in 2004, 2005 and June 30, 2006, respectively; 12,065,433 and 12,054,809 shares issued and outstanding on a pro forma basis at June 30, 2006 (unaudited)	18,086	18,128	20,734	120,654
Treasury stock (at cost); 10,624 shares in 2004, 2005 and 2006	(35,100)	(35,100)	(35,100)	(35,100)
Additional paid-in capital	3,595,037	3,633,661	4,870,117	66,212,677
Deferred compensation	—	—	(105,235)	(105,235)
Accumulated deficit	(42,549,138)	(50,174,565)	(54,509,810)	(54,509,810)
Total stockholders' equity (deficit)	(38,971,115)	(46,557,876)	(49,759,294)	11,683,186
Total liabilities, redeemable convertible preferred stock and stockholders' equity (deficit)	$ 7,509,728	$ 7,324,594	$ 22,044,095	$ 22,044,095

The accompanying notes are an integral part of these consolidated financial statements.

Metabolix, Inc.

Consolidated Statements of Operations

	Years Ended December 31,			Six Months Ended June 30,	
	2003	2004	2005	2005	2006 (restated)
				(Unaudited)	
Revenue					
Research and development revenue	$ 120,430	$ 96,875	$ 106,462	$ 31,387	$ 2,502,450
License fee and royalty revenue					
From related parties	112,800	316,880	242,100	134,000	189,800
Other	—	75,000	—	—	—
Grant revenue	2,149,995	3,189,449	2,432,439	1,343,500	1,117,486
Total revenue	2,383,225	3,678,204	2,781,001	1,508,887	3,809,736
Operating expenses					
Research and development expenses, including cost of revenue	6,203,632	5,426,601	5,980,339	2,823,666	4,669,271
General and administrative expenses	2,692,105	3,251,800	3,825,303	2,077,846	3,815,311
Total operating expenses	8,895,737	8,678,401	9,805,642	4,901,512	8,484,582
Loss from operations	(6,512,512)	(5,000,197)	(7,024,641)	(3,392,625)	(4,674,846)
Other income (expense)					
Interest income	6,876	14,154	109,356	44,042	341,902
Interest expense	(134,430)	(68,468)	(10,142)	(11,904)	(2,301)
Loss on investment in related party	—	—	(700,000)	—	—
Net loss	$ (6,640,066)	$ (5,054,511)	$ (7,625,427)	$ (3,360,487)	$ (4,335,245)
Net loss per share					
Basic and Diluted	$ (3.33)	$ (1.68)	$ (2.56)	$ (1.13)	$ (1.45)
Number of shares used in per share calculations					
Basic and Diluted	1,991,106	3,009,137	2,975,116	2,973,441	2,987,860
Pro forma net loss per share					
Basic and Diluted (unaudited)			$ (0.73)		$ (0.34)
Pro forma number of shares used in per share calculations					
Basic and Diluted (unaudited)			10,391,929		12,729,420

The accompanying notes are an integral part of these consolidated financial statements.

Metabolix, Inc.

Consolidated Statements of Stockholders' Equity (Deficit)

	Common Stock		Treasury Stock					
	Shares	Par value	Shares	Amount	Additional Paid-in Capital	Deferred Compensation	Accumulated Deficit	Total
Balance, December 31, 2002	1,792,500	$ 17,925	10,624	$ (35,100)	$ 2,080,349	$ —	$ (30,854,561)	$ (28,791,387)
Issuance of common stock warrants in connection with Series I preferred stock financing					149,405			149,405
Issuance of common stock warrants in connection with Series J preferred stock financing					373,725			373,725
Issuance of common stock warrants in connection with an exchange of Series I preferred stock and cancellation of warrants for Series I-1 and Series J preferred stock					908,771			908,771
Exercise of common stock options	16,141	161			21,215			21,376
Stock-based compensation related to common stock options issued to nonemployees					123,554			123,554
Net loss							(6,640,066)	(6,640,066)
Balance, December 31, 2003	1,808,641	18,086	10,624	(35,100)	3,657,019	$ —	(37,494,627)	(33,854,622)
Issuance of common stock warrants in connection with Series J preferred stock financing					66,140			66,140
Issuance of common stock warrants in connection with an exchange of Series I preferred stock for Series J preferred stock					41,730			41,730
Cancellation of 189,716 shares of common stock warrants in connection with the exchange of Series J-1 and Series 04 preferred stock					(218,774)			(218,774)
Stock-based compensation related to common stock options issued to nonemployees					48,922			48,922
Net loss							(5,054,511)	(5,054,511)
Balance, December 31, 2004	1,808,641	18,086	10,624	(35,100)	3,595,037	$ —	(42,549,138)	(38,971,115)
Exercise of common stock options	4,187	42			11,602			11,644
Stock-based compensation related to common stock options issued to nonemployees					27,022			27,022
Net loss							(7,625,427)	(7,625,427)
Balance, December 31, 2005	1,812,828	18,128	10,624	(35,100)	3,633,661	$ —	(50,174,565)	(46,557,876)
Exercise of common stock warrants (unaudited)	249,300	2,493			300,327			302,820
Exercise of common stock options (unaudited)	11,262	113			28,954			29,067
Stock-based compensation related to common stock options issued to nonemployees and employees (unaudited, restated)					907,175	(105,235)		801,940
Net loss (unaudited, restated)							(4,335,245)	(4,335,245)
Balance, June 30, 2006 (Unaudited)	2,073,390	$ 20,734	10,624	$ (35,100)	$ 4,870,117	$ (105,235)	$ (54,509,810)	$ (49,759,294)

The accompanying notes are an integral part of these consolidated financial statements.

Metabolix, Inc.

Consolidated Statements of Cash Flows

	Years Ended December 31,			Six Months Ended June 30,	
	2003	2004	2005	2005	2006
					(restated)
				Unaudited	
Cash flows from operating activities					
Net loss	$ (6,640,066)	$ (5,054,511)	$ (7,625,427)	$ (3,360,487)	$ (4,335,245)
Adjustments to reconcile net loss to cash used in operating activities					
Depreciation	307,508	265,253	314,565	136,976	427,692
Stock-based compensation	123,554	48,922	27,022	2,154	801,979
Loss on investment in related party	—	—	700,000	—	—
Changes in operating assets and liabilities					
Accounts receivable	(36,848)	10,173	(3,325)	16,800	30,000
Unbilled receivable	(261,679)	180,477	(31,539)	(206,170)	(526,044)
Other current assets	(9,543)	(14,842)	(75,854)	(108,729)	(150,497)
Other assets	84,050	234,082	(64,526)	—	39,526
Accounts payable	928,774	(429,303)	(195,527)	(759,323)	(51,427)
Accrued expenses	473,126	(439,535)	105,088	617,709	363,565
Deferred rent	(30,270)	1,452,699	(165,469)	(82,735)	(82,736)
Deferred revenue	(84,050)	2,765,918	2,620,808	1,050,000	637,478
Net cash used in operating activities	(5,145,444)	(980,667)	(4,394,184)	(2,693,805)	(2,845,709)
Cash flows from investing activities					
Purchase of property and equipment	(35,182)	(1,324,397)	(1,870,019)	(53,764)	(958,012)
Restricted cash	—	(497,486)	1,119	3,241	(1,762)
Proceeds from maturity of short-term investments	—	—	1,287,521	—	17,585,098
Purchase of short-term investments	—	(1,302,906)	(1,323,630)	—	(16,892,787)
Net cash used in investing activities	(35,182)	(3,124,789)	(1,905,009)	(50,523)	(267,463)
Cash flows from financing activities					
Principal payments for capitalized lease obligations	(84,636)	(124,544)	(117,052)	(64,404)	(48,454)
Payments on convertible promissory note	(436,379)	(596,877)	(299,731)	(299,731)	—
Advances for financing from investors	—	—	612,994	—	—
Proceeds from issuance of redeemable convertible preferred stock and warrants, net of issuance costs	6,307,220	6,484,038	4,774,297	4,828,695	16,818,581
Proceeds from options exercised	21,376	—	11,644	6,413	29,067
Proceeds from warrants exercised	—	—	—	—	302,820
Deferred initial public offering costs	—	—	—	—	(598,560)
Net cash provided by financing activities	5,807,581	5,762,617	4,982,152	4,470,973	16,503,454
Net increase (decrease) in cash and cash equivalents	626,955	1,657,161	(1,317,041)	1,726,645	13,390,282
Cash and cash equivalents at beginning of period	867,557	1,494,512	3,151,673	3,151,673	1,834,632
Cash and cash equivalents at end of period	$ 1,494,512	$ 3,151,673	$ 1,834,632	$ 4,878,318	$ 15,224,914
Supplemental disclosure of cash flow information					
Cash paid during the period for interest	$ 93,635	$ 35,233	$ 10,141	$ 5,169	$ 2,301
Supplemental disclosure of noncash activities					
Equipment acquired under capital lease obligations	191,982	71,600	—	—	—
Conversion of advances from investors to preferred stock	—	—	—	—	(614,993)

The accompanying notes are an integral part of these consolidated financial statements.

Metabolix, Inc.

Notes to Consolidated Financial Statements

**(Information as of June 30, 2006
and the six months ended
June 30, 2006 and 2005
is unaudited)**

1. Nature of Business

Metabolix, Inc. (the "Company"), which began operations on June 19, 1992, uses advanced biotechnology to develop environmentally sustainable, economically attractive alternatives to petrochemical-based plastics, fuels and chemicals. Metabolix is a leader in applying the advanced tools of metabolic engineering and molecular biology to efficiently produce *PHA Natural Plastics* in microbial systems and directly in nonfood plant crops. In 2005 the Company determined that it is no longer a development stage enterprise due to the commencement of its principal operations, significant collaboration agreements and its revenue levels.

The Company has incurred losses since inception and expects to incur net operating losses and negative cash flows in the near term as expenditures for research and development and commercialization exceed its revenues. The Company plans to continue to seek additional financing and collaboration arrangements to fund operations. If the Company is unable to obtain cash from these sources at acceptable terms, management intends to reduce expenses so that it can continue to meet its obligations. There can be no assurance that the Company will be successful in raising additional funds or reducing spending to a sufficient level. The Company completed a preferred stock financing round in January 2006 (Note 10).

The Company is subject to risks common to companies in the biotechnology industry including, but not limited to, development by the Company's competitors of new technological innovations, dependence on key personnel, protection of proprietary technology, the need to obtain additional funding, and compliance with government regulations.

2. Restated Interim Financial Statements

The unaudited consolidated financial statements as of and for the six months ended June 30, 2006 have been restated to include a $447,010 incremental compensation charge resulting from an adjustment to the fair value of options that were granted by the Company to its employees and certain non-employee consultants in the first six months of 2006 (see Note 12). Subsequent to the initial issuance of its interim financial statements for the six months ended June 30, 2006, the Company reassessed the fair value of its common stock and determined that the exercise prices of the employee stock options granted in the first six months of 2006 were less than the reassessed fair values of the Company's common stock at the related date of grant for accounting purposes. The restated aggregate fair value of these grants to be recognized over the four-year vesting period is $2,481,913. The Company had previously assigned an aggregate fair value of $1,109,381 to these grants.

The effect of the restatement is as follows for the six months ended June 30, 2006:

	As previously reported	As restated
Income Statement:		
Research and development expense	4,640,315	4,669,271
General and administrative expense	3,397,257	3,815,311
Loss from operations	(4,227,836)	(4,674,846)
Net loss	(3,888,235)	(4,335,245)
Net loss per share basic and diluted	$ (1.30)	$ (1.45)
Pro forma net loss per share basic and diluted	$ (0.31)	$ (0.34)

In addition to the item noted above, the Company has restated its unaudited Statement of Cash Flows for the six months ended June 30, 2006 to appropriately classify $598,560 of deferred initial public offering costs to financing activities from operating activities, where it had previously been included in the change in other assets.

3. Summary of Significant Accounting Policies

Unaudited Interim Financial Statements

The consolidated financial statements and related notes of the Company for the six months ended June 30, 2005 and June 30, 2006, respectively, are unaudited. Management believes the unaudited consolidated financial statements have been prepared on the same basis as the audited consolidated financial statements and include all adjustments, consisting only of normal recurring adjustments, necessary for a fair statement of the financial position and results of operations in such periods. Results of operations for the six months ended June 30, 2006 are not necessarily indicative of the results that may be expected for the year ended December 31, 2006.

Unaudited Pro Forma Presentation

Unaudited pro forma net loss per share is computed using the weighted average number of common shares outstanding and warrants that can be issued with little or no consideration during the period, including the pro forma effects of automatic conversion of all outstanding redeemable convertible preferred stock into shares of the Company's common stock effective upon the assumed closing of the Company's proposed initial public offering as if such conversion had occurred at the date of original issuance.

Upon the closing of the Company's initial public offering of securities, all of the outstanding shares of Series A, B, C, D, E, F, G, I-1, J-1, 04, and 05 convertible preferred stock will automatically convert

on a one-for-0.8173 basis to 9,992,041 shares of the Company's common stock. The unaudited pro forma presentation of the balance sheet has been prepared assuming the conversion of the convertible preferred stock into common stock as of June 30, 2006.

Principles of Consolidation

The consolidated financial statements include the accounts of the Company and its former wholly-owned subsidiary, Metabolix Canada. The subsidiary was closed during 2005. All significant intercompany transactions were eliminated.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting periods. Actual results could differ from those estimates.

Cash and Cash Equivalents

The Company considers all highly liquid investments purchased with an original maturity date of ninety days or less at the date of purchase to be cash equivalents. Cash and cash equivalents consist of cash on deposit.

Short-Term Investments

The Company considers all highly liquid investments with a maturity date of one year or less at the balance sheet date to be short-term investments. Short-term investments consist of certificates of deposit, for which the carrying amount approximates fair value as of December 31, 2004 and 2005. As of June 30, 2006, the Company held a corporate bond of $646,665.

Restricted Cash

The Company has restricted cash consisting of a certificate of deposit supporting a letter of credit, of $496,367 and $498,129 at December 31, 2005 and June 30, 2006, respectively, in connection with its leased facility.

Comprehensive Income (Loss)

Statement of Financial Accounting Standards No. 130, *Reporting Comprehensive Income* ("SFAS No. 130"), requires that changes in comprehensive income be shown in the financial statements with the same prominence as other financial statements. For all periods presented the Company's net loss is equal to comprehensive loss and as a result separate disclosure is not necessary.

Concentration of Credit Risk

Financial instruments that potentially subject the Company to concentrations of credit risk primarily consist of cash and cash equivalents and short-term investments. The Company invests its excess cash and cash equivalents in interest bearing certificates of deposit of a major U.S. bank. Accordingly, management believes these investments are subject to minimal credit and market risk and are of high credit quality.

At December 31, 2004 and 2005, all of the Company's unbilled receivables were due under U.S. government grants and credit risk is considered minimal. Additionally, all grant revenues were related to U.S. government grants for all periods presented.

Fair Value of Financial Instruments

The carrying amounts of the Company's financial instruments as of December 31, 2004 and 2005, which include cash equivalents, accounts receivable, unbilled receivable, accounts payable, accrued expenses, promissory note and advances on financing from investors, approximate their fair values due to the short-term nature of these instruments.

Segment Information

Statement of Financial Accounting Standards No. 131, *Disclosures about Segments of an Enterprise and Related Information (*"SFAS 131"), establishes standards for reporting information on operating segments in interim and annual financial statements. The Company operates in one segment, which is the business of developing technologies for the production of polymers and chemicals in plants and in microbes. The chief operating decision-makers review the Company's operating results on a consolidated basis and manage operations as a single operating segment.

Property and Equipment

Property and equipment are stated at cost less accumulated depreciation. Repairs and maintenance are charged to operations as incurred. Gains and losses on the disposition of equipment are recorded in net income or loss and the related cost and accumulated depreciation are removed from the respective

accounts. Depreciation is computed using the straight-line method over the estimated useful lives as follows:

	Estimated Useful Life
Equipment	$2^1/2$ - 3 years
Furniture and Fixtures	5
Software	3
Capital leases and leasehold improvements	Shorter of life or term of lease

The Company accounts for operating lease incentive payments received from the lessor in accordance with Statement of Financial Accounting Standards No. 13, *Accounting for Leases* ("SFAS 13"). Under SFAS 13, leasehold improvements made by a lessee that are funded by landlord incentives or allowances under an operating lease should be recorded by the lessee as leasehold improvement assets and amortized over the shorter of their economic lives or the lease term. The Company records landlord incentive received as deferred rent and amortizes those amounts as reductions to lease expense over the lease term.

Impairment of Long-Lived Assets

The Company accounts for the impairment and disposal of long-lived assets utilizing Statement of Financial Accounting Standards No. 144, *Accounting for the Impairment or Disposal of Long-Lived Assets* ("SFAS 144"). SFAS 144 requires that long-lived assets, such as property, plant and equipment, and purchased intangible assets subject to amortization, be reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. SFAS No. 144 further refines the requirements of Statement of Financial Accounting Standards No. 121, *Accounting for the Impairment of Long-Lived Assets and Long-Lived Assets to be Disposed of* ("SFAS No. 121"), that companies (1) recognize an impairment loss only if the carrying amount of a long-lived asset is not recoverable based on its undiscounted future cash flows and (2) measure an impairment loss as the difference between the carrying amount and fair value of the asset.

Redeemable Convertible Preferred Stock

The preferred stock contains certain redemption features that are considered outside the control of the Company, including redemption upon a change in control. Therefore the Company presents redeemable convertible preferred stock as temporary equity in the mezzanine level of the consolidated balance sheet.

Research and Development Expenses

All costs associated with internal research and development as well as research and development services conducted for others are expensed as incurred. Research and development expenses include direct costs for salaries, employee benefits, subcontractors, facility related expenses, depreciation and stock-based compensation related to employees and non-employees involved in the company's research and development. Costs related to revenue-producing contracts are recorded as research and development expenses.

Revenue Recognition

The Company recognizes revenue in accordance with the Staff Accounting Bulletin No. 104, *Revenue Recognition* ("SAB 104"), and Emerging Issues Task Force (EITF) Issue No. 00-21, *Revenue Arrangements with Multiple Deliverables*, for all revenue transactions entered into in fiscal periods beginning after June 15, 2003. Principal sources of revenue are government grants, license fees, royalty revenues and research and development payments that are primarily derived from collaborative agreements with other companies.

The Company's research and development revenue includes research services and delivery of specified materials or sample product produced resulting from the research services and revenue is recognized upon completion of the related services.

Fees to license the use of the Company's proprietary and licensed technologies in research performed by the customer are recognized only after both the license period has commenced and the technology has been delivered. Royalty revenue is recognized when it becomes determinable and collectibility is reasonably assured, otherwise the Company recognizes revenue upon receipt of payment.

The Company analyzes its multiple element arrangements to determine whether the elements can be separated and accounted for individually as separate units of accounting in accordance with EITF No. 00-21. The Company recognizes up-front license payments or technology access fees as revenue if the license or access fee has stand-alone value and the fair value of the undelivered items can be determined. If the license is considered to have stand-alone value but the fair value of any of the undelivered services or items cannot be determined, the license payments are initially deferred and recognized as revenue over the period of performance of undelivered services or as undelivered items are delivered.

Revenue from milestone payments related to arrangements under which the Company has continuing performance obligations are recognized as revenue upon achievement of the milestone only if all of the following conditions are met: the milestone payments are nonrefundable; achievement of the milestone was not reasonably assured at the inception of the arrangement; substantive effort is involved in

achieving the milestone; and the amount of the milestone is reasonable in relation to the effort expended or the risk associated with the achievement of the milestone. If any of these conditions are not met, the milestone payments are deferred and recognized as revenue over the term of the arrangement as the Company completes its performance obligations.

Government research grants that provide for payments to the Company for work performed are recognized as revenue when the related expense is incurred and the Company has obtained governmental approval to use the grant funds for agreed upon budgeted expenses. Government grant revenue is earned as research expenses related to the grants are incurred.

Intellectual Property Costs

The Company includes all costs associated with the prosecution and maintenance of patents within general and administrative expenses in the consolidated statement of operations.

Stock-Based Compensation

Prior to January 1, 2006, as permitted by Statement of Financial Accounting Standards No. 123, *Accounting for Stock-Based Compensation* ("SFAS No. 123"), the Company accounted for its stock-based awards to employees and directors using the intrinsic value method prescribed in Accounting Principles Board Opinion No. 25 ("APB No. 25"), *Accounting for Stock Issued to Employees*, and related interpretations. The Company recognizes compensation expense for stock options granted to nonemployees in accordance with the requirements of SFAS No. 123 and Emerging Issues Task Force ("EITF") Issue No. 96-18, *Accounting for Equity Instruments that Are Issued to Other than Employees for Acquiring, or in Conjunction with Selling, Goods or Services* ("EITF 96-18"). EITF 96-18 requires that such equity instruments be recorded at their fair value at the measurement date, which is generally the vesting date of the instruments. Therefore, the measurement of stock-based compensation is subject to periodic adjustments as the underlying equity instruments vest.

On January 1, 2006, the Company adopted Statement of Financial Accounting Standards No. 123(R), *Share-Based Payments* ("SFAS No. 123(R)"). Under the provisions of SFAS No. 123(R), compensation cost recognized for the six months ended June 30, 2006 includes compensation cost for all share-based payments granted subsequent to January 1, 2006, based on the grant-date fair value estimated in accordance with the provisions of SFAS No. 123(R) and will be recognized over the vesting period of the applicable award on a straight-line basis. The effect of adopting SFAS No. 123(R) for the six months ended June 30, 2006 (as restated) was an increase in net loss by $187,217 and a $0.06 increase to basic and diluted net loss per share. There is no expense recorded for options which were granted prior to January 1, 2006 under the minimum value method and with an exercise price equal to the fair value of common stock and that had a fixed measurement date at the time of grant.

Had compensation expense been determined based on the fair value of the options at the grant date consistent with the provisions of SFAS No. 123, the Company's net loss would have increased to the pro forma amounts below:

	Years Ended December 31,		
	2003	2004	2005
Net loss as reported	$ (6,640,066)	$ (5,054,511)	$ (7,625,427)
Add stock-based employee compensation expense included in reported net loss	—	—	—
Deduct stock-based employee compensation expense determined under fair value method	(80,316)	(32,264)	(106,255)
Net loss — pro forma	$ (6,720,382)	$ (5,086,775)	$ (7,731,682)
Net loss per share, as reported			
Basic and Diluted	$ (3.33)	$ (1.68)	$ (2.56)
Pro forma net loss per share			
Basic and Diluted	$ (3.38)	$ (1.69)	$ (2.60)
Number of shares used in per share calculations			
Basic and Diluted	1,991,106	3,009,137	2,975,116

Pursuant to the requirements of SFAS No. 123, for the three years ended December 31, 2005 the Company had estimated the fair value of its stock options, by applying the minimum value method which does not consider expected volatility of the underlying stock using the following assumptions and for the six months ended June 30, 2006, the Company determined the fair value of stock options using the Black-Scholes option pricing model with the following assumptions for option grants, respectively:

	Years Ended December 31,			Six Months Ended June 30, 2006
	2003	2004	2005	
Expected dividend yield	—	—	—	—
Risk-free interest rate	3.77%	4.08%	4.22%	4.89%
Expected option term (in years)	5	5	5	6.1
Volatility	—	—	—	75%

For the six months ended June 30, 2006, expected volatility is based on review of historical volatilities for similar companies as adjusted to anticipate increased expected volatility associated with being a newly public company. Management believes that the historical volatility of the Company's stock price does not best represent the expected volatility of the stock price.

The risk-free interest rate used for each grant is equal to the U.S. Treasury yield curve in effect at the time of grant for instruments with a similar expected life.

For the period ended June 30, 2006, the expected term of the options granted was determined using the "simplified" method for "plain vanilla" options as permitted by Staff Accounting Bulletin No. 107. For stock options that are not considered "plain vanilla" and, as such, do not qualify for the simplified method, for example stock options with an exercise price below the related fair value of common stock on the date of grant, the Company's estimate of expected term was based upon review of the expected terms of publicly traded peer companies with stock options that have similar characteristics.

The stock price volatility and expected terms utilized in the calculation involve management's best estimates at that time, both of which impact the fair value of the option calculated under the Black-Scholes methodology and, ultimately, the expense that will be recognized over the life of the option. SFAS 123(R) also requires that the Company recognize compensation expense for only the portion of options that are expected to vest. Therefore, the Company has estimated expected forfeitures of stock options for the grants valued. In developing a forfeiture rate estimate, the Company considered its historical experience, its growing employee base and the limited liquidity of its common stock. If the actual number of forfeitures differs from those estimated by management, additional adjustments to compensation expense may be required in future periods.

Earnings per Share

Basic net loss per share is computed by dividing net loss by the weighted-average number of shares of common stock outstanding and warrants outstanding that were previously issued for little or no consideration, excluding the dilutive effects of common stock equivalents. Common stock equivalents include stock options, certain warrants and convertible securities. Diluted net income per share assumes the conversion of all outstanding shares of redeemable convertible preferred stock using the "if converted" method, if dilutive, and includes the dilutive effect of common stock equivalents under the treasury stock method.

The number of shares of potentially dilutive common stock related to redeemable convertible preferred stock, options and warrants that were excluded from the calculation of dilutive shares since the inclusion of such shares would be anti-dilutive for the years ended December 31, 2003, 2004, 2005, and the periods ended June 30, 2005 and 2006 are shown below:

	2003	2004	2005	Six Months Ended June 30, 2005	Six Months Ended June 30, 2006
				(Unaudited)	(Unaudited)
Redeemable convertible preferred stock	4,600,314	6,875,186	7,605,556	7,605,556	9,992,043
Common stock options	681,322	762,635	2,036,982	1,067,377	2,285,167
Common stock warrants	789,444	939,150	939,150	939,150	830,911
	6,071,080	8,576,971	10,581,688	9,612,083	13,108,121

Foreign Currency Translation

The financial statements of the Company's former wholly-owned Canadian subsidiary which ceased to exist during 2005, were remeasured using the U.S. dollar as the functional currency. Monetary assets and liabilities were translated using the current exchange rate. Nonmonetary assets and liabilities are remeasured using historical exchange rates. Revenue and expenses were remeasured using average exchange rates for the period, except for items related to nonmonetary assets and liabilities, which are translated using historical exchange rates. All remeasurement gains and losses were included in determining net loss for the period in which exchange rates change and were immaterial for all years presented.

Income Taxes

The Company follows the provisions of Statement of Financial Accounting Standards No. 109, *Accounting for Income Taxes* ("SFAS No. 109"). SFAS No. 109 requires recognition of deferred tax assets and liabilities for the expected future tax consequences of events that have been included in the financial statements or tax returns. Under this method, deferred tax assets and liabilities are determined based on the difference between the financial statement and tax basis of assets and liabilities using enacted tax rates in effect for the year in which the differences are expected to reverse. A valuation allowance is provided to reduce the deferred tax asset to a level which, more likely than not, will be realized.

Recent Accounting Pronouncements

In December 2004, the Financial Accounting Standards Board ("FASB") issued SFAS No. 123(R), which replaces SFAS No. 123 and supersedes APB No. 25. SFAS No. 123(R) which requires all share-based payments to employees, including grants of employee stock options, to be recognized in the statement of operations based on their fair values. The Company implemented SFAS No. 123(R) in the reporting period beginning January 1, 2006, which resulted in a material effect on its stock compensation expense for the period ended June 30, 2006. The Company expects stock compensation

expense to materially increase in future periods as a result of the adoption of this standard and future possible stock grant activity.

In April 2005, the FASB issued FASB Interpretation No. 47, *Accounting for Conditional Asset Retirement Obligations—an interpretation of FASB Statement No. 143* (FIN No. 47). FIN No. 47 expands on the accounting guidance of Statement of Financial Accounting Standards No. 143, *Accounting for Asset Retirement Obligations* (SFAS No. 143), providing clarification of the term, conditional asset retirement obligation, and guidelines for the timing of recording the obligation. The interpretation is effective for fiscal years ending after December 15, 2005. The Company adopted FIN No. 47 and has recorded a long-term liability for its asset retirement obligations of $66,218 and an associated non-current asset of $64,615 at December 31, 2005 which represents the contractual obligations associated with the potential removal of a leasehold addition constructed during 2005.

In May 2005, the FASB issued Statement of Financial Accounting Standards No. 154, *Accounting Changes and Error Corrections*, a replacement of APB Opinion No. 20, *Accounting Changes*, and FASB issued Statement of Financial Accounting Standards No. 3, *Reporting Accounting Changes in Interim Financial Statements* ("SFAS No. 154"). SFAS No. 154 requires retrospective application to prior period financial statements of changes in accounting principle, unless it is impracticable to determine either the period-specific effects or the cumulative effect of the change. This statement requires that retrospective application of a change in accounting principle be limited to the direct effects of a change. SFAS 154 is effective for accounting changes and corrections of errors made in fiscal years beginning after December 15, 2005.

In July, 2006 the FASB issued Financial Accounting Standards Interpretation No. (FIN) 48, *Accounting for Uncertainty in Income Taxes*. FIN 48 clarifies the accounting for uncertainty in income taxes recognized in an enterprises' financial statements in accordance with SFAS No. 109. FIN 48 prescribes a recognition threshold and measurement attributable for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. FIN 48 also provides guidance on derecognition, classification, interest and penalties, accounting in interim periods, disclosures and transitions. FIN 48 is effective for fiscal years beginning after December 15, 2006. The adoption of this statement is not expected to have a material impact on the Company's consolidated financial position or results of operations.

4. Significant Collaborations

ADM Agreement

On November 3, 2004, the Company signed an agreement with ADM Polymer Corporation ("ADM"), a subsidiary of Archer Daniels Midland Company, to establish an alliance whereby the Company would provide technology and licenses thereto and research and development services, and ADM

would provide manufacturing services and capital necessary to produce *PHA Natural Plastics* on a commercial scale basis. This agreement was amended by the parties on September 8, 2005 to define certain cost sharing activities related to pilot manufacturing, to change certain milestones and make other minor modifications. The arrangement is comprised of two primary agreements: (1) the Technology Alliance and Option Agreement and (2) the Commercial Alliance Agreement.

Technology Alliance and Option Agreement

The goal of the Technology Alliance and Option Agreement is to demonstrate the capabilities of the Company's fermentation and recovery technologies at commercial scale and to prepare a master plan and budget for the construction of a 50,000 ton commercial manufacturing facility, which would provide the basis for entering into the Commercial Alliance Agreement.

The Technology Alliance and Option Agreement provides ADM with an option (the "Option") to enter into a commercial alliance for further research, development, manufacture, use and sale of *PHA Natural Plastics* on the terms and conditions set forth in the Commercial Alliance Agreement (see below). The Option is exercisable by ADM under certain conditions at any time until 30 days after the expiration of the term of the Technology Alliance and Option Agreement. This Agreement was scheduled to expire on October 6, 2006. On July 12, 2006, ADM exercised the Option (see Note 15).

Under the Technology Alliance and Option Agreement, ADM made a nonrefundable, noncreditable upfront payment of $3,000,000 to the Company in 2004. In May 2006, the Company received a $2,000,000 payment from ADM in recognition of achieving certain technical goals under the Technology Alliance and Option Agreement (unaudited). Due to future obligations of the Company under the agreements for which fair value cannot be determined, including the requirement to provide research and development activities and recovery services under the Technology Alliance and Option Agreement and certain manufacturing services, including formulation, and sales and marketing activities and other services under the Commercial Alliance Agreement (as discussed below), the entire upfront payment and milestone payment received have been recorded as deferred revenue. The Company's policy is to expense, as period costs, the direct and incremental costs incurred associated with this collaboration.

In connection with the 2005 amendment, ADM agreed to reimburse the Company for one-half of certain costs incurred by the Company related to the Company's establishment of pilot manufacturing capabilities. If the Technology Alliance was terminated without ADM exercising its Option to enter into a commercial alliance, the Company would have been required to refund to ADM a portion of these reimbursements. Amounts reimbursed in 2005 and during the six month period ended June 30, 2006, totaled approximately $620,000 and $587,000, respectively, and have been recorded as deferred revenue.

Revenue recognition for amounts deferred through June 30, 2006 are expected to commence approximately at the time of the first commercial sale of *PHA Natural Plastics* (see Commercial Alliance Agreement below) and amounts will be recognized proportionately over the period that the final services are provided over the remaining term of the Commercial Alliance Agreement.

Commercial Alliance Agreement

The Commercial Alliance Agreement specifies the terms and structure of the relationship between the Company and ADM once the Option is exercised by ADM. As of December 31, 2005 and June 30, 2006, the Option had not been exercised (see Note 15). The primary goal of this agreement is to establish the activities and obligations of the Company and ADM by which the parties will commercialize *PHA Natural Plastics*. These activities include: the establishment of a Joint Sales Company (JSC) to market and sell *PHA Natural Plastics*, the construction of a manufacturing facility capable of producing 50,000 tons of material annually, the licensing of technology to the JSC and to ADM, and the conducting of various research, development, manufacturing, sales and marketing, formulation and administrative services by the parties.

The JSC will be a limited liability company, formed and equally owned by the Company and ADM, and is intended to: (i) serve as the commercial entity to establish and develop the commercial market for the *PHA Natural Plastics*, and conduct the marketing and sales in accordance with the goals of the commercial alliance, (ii) assist in the coordination and integration of the manufacturing, formulation and marketing activities, and (iii) administer and account for financial matters on behalf of the parties. The Company and ADM will each have 50% equity and voting interest in the JSC.

A summary of the key activities under this agreement is as follows: (i) ADM will arrange for and finance the construction of a facility in which it will manufacture *PHA Natural Plastics* under contract to the JSC; (ii) the Company will either arrange for and finance the acquisition or construction of a facility in which it will formulate PHA materials or it will arrange for third parties to formulate the *PHA Natural Plastics*; (iii) the Company, acting in the name and on behalf of the JSC, will establish the initial market for the *PHA Natural Plastics*. The Company will also continue its research and development efforts to further advance the technology and expand and enhance the commercial potential of PHA materials. Subject to certain limitations, ADM will finance the working capital requirements of the JSC.

The JSC will make up to twelve payments of $1,575,000 per calendar quarter to the Company to support these activities during the construction of the Commercial Manufacturing Facility. In the event construction is completed and sale of commercial product commences prior to the JSC making all twelve such payments, the quarterly payments will cease, and the JSC will pay the Company a lump sum equal to the number of remaining unpaid payments multiplied by $250,000.

Upon the commencement of commercial sales, the JSC will pay the Company royalties on sales as well as reimburse it for the cost of services provided pursuant to the agreement.

While the JSC will be a fifty-fifty joint venture, ADM will be advancing a disproportionate share of the financial capital needed to construct the manufacturing plant and to fund the activities of the JSC. Therefore, a preferential distribution of cash flow will be used, whereby all profits (after payment of all royalties, reimbursements and fees) from the JSC shall be distributed to ADM until ADM's disproportionate investment in the JSC has been returned in full. Once ADM has recouped such amounts, the profits of the JSC shall be distributed in equal amounts to the parties.

The Commercial Alliance Agreement provides for expansion of the operations of the JSC beyond the initial license of 50,000 tons annual production through an equally owned joint venture. While certain principles of the joint venture have been agreed to, the detailed terms and conditions will not be determined until a later date.

The agreements include detailed provisions setting out the rights and obligations of the parties in the event of a termination of the Commercial Alliance. These provisions include the right for parties to terminate the Commercial Alliance upon a material default of a material obligation by the other party after a notice and cure period has expired. The parties are also permitted to terminate the Commercial Alliance if a change in circumstances that is not reasonably within the control of a party makes the anticipated financial return from the project inadequate or too uncertain. Finally, the parties have specific obligations to fulfill in the event of termination or if they file for bankruptcy protection.

BP America Production Company

On February 14, 2005, the Company signed a joint development agreement with BP America Production Company ("BP") to advance the Company's technology for producing PHA polymers in plants and to conduct an evaluation of the potential for using PHA producing plants in a biomass to energy system. In exchange for the Company completing certain research and development activities, the agreement provided for BP to pay the Company $500,000 at the start of each calendar quarter during the term of the agreement with the first two such payments due within five days of the effective date of the agreement. The Company received $2,000,000 in 2005 related to this agreement. Due to these amounts being applicable for determining BP's equity participation in a potential future joint venture between the parties, these amounts were recorded as deferred revenue at December 31, 2005.

In January 2006, the Company received notice of termination from BP with respect to the joint development agreement and as a result, there will no longer be any continuing obligations from either party. During the six months ended June 30, 2006, the Company recognized $2,500,000 in revenue from the BP arrangement, consisting of the $2,000,000 of deferred revenue and the $500,000 final payment due under the arrangement, which was received in June 2006 (unaudited).

5. Property and Equipment

Property and equipment consist of the following:

	December 31, 2004	December 31, 2005	June 30, 2006 (Unaudited)
Equipment	$ 1,810,395	$ 2,011,264	$ 2,207,285
Equipment under lease	342,539	249,030	188,950
Furniture and Fixtures	21,071	24,255	55,542
Leasehold improvements	1,284,020	3,104,947	3,894,059
Software	19,773	22,938	22,938
Total property and equipment, at cost	3,477,798	5,412,434	6,368,774
Less: Accumulated depreciation	(2,093,999)	(2,406,962)	(2,832,983)
Property and equipment, net	$ 1,383,799	$ 3,005,472	$ 3,535,791

Depreciation expense for the six months ended June 30, 2005 and 2006 and for the years ended December 31, 2003, 2004 and 2005 was $136,976 (unaudited), $427,692 (unaudited), $307,508, $265,253 and $312,964, respectively. Accumulated depreciation for equipment acquired under capital leases was $225,964 and $200,750, respectively, as of December 31, 2004 and 2005.

During 2004 the Company received a lease incentive payment of $1,521,045 from its lessor for leasehold improvements. In accordance with SFAS No. 13, the Company has recorded the leasehold improvements as an asset and is amortizing them over their useful life, along with a corresponding deferred rent liability that will be amortized as a reduction of lease expense over the remaining term of the lease.

6. Convertible Promissory Note

In conjunction with the purchase of certain technology in 2001, the Company issued a promissory note in the amount of $2,000,000. The note accrued interest beginning January 2002 at a rate of 10% per annum, through March 2005. Payments due on the promissory note were due in quarterly installments of $142,857 through March 2005. At December 31, 2005, the convertible promissory note had been repaid in full.

7. Accrued Expenses

Accrued expenses consist of the following:

	December 31, 2004	December 31, 2005	June 30, 2006 (Unaudited)
Intellectual property costs	$ 111,938	$ 92,104	$ 105,459
Contracted research and development	31,805	126,259	9,383
Professional services	299,128	497,295	561,470
Tolling fees	—	—	220,000
Other	282,745	115,046	526,940
Total accrued expenses	$ 725,616	$ 830,704	$ 1,423,252

8. Commitments and Contingencies

Leases

The Company leases its facility under an operating lease, which expires in May 2014. The Company leases equipment under capital leases with various rates of interest, ranging from 10.07% to 15.71%, with expiration dates through August 2006. All commitments are collateralized by equipment under lease. Rental payments under operating leases for the years ended December 31, 2003, 2004 and 2005, were $484,003, $590,169 and $834,148, respectively. The deferred rent liability recorded on the balance sheet includes the unamortized balance of the landlord incentive payments and the cumulative difference between actual facility lease payments and lease expense recognized ratably over the operating lease period. At December 31, 2005, the Company's future minimum payments required under operating and capital leases are as follows:

	Operating	Capital
2006	$ 988,185	$ 65,001
2007	988,185	—
2008	988,185	—
2009	988,185	—
2010	988,185	—
2011 and thereafter	3,443,948	—
Total commitments and contingencies	$ 8,384,873	65,001
Less: Amount representing interest		(2,430)
Present value of minimum lease payments		62,571
Less: Current portion		(62,571)
Capital leases — long term		$ —

Patent Action

The Procter & Gamble Company ("P&G") filed a nullity action on March 8, 2005 in Germany seeking to revoke the German equivalent of one of the Company's patents. The patent is licensed by the Massachusetts Institute of Technology ("MIT") exclusively to the Company. The Company is controlling the response to the nullity action, at the Company's expense, with MIT's cooperation.

The Company believes this nullity action is without merit and intends to vigorously defend this patent. The Company is unable to determine the potential outcome at this time and has not reserved for any potential liability in this matter at either December 31, 2005 or June 30, 2006.

Funded Research Arrangements

The Company has entered into various arrangements with universities and other unrelated third parties to perform certain research and development activities. As of June 30, 2006, the Company has committed funding of approximately $299,491 to these universities and unrelated parties. Certain of these arrangements also contain provisions for future royalties to be paid by the Company on sales of products developed under the arrangements. The Company has the right in most arrangements to terminate the relationship by giving written notice, after which the Company would be liable for services rendered to date under the arrangement.

License Agreement with Massachusetts Institute of Technology ("MIT")

The Company's exclusive license agreement with MIT requires the Company to pay annual license fees of $25,000 and additional potential royalty payments to MIT based on a percentage of net sales of products or services covered by a patent that is subject to the license. There are no material license fees or royalties accrued at December 31, 2004, 2005 and approximately $27,000 accrued at June 30, 2006.

9. Related Party Transactions

Tepha, Inc.

During 1999, the Company entered into a sublicense agreement with Tepha, Inc. ("Tepha"), to sublicense technology to Tepha. The Company's director at the time, Dr. Williams, is the president, chief executive officer and a director of Tepha. In addition, the Company directors Messrs. Muller and Giles and Dr. Sinskey serve on the Board of Directors of Tepha. The agreement with Tepha contains provisions for sublicense maintenance fees to be paid to the Company upon Tepha achieving certain financing milestones and for product related milestone payments. Under the agreement, the Company

will also receive royalties on net sales of licensed products or sublicensing revenues received by Tepha, subject to a minimum payment each year.

In December 2002, the Company amended this agreement to provide that $800,000 of Tepha's payment obligation pursuant to the agreement became payable in both cash and equity. In October 2002, Tepha paid the Company $100,000 and the balance of the payment obligation was satisfied in December 2002 through the issuance of 648,149 shares of Tepha's Series A redeemable convertible preferred stock. The Company licensed or sublicensed additional technology to Tepha in subsequent periods. The Company recognized license and royalty revenues of $112,800, $316,880, $242,100 and $189,800 from Tepha for the years ended December 31, 2003, 2004, 2005 and six months ended June 30, 2006 (unaudited), respectively.

The Company reviewed the preferred stock investment in Tepha for other than temporary impairment in accordance with Statement of Financial Accounting Standard No. 115, *Accounting for Certain Investments in Debt and Equity Securities* ("SFAS No. 115") and determined that at December 31, 2005, its investment was fully impaired based on its current fair value and, therefore, recorded an asset impairment charge of $700,000 in 2005.

ADM

The Company's collaborative partner ADM made a $5,000,000 investment in the Company as part of the Series 05 redeemable convertible preferred stock issuance in January 2006 (Note 10). ADM makes various payments to the Company under the collaborative agreements signed during November 2004 and July 2006 (Notes 4 and 15.)

Dr. ChoKyun Rha

The Company retained Dr. ChoKyun Rha, a related party, to serve as an advisor for the purpose of building and managing business relationships in Asia. Dr. Rha is the spouse of a director of the Company. In consideration for Dr. Rha's services, on September 20, 2005, the Company granted her a nonqualified stock option for the purchase of 16,346 shares of the Company's common stock, vesting over a period of four years, with an exercise price of $1.65 per share, which was the fair market value per share of the common stock at the date of grant of the option (Note 12).

10. Redeemable Convertible Preferred Stock

At December 31, 2005 the total number of shares of all classes of stock which the Company had authorization to issue was 41,600,000, consisting of 18,600,000 shares of $0.01 par value preferred stock, and 23,000,000 shares of $0.01 par value common stock.

Redeemable convertible preferred stock consists of the following at December 31:

	2003			
	Number of Shares Authorized	Shares Outstanding	Liquidation Preference	Carrying Value
Series A preferred stock	1,033,000	1,033,000	$ 1,177,620	$ 1,177,279
Series B preferred stock	396,000	396,000	633,600	633,600
Series C preferred stock	785,000	785,000	1,884,000	1,884,000
Series D preferred stock	733,000	733,000	3,371,800	3,374,732
Series E preferred stock	420,751	420,751	4,544,111	4,515,903
Series F preferred stock	186,899	186,899	2,018,509	2,018,509
Series G preferred stock	312,119	312,119	3,370,885	3,370,885
Series H preferred stock	300,000	—	—	—
Series I preferred stock	1,437,945	36,918	398,714	335,220
Series I-1 preferred stock	1,437,945	192,147	2,075,188	1,800,000
Series J preferred stock	1,837,945	1,532,954	16,555,903	13,529,539
Series J-1 preferred stock	1,837,945	—	—	—
	10,718,549	5,628,788	$ 36,030,330	$ 32,639,667

	2004			
	Number of Shares Authorized	Shares Outstanding	Liquidation Preference	Carrying Value
Series A preferred stock	1,033,000	1,033,000	$ 1,177,620	$ 1,177,279
Series B preferred stock	396,000	396,000	633,600	633,600
Series C preferred stock	785,000	785,000	1,884,000	1,884,000
Series D preferred stock	733,000	733,000	3,371,800	3,374,732
Series E preferred stock	420,751	420,751	4,544,111	4,515,903
Series F preferred stock	186,899	186,899	2,018,509	2,018,509
Series G preferred stock	312,119	312,119	3,370,885	3,370,885
Series H preferred stock	300,000	—	—	—
Series I-1 preferred stock	192,147	192,147	2,075,188	1,800,000
Series J preferred stock	1,627,242	—	—	—
Series J-1 preferred stock	1,627,242	2,000	21,600	19,010
Series 04 preferred stock	4,458,188	4,351,250	23,496,750	20,440,691
Series 04-1 preferred stock	4,458,188	—	—	—
	16,529,776	8,412,166	$ 42,594,063	$ 39,234,609

	2005			
	Number of Shares Authorized	Shares Outstanding	Liquidation Preference	Carrying Value
Series A preferred stock	1,033,000	1,033,000	$ 1,177,620	$ 1,177,279
Series B preferred stock	396,000	396,000	633,600	633,600
Series C preferred stock	785,000	785,000	1,884,000	1,884,000
Series D preferred stock	733,000	733,000	3,371,800	3,374,732
Series E preferred stock	420,751	420,751	4,544,111	4,515,903
Series F preferred stock	186,899	186,899	2,018,509	2,018,509
Series G preferred stock	312,119	312,119	3,370,885	3,370,885
Series H preferred stock	300,000	—	—	—
Series I-1 preferred stock	192,147	192,147	2,075,188	1,800,000
Series J preferred stock	1,627,242	—	—	—
Series J-1 preferred stock	1,627,242	2,000	21,600	19,010
Series 04 preferred stock	5,458,188	5,244,902	28,322,471	25,214,988
Series 04-1 preferred stock	5,458,188	—	—	—
	18,529,776	9,305,818	$ 47,419,784	$ 44,008,906

At June 30, 2006, the total number of shares of all stock which the Company has authorized to issue is 47,400,000 (unaudited), consisting of 20,900,000 (unaudited) shares of $0.01 par value preferred stock, and 26,500,000 (unaudited) shares of $0.01 par value common stock.

Redeemable convertible preferred stock consists of the following at June 30:

	2006			
	(Unaudited)			
	Number of Shares Authorized	Shares Outstanding	Liquidation Preference	Carrying Value
Series A preferred stock	1,033,000	1,033,000	$ 1,177,620	$ 1,177,279
Series B preferred stock	396,000	396,000	633,600	633,600
Series C preferred stock	785,000	785,000	1,884,000	1,884,000
Series D preferred stock	733,000	733,000	3,371,800	3,374,732
Series E preferred stock	420,751	420,751	4,544,111	4,515,903
Series F preferred stock	186,899	186,899	2,018,509	2,018,509
Series G preferred stock	312,119	312,119	3,370,885	3,370,885
Series I-1 preferred stock	192,147	192,147	2,075,188	1,800,000
Series J-1 preferred stock	2,000	2,000	21,600	19,010
Series 04 preferred stock	5,244,902	5,244,902	28,322,471	25,214,988
Series 04-1 preferred stock	5,244,902	—	—	—
Series 05 preferred stock	2,920,000	2,920,000	17,520,000	17,433,574
Series 05-1 preferred stock	2,920,000	—	—	—
	20,390,720	12,225,818	$ 64,939,784	$ 61,442,480

The following table depicts the preferred stock activity for the years ended December 31, 2003, 2004, 2005 and the period ended June 30, 2006:

	Series A-H Redeemable Preferred Stock		Series I & I-1 Redeemable Preferred Stock		Series J & J-1 Redeemable Preferred Stock		Series 04 & 04-1 Redeemable Preferred Stock		Series 05 Redeemable Preferred Stock		Total Redeemable Preferred Stock	
	Shares	Value	Shares	Value	Shares	Value	Shares	Value	Shares	Value	Shares	Value
Balance, December 31, 2002	3,866,769	$ 16,974,908	1,167,241	$ 10,789,439	—	$ —	—	$ —	—	$ —	5,034,010	$ 27,764,347
Issuance of Series I preferred stock and common stock warrants, net of issuance costs of $74,268			270,704	2,699,931							270,704	2,699,931
Issuance of Series J preferred stock and common stock warrants for cash and upon conversion of notes payable and accrued expenses, net of issuance costs of $42,115					324,074	3,084,160					324,074	3,084,160
Exchange of 1,401,027 shares of Series I preferred stock and cancellation of warrants for 192,147 shares of Series I-1 preferred stock and 1,208,880 shares of Series J preferred stock and issuance of warrants			(1,208,880)	(11,354,150)	1,208,880	10,445,379					—	(908,771)
Balance, December 31, 2003	3,866,769	16,974,908	229,065	2,135,220	1,532,954	13,529,539	—	—	—	—	5,628,788	32,639,667
Issuance of Series J preferred stock and common stock warrants, net of issuance costs of $12,015					57,370	541,440					57,370	541,440
Exchange of 36,918 shares of Series I preferred stock for 36,918 shares of Series J preferred stock and issuance of warrants			(36,918)	(335,220)	36,918	293,490					—	(41,730)
Exchange of 1,627,242 shares of Series J preferred stock for 2,000 shares of Series J-1 preferred stock and 3,250,484 shares of Series 04 preferred stock and cancellation of 189,716 shares of common stock warrants					(1,625,242)	(14,345,459)	3,250,484	14,564,233			1,625,242	218,774
Issuance of Series 04 preferred stock, net of issuance costs of $67,678							1,100,766	5,876,458			1,100,766	5,876,458
Balance, December 31, 2004	3,866,769	16,974,908	192,147	1,800,000	2,000	19,010	4,351,250	20,440,691	—	—	8,412,166	39,234,609
Issuance of Series 04 preferred stock, net of issuance costs of $54,399							893,652	4,774,297			893,652	4,774,297
Balance, December 31, 2005	3,866,769	16,974,908	192,147	1,800,000	2,000	19,010	5,244,902	25,214,988	—	—	9,305,818	44,008,906
Issuance of Series 05 preferred stock, net of issuance costs of $86,426 (unaudited)									2,920,000	17,433,574	2,920,000	17,433,574
Balance, June 30, 2006 (Unaudited)	3,866,769	$ 16,974,908	192,147	$ 1,800,000	2,000	$ 19,010	5,244,902	$ 25,214,988	2,920,000	$ 17,433,574	12,225,818	$ 61,442,480

The rights and preferences of the preferred stock at December 31, 2005 are as follows:

Dividends

The holders of outstanding preferred stock shall be entitled to receive, out of funds legally available, when and if declared by the Board of Directors, dividends at the same rate as dividends that are paid with respect to the common stock, treating each share of preferred stock as being equal to the number of shares of common stock into which each such share of preferred stock is then convertible.

Liquidation Preferences

In the event of any voluntary or involuntary liquidation, dissolution or winding-up of the Company, the holders of preferred stock then outstanding shall be entitled to be paid out of the assets of the Corporation available for distribution to its stockholders before any payment shall be made to the holders of common stock or any other class or series of stock ranking on liquidation junior to the preferred stock by reason of their ownership thereof, an amount equal to:

(i) $1.14 per share of Series A preferred,

(ii) $1.60 per share of Series B preferred,

(iii) $2.40 per share of Series C preferred,

(iv) $4.60 per share of Series D preferred,

(v) $10.80 per share of Series E preferred,

(vi) $10.80 per share of Series F preferred,

(vii) $10.80 per share of Series G preferred,

(viii) $10.80 per share of Series H preferred,

(ix) $10.80 per share of Series I-1 preferred,

(x) $10.80 per share of Series J preferred,

(xi) $10.80 per share of Series J-1 preferred,

(xii) $5.40 per share of Series 04 preferred, and

(xiii) $5.40 per share of Series 04-1 preferred.

Each of the above shall be appropriately adjusted for stock splits, stock dividends, reclassifications, recapitalizations or other similar events affecting the preferred stock.

If upon any such liquidation, dissolution or winding-up of the Company the remaining assets of the Company available for distribution to its stockholders shall be insufficient to pay the holders of shares of preferred stock the full amount to which they shall be entitled, the assets of the Company shall be distributed as follows:

(i) ratably to the holders of shares of Series 04 preferred until the Series 04 preference is paid in full,

(ii) ratably to the holders of shares of 04-1 preferred, Series J preferred, Series J-1 preferred and Series I-1 preferred in proportion to the respective amounts which would otherwise be payable in respect to the shares held by them upon such distribution if all amounts payable on or with respect to such shares were paid in full, until the Series 04-1 preference, Series J preference, Series J-1 preference and Series I-1 preference are paid in full, and

(iii) then to the holders of shares of junior preferred and any class or series of stock ranking on liquidation on a parity with the junior preferred in proportion to the respective amounts which would otherwise be payable with respect to the shares held by them upon such distribution if all amounts payable on or with respect to such shares were paid in full.

After the payment of all preferential amounts required to be paid to the holders of preferred stock and any other class or series of stock of the Company ranking on liquidation senior to or on a parity with the preferred stock, upon the dissolution, liquidation or winding-up of the Company, the remaining net assets of the Company available for distribution shall be distributed ratably among the participating holders of Series 04 preferred, Series 04-1 preferred, Series J preferred, Series J-1 preferred, Series I-1 preferred and common stock.

Change in Control

A merger or consolidation of the Company, or the sale of all or substantially all the assets of the Company, shall be deemed to be a liquidation, dissolution or winding up of the Company, and the holders of preferred stock shall be paid the liquidation amount for their shares, but only if, in the case of a merger, after giving effect to such merger, the holders of the Company's securities immediately prior to such merger own 50% or less of any surviving entity's voting securities.

Voting

Each holder of outstanding shares of preferred stock shall be entitled to the number of votes equal to the number of whole shares of common stock into which the shares of preferred stock held by such holder are then convertible. Except as provided by law, by the provisions of the Certificate of Incorporation or by the provisions establishing any other series of preferred stock, holders of any outstanding series of preferred stock shall vote together with the holders of common stock as a single class on all actions to be taken by the stockholders of the Company.

In addition, the Certificate of Incorporation provides holders of certain series of preferred stock with additional voting rights and requires the Company to secure stockholder consent for certain actions as defined in the Certificate of Incorporation.

Conversion

The holders of the preferred stock shall have conversion rights as follows:

Right to Convert

Each share of preferred stock shall be convertible, at the option of the holder, at any time and from time to time, into such number of fully paid and nonassessable shares of common stock as is determined by dividing the Adjusted Purchase Price for the series of preferred stock being converted by the applicable Conversion Price in effect at the time of conversion. The Adjusted Purchase Price and the Conversion Price shall initially be equal to the liquidation preferences.

All shares of preferred stock then outstanding shall convert into shares of common stock at the then effective conversion rate at the closing of the sale of shares of common stock in a fully underwritten public offering pursuant to an effective registration statement under the Securities Act of 1933.

Adjustment of Series J and Series 04 Conversion Price Upon Issuance of Common Stock

If the Company shall, at any time there are shares of Series J preferred and/or Series 04 preferred outstanding, issue or sell, any shares of common stock for a consideration per share less than the Conversion Price of such series of preferred stock in effect immediately prior to the time of such issue or sale, then, the Effective Conversion Price for such series of preferred stock shall be reduced to the price determined by dividing (i) an amount equal to the sum of (a) the number of shares of common stock outstanding or deemed outstanding, determined on a fully diluted basis assuming the exercise, conversion and exchange of all outstanding shares of Convertible Securities and Options immediately prior to such issue or sale multiplied by the then existing per share Effective Conversion Price for such series of preferred stock and (b) the consideration, if any, received by the Company upon such issue or

sale, by (ii) the total number of shares of common stock outstanding or deemed outstanding determined on a fully diluted basis assuming the exercise, conversion and exchange of all outstanding shares of Convertible Securities and Options immediately after such issue or sale.

Pay to Play

In the event that the Company issues any securities which would result in the reduction of the Effective Conversion Price of the Series J preferred and/or the Series 04 preferred (a "Dilutive Equity Financing"), the Company shall, after the initial closing of such Dilutive Equity Financing, provide notice to each holder of the Series J preferred and /or Series 04 preferred, that did not purchase its Participation Amount of the securities issued in such Dilutive Equity Financing (the "Pay to Play Notice"). If such holder does not purchase or agree to purchase its Participation Amount by the close of business on the 15th day after delivery of the Pay to Play Notice, then, as of such date, such holder shall be deemed to be a "Non-Participating holder" and all of the shares of the Series J preferred and/or Series 04 preferred owned by the Non-participating Holder shall automatically be converted into one share of a newly created series of preferred stock (Series J-1 or Series 04-1, as the case may be), which series shall be identical in all respects to the Series J or Series 04 preferred except that the Conversion Price of the newly created series of preferred stock shall be equal to the Effective Conversion Price of the Series J or Series 04 preferred immediately prior to the applicable Subsequent Dilutive Equity Financing and shall not be subject to further anti-dilution adjustments.

Redeemable Convertible Preferred Stock Issuances for 2003 through 2005 and for the period ended June 30, 2006 (unaudited)

In June 2003, the Company issued 270,704 shares of Series I preferred stock at $10.80 per share and warrants to purchase common stock for gross proceeds of $2,923,604.

In November 2003, the Company issued 324,074 shares of Series J redeemable convertible preferred stock at $10.80 per share and warrants to purchase common stock for gross proceeds of $3,499,999.

In November 2003, in conjunction with the issuance of Series J preferred stock, shareholders of 1,208,880 shares of Series I preferred stock exercised their right to exchange the shares of Series I preferred stock for 1,208,880 shares of Series J preferred stock.

In November 2003, shareholders of 192,147 shares of Series I preferred stock who elected not to participate in the Series J preferred stock offering had their 192,147 shares of Series I preferred stock converted into 192,147 shares of Series I-1 redeemable convertible preferred stock in accordance with the preferred stock provisions.

In January 2004, the Company issued an additional 57,370 shares of Series J preferred stock at $10.80 per share and warrants to purchase common stock for gross proceeds of $619,596.

In January 2004, in conjunction with the issuance of Series J preferred stock, the remaining shareholders of 36,918 shares of Series I preferred stock exercised their right to exchange the shares of Series I preferred stock for 36,918 shares of Series J preferred stock.

In April through August 2004, the Company issued 1,100,766 shares of Series 04 redeemable convertible preferred stock at $5.40 per share for gross proceeds of $5,944,136. In conjunction with the issuance of Series 04 preferred stock, shareholders of 1,625,242 shares of Series J preferred stock exercised their right to exchange the shares of Series J preferred stock for 3,250,484 shares of Series 04 preferred stock.

Shareholders of 2,000 shares of Series J preferred stock who elected not to participate in the Series 04 preferred stock offering had their 2,000 shares of Series J preferred stock converted into 2,000 shares of Series J-1 redeemable convertible preferred stock in accordance with the preferred stock provisions.

From March through May 2005, the Company issued 893,652 shares of Series 04 redeemable convertible preferred stock at $5.40 per share for gross proceeds of $4,825,721.

In January 2006, the Company issued 2,920,000 shares of Series 05 redeemable convertible preferred stock at $6.00 per share for gross proceeds of $17,520,000. The rights and preferences associated with this Series are similar to those rights of Series 04 redeemable convertible preferred stock. The Company also authorized 2,920,000 shares of Series 05-1 redeemable convertible preferred stock which has the rights similar to those of Series 04-1. The Company also cancelled Series H and Series J preferred stock during its first quarter ended March 31, 2006. There was no associated Series H or Series J preferred stock outstanding.

Warrants

In connection with the issuance of the Series H preferred stock during 2001, the Company issued warrants to purchase 108,239 shares of common stock at an exercise of $13.21 per share. The warrants expire five years from issuance date. The warrants were recorded at their relative fair value of $169,703 as a reduction to the carrying value of the Series H preferred stock and a corresponding increase to additional paid-in capital. The fair value of the warrants was estimated on the date of grant using the Black-Scholes option-pricing model with the following assumptions: no dividend yield, 90% volatility, risk-free interest rate of 5.13%, and a life of five years.

In connection with the issuance of Series I preferred stock during 2002, the Company issued warrants to purchase 520,990 shares of common stock at an exercise price of $13.21 per share; and concurrently, the Company issued warrants to purchase 432,983 shares of common stock at an exercise price of $13.21 per share in connection with the exchange of Series H preferred stock for Series I preferred stock. The warrants expire five years from issuance date. The warrants were recorded at their relative fair value of $1,553,389 as a reduction to the carrying value of the Series I preferred stock and a corresponding increase to additional paid-in capital. The fair value of the warrants was estimated on the date of grant using the Black-Scholes option-pricing model with the following assumptions: no dividend yield, 100% volatility, risk-free interest of 4.65%, and a life of five years.

In conjunction with the issuance of the Series I preferred stock during 2003, the Company issued warrants to purchase 221,238 shares of common stock at an exercise price of $13.21 per share. The warrants expire five years from issuance date. The warrants were recorded at their relative fair value of $149,405 as a reduction to the carrying value of the Series I preferred stock and a corresponding increase to additional paid-in capital. The fair value of the warrants was estimated on the date of grant using the Black-Scholes option-pricing model with the following assumptions: no dividend yield, 100% volatility, risk-free interest of 2.27%, and a life of five years.

In connection with the issuance of Series J preferred stock, the Company issued warrants to purchase 264,865 shares of common stock at an exercise price of $0.12 per share; and concurrently, the Company issued warrants to purchase 988,004 shares of common stock at an exercise price of $0.12 per share in connection with the exchange of Series I preferred stock for Series J preferred stock. The warrants expire five years from issuance date. In addition, the Company cancelled warrants to purchase 348,386 shares of common stock at an exercise price of $13.21 per share. The warrants issued were recorded at their relative fair value of $1,282,495 as a reduction to the carrying value of the Series J preferred and a corresponding increase to additional paid-in capital, net of the reversal of the canceled warrants. The fair value of the warrants was estimated on the date of grant using the Black-Scholes option-pricing model with the following assumptions: no dividend yield, 100% volatility, risk-free interest rate of 3.29%, and a life of five years.

In connection with the issuance of the Series J preferred stock during 2004, the Company issued warrants to purchase 46,881 shares of common stock at an exercise price of $0.12 per share; and concurrently, the Company issued warrants to purchase 30,173 shares of common stock at an exercise price of $0.12 per share in connection with the exchange of Series I preferred stock for Series J preferred stock. The warrants expire five years from issuance date. The warrants were recorded at their relative fair value of $107,870 as a reduction to the carrying value of the Series J preferred stock and a corresponding increase to additional paid-in capital. The fair value of the warrants was estimated on the date of grant using the Black-Scholes option-pricing model with the following assumptions: no dividend yield, 100% volatility, risk-free interest rate range of 3.12% - 3.29%, and a life of five years.

In connection with signing the lease agreement in 2004, the Company issued the landlord warrants to purchase 4,086 shares of common stock at an exercise price of $3.30 per share. The warrants expire ten years from the lease term commencement date. The fair value of the warrants was immaterial.

In conjunction with the issuance of Series 04 preferred stock in 2004 and the exchange of the shares of Series J preferred stock, 155,041 warrants to purchase common stock were cancelled resulting in a decrease of additional paid-in capital of $218,773.

During the six months ended June 30, 2006, 228,501 and 20,800 of the outstanding $0.12 and $13.21 warrants, respectively, were exercised (unaudited). Also, during the six months ended June 30, 2006, 87,439 warrants at $13.21 expired (unaudited).

11. Common Stock

Common Stock Issuances

In 1992, the Company issued 245,190 shares of common stock to initial investors at a price of $0.04 per share or total proceeds of $9,000.

In November 1993, the Company issued 980,760 shares of common stock to new and existing stockholders at a price of $0.031 per share or total proceeds of $30,000. Additionally, in November 1993, the Company issued 408,650 shares of Class A common stock to existing stockholders at a price of $0.24 per share or total proceeds of $100,000. The outstanding shares of Class A common stock were automatically converted into common stock upon issuance of a preferred series in 1994 and Class A common shares are no longer authorized by the Company.

12. Stock Compensation Plans

In 1995, the Company adopted a stock plan (the "1995 Plan"). The 1995 Plan provided for the granting of incentive stock options, nonqualified stock options, stock awards, and opportunities to make direct purchases of stock, to employees, officers, directors and consultants of the Company. In June 2005, the 1995 Plan was terminated, and the Company adopted a new plan (the "2005 Plan" and, together with the 1995 Plan, referred to as the "Plans"). No further grants or awards have been, or may be, made under the 1995 Plan. Options that are outstanding under the 1995 Stock Plan continue to be governed by the 1995 Stock Plan. The 2005 Plan provides for the granting of incentive stock options, nonqualified stock options, stock grants, and stock-based awards to employees, officers, directors and consultants of the Company. The number of shares of common stock authorized for issuance under the 2005 Plan is 1,838,925 shares plus the amount of shares, if any, that were subject to options under the 1995 Stock Plan at June 2, 2005, but which subsequently become unissued upon the cancellation, surrender or termination of such options. At December 31, 2005, there were 2,448 and 2,656 shares that were subject to outstanding options under the 1995 Plan and the 2005 Plan, respectively, which had been unissued as a result of termination.

Options granted under the Plans generally vest ratably over four years from the date of hire, or date of commencement of services with the Company for nonemployees, and generally expire ten years from the date of issuance.

A summary of the number of shares of common stock for which outstanding options were exercisable under each of the Plans follows:

	1995 Stock Plan		2005 Stock Plan	
	Number Exercisable	Weighted Average Exercise Price	Number Exercisable	Weighted Average Exercise Price
December 31, 2003	406,677	$ 3.11	—	$ —
December 31, 2004	516,136	3.07	—	—
December 31, 2005	644,751	3.79	296,775	1.70
June 30, 2006 (unaudited)	671,724	3.76	458,032	1.84

A summary of the activity related to the shares of common stock covered by outstanding options under each of the plans follows:

	1995 Stock Option Plan			2005 Stock Option Plan		
	Number of Shares	Exercise Price Per Share	Weighted Average Exercise Price	Number of Shares	Exercise Price Per Share	Weighted Average Exercise Price
Balance at December 31, 2002	489,877	$0.49 - $13.21	$ 4.04	—	$—	$ —
Granted	216,365	$3.30	3.30	—	—	—
Exercised	(16,137)	$0.49 - $3.30	1.32	—	—	—
Cancelled	(8,783)	$3.30	3.30	—	—	—
Balance at December 31, 2003	681,322	$1.41 - $13.21	3.88	—	—	—
Granted	89,483	$1.65	1.65	—	—	—
Exercised	—	—	—	—	—	—
Cancelled	(8,170)	$1.65 - $3.30	3.14	—	—	—
Balance at December 31, 2004	762,635	$1.41 - $13.21	3.62	—	—	—
Granted	—	—	—	1,283,641	$1.65 - $1.84	1.70
Exercised	(3,265)	$1.65 - $3.30	3.09	(918)	1.65	1.65
Cancelled	(2,454)	$1.65 - $3.30	2.48	(2,657)	1.65	1.65
Balance at December 31, 2005	756,916	$1.41 - $13.21	$ 3.63	1,280,066	$1.65 - $1.84	$ 1.70

The weighted average fair value per share of options granted during fiscal years 2003, 2004 and 2005 was approximately $1.41, $0.54 and $0.33, respectively.

A summary of information about the shares of common stock covered by outstanding and exercisable options under the option plans at December 31, 2005 follows:

	Outstanding			Exercisable	
Exercise Prices	Number of Shares	Weighted Average Remaining Contractual Life (Years)	Weighted Average Exercise Price	Number of Shares	Weighted Average Exercise Price
$1.41	40,045	1.52	$ 1.41	40,045	$ 1.41
$1.65	1,042,440	9.51	$ 1.65	266,482	$ 1.65
$1.84	324,658	9.96	$ 1.84	76,670	$ 1.84
$3.30	582,436	5.57	$ 3.30	510,926	$ 3.30
$13.21	47,403	4.06	$ 13.21	47,403	$ 13.21
$1.41 - 13.21	2,036,982	8.17	$ 2.42	941,526	$ 3.13

At December 31, 2005, 560,395 shares were available for future option grants, stock grants, and stock-based awards under the 2005 Plan.

During the six months ended June 30, 2006, the Company granted stock options to acquire 17,570 shares of common stock at an exercise price of $1.84, 112,376 shares of common stock at an exercise price of $3.36, and 185,116 shares of common stock at an exercise price of $5.14.

In connection with this offering, the Company's board of directors determined to undertake a reassessment of the fair value of our common stock as of each of the 2006 grant dates. In connection with this undertaking, the Company's board of directors considered the following:

- the valuation indicated by the January 2006 closing of the Series 05 convertible preferred stock financing, which included participation by investors who had not participated in prior financing rounds; and
- events leading up to the signing of the commercial alliance agreement with ADM in July 2006.

Following this reassessment, the Company's board of directors, with input from management, determined that the exercise prices of stock option grants in 2006 were less than the respective fair values of our common stock on the grant dates for accounting purposes. The Company has therefore revised the Black-Scholes fair value of these stock option grants to reflect the reassessed fair value of the Company's common stock.

In December 2005, 324,660 options were granted to an officer of the Company of which 125,864 contain performance based vesting conditions. These options were issued at an exercise price of $1.84 which was below their fair market value of $1.91 at the time of grant and the related compensation expense was immaterial for the period ended December 31, 2005. The 125,864 options are a variable award and are subject to remeasurement which could result in the recording of compensation expense in the future, depending on the probability of achieving certain performance conditions. All other option grants awards during 2003, 2004 and 2005 were issued at an exercise price equal to the fair market value on the date of issuance.

During the six months ended June 30, 2006, 41,954 of the 125,864 variable options granted to the officer of the Company during 2005 were cancelled due to the term expiration; 41,954 of these variable options were determined to be highly probable for meeting the performance condition and as a result $231,516 in compensation expense and $105,235 in deferred compensation was recorded during the period (unaudited, restated).

During 2005 and through June 30, 2006 (unaudited), the Company granted the following options to employees and nonemployees:

Grants Made During Quarter Ended	Number of Options Granted	Weighted-Average Exercise Price	Weighted-Average Fair Value per Share	Weighted-Average Intrinsic Value per Share
6/30/2006 (unaudited, restated)	297,492	$ 4.47	$ 8.98	$ 4.51
3/31/2006 (unaudited, restated)	17,570	$ 1.84	$ 2.81	$ 0.97
12/31/2005	324,658	$ 1.84	$ 1.91	$ 0.07
9/30/2005	652,200	$ 1.65	$ 1.65	$ —
6/30/2005	306,783	$ 1.65	$ 1.65	$ —
3/31/2005	—	$ —	$ —	$ —

During 2003, 2004, 2005 and the six months ended June 30, 2006, the Company granted stock options to purchase 75,395, 17,980, 59,558 and 42,907 (unaudited) shares of common stock, respectively, to nonemployees. The compensation expense related to these options is recognized over a period of four years. The 2005 and 2006 grants vest quarterly and the 2003 and 2004 grants vest on an annual basis and such vesting is contingent upon future services provided by the consultants to the Company. Relating to these options, the Company recorded stock based compensation expense of $123,554, $48,922, $27,022 and $376,123 (unaudited, restated) during 2003, 2004, 2005 and the six months ended June 30, 2006, respectively. Options remaining unvested for the nonemployee are subject to remeasurement each reporting period prior to vesting in full. Since the fair market value of the options issued to the nonemployee is subject to change in the future, the compensation expense recognized in each year may not be indicative of future compensation charges.

The fair value of each option granted to non-employees was estimated using the Black-Scholes option pricing model with the following assumptions:

Dividend yield	—
Volatility	75 - 100%
Risk-free interest rate	3.94 - 5.15%
Option term	10 years

Stock Options under SFAS No. 123(R) for the period ended June 30, 2006 (unaudited, restated)

A summary of stock option activity under the Plans for the six months ended June 30, 2006 (unaudited) is presented below:

	1995 Stock Option Plan			2005 Stock Option Plan		
	Number of Shares	Exercise Price Per Share	Weighted Average Exercise Price	Number of Shares	Exercise Price Per Share	Weighted Average Exercise Price
Balance at December 31, 2005	756,916	$1.41 - $13.21	$ 3.63	1,280,066	$1.65 - $1.84	$ 1.70
Granted	—	—	—	315,062	$1.84 - $5.14	4.32
Exercised	(7,966)	$1.65 - $3.30	2.96	(3,294)	$1.65	1.65
Cancelled	(2,247)	$1.65 - $3.30	2.10	(53,370)	$1.65 - $1.84	1.81
Balance at June 30, 2006	746,703	$1.41 - $13.21	3.64	1,538,464	$1.65 - $5.14	2.23

A summary of information about the shares of common stock covered by outstanding and exercisable options under the option plans at June 30, 2006 (unaudited) follows:

	Outstanding			Exercisable	
Exercise Prices	Number of Shares	Weighted Average Remaining Contractual Life (Years)	Weighted Average Exercise Price	Number of Shares	Weighted Average Exercise Price
$1.41	40,045	1.02	$ 1.41	40,045	$ 1.41
$1.65	1,028,548	9.02	$ 1.65	386,240	$ 1.65
$1.84	296,188	9.47	$ 1.84	98,222	$ 1.84
$3.30	575,491	5.06	$ 3.30	534,221	$ 3.30
$3.36	112,376	9.81	$ 3.36	7,279	$ 3.36
$5.14	185,116	9.96	$ 5.14	16,346	$ 5.14
$13.21	47,403	3.57	$ 13.21	47,403	$ 13.21
$1.41 - 13.21	2,285,167	7.94	$ 2.69	1,129,756	$ 2.98

At June 30, 2006 the aggregate intrinsic value of outstanding and exercisable options was $16,537,600 and $7,926,107, respectively (unaudited, restated). At June 30, 2006 the weighted average contractual remaining life of exercisable options was 6.60 years.

The weighted average fair value of stock options granted during the six months ended June 30, 2006 was $7.31 (unaudited, restated).

As of June 30, 2006, the total compensation cost related to nonvested options not yet recognized in the financial statements is approximately $1,647,810 (unaudited, restated) and the weighted average period over which it is expected to be recognized is 3.74 years (unaudited).

13. Income Taxes

There is no provision for income taxes because the Company has incurred operating losses since inception. The reported amount of income tax expense for the years differs from the amount that would result from applying domestic federal statutory tax rates to pretax losses primarily because of changes in valuation allowance. Significant components of the Company's net deferred tax asset at December 31, 2003, 2004 and 2005 are as follows:

	2003	2004	2005
Net operating loss carryforwards	$ 8,301,389	$ 9,136,063	$ 9,905,024
Capitalization of research and development expenses	3,798,657	3,572,974	4,670,977
Credit carryforwards	1,343,156	1,431,308	1,736,233
Other temporary differences	2,453,955	3,664,049	4,802,220
Total deferred tax assets	15,897,157	17,804,394	21,114,454
Valuation allowance	(15,897,157)	(17,804,394)	(21,114,454)
Net deferred tax asset	$ —	$ —	$ —

At December 31, 2005, the Company had net operating loss carryforwards for federal and state income tax purposes of approximately $26,033,000 and $16,807,000, respectively. The Company's federal and state net operating loss carryforwards will begin to expire in 2008 and 2006, respectively. The Company also has available research and development credits for federal and state income tax purposes of approximately $1,075,000 and $888,000, respectively. The federal and state research and development credit will begin to expire in 2012. The Company also has available investment tax credits for state income tax purposes of approximately $114,000, which began to expire in 2005. However, changes in the Company's ownership, as defined in the Internal Revenue Code, may limit the Company's ability to utilize the net operating loss and tax credit carryforwards.

Management of the Company has evaluated the positive and negative evidence bearing upon the realizability of its deferred tax assets, which are comprised principally of net operating loss carryforwards and research and development credits. Under the applicable accounting standards, management has considered the Company's history of losses and concluded that it is more likely than not that the Company will not recognize the benefits of federal and state deferred tax assets. Accordingly, a full valuation allowance has been established against the deferred tax assets.

Utilization of the net operating losses and credits may be subject to a substantial annual limitation due to ownership change limitations provided by the Internal Revenue Code of 1986, as well as similar state and foreign provisions. These ownership changes may limit the amount of net operating loss and credit carryforwards that can be utilized annually to offset future taxable income and tax, respectively. Subsequent ownership changes could further affect the limitation in future years. These annual limitation provisions may result in the expiration of certain net operating losses and credits before utilization.

14. Employee Benefits

The Company established a 401(k) savings plan in 1995, in which substantially all of its permanent employees are eligible to participate. Participants may contribute up to $14,000 of their annual compensation to the plan in 2005, subject to certain limitations. The Company has not made any contribution from inception to December 31, 2005.

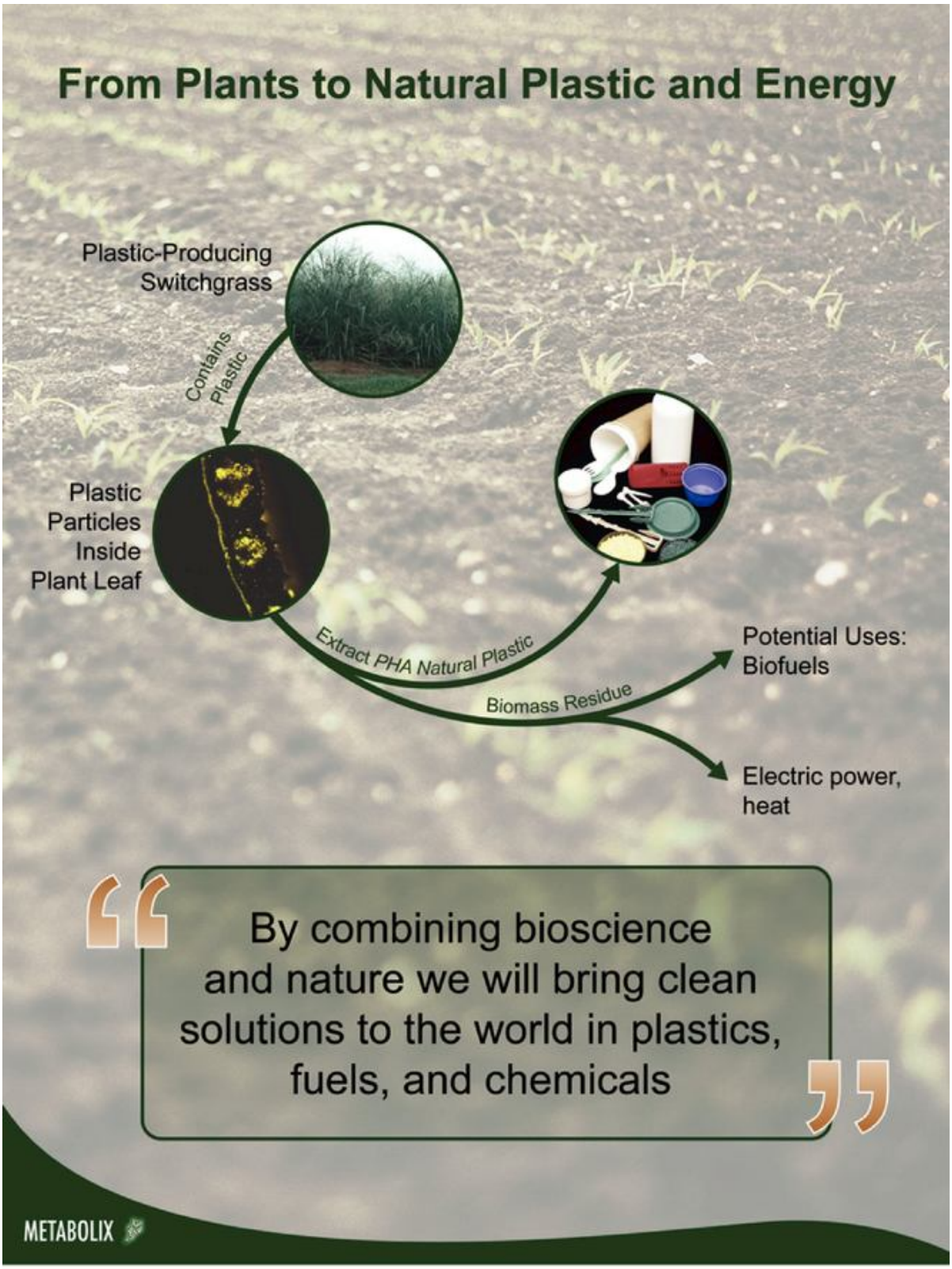
15. Subsequent Events

On July 12, 2006, ADM exercised its option under the Technology Alliance and Option Agreement and entered into the Commercial Alliance Agreement with the Company at which time the Technology Alliance and Option Agreement terminated pursuant to its terms.

On July 14, 2006, the Company filed its initial public offering S-1 registration statement.

On July 25, 2006, the Company received the first two quarterly payments due from ADM under the Commercial Alliance Agreement totaling $3.15 million.

On September 20, 2006, a 0.8173-for-1 reverse stock split was declared by the Board of Directors and was effective on November 3, 2006. Such reverse stock split is retroactively reflected in these consolidated financial statements for all periods presented.


From Plants to Natural Plastic and Energy
Plastic-Producing Switchgrass
Contains Plastic
Plastic Particles Inside Plant Leaf
Extract PHA Natural Plastic
Biomass Residue
Potential Uses: Biofuels
Electric power, heat
By combining bioscience and nature we will bring clean solutions to the world in plastics, fuels, and chemicals
METABOLIX

5,800,000 Shares

METABOLIX, INC.

Common Stock

PROSPECTUS

No dealer, salesperson or other person is authorized to give any information or to represent anything not contained in this prospectus. You must not rely on any unauthorized information or representations. This prospectus is an offer to sell only the shares offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so. The information contained in this prospectus is current only as of its date.

Through and including , 2006 (the 25th day after the date of this prospectus), all dealers effecting transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This is in addition to a dealer's obligation to deliver a prospectus when acting as an underwriter and with respect to an unsold allotment or subscription.

Piper Jaffray

Jefferies & Company **Thomas Weisel Partners LLC**

Ardour Capital Investments, LLC

, 2006

PART II
INFORMATION NOT REQUIRED IN PROSPECTUS

Item 13. Other Expenses of Issuance and Distribution.

The following table sets forth the costs and expenses, other than the underwriting discount, payable by us in connection with the sale of common stock being registered. All amounts are estimated except the SEC registration fee and the NASD filing fees.

	Amount
Securities and Exchange Commission registration fee	$ 9,992
NASD registration fee	9,125
NASDAQ listing application fee	105,000
Blue sky fees and expenses	20,000
Transfer agent and registrar fee	25,000
Printing and engraving expenses	200,000
Accountant fees and expenses	550,000
Legal fees and expenses	1,000,000
Miscellaneous	380,883
Total	$ 2,300,000

Item 14. Indemnification of Directors and Officers.

Section 145(a) of the Delaware General Corporation Law provides, in general, that a corporation may indemnify any person who was or is a party or is 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 corporation), because he or she is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with such action, suit or proceeding, if he or she acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the corporation and, with respect to any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful.

Section 145(b) of the Delaware General Corporation Law provides, in general, that a corporation may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the corporation to procure a judgment in its favor because the person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees) actually and reasonably incurred by the person in connection with the defense or settlement of such action or suit if he or she acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the corporation, except that no indemnification shall be made with respect to any claim, issue or matter as to which he or she 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, he or she is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or other adjudicating court shall deem proper.

Section 145(g) of the Delaware General Corporation Law provides, in general, that a corporation may purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against any liability asserted against such person and incurred by such person in any such capacity, or arising out of his or her status as such, whether or not the corporation would have the power to indemnify the person against such liability under Section 145 of the Delaware General Corporation Law.

Article VII of our amended and restated certificate of incorporation (the "Charter"), provides that no director of our company shall be personally liable to us or our stockholders for monetary damages for any breach of fiduciary duty as a director, except for liability (1) for any breach of the director's duty of loyalty to us or our stockholders, (2) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (3) in respect of unlawful dividend payments or stock redemptions or repurchases, or (4) for any transaction from which the director derived an improper personal benefit. In addition, our Charter provides that if the Delaware General Corporation Law is amended to authorize the further elimination or limitation of the liability of directors, then the liability of a director of our company shall be eliminated or limited to the fullest extent permitted by the Delaware General Corporation Law, as so amended.

Article VII of the Charter further provides that any repeal or modification of such article by our stockholders or an amendment to the Delaware General Corporation Law will not adversely affect any right or protection existing at the time of such repeal or modification with respect to any acts or omissions occurring before such repeal or modification of a director serving at the time of such repeal or modification.

Article V of our amended and restated by-laws (the "By-Laws"), provides that we will indemnify each of our directors and officers and, in the discretion of our board of directors, certain employees, to the fullest extent permitted by the Delaware General Corporation Law as the same may be amended (except that in the case of an amendment, only to the extent that the amendment permits us to provide broader indemnification rights than the Delaware General Corporation Law permitted us to provide prior to the amendment) against any and all expenses, judgments, penalties, fines and amounts reasonably paid in settlement that are incurred by the director, officer or such employee or on the director's, officer's or employee's behalf in connection with any threatened, pending or completed proceeding or any claim, issue or matter therein, to which he or she is or is threatened to be made a party because he or she is or was serving as a director, officer or employee of our company, or at our request as a director, partner, trustee, officer, employee or agent of another corporation, partnership, joint venture, trust, employee benefit plan or other enterprise, if he or she acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of our company and, with respect to any criminal proceeding, had no reasonable cause to believe his or her conduct was unlawful. Article V of the By-Laws further provides for the advancement of expenses to each of our directors and, in the discretion of the board of directors, to certain officers and employees.

In addition, Article V of the By-Laws provides that the right of each of our directors and officers to indemnification and advancement of expenses shall be a contract right and shall not be exclusive of any other right now possessed or hereafter acquired under any statute, provision of the Charter or By-Laws, agreement, vote of stockholders or otherwise. Furthermore, Article V of the By-Laws authorizes us to provide insurance for our directors, officers and employees, against any liability, whether or not we would have the power to indemnify such person against such liability under the Delaware General Corporation Law or the provisions of Article V of the By-Laws.

In connection with the sale of common stock being registered hereby, we intend to enter into indemnification agreements with each of our directors and our executive officers. These agreements will provide that we will indemnify each of our directors and such officers to the fullest extent permitted by law and the Charter and By-Laws.

We also intend to obtain a general liability insurance policy which covers certain liabilities of directors and officers of our company arising out of claims based on acts or omissions in their capacities as directors or officers.

In any underwriting agreement we enter into in connection with the sale of common stock being registered hereby, the underwriters will agree to indemnify, under certain conditions, us, our directors, our officers and persons who control us within the meaning of the Securities Act of 1933, as amended, against certain liabilities.

Item 15. Recent Sales of Unregistered Securities.

In the three years preceding the filing of this registration statement, we have issued the following securities that were not registered under the Securities Act:

(a) Issuances of Capital Stock

In June 2003, we issued and sold an aggregate of 270,704 shares of Series I convertible preferred stock to 20 investors for an aggregate purchase price of $2,923,603.

In November 2003, we issued and sold an aggregate of 324,074 shares of Series J convertible preferred stock to 19 investors for an aggregate purchase price of $3,499,999.

In November 2003, in conjunction with the issuance of Series J convertible preferred stock, shareholders of 1,208,880 shares of Series I convertible preferred stock exercised their right to exchange their shares of Series I convertible preferred stock for 1,208,880 shares of Series J convertible preferred stock.

In November 2003, shareholders of 192,147 shares of Series I convertible preferred stock not participating in the Series J convertible preferred stock offering had their 192,147 shares of Series I convertible preferred stock converted into 192,147 shares of Series I-1 redeemable convertible preferred stock in accordance with the preferred stock provisions.

In January 2004, we issued and sold an aggregate of 57,370 shares of Series J convertible preferred stock to 15 investors for an aggregate purchase price of $619,596.

In January 2004, in conjunction with the issuance of Series J convertible preferred stock, shareholders of 36,918 shares of Series I convertible preferred stock exercised their right to exchange their shares of Series I convertible preferred stock for 36,918 shares of Series J convertible preferred stock.

In April through August 2004, we issued and sold an aggregate of 1,100,766 shares of Series 04 convertible preferred stock to 39 investors for an aggregate purchase price of $5,944,136. In conjunction with the issuance of Series 04 convertible preferred stock, shareholders of 1,625,242 shares of Series J convertible preferred stock exercised their right to exchange the shares of Series J convertible preferred stock for 3,250,484 shares of Series 04 convertible preferred stock.

Shareholders of 2,000 shares of Series J convertible preferred stock not participating in the Series 04 preferred stock offering had their 2,000 shares of Series J convertible preferred stock converted into 2,000 shares of Series J-1 redeemable convertible preferred stock in accordance with the preferred stock provisions.

From March through May 2005, we issued and sold an aggregate of 893,652 shares of Series 04 convertible preferred stock to 29 investors for an aggregate purchase price of $4,825,721.

In January 2006, we issued 2,920,000 shares of Series 05 convertible preferred stock at $6.00 per share.

ADM has agreed to purchase $7.5 million of our shares of common stock in a private placement concurrent with this offering at a price per share equal to the initial public offering price. The sale of shares to ADM will not be registered in this offering.

No underwriters were used in the foregoing transactions. All sales of securities described above were made in reliance upon the exemption from registration provided by Section 4(2) of the Securities Act (and/or Regulation D promulgated thereunder) for transactions by an issuer not involving a public offering. All of the foregoing securities are deemed restricted securities for the purposes of the Securities Act.

(b) Grants and Exercises of Stock Options.

From May 1, 2003 to September 30, 2006, we granted stock options to purchase an aggregate of 1,790,548 shares of our common stock, with exercise prices ranging from $1.65 to $8.81 per share, to employees, directors and consultants pursuant to our stock option plans. Since May 1, 2003, we issued and sold an aggregate of 15,443 shares of our common stock upon exercise of stock options granted pursuant to our stock plans for an aggregate consideration of $2,194. The issuance of common stock upon exercise of the options were exempt either pursuant to Rule 701, as a transaction pursuant to a compensatory benefit plan, or pursuant to Section 4(2), as a transaction by an issuer not involving a public offering. The common stock issued upon exercise of options and in connection with awards of restricted stock are deemed restricted securities for the purposes of the Securities Act.

(c) Issuance of Warrants.

In conjunction with the issuance of the Series I preferred stock during 2003, the Company issued warrants to purchase 221,238 shares of common stock at an exercise price of $13.21 per share.

In connection with the issuance of Series J preferred stock, the Company issued warrants to purchase 264,865 shares of common stock at an exercise price of $0.12 per share; and concurrently, the Company issued warrants to purchase 988,004 shares of common stock at an exercise price of $0.12 per share in connection with the exchange of Series I preferred stock for Series J preferred stock. The warrants expire five years from issuance date. In addition, the Company canceled warrants to purchase 348,386 shares of common stock at an exercise price of $13.21 per share.

In connection with the issuance of the Series J preferred stock during 2004, the Company issued warrants to purchase 46,881 shares of common stock at an exercise price of $0.12 per share; and concurrently, the Company issued warrants to purchase 30,173 shares of common stock at an exercise price of $0.12 per share in connection with the exchange of Series I preferred stock for Series J preferred stock.

In connection with signing the lease agreement in 2004, the Company issued the landlord warrants to purchase 4,086 shares of common stock at an exercise price of $3.30 per share.

During 2004, the Company canceled warrants to purchase 155,041 shares of common stock at an exercise price of $0.12 per share. The cancellation resulted in a decrease of additional paid-in capital of $218,774.

This issuance was made in reliance upon the exemption from registration provided by Section 4(2) of the Securities Act (and/or Regulation D promulgated thereunder) for transactions by an issuer not involving a public offering. The common stock issued upon exercise of the warrant are deemed restricted securities for the purposes of the Securities Act.

Item 16. Exhibits and Financial Statement Schedules.

(a) See the Exhibit Index on the page immediately preceding the exhibits for a list of exhibits filed as part of this registration statement on Form S-1, which Exhibit Index is incorporated herein by reference.

(b) Financial Statement Schedules

None.

Item 17. Undertakings.

The undersigned registrant hereby undertakes to provide to the underwriter at the closing specified in the underwriting agreements, certificates in such denominations and registered in such names as required by the underwriter to permit prompt delivery to each purchaser.

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

The undersigned registrant hereby undertakes that:

(1) For purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.

(2) For the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and this offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

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-1 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Cambridge, Massachusetts, on this 6th day of November, 2006.

METABOLIX, INC.

By: /s/ JAMES J. BARBER

Name: James J. Barber
Title: President, Chief Executive Officer and Director

Pursuant to the requirements of the Securities Act of 1933, as amended, this registration statement has been signed by the following persons in the capacities and on the dates indicated:

/s/ JAMES J. BARBER James J. Barber	President, Chief Executive Officer, and Director (Principal Executive Officer)	November 6, 2006
/s/ DR. OLIVER P. PEOPLES Dr. Oliver P. Peoples	Chief Scientific Officer, Vice President Research and Director	November 6, 2006
/s/ THOMAS G. AUCHINCLOSS, JR. Thomas G. Auchincloss, Jr.	Vice President and Chief Financial Officer (Principal Financial Officer)	November 6, 2006
* Aninda Katragadda	Director of Finance and Corporate Controller (Principal Accounting Officer)	November 6, 2006
* Edward M. Muller	Chairman of the Board, Director	November 6, 2006
* Edward M. Giles	Director	November 6, 2006
* Dr. Jay Kouba	Director	November 6, 2006
* Jack W. Lasersohn	Director	November 6, 2006
* Dr. Anthony J. Sinskey	Director	November 6, 2006
* Dr. Matthew Strobeck	Director	November 6, 2006

*		
Robert L. Van Nostrand	Director	November 6, 2006

*By: /s/ JAMES J. BARBER

James J. Barber
Attorney-in-fact

EXHIBIT INDEX

Number	Description
1.1/*\	Form of Underwriting Agreement
3.1**	Form of Amended and Restated Certificate of Incorporation of the Registrant
3.2**	Form of Second Amended and Restated Certificate of Incorporation of the Registrant (to be effective upon the completion of this offering)
3.3**	Amended and Restated By-laws of the Registrant
4.1**	Specimen Stock Certificate for shares of the Registrant's Common Stock
4.2**	Form of Common Stock Purchase Warrant issued in each of the Series I Financing, the Series J Financing and the Series 04 financing
5.1**	Opinion of Goodwin Procter LLP
10.1†**	1995 Stock Plan
10.1.1†**	1995 Stock Plan, Form of Incentive Stock Option Agreement
10.1.2†**	1995 Stock Plan, Form of Non-Qualified Stock Option Agreement
10.2†**	2005 Stock Plan
10.2.1†**	2005 Stock Plan, Form of Incentive Stock Option Agreement
10.2.2†**	2005 Stock Plan, Form of Non-Qualified Stock Option Agreement
10.3†**	2006 Stock Option and Incentive Plan
10.3.1†**	2006 Stock Option and Incentive Plan, Form of Incentive Stock Option Agreement
10.3.2†**	2006 Stock Option and Incentive Plan, Form of Non-Qualified Stock Option Agreement
10.3.3†**	2006 Stock Option and Incentive Plan, Form of Director Non-Qualified Stock Option Agreement
10.4#**	License Agreement between the Registrant and Massachusetts Institute of Technology dated July 15, 1993, as amended
10.5#**	Commercial Alliance Agreement by and among the Registrant, ADM/Metabolix Sales Company, LLC and ADM Polymer Corporation dated July 14, 2006
10.6#**	Operating Agreement of ADM/Metabolix Sales Company, LLC by and between the Registrant and ADM Polymer Corporation dated July 14, 2006
10.7**	Letter Agreement by and between the Registrant and Archer Daniels Midland Company dated November 3, 2004.
10.8†**	Amended and Restated Employment Agreement by and between the Registrant and James J. Barber dated September 19, 2006
10.9†**	Amended and Restated Employment Agreement by and between the Registrant and Thomas G. Auchincloss dated September 22, 2006
10.10†**	Amended and Restated Employment Agreement by and between the Registrant and Johan van Walsem dated September 22, 2006
10.11†**	Amended and Restated Employment Agreement by and between the Registrant and Robert C. Findlen dated September 22, 2006

10.12†**	Form of Employee Noncompetition, Nondisclosure and Inventions Agreement with James J. Barber, Oliver P. Peoples, Johan van Walsem and Thomas G. Auchincloss.
10.13†**	Form of Noncompetition, Nondisclosure and Inventions Agreement with Mr. Findlen and Mr. Igoe.
10.14†**	Form of Indemnification Agreement
10.15**	Lease Agreement by and between the Registrant and 21 Erie Realty Trust dated as of December 29, 2003 for the premises located at 21 Erie Street, Cambridge, Massachusetts 02139
10.16**	Fifth Amended and Restated Stockholders Agreement by and among the Registrant and certain of its stockholders dated January 19, 2006.
10.17**	Amendment No. 1 to Fifth Amended and Restated Stockholders Agreement by and among the Registrant and certain of its stockholders dated July 12, 2006
10.18**	Stock Purchase Agreement between the Registrant and Archer Daniels Midland Company dated July 12, 2006
10.19#**	License Agreement by and between the Registrant and Tepha, Inc. dated as of October 1, 1999.
10.20#**	License Agreement by and between the Registrant and Tepha, Inc. dated as of September 9, 2003.
10.21#**	Technology Alliance and Option Agreement by and between the Registrant and ADM Polymer Corporation dated as of November 4, 2004.
10.22#**	First Amendment to Technology Alliance and Option Agreement by and between the Registrant and ADM Polymer Corporation dated as of September 8, 2005.
10.23†**	Employment Agreement by and between the Registrant and Brian Igoe dated August 29, 2006.
10.24†**	Employment Agreement by and between the Registrant and Oliver P. Peoples dated July 20, 2006.
23.1**	Consent of Goodwin Procter LLP (included in Exhibit 5.1)
23.2/*\	Consent of PricewaterhouseCoopers LLP
24.1**	Power of Attorney (included in page II-8)

† Indicates a management contract or any compensatory plan, contract or arrangement.

* To be filed by amendment.

** Previously filed.

/*\ Filed herewith.

Confidential treatment requested for portions of this document.

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EXHIBIT INDEX

Exhibit 1.1

[_____] SHARES(1)

METABOLIX, INC.

COMMON STOCK

PURCHASE AGREEMENT

November [_], 2006

PIPER JAFFRAY & CO.
JEFFERIES & CO.
THOMAS WEISEL PARTNERS LLC
ARDOUR CAPITAL INVESTMENTS
As Representatives of the several
Underwriters named in Schedule I hereto
c/o Piper Jaffray & Co.
800 Nicollet Mall
Minneapolis, Minnesota 55402

Ladies and Gentlemen:

Metabolix, Inc., a Delaware corporation (the "COMPANY"), proposes to sell to the several Underwriters named in Schedule I hereto (the "UNDERWRITERS") an aggregate of [_____] shares (the "FIRM SHARES") of Common Stock, $0.01 par value per share (the "COMMON STOCK"), of the Company. The Company has also granted to the several Underwriters an option to purchase up to [_____] additional shares of Common Stock on the terms and for the purposes set forth in Section 3 hereof (the "OPTION SHARES"). The Firm Shares and any Option Shares purchased pursuant to this Purchase Agreement are herein collectively called the "SECURITIES."

The Company hereby confirms its agreement with respect to the sale of the Securities to the several Underwriters, for whom you are acting as representatives (the "REPRESENTATIVES").

1. REGISTRATION STATEMENT AND PROSPECTUS. A registration statement on Form S-1 (File No. 333-135760) with respect to the Securities, including a preliminary form of prospectus, has been prepared by the Company in conformity with the requirements of the Securities Act of 1933, as amended (the "ACT"), and the rules and regulations ("RULES AND REGULATIONS") of the Securities and Exchange Commission (the "COMMISSION") thereunder and has been filed with the Commission; one or more amendments to such registration statement have also been so prepared and have been, or will be, so filed; and, if the Company has elected to rely upon Rule 462(b) of the Rules and Regulations to increase the size of the offering

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(1) Plus an option to purchase up to [_____] additional shares to cover over-allotments.

registered under the Act, the Company will prepare and file with the Commission a registration statement with respect to such increase pursuant to Rule 462(b). Copies of such registration statement(s) and amendments and each related preliminary prospectus have been delivered to you.

If the Company has elected not to rely upon Rule 430A of the Rules and Regulations, the Company has prepared and will promptly file an amendment to the registration statement and an amended prospectus. If the Company has elected to rely upon Rule 430A of the Rules and Regulations, it will prepare and file a prospectus pursuant to Rule 424(b) that discloses the information previously omitted from the prospectus in reliance upon Rule 430A. Each part of such registration statement as amended at the time it is or was declared effective by the Commission, and, in the event of any amendment thereto after the effective date, each part of such registration statement as so amended (but only from and after the effectiveness of such amendment, including a registration statement (if any) filed pursuant to Rule 462(b) of the Rules and Regulations increasing the size of the offering registered under the Act) and information (if any) deemed to be part of the registration statement at the time of effectiveness pursuant to Rules 430A(b) of the Rules and Regulations, is hereinafter called

the "Registration Statement." The prospectus included in the Registration Statement at the time it is or was declared effective by the Commission is hereinafter called the "Prospectus," except that if any prospectus filed by the Company with the Commission pursuant to Rule 424(b) of the Rules and Regulations or any other such prospectus provided to the Underwriters by the Company for use in connection with the offering of the Securities (whether or not required to be filed by the Company with the Commission pursuant to Rule 424(b) of the Rules and Regulations, but not including a "free writing prospectus" as defined in Rule 405 of the Rules and Regulations) differs from the prospectus on file at the time the Registration Statement is or was declared effective by the Commission, the term "Prospectus" shall refer to such differing prospectus from and after the time such prospectus is filed with the Commission or transmitted to the Commission for filing pursuant to such Rule 424(b) or from and after the time of its first use within the meaning of the Rules and Regulations. The term "Preliminary Prospectus" as used herein means any preliminary prospectus included in the Registration Statement prior to the time it becomes or became effective under the Act and any prospectus subject to completion as described in Rule 430A of the Rules and Regulations. All references in this Agreement to the Registration Statement, any Preliminary Prospectus, the Prospectus or any amendment or supplement to any of the foregoing, shall be deemed to include the copy filed with the Commission pursuant to its Electronic Data Gathering, analysis and Retrieval System ("EDGAR").

2. REPRESENTATIONS AND WARRANTIES OF THE COMPANY.

(a) The Company represents and warrants to, and agrees with, the several Underwriters as follows:

(i) No order preventing or suspending the use of any Preliminary Prospectus has been issued by the Commission and each Preliminary Prospectus, at the time of filing thereof or the time of first use within the meaning of the Rules and

Regulations, complied in all material respects with the requirements of the Securities Act and the Rules and Regulations and did not contain an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading; except that the foregoing shall not apply to statements in or omissions from any Preliminary Prospectus in reliance upon, and in conformity with, written information furnished to the Company by you, or by any Underwriter through you, specifically for use in the preparation thereof.

(ii) As of the time any part of the Registration Statement (or any post-effective amendment thereto, including a registration statement (if any) filed pursuant to Rule 462(b) of the Rules and Regulations increasing the size of the offering registered under the Act) became effective, upon the filing or first use (within the meaning of the Rules and Regulations) of the Prospectus (or any supplement to the Prospectus) and at the First Closing Date and Second Closing Date (as hereinafter defined), (A) the Registration Statement and the Prospectus (in each case, as so amended and/or supplemented) conformed or will conform in all material respects to the requirements of the Act and the Rules and Regulations, (B) the Registration Statement (as so amended) did not or will not include an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein not misleading, and (C) the Prospectus (as so supplemented) did not or will not include an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances in which they are or were made, not misleading; except that the foregoing shall not apply to statements in or omissions from any such document in reliance upon, and in conformity with, written information furnished to the Company by you, or by any Underwriter through you, specifically for use in the preparation thereof. If the Registration Statement has been declared effective by the Commission, no stop order suspending the effectiveness of the Registration Statement has been issued, and no proceeding for that purpose has been initiated or, to the Company's knowledge, threatened by the Commission.

(iii) Neither (A) the Issuer General Free Writing Prospectus(es) issued at or prior to the Time of Sale and the Statutory Prospectus, all considered together (collectively, the "TIME OF SALE DISCLOSURE PACKAGE"), nor (B) any individual Issuer Limited-Use Free

Writing Prospectus, when considered together with the Time of Sale Disclosure Package, includes or included as of the Time of Sale any untrue statement of a material fact or omit or omitted as of the Time of Sale to state any material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading. The preceding sentence does not apply to statements in or omissions from any Statutory Prospectus included in the Registration Statement or any Issuer Free Writing Prospectus based upon and in conformity with written information furnished to the Company by you or by any Underwriter through you specifically for use therein. As used in this paragraph and elsewhere in this Agreement:

(1) "TIME OF SALE" means [____] am (Eastern time) on the date of this Agreement.

(2) "STATUTORY PROSPECTUS" as of any time means the prospectus that is included in the Registration Statement immediately prior to that time. For purposes of this definition, information contained in a form of prospectus that is deemed retroactively to be a part of the Registration Statement pursuant to Rule 430A shall be considered to be included in the Statutory Prospectus as of the actual time that form of prospectus is filed with the Commission pursuant to Rule 424(b) under the Act.

(3) "ISSUER FREE WRITING PROSPECTUS" means any "issuer free writing prospectus," as defined in Rule 433 under the Act, relating to the Securities that (A) is required to be filed with the Commission by the Company, or (B) is exempt from filing pursuant to Rule 433(d)(5)(i) under the Act because it contains a description of the Securities or of the offering that does not reflect the final terms or pursuant to Rule 433(d)(8)(ii) because it is a "bona fide electronic road show," as defined in Rule 433 of the Rules and Regulations, which is made available by the Company without restriction, in each case in the form filed or required to be filed with the Commission or, if not required to be filed, in the form retained in the Company's records pursuant to Rule 433(g) under the Act.

(4) "ISSUER GENERAL FREE WRITING PROSPECTUS" means any Issuer Free Writing Prospectus that is intended for general distribution to prospective investors, as evidenced by its being specified in Schedule II to this Agreement.

(5) "ISSUER LIMITED-USE FREE WRITING PROSPECTUS" means any Issuer Free Writing Prospectus that is not an Issuer General Free Writing Prospectus. The term Issuer Limited-Use Free Writing Prospectus also includes any "bona fide electronic road show," as defined in Rule 433 of the Rules and Regulations, that is made available without restriction pursuant to Rule 433(d)(8)(ii), even though not required to be filed with the Commission.

(iv) (A) Each Issuer Free Writing Prospectus, as of its issue date and at all subsequent times through the completion of the public offer and sale of the Securities or until any earlier date that the Company notified or notifies the Representatives as described in Section 4(a)(iii)(B), did not, does not and will not include any information that conflicted, conflicts or will conflict with the information contained in the Registration Statement, any Statutory Prospectus or the Prospectus. The foregoing sentence does not apply to statements in or omissions from any Issuer Free Writing Prospectus based upon and in conformity with written information furnished to the Company by you or by any Underwriter through you specifically for use therein.

(B) (1) At the time of filing the Registration Statement and (2) at the date hereof, the Company was not and is not an "ineligible issuer," as defined in Rule 405 under the Act, including the Company in the preceding three years not having been convicted of a felony or

misdemeanor or having been made the subject of a judicial or administrative decree or order as described in Rule 405 (without taking account of any determination by the Commission pursuant to Rule 405 that it is not necessary that the Company be considered an ineligible issuer), nor an "excluded issuer" as defined in Rule 164 under the Act.

(C) Each Issuer Free Writing Prospectus satisfied, as of its issue date and at all subsequent times through the completion of the public offer and sale of the Securities, all other conditions to use thereof as set forth in Rules 164 and 433 under the Act.

(v) The financial statements of the Company, together with the related notes, set forth in the Registration Statement, the Time of Sale Disclosure Package and Prospectus comply in all material respects with the requirements of the Act and fairly present the financial condition of the Company as of the dates indicated and the results of operations and changes in cash flows for the periods therein specified in conformity with generally accepted accounting principles consistently applied throughout the periods involved; and the supporting schedules included in the Registration Statement present fairly the information required to be stated therein. No other financial statements or schedules are required to be included in the Registration Statement, the Time of Sale Disclosure Package or the Prospectus. To the Company's knowledge, PricewaterhouseCoopers LLP, which has expressed its opinion with respect to the financial statements and schedules filed as a part of the Registration Statement and included in the Registration Statement, the Time of Sale Disclosure Package and the Prospectus, is (x) an independent public accounting firm within the meaning of the Act and the Rules and Regulations, (y) a registered public accounting firm (as defined in Section 2(a)(12) of the Sarbanes-Oxley Act of 2002 (the "SARBANES-OXLEY ACT")) and (z) not in violation of the auditor independence requirements of the Sarbanes-Oxley Act.

(vi) The Company has been duly organized and is validly existing as a corporation in good standing under the laws of its jurisdiction of incorporation. The Company has full corporate power and authority to own its properties and conduct its business as currently being carried on and as described in the Registration Statement, the Time of Sale Disclosure Package and Prospectus, and is duly qualified to do business as a foreign corporation in good standing in each jurisdiction in which it owns or leases real property or in which the conduct of its business makes such qualification necessary and in which the failure to so qualify would reasonably be expected to have a material adverse effect upon the business, properties, operations, condition (financial or otherwise) or results of operations of the Company ("MATERIAL ADVERSE EFFECT").

(vii) Except as contemplated in the Time of Sale Disclosure Package and in the Prospectus, subsequent to the respective dates as of which information is given in the Time of Sale Disclosure Package, the Company has not incurred any material liabilities or obligations, direct or contingent, or entered into any material transactions, or declared or paid any dividends or made any distribution of any kind with respect to its capital stock; and there has not been any change in the capital stock (other than a change in the number of outstanding shares of Common Stock due to the issuance of shares upon the exercise of outstanding options or warrants or those granted in compliance with this Section 2(a)(vii)), or any material change in the short-term or long-term debt, or any issuance of options, warrants, convertible securities or other rights to purchase the capital stock (other than grants of stock options under the Company's stock option plans existing on the date hereof or the Company's 2006 Stock Plan), of the Company, or any material adverse change in the general affairs, condition (financial or otherwise), business, property, operations or results of operations of the Company, taken as a whole ("MATERIAL ADVERSE CHANGE") or any development involving a prospective Material Adverse Change.

(viii) Except as set forth in the Registration Statement, in the Time of Sale Disclosure Package and in the Prospectus, there is not pending or, to the knowledge of the Company, threatened in writing, any action, suit or proceeding to which the Company is a party or of which any material property or assets of the Company is the subject before or by any court or governmental agency, authority or body, or any arbitrator, which, individually or in the aggregate, would reasonably be expected to result in any Material Adverse Change.

(ix) There are no statutes, regulations, contracts or documents that are required to be described in the Registration Statement, in the Time of Sale Disclosure Package and in the Prospectus or be filed as exhibits to the Registration Statement by the Act or by the Rules and Regulations that have not been so described or filed.

(x) This Agreement has been duly authorized, executed and delivered by the Company, and constitutes a valid, legal and binding obligation of the Company, enforceable in accordance with its terms, except as rights to indemnity hereunder may be limited by federal or state securities laws and except as such enforceability may be limited by bankruptcy, insolvency, reorganization or similar laws affecting the rights of creditors generally and subject to general principles of equity. The execution, delivery and performance of this Agreement and the consummation of the transactions herein contemplated will not result in a breach or violation of any of the terms and provisions of, or constitute a default under, any statute applicable to the Company, any material agreement or instrument to which the Company is a party or by which it is bound or to which any of its material property is subject, the Company's charter or by-laws, or any order, rule, regulation or decree of any court or governmental agency or body having jurisdiction over the Company or any of its material properties; no consent, approval, authorization or order of, or filing with, any court or governmental agency or body is required for the execution, delivery and performance of this Agreement or for the

consummation of the transactions contemplated hereby, including the issuance or sale of the Securities by the Company, except such as may be required under the Act or state securities or blue sky laws; and the Company has full power and authority to enter into this Agreement and to authorize, issue and sell the Securities as contemplated by this Agreement.

(xi) All of the issued and outstanding shares of capital stock of the Company, including the outstanding shares of Common Stock, are duly authorized and validly issued, fully paid and nonassessable, have been issued in compliance with all federal and state securities laws, were not issued in violation of or subject to any preemptive rights or other rights to subscribe for or purchase securities that have not been waived in writing, and the holders thereof are not subject to personal liability by reason of being such holders; the Securities which may be sold hereunder by the Company have been duly authorized and, when issued, delivered and paid for in accordance with the terms of this Agreement, will have been validly issued and will be fully paid and nonassessable, and the holders thereof will not be subject to personal liability by reason of being such holders; and the capital stock of the Company, including the Common Stock, conforms to the description thereof in the Registration Statement, in the Time of Sale Disclosure Package and in the Prospectus. Except as otherwise stated in the Registration Statement, in the Time of Sale Disclosure Package and in the Prospectus, there are no preemptive rights or other rights to subscribe for or to purchase, or any restriction upon the voting or transfer of, any shares of Common Stock pursuant to the Company's charter, by-laws or any agreement or other instrument to which the Company is a party or by which the Company is bound. Except as otherwise stated in the Registration Statement, in the Time of Sale Disclosure Package and in the Prospectus, neither the filing of the Registration Statement nor the offering or sale of the Securities as contemplated by this Agreement gives rise to any rights for or relating to the registration of any shares of Common Stock or other securities of the Company that have not been waived in writing. Except as described in the Registration Statement, in the Time of Sale Disclosure Package and in the Prospectus, there are no options, warrants, agreements, contracts or other rights in existence to purchase or acquire from the Company any shares of the capital stock of the Company. The Company has an authorized and outstanding capitalization as set forth in the Registration Statement, in the Time of Sale Disclosure Package and in the Prospectus.

(xii) The Company holds, and is operating in compliance in all material respects with, all material franchises, grants, authorizations, licenses, permits, easements, consents, certificates and orders of any governmental or self-regulatory body required for the conduct of its business and all such franchises, grants, authorizations, licenses, permits, easements, consents, certifications

and orders are valid and in full force and effect; and the Company is in compliance in all material respects with all applicable federal, state, local and foreign laws, regulations, orders and decrees.

(xiii) The Company has good and marketable title to all property (whether real or personal) described in the Registration Statement, in the Time of Sale

Disclosure Package and in the Prospectus as being owned by it, in each case free and clear of all material liens, claims, security interests, other encumbrances or defects except such as are described in the Registration Statement, in the Time of Sale Disclosure Package and in the Prospectus. The property held under lease by the Company is held by it under valid, subsisting and enforceable leases with only such exceptions with respect to any particular lease as do not interfere in any material respect with the conduct of the business of the Company.

(xiv) The Company owns or possesses the right to use all patents, patent applications, trademarks, service marks, tradenames, trademark applications, service mark applications, copyrights, licenses, inventions, know-how, trade secrets and other intellectual property rights (collectively, the "Intellectual Property") necessary for the conduct of the business of the Company as currently carried on and as described in the Registration Statement, in the Time of Sale Disclosure Package and in the Prospectus, free and clear of any security interests, claims, liens or other encumbrances. The Company has not received notice of infringement of or conflict with asserted rights of others with respect to any Intellectual Property rights (including any claim that the Company must license or refrain from using any Intellectual Property of any third party). The use of the Intellectual Property in connection with the current and proposed business and operations of the Company does not and will not infringe on the rights of others or require the payment of license fees for any Intellectual Property of a third party material to the business or prospects of the Company. All material patents are listed on schedules to the opinions of intellectual property counsel attached as Exhibits B-1 and B-2.

(xv) The Company is not in violation of its charter or by-laws or in breach of or otherwise in default, and no event has occurred which, with notice or lapse of time or both, would constitute such a default in the performance of any material obligation, agreement or condition contained in any bond, debenture, note, indenture, loan agreement or any other material contract, lease or other instrument to which it is subject or by which it may be bound, or to which any of the material property or assets of the Company is subject, except as would not have a Material Adverse Effect.

(xvi) The Company has timely filed all federal, state, local and foreign income and franchise tax returns required to be filed and is not in default in the payment of any taxes which were payable pursuant to said returns or any assessments with respect thereto, other than any which the Company is contesting in good faith.

(xvii) The Company has not distributed and will not distribute any prospectus or other offering material in connection with the offering and sale of the Securities other than any Preliminary Prospectus, the Time of Sale Disclosure Package or the Prospectus or other materials permitted by the Act to be distributed by the Company; PROVIDED, HOWEVER, that, except as set forth on Schedule II, the Company has not made and will not make any offer relating to the Securities that would constitute a "free writing prospectus" as defined in Rule 405 under the Act, except in accordance with the provisions of Section 4(a)(xix) of this Agreement.

(xviii) The Securities have been approved for listing on the Nasdaq National Market upon official notice of issuance and, on the date the Registration Statement became or becomes effective, the Company's Registration Statement on Form 8-A or other applicable form under the Securities Exchange Act of 1934, as amended (the "EXCHANGE ACT"), became or will become effective.

(xix) Except as disclosed in the Registration Statement, the Time of Sale Disclosure Package or the Prospectus, the Company, directly or indirectly, owns no capital stock or other equity or ownership or proprietary interest in any corporation, partnership, association, trust or other entity.

(xx) The Company's board of directors has validly appointed an audit committee whose composition satisfies the applicable requirements of Rule 4350(d)(2) of the Rules of the NASD (the "NASD Rules") and the Company's board of directors and/or the audit committee has adopted a charter that satisfies the requirements of Rule 4350(d)(1) of the NASD Rules. Neither the Company's board of directors, nor the audit committee has been informed, nor is any director of the Company aware, of (A) any significant deficiencies in the design or operation of the Company's internal controls which could adversely affect the Company's ability to record, process, summarize and report financial data or any material weakness in the Company's internal controls; or (B) any fraud, whether or not material, that involves management or other employees of the Company who have a significant role in the Company's internal controls.

(xxi) No relationship, direct or indirect, exists between or among the Company, on the one hand, and the directors, officers, stockholders, customers or suppliers of the Company, on the other hand, which is required to be described in the Registration Statement, the Time of Sale Disclosure Package and the Prospectus which is not so described. The Company has not, directly or indirectly, extended or maintained credit, or arranged for the extension of credit, or renewed an extension of credit, in the form of a personal loan to or for any of its directors or executive officers in violation of applicable laws, including Section 402 of the Sarbanes-Oxley Act.

(xxii) The Company maintains a system of internal accounting controls sufficient to provide reasonable assurances that (i) transactions are executed in accordance with management's general or specific authorization; (ii) transactions are recorded as necessary to permit preparation of financial statements in conformity with generally accepted accounting principles and to maintain accountability for assets; (iii) access to assets is permitted only in accordance with management's general or specific authorization; and (iv) the recorded accountability for assets is compared with existing assets at reasonable intervals and appropriate action is taken with respect to any differences. Since the end of the latest audited fiscal year, there has been no change in the Company's internal control over financial reporting (whether or not remediated) that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting.

(xxiii) Except as disclosed in the Registration Statement, the Time of Disclosure Package or the Prospectus, the Company (A) is in compliance, in all material respects, with any and all applicable federal, state, local and foreign laws, rules, regulations, decisions and orders relating to the protection of human health and safety, the environment or hazardous or toxic substances or wastes, pollutants or contaminants (collectively, "Environmental Laws"); (B) has received and is in compliance with all permits, licenses or other approvals required of it under applicable Environmental Laws to conduct its business; and (C) has not received notice of any actual or potential liability for the investigation or remediation of any disposal or release of hazardous or toxic substances or wastes, pollutants or contaminants, except in any such case for any such failure to comply, or failure to receive required permits, licenses or approvals, or liability as would not, individually or in the aggregate, reasonably be expected to result in a Material Adverse Change.

(xxiv) The Company (A) is in compliance, in all material respects, with any and all applicable foreign, federal, state and local laws, rules, regulations, treaties, statutes and codes promulgated by any and all governmental authorities (including pursuant to the Occupational Health and Safety Act) relating to the protection of human health and safety in the workplace ("Occupational Laws"); (B) has received all material permits, licenses or other approvals required of it under applicable Occupational Laws to conduct its business as currently conducted; and (C) is in compliance, in all material respects, with all terms and conditions of such permit, license or

approval. No material action, proceeding, revocation proceeding, writ, injunction or claim is pending or, to the Company's knowledge, threatened against the Company relating to Occupational Laws and the Company does not have knowledge of any facts, circumstances or developments relating to its operations or cost accounting practices that could reasonably be expected to form the basis for or give rise to such actions, suits, investigations or proceedings.

(xxv) Each employee benefit plan, within the meaning of Section 3(3) of the Employee Retirement Income Security Act of 1974, as amended ("ERISA"), that is maintained, administered or contributed to by the Company or any of its affiliates for employees or former employees of the Company and its affiliates has been maintained in material compliance with its terms and the requirements of any applicable statutes, orders, rules and regulations, including but not limited to, ERISA and the Internal Revenue Code of 1986, as amended (the "Code"). No material prohibited transaction, within the meaning of Section 406 of ERISA or Section 4975 of the Code, has occurred with respect to any such plan excluding transactions effected pursuant to a statutory or administrative exemption; and for each such plan that is subject to the funding rules of Section 412 of the Code or Section 302 of ERISA, no "accumulated funding deficiency" as defined in Section 412 of the Code has been incurred, whether or not waived, and the fair market value of the assets of each such plan (excluding for these purposes accrued but unpaid contributions) exceeds the present value of all benefits accrued under such plan determined using reasonable actuarial assumptions.

(xxvi) Except as set forth in the Registration Statement, the Time of Sale Disclosure Package and the Prospectus and except for contract manufacturers and similar parties engaged by the Company, the Company has not granted material rights to develop, manufacture, produce, assemble, distribute, license, market or sell its products to any other person and is not bound by any agreement that materially affects the Company's exclusive right to develop, manufacture, produce, assemble, distribute, license, market or sell its products.

(xxvii) Nothing has come to the attention of the Company that has caused the Company to believe that the statistical and market-related data included in the Registration Statement, the Time of Sale Disclosure Package and the Prospectus is not based on or derived from sources that are reliable and accurate in all material respects.

(xxviii) Other than as contemplated by this Agreement, the Company has not incurred any liability for any finder's or broker's fee or agent's commission in connection with the execution and delivery of this Agreement or the consummation of the transactions contemplated hereby.

(xxix) The Company carries, or is covered by, insurance in such amounts and covering such risks as is adequate for the conduct of its business and the value of its properties and as is customary for companies engaged in similar businesses in similar industries.

(xxx) Except with notice to the Representatives and compliance with applicable laws, none of the Directed Stock (as defined below) distributed in connection with the Directed Stock Program (as defined below) will be offered or sold outside of the United States.

(xxxi) Neither the Company nor, to the knowledge of the Company, any director, officer, agent, employee or other person associated with or acting on behalf of the Company has (A) used any corporate funds for any unlawful contribution, gift, entertainment or other unlawful expense relating to political activity; (B) made any direct or indirect unlawful payment to any foreign or domestic government official or employee from corporate funds; (C) violated or is in violation of any provision of the Foreign Corrupt Practices Act of 1977 on behalf of the Company or using corporate funds; or (D) made any bribe, rebate, payoff, influence payment, kickback or other unlawful payment on behalf of the Company or using corporate funds.

(xxxii) The Company is not and, after giving effect to the offering and sale of the Securities, will not be an "investment company," as such term is defined in the Investment Company Act of 1940, as amended.

(xxxiii) The Company is in compliance with all applicable provisions of the Sarbanes Oxley Act and the rules and regulations of the Commission thereunder applicable to the Company.

(xxxiv) The Company acknowledges and agrees that: (A) the Representatives have been retained solely to act as an underwriter in connection with the sale of the Securities and that no fiduciary, advisory or agency relationship between the Company and the Representatives has been created in respect to any of the transactions contemplated by this Agreement, irrespective of whether the Representatives have advised or are advising the Company on other matters; (B) the price and other terms of the Securities set forth in this Agreement were established by the Company following discussions and arms-length negotiations with the Representatives and the Company are capable of evaluating and understanding and understand and accept the terms, risks and conditions of the transaction contemplated by this Agreement; (C) it has been advised that the Representatives and their affiliates are engaged in a broad range of transactions which may involve interests that differ from those of the Company and that the Representatives have no obligation to disclose such interests and transactions to the Company by virtue of any fiduciary, advisory or agency relationship; (D) it has been advised that the Representatives are acting, in respect of the transactions contemplated by this Agreement, solely for the benefit of the Representatives and the other Underwriters, and not on behalf of the Company; and (E) it waives, to the fullest extent permitted by law, any claims it may have against the Representatives for breach of fiduciary duty or alleged breach of fiduciary duty in respect of any of the transactions contemplated by this Agreement and agrees that the Representatives shall have no liability (whether direct or indirect) to the Company in respect of such a fiduciary duty claim on behalf of or in right of the Company, including stockholders, employees or creditors of the Company.

(xxxv) The Company has established and maintains disclosure controls and procedures (as defined in Rules 13a-15 and 15d-14 under the Exchange Act) and such controls and procedures are effective in ensuring that material information relating to the Company is made known to the principal executive officer and the principal financial officer. The Company has utilized such disclosure controls and procedures in preparing and evaluating the disclosures in the Registration Statement, in the Time of Sale Disclosure Package and in the Prospectus.

(b) Any certificate signed by any officer of the Company and delivered to you or to counsel for the Underwriters in connection with the transactions contemplated by this Agreement shall be deemed a representation and warranty by the Company to each Underwriter as to the matters covered thereby.

3. PURCHASE, SALE AND DELIVERY OF SECURITIES.

(a) On the basis of the representations, warranties and agreements herein contained, but subject to the terms and conditions herein set forth, the Company agrees to issue and sell [ ] Firm Shares to the several Underwriters, and each Underwriter agrees, severally and not jointly, to purchase from the Company the number of Firm Shares set forth opposite the name of such Underwriter in Schedule I hereto. The purchase price for each Firm Share shall

be $ per share. In making this Agreement, each Underwriter is contracting severally and not jointly; except as provided in paragraph (c) of this Section 3 and in Section 8 hereof, the agreement of each Underwriter is to purchase only the respective number of Firm Shares specified in Schedule I.

It is understood that [_____] shares of the Firm Shares ("DIRECTED STOCK") will initially be reserved by the Underwriters for offer and sale to employees and persons having relationships with the Company or its employees ("DIRECTED STOCK PARTICIPANTS") upon the terms and conditions set forth in the Prospectus and in accordance with the rules and regulations of the National Association of Securities Dealers ("DIRECTED STOCK PROGRAM"). Under no circumstance will the Representatives or any Underwriter be liable to the Company or to any Directed Stock Participant for any action taken or omitted to be taken in good faith in connection with such Directed Stock Program. To the

extent that any shares of Directed Stock are not affirmatively reconfirmed for purchase by any Directed Stock Participant on or immediately after the date of this Agreement, such Directed Stock may be offered to the public as part of the public offering contemplated hereby. The Company agrees to pay all fees and disbursements incurred by the Underwriters in connection with the Directed Stock Program, including counsel fees and any stamp duties or other taxes incurred by the Underwriters in connection with the Directed Stock Program.

The Firm Shares will be delivered by the Company and the Custodian to you for the accounts of the several Underwriters against payment of the purchase price therefor by wire transfer of same day FUNDS payable to the order of the Company and the Custodian, as appropriate, at the offices of Latham & Watkins LLP, 885 Third Avenue, New York, New York 10022, or such other location as may be mutually acceptable, at [_____] a.m. Eastern time on the third (or if the Securities are priced, as contemplated by Rule 15c6-1(c) under the Exchange Act, after [_____] p.m. Eastern time, the fourth) full business day following the date hereof, or at such other time and date as you and the Company determine pursuant to Rule 15c6-1(a) under the Exchange Act, such time and date of delivery being herein referred to as the "First Closing Date." If the Representatives so elect, delivery of the Firm Shares may be made by credit through full fast transfer to the accounts at The Depository Trust Company designated by the Representatives. Certificates representing the Firm Shares, in definitive form and in such denominations and registered in such names as you may request upon at least two business days' prior notice to the Company and the Custodian, will be made available for checking and packaging not later than [_____] a.m., Eastern time, on the business day next preceding the First Closing Date at the offices of Latham & Watkins LLP, 885 Third Avenue, New York, New York 10022, or such other location as may be mutually acceptable.

(b) On the basis of the representations, warranties and agreements herein contained, but subject to the terms and conditions herein set forth, the Company, with respect to [_____] of the Option Shares, hereby grants to the several Underwriters an option to purchase all or any portion of the Option Shares at the same purchase price as the Firm Shares, for use solely in covering any over-allotments made by the Underwriters in the sale and distribution of the Firm Shares. The option granted hereunder may be exercised in whole or in part at any time (but not more than once) within 30 days after the effective date of this Agreement upon notice

(confirmed in writing) by the Representatives to the Company and to the Attorneys-in-Fact setting forth the aggregate number of Option Shares as to which the several Underwriters are exercising the option, the names and denominations in which the certificates for the Option Shares are to be registered and the date and time, as determined by you, when the Option Shares are to be delivered, such time and date being herein referred to as the "Second Closing" and "Second Closing Date", respectively; provided, however, that the Second Closing Date shall not be earlier than the First Closing Date nor earlier than the second business day after the date on which the option shall have been exercised. If the option is exercised, the obligation of each Underwriter shall be to purchase from the Company up to an aggregate of [ ] Option Shares. The number of Option Shares to be purchased by each Underwriter shall be the same percentage of the total number of Option Shares to be purchased by the several Underwriters as the number of Firm Shares to be purchased by such Underwriter is of the total number of Firm Shares to be purchased by the several Underwriters, as adjusted by the Representatives in such manner as the Representatives deem advisable to avoid fractional shares. No Option Shares shall be sold and delivered unless the Firm Shares previously have been, or simultaneously are, sold and delivered.

The Option Shares will be delivered by the Custodian and the Company, as appropriate, to you for the accounts of the several Underwriters against payment of the purchase price therefor by wire transfer of same day funds payable to the order of the Custodian or the Company, as appropriate, at the offices of Latham & Watkins LLP, 885 Third Avenue, New York, New York 10022, or such other location as may be mutually acceptable at [_____] a.m., Eastern time, on the Second Closing Date. If the Representatives so elect, delivery of the Option Shares may be made by credit through full fast transfer to the accounts at The Depository Trust Company designated by the Representatives. Certificates representing the Option Shares in definitive form and in such denominations and registered in such names as you have set forth in your notice of option exercise, will be made available for checking and packaging not later than [_____] a.m., Eastern time, on the business day next preceding the Second Closing Date at the office of Latham & Watkins LLP, 885 Third Avenue, New York, New York 10022, or such other location as may be mutually acceptable.

(c) It is understood that you, individually and not as

Representatives of the several Underwriters, may (but shall not be obligated to) make payment to the Company, on behalf of any Underwriter for the Securities to be purchased by such Underwriter. Any such payment by you shall not relieve any such Underwriter of any of its obligations hereunder. Nothing herein contained shall constitute any of the Underwriters an unincorporated association or partner with the Company.

4. COVENANTS.

(a) The Company covenants and agrees with the several Underwriters as follows:

(i) If the Registration Statement has not already been declared effective by the Commission, the Company will use its reasonable best efforts to cause

the Registration Statement and any post-effective amendments thereto to become effective as promptly as possible; the Company will notify you promptly of the time when the Registration Statement or any post-effective amendment to the Registration Statement has become effective or any supplement to the Prospectus has been filed and of any request by the Commission for any amendment or supplement to the Registration Statement or Prospectus or additional information; if the Company has elected to rely on Rule 430A of the Rules and Regulations, the Company will prepare and file a Prospectus containing the information omitted therefrom pursuant to Rule 430A of the Rules and Regulations with the Commission within the time period required by, and otherwise in accordance with the provisions of, Rules 424(b) and 430A of the Rules and Regulations; if the Company has elected to rely upon Rule 462(b) of the Rules and Regulations to increase the size of the offering registered under the Act, the Company will prepare and file a registration statement with respect to such increase with the Commission within the time period required by, and otherwise in accordance with the provisions of, Rule 462(b); the Company will prepare and file with the Commission, promptly upon your request, any amendments or supplements to the Registration Statement or Prospectus that, in your opinion, may be necessary or advisable in connection with the distribution of the Securities by the Underwriters; and the Company will not file any amendment or supplement to the Registration Statement or Prospectus to which you shall reasonably object by notice to the Company after having been furnished a copy a reasonable time prior to the filing.

(ii) The Company will advise you, promptly after it shall receive notice or obtain knowledge thereof, of the issuance by the Commission of any stop order suspending the effectiveness of the Registration Statement, or any post-effective amendment thereto or preventing or suspending the use of any Preliminary Prospectus, the Time of Sale Disclosure Package, the Prospectus or any Issuer Free Writing Prospectus, of the suspension of the qualification of the Securities for offering or sale in any jurisdiction, or of the initiation or threatening of any proceeding for any such purpose; and the Company will promptly use its reasonable best efforts to prevent the issuance of any stop order or to obtain its withdrawal if such a stop order should be issued. Additionally, the Company agrees that it shall comply with the provisions of Rules 424(b) and 430A, as applicable, under the Act and will use its reasonable efforts to confirm that any filings made by the Company under Rule 424(b), Rule 433 or Rule 462 were received in a timely manner by the Commission.

(iii) (A) Within the time during which a prospectus (or in lieu thereof the notice referred to in Rule 173(a)) relating to the Securities is required to be delivered under the Act, the Company will comply as far as it is able with all requirements imposed upon it by the Act, as now and hereafter amended, and by the Rules and Regulations, as from time to time in force, so far as necessary to permit the continuance of sales of or dealings in the Securities as contemplated by the provisions hereof, the Time of Sale Disclosure Package and the Prospectus. If during such period any event occurs as a result of which the Prospectus (or if the Prospectus is not yet available to prospective purchasers, the Time of Sale Disclosure Package) would include an untrue

statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances then existing, not misleading, or if during such period it is necessary to amend the Registration Statement or supplement the Prospectus (or if the Prospectus is not yet available to prospective investors, the Time of Sale Disclosure Package) to comply with the Act, the Company will promptly notify you and will amend the Registration Statement or supplement the Prospectus (or, if the Prospectus is not yet available to prospective purchasers, the Time of Sale Disclosure Package) (at the expense of the Company) so as to correct such statement or omission or effect such compliance.

(B) If at any time following issuance of an Issuer Free Writing Prospectus there occurred or occurs an event or development as a result of which such Issuer Free Writing Prospectus conflicted or would conflict with the information contained in the Registration Statement, any Statutory Prospectus or the Prospectus relating to the Securities or included or would include an untrue statement of a material fact or omitted or would omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances prevailing at that subsequent time, not misleading, the Company has promptly notified or promptly will notify the Representatives and has promptly amended or will promptly amend or supplement, at its own expense, such Issuer Free Writing Prospectus to eliminate or correct such conflict, untrue statement or omission.

(iv) The Company shall take or cause to be taken all necessary action to qualify the Securities for sale under the securities laws of such jurisdictions as you reasonably designate or as is necessary to effect the distribution of the Directed Stock and to continue such qualifications in effect so long as required for the distribution of the Securities, except that the Company shall not be required in connection therewith to qualify as a foreign corporation or to execute a general consent to service of process in any state.

(v) The Company will furnish to the Underwriters and counsel for the Underwriters copies of the Registration Statement (three of which include all consents and exhibits filed therewith), each Preliminary Prospectus, the Time of Sale Disclosure Package, the Prospectus, any Issuer Free Writing Prospectus and all amendments and supplements to such documents, in each case as soon as available and in such quantities as you may from time to time reasonably request.

(vi) During a period of two years commencing with the date hereof, the Company will furnish to the Representatives, and to each Underwriter who may so request in writing, copies of all periodic and current reports furnished to the stockholders of the Company and all information, documents and reports filed with the Commission, the National Association of Securities Dealers, Inc., Nasdaq or any securities exchange (other than any such information, documents and reports that are filed with the Commission electronically via EDGAR or any successor system).

(vii) The Company will make generally available to its security holders as soon as practicable, but in any event not later than 15 months after the end of the Company's current fiscal quarter, an earnings statement (which need not be audited) covering a 12-month period beginning after the effective date of the Registration Statement that shall satisfy the provisions of Section 11(a) of the Act and Rule 158 of the Rules and Regulations.

(viii) The Company, whether or not the transactions contemplated hereunder are consummated or this Agreement is prevented from becoming effective under the provisions of Section 9(a) hereof or is terminated, will pay or cause to be paid (A) all expenses (including transfer taxes allocated to the respective transferees) incurred in connection with the delivery to the Underwriters of the Securities, (B) all expenses and fees (including, without limitation, fees and expenses of the Company's accountants and counsel but, except as otherwise provided below, not including fees of the Underwriters' counsel) in connection with the preparation, printing, filing, delivery, and shipping of the Registration Statement (including the financial statements therein and all amendments, schedules, and exhibits thereto), the Securities, each Preliminary Prospectus, the Time of Sale

Disclosure Package, the Prospectus, any Issuer Free Writing Prospectus and any amendment thereof or supplement thereto, and the printing, delivery, and shipping of this Agreement and other underwriting documents, including Blue Sky Memoranda (covering the states and other applicable jurisdictions), (C) all filing fees and fees and disbursements of the Underwriters' counsel, not to exceed, in the aggregate, $12,500, incurred in connection with the qualification of the Securities for offering and sale by the Underwriters or by dealers under the securities or blue sky laws of the states and other jurisdictions which you shall designate or are necessary to distribute the Directed Stock, (D) the fees and expenses of any transfer agent or registrar, (E) the filing fees and fees and disbursements of the Underwriters' counsel incident to any required review by the National Association of Securities Dealers, Inc. of the terms of the sale of the Securities, (F) listing fees, if any, and (G) all other costs and expenses incident to the performance of its obligations hereunder that are not otherwise specifically provided for herein; provided, however, that the Underwriters shall bear the cost of travel and lodging for the Underwriters in connection with the investor presentations on any "road show" undertaken in connection with the marketing of the Securities, stock transfer taxes on any resale of the Securities by them and any advertising expenses connected with any offers they may make. If the sale of the Securities provided for herein is not consummated by reason of action by the Company pursuant to Section 9(a) hereof which prevents this Agreement from becoming effective, or by reason of any failure, refusal or inability on the part of the Company to perform any agreement on its part to be performed, or because any other condition of the Underwriters' obligations hereunder required to be fulfilled by the Company is not fulfilled, the Company will reimburse the several Underwriters for all out-of-pocket disbursements (including reasonable fees and disbursements of counsel) incurred by the Underwriters in connection with their investigation, preparing to market and marketing the Securities or in contemplation of performing their obligations hereunder. The

Company shall not in any event be liable to any of the Underwriters for loss of anticipated profits from the transactions covered by this Agreement.

(ix) The Company will apply the net proceeds from the sale of the Securities to be sold by it hereunder for the purposes set forth in the Time of Sale Disclosure Package and in the Prospectus and will file such reports with the Commission with respect to the sale of the Securities and the application of the proceeds therefrom as may be required in accordance with Rule 463 of the Rules and Regulations.

(x) Except as set forth in the Registration Statement, the Time of Sale Disclosure Package and the Prospectus, the Company will not, without the prior written consent of Piper Jaffray & Co., from the date of execution of this Agreement and continuing to and including the date 180 days after the date of the Prospectus (the "LOCK-UP PERIOD") offer for sale; sell, contract to sell, pledge, grant any option for the sale of, enter into any transaction which is designed to, or might reasonably be expected to, result in the disposition (whether by actual disposition or effective economic disposition due to cash settlement or otherwise) by the Company or any affiliate, or otherwise issue or dispose of, directly or indirectly (or publicly disclose the intention to make any such offer, sale, pledge, grant, issuance or other disposition), any Common Stock or any securities convertible into or exchangeable for, or any options or rights to purchase or acquire, Common Stock, except (i) to the Underwriters pursuant to this Agreement, (ii) to directors, employees and consultants of the Company under the Company's stock option plans existing on the date hereof or the Company's 2006 Stock Plan and (iii) upon the exercise or conversion of securities outstanding on the date hereof or granted in compliance with clause (ii) above. The Company agrees not to accelerate the vesting of any option or warrant or the lapse of any repurchase right prior to the expiration of the Lock-Up Period. If (1) during the period that begins on the date that is 18 calendar days before the last day of the Lock-Up Period and ends on the last day of the Lock-Up Period, (a) the Company issues an earnings release, (b) the Company publicly announces material news or (c) a material event relating to the Company occurs; or (2) prior to the expiration of the Lock-Up Period, the Company announces that it will release earnings results during the 16-day period beginning on the last day of the Lock-Up Period, then the restrictions in this Agreement, unless otherwise waived by Piper

Jaffray & Co. in writing, shall continue to apply until the expiration of the date that is 18 calendar days after the date on which (a) the Company issues the earnings release, (b) the Company publicly announces material news or (c) a material event relating to the Company occurs. The Company will provide the Representatives, any co-managers and each shareholder subject to the Lock-Up Agreement (as defined below) with prior notice of any such announcement that gives rise to the extension of the Lock-Up Period.

(xi) The Company has caused to be delivered to you prior to the date of this Agreement a letter from each of the Company's directors and officers and certain of its shareholders stating that such person agrees that he or she will not, without your prior written consent, offer for sale, sell, contract to sell or otherwise dispose of, as set

forth in such letter, any shares of Common Stock or rights to purchase Common Stock, except to the Underwriters pursuant to this Agreement, for a period commencing on the date of such letter and ending the earlier of (a) 180 days after the date hereof and (b) December 31, 2006 if on such date this Agreement has not been executed (the "LOCK-UP AGREEMENT"). The Company will enforce the terms of each Lock-Up Agreement and issue stop-transfer instructions to the transfer agent for the Common Stock with respect to any transaction or contemplated transaction that would constitute a breach of or default under the applicable Lock-Up Agreement.

(xii) The Company has not taken and will not take, directly or indirectly, any action designed to or which might reasonably be expected to cause or result in, or which has constituted, the stabilization or manipulation of the price of any security of the Company to facilitate the sale or resale of the Securities, and has not effected any sales of Common Stock which are required to be disclosed in response to Item 701 of Regulation S-K under the Act which have not been so disclosed in the Registration Statement.

(xiii) The Company will not incur any liability for any finder's or broker's fee or agent's commission in connection with the execution and delivery of this Agreement or the consummation of the transactions contemplated hereby.

(xiv) The Company will comply with all applicable securities and other applicable laws, rules and regulations in each foreign jurisdiction in which Directed Stock is offered in connection with the Directed Stock Program.

(xv) In connection with the Directed Stock Program to ensure that the Directed Stock will be restricted to the extent required by the National Association of Securities Dealers or the rules of such association from sale, transfer, assignment, pledge or hypothecation for a period of three months following the date of the effectiveness of the Registration Statement, the Company will direct the transfer agent to place stop-transfer restrictions upon such securities for such period of time. Should the Company release, or seek to release, from such restrictions any of the Directed Stock, the Company agrees to reimburse the Underwriters for any reasonable expense (including, without limitation, legal expenses) they incur with such release.

(xvi) The Company will file with the Commission such periodic and current reports as required by the rules and regulations of the Commission under the Exchange Act.

(xvii) The Company will establish, within the timer prescribed by the rules of the Commission and, after such time, will maintain controls and other procedures required by Sections 302 and 906 of the Sarbanes-Oxley Act and the applicable regulations thereunder, that are designed to ensure that information required to be disclosed by the Company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time

periods specified in the Commission's rules and forms, including

without limitation, controls and procedures designed to ensure that information required to be disclosed by the Company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the Company's management, including its principal executive officer and its principal financial officer, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure, to ensure that material information relating to Company is made known to them by others within the Company.

(xviii) The Company will comply with all effective applicable provisions of the Sarbanes-Oxley Act.

(xix) The Company represents and agrees that, unless it obtains the prior written consent of Piper Jaffray & Co., and each Underwriter severally represents and agrees that, unless it obtains the prior written consent of the Company and Piper Jaffray & Co., it has not made and will not make any offer relating to the Securities that would constitute an "issuer free writing prospectus," as defined in Rule 433 under the Securities Act, or that would otherwise constitute a "free writing prospectus," as defined in Rule 405 under the Securities Act, required to be filed with the Commission; provided that the prior written consent of the parties hereto shall be deemed to have been given in respect of the free writing prospectuses included in Schedule II. Any such free writing prospectus consented to by the Company and Piper Jaffray & Co. is hereinafter referred to as a "PERMITTED FREE WRITING PROSPECTUS." The Company represents that it has treated or agrees that it will treat each Permitted Free Writing Prospectus as an "issuer free writing prospectus," as defined in Rule 433, and has complied and will comply with the requirements of Rule 433 applicable to any Permitted Free Writing Prospectus, including timely Commission filing where required, legending and record keeping. The Company represents that it has satisfied and agrees that it will satisfy the conditions in Rule 433 to avoid a requirement to file with the Commission any electronic road show.

5. CONDITIONS OF UNDERWRITERS' OBLIGATIONS. The obligations of the several Underwriters hereunder are subject to the accuracy, as of the date hereof and at each of the First Closing Date and the Second Closing Date (as if made at such Closing Date), of and compliance with, in all material respects, all representations, warranties and agreements of the Company contained herein, to the performance by the Company of its obligations hereunder and to the following additional conditions:

(a) The Registration Statement shall have become effective not later than 5:30 p.m., Eastern time, on the date of this Agreement, or such later time and date as you, as Representatives of the several Underwriters, shall approve and all filings required by Rules 424, 430A and 433 of the Rules and Regulations shall have been timely made (without reliance on Rule 424(b)(8) or Rule 164(b)); no stop order suspending the effectiveness of the Registration Statement or any part thereof or any amendment thereof, nor suspending or preventing the use of the Time of Sale Disclosure Package, the Prospectus or any Issuer Free Writing Prospectus

shall have been issued; no proceedings for the issuance of such an order shall have been initiated or threatened; and any request of the Commission for additional information (to be included in the Registration Statement, the Time of Sale Disclosure Package, the Prospectus, any Issuer Free Writing Prospectus or otherwise) shall have been complied with to your satisfaction.

(b) No Underwriter shall have advised the Company that the Registration Statement, the Time of sale Disclosure Package or the Prospectus, or any amendment thereof or supplement thereto, or any Issuer Free Writing Prospectus contains an untrue statement of fact which, in your opinion, is material, or omits to state a fact which, in your opinion, is material and is required to be stated therein or necessary to make the statements therein not misleading.

(c) Except as contemplated in the Time of Sale Disclosure Package and in the Prospectus, subsequent to the respective dates as of which information is given in the Time of Sale Disclosure Package, the Company shall not have incurred any material liabilities or obligations, direct or contingent, or entered into any material transactions, or declared or paid any dividends or made any distribution of any kind with respect to its capital stock; and there shall not have been any change in the capital stock (other than a change in the number of outstanding shares of Common Stock due to the issuance of shares upon the exercise of outstanding options or warrants), or any material change in the

short-term or long-term debt of the Company, or any issuance of options, warrants, convertible securities or other rights to purchase the capital stock of the Company (other than grants of stock options under the Company's stock option plans existing on the date hereof or the Company's 2006 Stock Plan), or any Material Adverse Change or any development involving a prospective Material Adverse Change (whether or not arising in the ordinary course of business), that, in your judgment, makes it impractical or inadvisable to offer or deliver the Securities on the terms and in the manner contemplated in the Time of Sale Disclosure Package and in the Prospectus.

(d) On or after the Time of Sale (i) no downgrading shall have occurred in the rating accorded the Company's debt securities or preferred stock by any "nationally recognized statistical organization," as that term is defined by the Commission for purposes of Rule 436(g)(2) under the Act, and (ii) no such organization shall have publicly announced that it has under surveillance or review, with possible negative implications, its rating of any of the Company's debt securities or preferred stock;

(e) On each Closing Date, there shall have been furnished to you, as Representatives of the several Underwriters, the opinion of Goodwin Procter LLP, counsel for the Company, dated such Closing Date and addressed to you, to in the form set forth on Exhibit A. hereto

(f) On each Closing Date, there shall have been furnished to you, as Representatives of the several Underwriters, the opinion of each of Fish & Richardson Pabst Patent Group LLP, special intellectual property counsel for the Company, dated such Closing Date and addressed to you, in the forms set forth on Exhibits B-1 and B-2 hereto.

(g) On each Closing Date, there shall have been furnished to you, as Representatives of the several Underwriters, such opinion or opinions from Latham & Watkins LLP, counsel for the several Underwriters, dated such Closing Date and addressed to you, with respect to such matters as you reasonably may request, and such counsel shall have received such papers and information as they request to enable them to pass upon such matters.

(h) On each Closing Date you, as Representatives of the several Underwriters, shall have received a letter of PricewaterhouseCoopers LLP, dated such Closing Date and addressed to you, confirming that they are independent public accountants within the meaning of the Act and are in compliance with the applicable requirements relating to the qualifications of accountants under Rule 2-01 of Regulation S-X of the Commission, and stating, as of the date of such letter (or, with respect to matters involving changes or developments since the respective dates as of which specified financial information is given in the Time of Sale Disclosure Package, as of a date not prior to the date hereof or more than five days prior to the date of such letter), the conclusions and findings of said firm with respect to the financial information and other matters covered by its letter delivered to you concurrently with the execution of this Agreement, and the effect of the letter so to be delivered on such Closing Date shall be to confirm the conclusions and findings set forth in such prior letter.

(i) On each Closing Date, there shall have been furnished to you, as Representatives of the Underwriters, a certificate, dated such Closing Date and addressed to you, signed by the chief executive officer and by the chief financial officer of the Company, to the effect that:

(i) The representations and warranties of the Company in this Agreement are true and correct, in all material respects, as if made at and as of such Closing Date, and the Company has complied with all the agreements and satisfied all the conditions on its part to be performed or satisfied at or prior to such Closing Date;

(ii) No stop order or other order suspending the effectiveness of the Registration Statement or any part thereof or any amendment thereof or the qualification of the Securities for offering or sale, nor suspending or preventing the use of the Time of Sale Disclosure Package, the Prospectus or any Issuer Free Writing Prospectus, has been issued, and no proceeding for that purpose has been instituted or, to the best of their knowledge, is contemplated by the Commission or any state or regulatory body; and

(iii) The signers of said certificate have carefully examined the Registration Statement, the Time of Sale Disclosure Package and the Prospectus, and any amendments thereof or supplements thereto, and (A) each part of the Registration Statement and the Prospectus, and any

amendments thereof or supplements thereto contain, and contained when such part of the Registration Statement, or any amendment thereof, became effective, all statements and information required to be included therein, the Registration Statement, or any amendment thereof, does not contain and did not

contain when such part of the Registration Statement, or any amendment thereof, became effective, any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein not misleading, and the Prospectus, as amended or supplemented, does not include and did not include as of its date or the time of first use within the meaning of the Rules and Regulations, any untrue statement of material fact or omit to state and did not omit to state as of its date or the time of first use within the meaning of the rules and Regulations a material fact necessary to make the statements therein, in light of the circumstances under which they were made, not misleading, (B) neither (1) the Time of Sale Disclosure Package nor (2) any individual Issuer Limited-Use Free Writing Prospectus, when considered together with the Time of Sale Disclosure Package, include, nor included as of the Time of Sale any untrue statement of a material fact or omits, or omitted as of the Time of Sale, to state any material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading, (C) since the Time of Sale there has occurred no event required to be set forth in an amended or supplemented prospectus which has not been so set forth, (D) subsequent to the respective dates as of which information is given in the Time of Sale Disclosure Package, the Company has not incurred any material liabilities or obligations, direct or contingent, or entered into any material transactions, not in the ordinary course of business, or declared or paid any dividends or made any distribution of any kind with respect to its capital stock, and except as disclosed in the Time of Sale Disclosure Package and in the Prospectus, there has not been any change in the capital stock (other than a change in the number of outstanding shares of Common Stock due to the issuance of shares upon the exercise of outstanding options or warrants), or any material change in the short-term or long-term debt, or any issuance of options, warrants, convertible securities or other rights to purchase the capital stock (other than grants of stock options under the Company's stock option plans existing on the date hereof or the Company's 2006 Stock Plan), of the Company or any Material Adverse Change or any development involving a prospective Material Adverse Change (whether or not arising in the ordinary course of business), and (E) except as stated in the Time of Sale Disclosure Package and in the Prospectus, there is not pending, or, to the knowledge of the Company, threatened or contemplated, any action, suit or proceeding to which the Company is a party before or by any court or governmental agency, authority or body, or any arbitrator, which would reasonably be expected to result in any Material Adverse Change.

(j) The Company shall have furnished to you and counsel for the Underwriters such additional documents, certificates and evidence as you or they may have reasonably requested.

(k) At each Closing Date, counsel for the Underwriters shall have been furnished with such information, certificates and documents as they may reasonably require for the purpose of enabling them to pass upon the issuance and sale of the Securities as contemplated herein and related proceedings, or to evidence the accuracy of any of the

representations or warranties, or the fulfillment of any of the conditions, herein contained, or otherwise in connection with the offering of the Securities contemplated hereby.

All such opinions, certificates, letters and other documents will be in compliance with the provisions hereof only if they are reasonably satisfactory in form and substance to you and counsel for the Underwriters. The Company will furnish you with such conformed copies of such opinions, certificates, letters and other documents as you shall reasonably request.

6. INDEMNIFICATION AND CONTRIBUTION.

(a) The Company agrees to indemnify and hold harmless each Underwriter against any losses, claims, damages or liabilities, joint or several, to which such Underwriter may become subject, under the Act or otherwise (including in settlement of any litigation if such settlement is effected with the written consent of the Company), insofar as such losses, claims, damages or liabilities (or actions in respect thereof) arise out of or are based upon an untrue statement or alleged untrue statement of a material fact contained in the Registration Statement, including the information deemed to be a part of the Registration Statement at the time of effectiveness and at any subsequent time pursuant to Rules 430A and 430C of the Rules and Regulations, if applicable, any Preliminary Prospectus, the Time of Sale Disclosure Package, the Prospectus, or any amendment or supplement thereto, any Issuer Free Writing Prospectus or in any materials or information provided to investors by, or with the approval of, the Company in connection with the marketing of the offering of the Common Stock ("MARKETING MATERIALS"), including any road show or investor presentations made to investors by the Company (whether in person or electronically) or arise out of or are based upon the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, and will reimburse each Underwriter for any legal or other expenses reasonably incurred by it in connection with investigating or defending against such loss, claim, damage, liability or action; PROVIDED, HOWEVER, that the Company shall not be liable in any such case to the extent that any such loss, claim, damage, liability or action arises out of or is based upon an untrue statement or alleged untrue statement or omission or alleged omission made in the Registration Statement, any Preliminary Prospectus, the Time of Sale Disclosure Package, the Prospectus, or any such amendment or supplement, any Issuer Free Writing Prospectus or in any Marketing Materials, in reliance upon and in conformity with written information furnished to the Company by you, or by any Underwriter through you, specifically for use in the preparation thereof.

In addition to its other obligations under this Section 6(a), the Company agrees that, as an interim measure during the pendency of any claim, action, investigation, inquiry or other proceeding arising out of or based upon any statement or omission, or any alleged statement or omission, described in this Section 6(a), it will reimburse each Underwriter on a monthly basis for all reasonable legal fees or other expenses incurred in connection with investigating or defending any such claim, action, investigation, inquiry or other proceeding, notwithstanding the absence of a judicial determination as to the propriety and enforceability of the Company's obligation to reimburse the Underwriters for such expenses and the possibility that such payments might later be held to have been improper by a court of competent

jurisdiction. To the extent that any such interim reimbursement payment is so held to have been improper, the Underwriter that received such payment shall promptly return it to the party or parties that made such payment, together with interest, compounded daily, determined on the basis of the prime rate (or other commercial lending rate for borrowers of the highest credit standing) announced from time to time by U.S. Bank (the "PRIME RATE"). Any such interim reimbursement payments which are not made to an Underwriter within 30 days of a request for reimbursement shall bear interest at the Prime Rate from the date of such request. This indemnity agreement shall be in addition to any liabilities which the Company may otherwise have.

(b) Each Underwriter will indemnify and hold harmless the Company against any losses, claims, damages or liabilities to which the Company may become subject, under the Act or otherwise (including in settlement of any litigation, if such settlement is effected with the written consent of such Underwriter), insofar as such losses, claims, damages or liabilities (or actions in respect thereof) arise out of or are based upon an untrue statement or alleged untrue statement of a material fact contained in the Registration Statement, including the information deemed to be a part of the Registration Statement at the time of effectiveness and at any subsequent time pursuant to Rules 430A and 430C of the Rules and Regulations, if applicable, any Preliminary Prospectus, the Time of Sale Disclosure Package, the Prospectus, or any amendment or supplement thereto, or any Issuer Free Writing Prospectus or arise out of or are based upon the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, in each case to the extent, but only to the extent, that such untrue statement or alleged untrue statement or omission or alleged omission was made in the Registration Statement, any Preliminary Prospectus, the Time of Sale Disclosure Package, the Prospectus, or any such amendment or supplement, or any Issuer Free Writing Prospectus in reliance upon and in conformity with written information furnished to the Company by you, or by such Underwriter through you, specifically for use in the preparation thereof, and

will reimburse the Company for any legal or other expenses reasonably incurred by the Company in connection with investigating or defending against any such loss, claim, damage, liability or action.

(c) Promptly after receipt by an indemnified party under subsection (a) or (b) above of notice of the commencement of any action, such indemnified party shall, if a claim in respect thereof is to be made against the indemnifying party under such subsection, notify the indemnifying party in writing of the commencement thereof; but the omission so to notify the indemnifying party shall not relieve the indemnifying party from any liability that it may have to any indemnified party except to the extent such indemnifying party has been materially prejudiced by such failure. In case any such action shall be brought against any indemnified party, and it shall notify the indemnifying party of the commencement thereof, the indemnifying party shall be entitled to participate in, and, to the extent that it shall wish, jointly with any other indemnifying party similarly notified, to assume the defense thereof, with counsel satisfactory to such indemnified party, and after notice from the indemnifying party to such indemnified party of the indemnifying party's election so to assume the defense thereof, the indemnifying party shall not be liable to such indemnified party under such subsection for any legal or other expenses subsequently incurred by such indemnified party in connection with the defense

thereof other than reasonable costs of investigation; provided, however, that if, in the sole judgment of the Representatives, it is advisable for the Underwriters to be represented as a group by separate counsel, the Representatives shall have the right to employ a single counsel to represent the Representatives and all Underwriters who may be subject to liability arising from any claim in respect of which indemnity may be sought by the Underwriters under subsection (a) of this Section 6, in which event the reasonable fees and expenses of such separate counsel shall be borne by the indemnifying party or parties and reimbursed to the Underwriters as incurred (in accordance with the provisions of the second paragraph in subsection (a) above). An indemnifying party shall not be obligated under any settlement agreement relating to any action under this Section 6 to which it has not agreed in writing. In addition, no indemnifying party shall, without the prior written consent of the indemnified party (which consent shall not be unreasonably withheld or delayed), effect any settlement of any pending or threatened proceeding unless such settlement includes an unconditional release of such indemnified party for all liability on claims that are the subject matter of such proceeding.

(d) If the indemnification provided for in this Section 6 is unavailable or insufficient to hold harmless an indemnified party under subsection (a) or (b) above, then each indemnifying party shall contribute to the amount paid or payable by such indemnified party as a result of the losses, claims, damages or liabilities referred to in subsection (a) or (b) above, (i) in such proportion as is appropriate to reflect the relative benefits received by the Company on the one hand and the Underwriters on the other from the offering of the Securities or (ii) if the allocation provided by clause (i) above is not permitted by applicable law, in such proportion as is appropriate to reflect not only the relative benefits referred to in clause (i) above but also the relative fault of the Company on the one hand and the Underwriters on the other in connection with the statements or omissions that resulted in such losses, claims, damages or liabilities, as well as any other relevant equitable considerations. The relative benefits received by the Company on the one hand and the Underwriters on the other shall be deemed to be in the same proportion as the total net proceeds from the offering (before deducting expenses) received by the Company bear to the total underwriting discounts and commissions received by the Underwriters, in each case as set forth in the table on the cover page of the Prospectus. The relative fault shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or the omission or alleged omission to state a material fact relates to information supplied by the Company or the Underwriters and the parties' relevant intent, knowledge, access to information and opportunity to correct or prevent such untrue statement or omission. The Company and the Underwriters agree that it would not be just and equitable if contributions pursuant to this subsection (d) were to be determined by pro rata allocation (even if the Underwriters were treated as one entity for such purpose) or by any other method of allocation which does not take account of the equitable considerations referred to in the first sentence of this subsection (d). The amount paid by an indemnified party as a result of the losses, claims, damages or liabilities referred to in the first sentence of this subsection (d) shall be deemed to include any legal or other expenses reasonably incurred by such indemnified party in connection with investigating or defending against any action or claim which is the subject of this subsection (d). Notwithstanding the provisions of this subsection (d), no Underwriter shall be required to contribute any amount

in excess of the

amount by which the total price at which the Securities underwritten by it and distributed to the public were offered to the public exceeds the amount of any damages that such Underwriter has otherwise been required to pay by reason of such untrue or alleged untrue statement or omission or alleged omission. No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation. The Underwriters' obligations in this subsection (d) to contribute are several in proportion to their respective underwriting obligations and not joint.

(e) The obligations of the Company under this Section 6 shall be in addition to any liability which the Company may otherwise have and shall extend, upon the same terms and conditions, to each person, if any, who controls any Underwriter within the meaning of the Act; and the obligations of the Underwriters under this Section 6 shall be in addition to any liability that the respective Underwriters may otherwise have and shall extend, upon the same terms and conditions, to each director of the Company (including any person who, with his consent, is named in the Registration Statement as about to become a director of the Company), to each officer of the Company who has signed the Registration Statement and to each person, if any, who controls the Company within the meaning of the Act.

(f) The Underwriters severally confirm and the Company acknowledges that the statements with respect to the public offering of the Securities by the Underwriters set forth on the cover page of and elsewhere in, and the concession and reallowance figures appearing under the caption "Underwriting" in the Registration Statement, any Preliminary Prospectus, the Time of Sale Disclosure Package and the Prospectus are correct and constitute the only information concerning such Underwriters furnished in writing to the Company by or on behalf of the Underwriters specifically for inclusion in the Registration Statement, any Preliminary Prospectus, the Time of Sale Disclosure Package, the Prospectus or any Issuer Free Writing Prospectus.

(g) In connection with the offer and sale of the Directed Stock, the Company agrees, promptly upon a request in writing, to indemnify and hold harmless the Underwriters from and against any and all losses, liabilities, claims, damages and expenses incurred by them as a result of the failure of the Directed Stock Participants to affirmatively reconfirm the Directed Stock for purchase as of the date of this Agreement or to pay for and accept delivery of the Directed Stock by the end of the First Closing Date.

7. REPRESENTATIONS AND AGREEMENTS TO SURVIVE DELIVERY. All representations, warranties, and agreements of the Company herein or in certificates delivered pursuant hereto, and the agreements of the several Underwriters and the Company contained in Section 6 hereof, shall remain operative and in full force and effect regardless of any investigation made by or on behalf of any Underwriter or any controlling person thereof, or the Company or any of its officers, directors, or controlling persons, and shall survive delivery of, and payment for, the Securities to and by the Underwriters hereunder.

8. SUBSTITUTION OF UNDERWRITERS.

(a) If any Underwriter or Underwriters shall fail to take up and pay for the amount of Firm Shares agreed by such Underwriter or Underwriters to be purchased hereunder, upon tender of such Firm Shares in accordance with the terms hereof, and the amount of Firm Shares not purchased does not aggregate more than 10% of the total amount of Firm Shares set forth in Schedule I hereto, the remaining Underwriters shall be obligated to take up and pay for (in proportion to their respective underwriting obligations hereunder as set forth in Schedule I hereto except as may otherwise be determined by you) the Firm Shares that the withdrawing or defaulting Underwriters agreed but failed to purchase.

(b) If any Underwriter or Underwriters shall fail to take up and pay for the amount of Firm Shares agreed by such Underwriter or Underwriters to be purchased hereunder, upon tender of such Firm Shares in accordance with the terms hereof, and the amount of Firm Shares not purchased aggregates more than 10% of the total amount of Firm Shares set forth in Schedule I hereto, and

arrangements satisfactory to you for the purchase of such Firm Shares by other persons are not made within 36 hours thereafter, this Agreement shall terminate. In the event of any such termination the Company shall not be under any liability to any Underwriter (except to the extent provided in Section 4(a)(viii) and Section 6 hereof) nor shall any Underwriter (other than an Underwriter who shall have failed, otherwise than for some reason permitted under this Agreement, to purchase the amount of Firm Shares agreed by such Underwriter to be purchased hereunder) be under any liability to the Company (except to the extent provided in Section 6 hereof).

If Firm Shares to which a default relates are to be purchased by the non-defaulting Underwriters or by any other party or parties, the Representatives or the Company shall have the right to postpone the First Closing Date for not more than seven business days in order that the necessary changes in the Registration Statement, in the Time of Sale Disclosure Package, in the Prospectus or in any other documents, as well as any other arrangements, may be effected. As used herein, the term "Underwriter" includes any person substituted for an Underwriter under this Section 8.

9. EFFECTIVE DATE OF THIS AGREEMENT AND TERMINATION.

(a) This Agreement shall become effective at [_____] a.m., Eastern time, on the first full business day following the effective date of the Registration Statement, or at such earlier time after the effective time of the Registration Statement as you in your discretion shall first release the Securities for sale to the public; PROVIDED, that if the Registration Statement is effective at the time this Agreement is executed, this Agreement shall become effective at such time as you in your discretion shall first release the Securities for sale to the public. For the purpose of this Section, the Securities shall be deemed to have been released for sale to the public upon release by you of an electronic communication authorizing commencement of the offering the Securities for sale by the Underwriters or other securities dealers. By giving notice as hereinafter specified before the time this Agreement becomes effective, you, as Representatives of the several Underwriters, or the Company, may prevent this Agreement from

becoming effective without liability of any party to any other party, except that the provisions of Section 4(a)(viii) and Section 6 hereof shall at all times be effective.

(b) You, as Representatives of the several Underwriters, shall have the right to terminate this Agreement by giving notice as hereinafter specified at any time at or prior to the First Closing Date, and the option referred to in Section 3(b), if exercised, may be cancelled at any time prior to the Second Closing Date, if (i) the Company shall have failed, refused or been unable, at or prior to such Closing Date, to perform any agreement on its part to be performed hereunder, (ii) any other condition of the Underwriters' obligations hereunder is not fulfilled, (iii) trading on the Nasdaq Stock Market, New York Stock Exchange or the American Stock Exchange shall have been wholly suspended, (iv) minimum or maximum prices for trading shall have been fixed, or maximum ranges for prices for securities shall have been required, on the Nasdaq Stock Market, New York Stock Exchange or the American Stock Exchange, by such Exchange or by order of the Commission or any other governmental authority having jurisdiction, (v) a banking moratorium shall have been declared by federal or state authorities, or (vi) there shall have occurred any outbreak or escalation of hostilities or any change in financial markets or any calamity or crisis that, in your judgment, is material and adverse and makes it impractical or inadvisable to proceed with the completion of the sale of and payment for the Securities. Any such termination shall be without liability of any party to any other party except that the provisions of Section 4(a)(viii) and Section 6 hereof shall at all times be effective.

(c) If you elect to prevent this Agreement from becoming effective or to terminate this Agreement as provided in this Section, the Company shall be notified promptly by you by telephone, confirmed by letter. If the Company elects to prevent this Agreement from becoming effective, you shall be notified by the Company by telephone, confirmed by letter.

10. DEFAULT BY THE COMPANY. If the Company shall fail at the First Closing Date to sell and deliver the number of Securities which it is obligated to sell hereunder, then this Agreement shall terminate without any liability on the part of any non-defaulting party.

No action taken pursuant to this Section shall relieve the Company so defaulting from liability, if any, in respect of such default.

11. NOTICES. Except as otherwise provided herein, all communications hereunder shall be in writing and, if to the Underwriters, shall be mailed or delivered to the Representatives c/o Piper Jaffray & Co., 800 Nicollet Mall, Minneapolis, Minnesota 55402, except that notices given to an Underwriter pursuant to Section 6 hereof shall be sent to such Underwriter at the address stated in the Underwriters' Questionnaire furnished by such Underwriter in connection with this offering with a copy to Latham & Watkins LLP, 885 Third Avenue, New York, New York 10022, Attention: Charles Ruck, Esq.; if to the Company, shall be mailed or delivered to it at 21 Erie Street, Cambridge, Massachusetts 02139, Attention: James J. Barber, with a copy to Goodwin Procter LLP, Exchange Place, 53 State Street, Boston, Massachusetts 02109, Attention: John M. Mutkoski, Esq.; or in each case to such

other address as the person to be notified may have requested in writing. Any party to this Agreement may change such address for notices by sending to the parties to this Agreement written notice of a new address for such purpose.

12. PERSONS ENTITLED TO BENEFIT OF AGREEMENT. This Agreement shall inure to the benefit of and be binding upon the parties hereto and their respective successors and assigns and the controlling persons, officers and directors referred to in Section 6. Nothing in this Agreement is intended or shall be construed to give to any other person, firm or corporation any legal or equitable remedy or claim under or in respect of this Agreement or any provision herein contained. The term "successors and assigns" as herein used shall not include any purchaser, as such purchaser, of any of the Securities from any of the several Underwriters.

13. ABSENCE OF FIDUCIARY RELATIONSHIP. The Company acknowledges and agrees that: (a) the Representatives have been retained solely to act as an underwriter in connection with the sale of the Securities and that no fiduciary, advisory or agency relationship between the Company and the Representatives have been created in respect of any of the transactions contemplated by this Agreement, irrespective of whether the Representatives have advised or are advising the Company on other matters; (b) the price and other terms of the Securities set forth in this Agreement were established by the Company following discussions and arms-length negotiations with the Representatives and the Company is capable of evaluating and understanding and understands and accepts the terms, risks and conditions of the transactions contemplated by this Agreement; (c) it has been advised that the Representatives and their affiliates are engaged in a broad range of transactions which may involve interests that differ from those of the Company and that the Representatives have no obligation to disclose such interest and transactions to the Company by virtue of any fiduciary, advisory or agency relationship; (d) it has been advised that the Representatives are acting, in respect of the transactions contemplated by this Agreement, solely for the benefit of the Representatives and the other Underwriters, and not on behalf of the Company; and (e) it waives to the fullest extent permitted by law, any claims it may have against the Representatives for breach of fiduciary duty or alleged breach of fiduciary duty in respect of any of the transactions contemplated by this Agreement and agrees that the Representatives shall have no liability (whether direct or indirect) to the Company in respect of such a fiduciary duty claim on behalf of or in right of the Company, including stockholders, employees or creditors of the Company.

14. GOVERNING LAW. This Agreement shall be governed by and construed in accordance with the laws of the State of New York.

15. COUNTERPARTS. This Agreement may be executed in one or more counterparts and, if executed in more than one counterpart, the executed counterparts shall each be deemed to be an original and all such counterparts shall together constitute one and the same instrument.

[Signature Page Follows]

Please sign and return to the Company the enclosed duplicates of this letter whereupon this letter will become a binding agreement between the Company and the several Underwriters in accordance with its terms.

Very truly yours,

METABOLIX, INC.

By

James J. Barber,
President and Chief Executive Officer

Confirmed as of the date first above mentioned, on behalf of themselves and the other several Underwriters named in Schedule I hereto.

PIPER JAFFRAY & CO.

By: ---

Name: ---

Title: ---

JEFFERIES & COMPANY, INC.

By: ---

Name: ---

Title: ---

[Signatures Continued on the Next Page]

THOMAS WEISEL PARTNERS LLC

By: ---

Name: ---

Title: ---

ARDOUR CAPITAL INVESTMENTS, LLC

By: ---

Name: ---

Title: ---

SCHEDULE I

UNDERWRITER	NUMBER OF FIRM SHARES (1)
Piper Jaffray & Co.	
Jefferies & Company, Inc.	
Thomas Weisel Partners LLC	
Ardour Capital Investments, LLC	
Total	

(1) The Underwriters may purchase up to an additional [_____] Option Shares, to the extent the option described in Section 3(b) of the Agreement is exercised, in the proportions and in the manner described in the Agreement.

SCHEDULE II

ISSUER GENERAL FREE WRITING PROSPECTUSES

EXHIBIT A

OPINION OF GOODWIN | PROCTER LLP

EXHIBIT B-1

OPINION OF PABST PATENT GROUP LLP

EXHIBIT B-2

OPINION OF FISH & RICHARDSON

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Exhibit 23.2

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the use in this Amendment No. 4 to the Registration Statement on Form S-1 of our report dated June 26, 2006, except for the information presented in footnote 15 for which the date is November 3, 2006, relating to the financial statements of Metabolix, Inc., which appears in such Amendment No. 4 to the Registration Statement. We also consent to the references to us under the headings "Experts" and "Selected Financial Data" in such Amendment No. 4 to the Registration Statement.

/s/ PricewaterhouseCoopers LLP
Boston, Massachusetts
November 3, 2006

QuickLinks

Exhibit 23.2
CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM