

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION**

Washington, D. C. 20549

**FORM 10-Q**

(Mark One)

- QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the quarterly period ended September 30, 2006

or

- TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission File Number 001-33133

**METABOLIX, INC.**

(Exact name of registrant as specified in its charter)

**Delaware**  
(State or other Jurisdiction of  
Incorporation or Organization)

**04-3158289**  
(IRS Employer  
Identification No.)

**21 Erie Street**  
**Cambridge, MA**  
(Address of principal executive offices)

**02139**  
(Zip Code)

(Registrant's telephone number, including area code): **(617) 492-0505**

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes  No

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

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes  No

The number of shares outstanding of the registrant's Common Stock, \$0.01 par value per share, as of December 1, 2006 was 20,418,603.

**METABOLIX, INC.**

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**FOR THE QUARTER ENDED SEPTEMBER 30, 2006**

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**PART I. FINANCIAL INFORMATION**

**Item 1. Condensed Consolidated Financial Statements (Unaudited)**

**METABOLIX, INC.**

**CONDENSED CONSOLIDATED BALANCE SHEETS (UNAUDITED)**

(In thousands, except share and per share amounts)

	September 30, 2006	December 31, 2005
<b>Assets</b>		
Current Assets		
Cash and cash equivalents	\$ 6,185	\$ 1,835
Short-term investments	9,140	1,339
Restricted cash	498	496
Accounts receivable	—	30
Unbilled receivable	181	431
Other current assets	245	124
Total current assets	<u>16,249</u>	<u>4,255</u>
Property and equipment, net	3,445	3,005
Other assets	1,690	65
Total assets	<u>\$ 21,384</u>	<u>\$ 7,325</u>
<b>Liabilities, Redeemable Convertible Preferred Stock and Stockholders' Deficit</b>		
Current Liabilities		
Accounts payable	\$ 962	\$ 1,299
Accrued expenses	1,605	831
Advances on financing from investors	—	615
Current portion of capital lease obligations	—	63
Current portion of deferred rent	165	165
Total current liabilities	<u>2,732</u>	<u>2,973</u>
Deferred rent	1,089	1,213
Long-term deferred revenue	9,622	5,621
Other long-term liabilities	71	67
Total liabilities	<u>13,514</u>	<u>9,874</u>
Commitments and contingencies (Note 8)		
Redeemable convertible preferred stock	61,442	44,009
Stockholders' Deficit		
Common stock (\$0.01 par value per share); 26,500,000 and 23,000,000 shares authorized at September 30, 2006 and December 31, 2005, respectively; 2,077,299 and 1,812,828 shares issued at September 30, 2006 and December 31, 2005, respectively; 2,066,675 and 1,802,204 shares outstanding at September 30, 2006 and December 31, 2005, respectively	21	18
Treasury stock (at cost); 10,624 shares at 2006 and 2005	(35)	(35)
Additional paid-in capital	5,270	3,634
Deferred compensation	(95)	—
Other comprehensive income	7	—
Accumulated deficit	<u>(58,740)</u>	<u>(50,175)</u>
Total stockholders' deficit	<u>(53,572)</u>	<u>(46,558)</u>
Total liabilities, redeemable convertible preferred stock and stockholders' deficit	<u>\$ 21,384</u>	<u>\$ 7,325</u>

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

**METABOLIX, INC.**

**CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS (UNAUDITED)**

(In thousands, except share and per share amounts)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2006	2005	2006	2005
<b>Revenue</b>				
Research and development revenue	\$ 2	—	\$ 2,505	32
License fee and royalty revenue from related party (Note 11)	38	58	227	192
Grant revenue	383	507	1,501	1,850
Total revenue	423	565	4,233	2,074
<b>Operating expenses</b>				
Research and development expenses, including cost of revenue	2,842	1,281	7,512	4,105
General and administrative expenses	2,031	1,245	5,846	3,323
Total operating expenses	4,873	2,526	13,358	7,428
Loss from operations	(4,450)	(1,961)	(9,125)	(5,354)
<b>Other income (expense)</b>				
Interest income	225	22	567	67
Interest expense	(5)	(3)	(7)	(15)
Net loss	\$ (4,230)	(1,942)	\$ (8,565)	(5,302)
<b>Net loss per share</b>				
Basic and Diluted	\$ (1.41)	\$ (0.65)	\$ (2.86)	\$ (1.78)
<b>Number of shares used in per share calculations</b>				
Basic and Diluted	3,009,146	2,976,440	2,995,033	2,974,452

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

**METABOLIX, INC.**  
**CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS (UNAUDITED)**  
(In thousands)

	Nine Months Ended September 30,	
	2006	2005
<b>Cash flows from operating activities</b>		
Net loss	\$ (8,565)	\$ (5,302)
Adjustments to reconcile net loss to net cash used in operating activities		
Depreciation	693	198
Stock-based compensation	1,211	4
Changes in operating assets and liabilities:		
Accounts receivable	30	17
Unbilled receivable	250	115
Other current assets	(121)	(83)
Accounts payable	(488)	(176)
Accrued expenses	430	514
Deferred rent	(124)	(124)
Deferred revenue	4,001	1,570
Net cash used in operating activities	(2,683)	(3,267)
<b>Cash flows from investing activities</b>		
Purchase of property and equipment	(1,133)	(489)
Restricted cash	(2)	2
Proceeds from maturity of short-term investments	17,505	—
Purchase of short-term investments	(25,299)	—
Net cash used in investing activities	(8,929)	(487)
<b>Cash flows from financing activities</b>		
Principal payments for capitalized lease obligations	(63)	(92)
Payments on convertible promissory note	—	(300)
Proceeds from issuance of redeemable convertible preferred stock, net of issuance costs	16,819	4,829
Proceeds from options exercised	29	12
Proceeds from warrants exercised	303	—
Deferred initial public offering costs	(1,126)	—
Net cash provided by financing activities	15,962	4,449
Net increase in cash and cash equivalents	4,350	695
Cash and cash equivalents at beginning of period	1,835	3,152
Cash and cash equivalents at end of period	\$ 6,185	\$ 3,847
<b>Supplemental disclosure of cash flow information</b>		
Cash paid during the period for interest	\$ 7	\$ 8
<b>Supplemental disclosure of noncash activities</b>		
Conversion of advances from investors to preferred stock	\$ (615)	\$ —

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**METABOLIX, INC.**  
**NOTES TO CONDENSED FINANCIAL STATEMENTS**  
**(In thousands except for share and per share data)**

**1. Basis of Presentation**

The accompanying condensed consolidated financial statements of Metabolix, Inc. ("the Company"), have been prepared in accordance with generally accepted accounting principles and the rules and regulations of the Securities and Exchange Commission ("SEC") for interim financial information. Accordingly, they do not include all the information and footnotes required by generally accepted accounting principles for complete financial statements and should be read in conjunction with the Company's consolidated financial statements for the year ended December 31, 2005 included in the Company's Registration Statement on Form S-1, as amended (Registration No. 333-135760), which was declared effective by the SEC on November 9, 2006. The financial information as of September 30, 2006 and for the three and nine months ended September 30, 2006 and September 30, 2005 is unaudited, but in the opinion of management, all adjustments, consisting of only normal recurring accruals, considered necessary for a fair statement of the results of these interim periods have been included. The results of the Company's operations for any interim period are not necessarily indicative of the results that may be expected for any other interim period or for a full fiscal year.

**2. 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.

**3. Use of Estimates**

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

**4. Initial Public Offering**

On November 9, 2006, the Company completed its initial public offering of 6,800,000 shares of common stock at an initial public offering price of \$14.00 per share. Net proceeds were approximately \$86,236 after deducting underwriting discounts and commissions and offering expenses payable by the Company. Total estimated fees and expenses payable by the Company, excluding underwriting discounts and commissions, were approximately \$2,300, which includes legal, accounting and printing costs and various other fees associated with registration and listing of the Company's common stock. Concurrent with this offering, Archer Daniels Midland Company ("ADM") purchased 535,714 shares at an initial offering price of \$14.00 per share, and the Company realized additional net proceeds of \$7,500. The Company's redeemable convertible preferred stock was converted into 9,992,041 shares of common stock upon the closing of the initial public offering.

On November 15, 2006, the underwriters exercised their over-allotment option and purchased an additional 1,020,000 shares of the Company's common stock, and net proceeds after deducting underwriters' discounts and commissions related to the offering were approximately \$13,280.

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On September 20, 2006, a 0.8173-for-1 reverse stock split was approved by the Board of Directors and it was effective on November 3, 2006. Except as otherwise indicated, all information in these consolidated financial statements has been retroactively adjusted to reflect such reverse stock split.

**5. Significant Accounting Policies**

**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. 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 is 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.

## Stock Based Compensation Expense

Effective January 1, 2006, the Company 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.

Prior to January 1, 2006, 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.

The following table illustrates the effect on net loss and net loss per share for the three and nine months ended September 30, 2005 as if the Company had applied the fair value recognition provisions of SFAS 123 to stock-based employee awards:

	Three Months Ended September 30, 2005	Nine Months Ended September 30, 2005
	<u>In thousands except per share data</u>	
Net loss attributable to common stockholders as reported	\$ (1,942)	\$ (5,302)
Add: employee stock-based compensation expense included in reported net loss	—	—
Deduct: total employee stock-based compensation expense determined under fair value based method for all awards	(42)	(70)
Pro forma net loss attributable to common stockholders	\$ (1,984)	\$ (5,372)
Basic and diluted net loss per share as reported	\$ (0.65)	\$ (1.78)
Pro forma basic and diluted net loss per share	\$ (0.66)	\$ (1.81)

The assumptions used for the Black-Scholes option pricing model are as follows:

	Three Months Ended September 30, 2005	Nine Months Ended September 30, 2005
Expected dividend yield	—	—
Risk-free interest rate	4.26%	3.89%-4.26%
Expected option term (in years)	5	5
Volatility	0%	0%

## 6. 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 *Natural Plastic* 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 was 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 provided ADM with an option (the "Option") to enter into a commercial alliance for further research, development, manufacture, use and sale of *Natural Plastic* on the terms and conditions set forth in the Commercial Alliance Agreement (see below). The Option was 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. On July 12, 2006, ADM exercised this Option.

Under the Technology Alliance and Option Agreement, ADM made a nonrefundable, noncreditable upfront payment of \$3,000 to the Company in 2004. In May 2006, the Company received a \$2,000 payment from ADM in recognition of achieving certain technical goals under the Technology Alliance and Option Agreement. 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. Amounts reimbursed in 2005 and during the nine month period ended September 30, 2006 totaled approximately \$620 and \$766, respectively, and have been recorded as deferred revenue.

Revenue recognition for amounts deferred through September 30, 2006 are expected to commence approximately at the time of the first commercial sale of *Natural Plastic* (see Commercial Alliance Agreement below) and amounts will be recognized proportionately over the period that the final services are provided over the estimated 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 was exercised by ADM. On July 12, 2006, ADM exercised this option. The primary goal of this agreement is to establish the activities and obligations of the Company and ADM by which the parties will commercialize *Natural Plastic*. These activities include: the

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establishment of a Joint Sales Company (JSC) to market and sell *Natural Plastic*, 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 is 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 *Natural Plastic*, 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 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 *Natural Plastic* 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 *Natural Plastic* or it will arrange for third parties to formulate the *Natural Plastic*; (iii) the Company, acting in the name and on behalf of the JSC, will establish the initial market for the *Natural Plastic*. The Company will also continue its research and development efforts to further advance the technology and expand and enhance the commercial potential of *Natural Plastic*. 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 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.

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 is 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.

## 7. Accrued Expenses

Accrued expenses consist of the following:

	September 30, 2006	December 31, 2005
Employee compensation and benefits	\$ 393	\$ 59
Pilot manufacturing	331	—
Professional fees	668	483
University programs	—	126
Other	213	163
Total accrued expenses	<u>\$ 1,605</u>	<u>\$ 831</u>

## 8. Commitments and Contingencies

### 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 September 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 September 30, 2006, the Company has committed funding of approximately \$271 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.

## 9. Stock Option 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”). No further grants or awards have been, or may be, made under the 1995 Plan. The 2005 Plan provided 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 was 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. In November 2006, the 2005 Plan was terminated, and the Company adopted a new plan (the “2006 Plan” and, together with the 1995 Plan and the 2005 Plan, referred to as the “Plans”). The 2006 Plan provides for the granting 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. No further grants or awards have been, or may be, made under the 2005 Plan. Options that are outstanding under the 1995 Plan and 2005 Plan continue to be governed by the 1995 Plan and 2005 Plan, respectively.

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.

On January 1, 2006 the Company adopted SFAS 123R. Under the provisions of SFAS 123R, compensation cost recognized for the three and nine months ended September 30, 2006 includes compensation cost for all share-based payments granted to employees subsequent to January 1, 2006, based on the grant-date fair value estimated in accordance with the provisions of SFAS 123R and will be recognized over the vesting period of the applicable award on a straight-line basis.

The effect of adopting SFAS 123R for the three months ended September 30, 2006 was an increase in net loss by \$111 and a \$0.04 increase to basic and diluted net loss per share. The effect of adopting SFAS No. 123R for the nine months ended September 30, 2006 was an increase in net loss by \$298 and a \$0.10 increase to basic and diluted net loss per share. There is no expense recorded for options which were granted prior to January 1, 2006 using the minimum value method and with an exercise price equal to the fair value of common stock at the time of grant and that had a fixed measurement date at the time of grant.

Pursuant to the requirements of SFAS 123R, for the three and nine months ended September 30, 2006, the Company determined the fair value of stock options using the Black-Scholes option pricing model with the following assumptions for employee option grants:

	Three Months Ended September 30, 2006	Nine Months Ended September 30, 2006
Expected dividend yield	—	—
Risk-free interest rate	4.90%	4.29% - 4.97%
Expected option term (in years)	6.1	6.1
Volatility	75%	75%

For the three and nine months ended September 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 nine months ended September 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 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 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.

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A summary of stock option activity under the Plans for the nine months ended September 30, 2006 is presented below:

	1995 Stock Plan			2005 Stock 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	—	—	\$ —	335,493	\$1.84-\$8.81	\$ 4.59
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						
September 30, 2006	746,703	\$1.41-\$13.21	\$ 3.64	1,558,895	\$1.65-\$8.81	\$ 2.32

A summary of information about the shares of common stock covered by outstanding and exercisable options under the option plans at September 30, 2006 follows:

Exercise Prices	Outstanding			Exercisable		
	Number of Shares	Weighted Average Remaining Contractual Life (Years)	Weighted Average Exercise Price	Number of Shares	Weighted Average Exercise Price	Weighted Average Exercise Price
\$ 1.41	40,045	0.77	\$ 1.41	40,045	\$ 1.41	\$ 1.41
\$ 1.65	1,028,548	8.77	\$ 1.65	445,906	\$ 1.65	\$ 1.65
\$ 1.84	296,188	9.22	\$ 1.84	139,396	\$ 1.84	\$ 1.84
\$ 3.30	575,491	4.81	\$ 3.30	541,972	\$ 3.30	\$ 3.30
\$ 3.36	112,376	9.56	\$ 3.36	18,130	\$ 3.36	\$ 3.36
\$ 5.14	185,116	9.71	\$ 5.14	26,892	\$ 5.14	\$ 5.14
\$ 8.81	20,431	9.85	\$ 8.81	765	\$ 8.81	\$ 8.81
\$ 13.21	47,403	3.32	\$ 13.21	47,403	\$ 13.21	\$ 13.21
\$1.41-13.21	<u>2,305,598</u>	7.71	\$ 2.75	<u>1,260,509</u>		\$ 2.91

At September 30, 2006 the aggregate intrinsic value of outstanding and exercisable options was \$23,640 and \$12,717, respectively. At September 30, 2006 the weighted average contractual remaining life of exercisable options was 6.62 years. The total intrinsic value for options exercised during the nine months ended September 30, 2006 was \$117.

The weighted average fair value of stock options granted during the nine months ended September 30, 2006 was \$7.44.

As of September 30, 2006, the total compensation cost related to nonvested options not yet recognized in the financial statements is approximately \$1,636 and the weighted average period over which it is expected to be recognized is 3.51 years.

In December 2005, 324,658 options were granted to an officer of the Company of which 125,863 contain performance based vesting conditions. The 125,863 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. During the nine months ended September 30, 2006, 41,954 of the 125,863 variable options granted to the officer of the Company during 2005 were cancelled due to the term expiration; 41,955 of these variable options were deemed to have met the performance conditions in the second quarter of 2006 and as a result \$11 and \$242 in compensation expense was recorded during the three and nine months ended September 30, 2006, respectively, and

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\$95 of deferred compensation remained as of September 30, 2006. Deferred compensation will be recorded to expense as the officer completes the remaining service conditions related to these options.

#### Non-employee Stock Option Awards

During the nine months ended September 30, 2006 and 2005, the Company granted stock options to purchase 51,080 shares and 59,558 of common stock to non-employees, respectively. The compensation expense related to these options is typically recognized over a period of four years. The grants vest quarterly 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 \$316 and \$664 for the three and nine months ended September 30, 2006. Options remaining unvested for the non-employees are subject to remeasurement each reporting period prior to vesting in full. Since the fair market value of the options issued to the nonemployees are subject to changes in the future, the compensation expense recognized in each year may not be indicative of future compensation charges.

For the nine months ended September 30, 2006, the fair value of each option granted to non-employees was estimated using the Black-Scholes option pricing model with the following assumptions:

	Three Months Ended September 30, 2006	Nine Months Ended September 30, 2006
Expected dividend yield	—	—
Risk-free interest rate	4.64%	4.64% - 5.15%
Expected option term (in years)	10	10
Volatility	75%	75%

## 10. Basic and Diluted Net Loss per Common Share

The Company accounts for and discloses net loss per common share in accordance with SFAS No. 128, "Earnings Per Share" ("SFAS No. 128"). Under the provisions of SFAS No. 128, basic net loss per share is computed by dividing net loss attributable to common stockholders by the weighted average number of shares of common stock 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 and certain warrants. Diluted net loss per share is computed by dividing the net loss attributable to common stockholders for the period by the weighted average number of common and potentially dilutive common shares outstanding during the period. Potentially dilutive common shares consist of the common shares issuable upon the exercise of stock options, warrants (using the if-converted method), and redeemable convertible preferred stock. Potentially dilutive common shares are excluded from the calculation if their effect is anti-dilutive.

The following sets forth the computation of basic and diluted net loss per share (in thousands except share and per share data):

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2006	2005	2006	2005
Basic and diluted net loss per share				
Net loss attributable to common stockholders	\$ (4,230)	\$ (1,942)	\$ (8,565)	\$ (5,302)
Weighted average number of common shares outstanding	3,009,146	2,976,440	2,995,033	2,974,452
Basic and diluted net loss per share	\$ (1.41)	\$ (0.65)	\$ (2.86)	\$ (1.78)

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The following potentially dilutive securities were excluded because their effect was antidilutive due to the Company's net loss for the periods presented:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2006	2005	2006	2005
Options	2,305,598	1,714,891	2,305,598	1,714,981
Warrants	830,911	939,150	830,911	939,150
Redeemable convertible preferred stock	9,992,041	7,605,556	9,992,041	7,605,556

## 11. 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.

The Company recognized license and royalty revenues of \$227 and \$192 from Tepha for the nine months ended September 30, 2006 and 2005, respectively, and recognized \$38 and \$58 for the three months ended September 30, 2006 and 2005, 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 in the fourth quarter of 2005.

### ADM

The Company's collaborative partner ADM made a \$5,000 investment in the Company as part of the Series 05 redeemable convertible preferred stock issuance in January 2006. Concurrent with the Company's initial public offering, ADM purchased \$7,500 of the Company's shares in a private placement. ADM makes various payments to the Company under the collaborative agreements signed during November 2004 and July 2006. (See Note 6).

## 12. New Accounting Pronouncements

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.

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In September 2006, the FASB issued SFAS No.157, *Fair Value Measurements*. SFAS No. 157 defines fair value, establishes a framework for measuring fair value in generally accepted accounting principles, and expands disclosures about fair value measurements. The standard is effective for financial statements issued for fiscal years beginning after November 15, 2007 and interim periods within those fiscal years. The Company does not believe that its adoption in the first quarter of 2008 will have a material impact on the Company's financial statements.

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## Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

### Forward Looking Statements

This quarterly report on Form 10-Q contains "forward-looking statements" within the meaning of 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. In particular, statements contained in the Form 10-Q, including but not limited to, statements regarding our future results of operations and financial position, business strategy and plan prospects, projected revenue or costs and objectives of management for future research, development or operations, are forward-looking statements. These statements relate to our future plans, objectives, expectations and intentions and may be identified by words such as "may," "will," "should," "expects," "plans," "anticipate," "intends," "target," "projects," "contemplates," "believe," "estimates," "predicts," "potential," and "continue," or similar words.

Although we believe that our expectations are based on reasonable assumptions within the bounds of our knowledge of our business and operations, the forward-looking statements contained in this document are neither promises nor guarantees; and our business is subject to significant risk and uncertainties and there can be no assurance that our actual results will not differ materially from our expectations. These forward looking statements include, but are not limited to, statements concerning: current or future financial performance and position, management's strategy, plans and objectives for future operations, plans and objectives for product development and commercialization, plans and objectives for present and future research and development and results of such research and development, plans and objectives for manufacturing, the commercialization of environmentally sustainable, economically attractive alternatives to petrochemical-based plastics, fuels and chemicals, the commercialization of *Natural Plastic* through our alliance with Archer Daniels Midland Company, or ADM, sales of *Natural Plastic* as alternatives to petrochemical-based plastics, the construction of the Commercial Manufacturing Facility, the production of *Natural Plastic* at the Commercial Manufacturing Facility, the commercial success of *Natural Plastic*, the feasibility of extracting *Natural Plastic* from switchgrass, the commercial viability of switchgrass, recognition of revenue, management's plans and expectations for revenue from government grants, research and development revenue, research and development expenses and capital and working capital requirements. Factors which could cause actual results to differ materially from our expectations set forth in our forward-looking statements include, among others: (i) our ability to successfully manufacture *Natural Plastic* at commercial scale in a timely or economical manner, (ii) we may not be successful in the development of our products, including *Natural Plastic*, (iii) if ADM does not build the Commercial Manufacturing Facility on time and on budget, our revenues and the distribution of profits, if any, to us will be delayed, (iv) we may not be able to develop manufacturing capacity sufficient to meet demand in an economical manner or at all, (v) we may not achieve market acceptance of our products, (vi) we have limited marketing and sales experience and capabilities, which may make the commercialization of our products difficult, (vii) we rely heavily on ADM and will rely heavily on future collaborative partners, (viii) 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, (ix) our future profitability is uncertain, and we have a limited operating history on which you can base your evaluation of our business, (x) we may need to secure additional funding and may be unable to raise additional capital on favorable terms or at all, (xi) 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, (xii) 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, (xiii) patent protection for our products is important and uncertain, (ixv) a substantial portion of the technology used in our business is owned by or subject to retained rights of third parties, (xv) third parties may claim we infringe their intellectual property, and we could suffer significant litigation or licensing expense as a result, (xvi) if we are unable to manage our

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growth effectively, our business could be adversely affected, (xvii) we may not be successful in identifying market needs for new technologies and developing new products to meet those needs, (xviii) our products are made using genetically modified products which may be, or may be perceived as being, harmful to human health or the environment, (xix) we face and will face substantial competition in several different markets that may adversely affect our results of operations, (xx) 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, (xxi) our government grants may subject us to government audits, which could materially harm our business and results of operations, (xxii) we face risks associated with our international business, (xxiii) 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, (xiv) 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, (xv) our pilot manufacturing recovery operations are currently conducted at a single location which makes us susceptible to disasters.

The forward-looking statements and risks factors presented made in this document are made only as of the date hereof and we do not intend to update any of these factors or to publicly announce the results of any revisions to any of our forward-looking statements other than as required under the federal securities laws. The above risks factors should be read in conjunction with Risk Factors discussed in Part II, Item IA, of this Form 10-Q.

The following discussion and analysis should be read in conjunction with the Condensed Consolidated Financial Statements and Notes thereto included in Part I, Item 1 of this Quarterly Report on Form 10-Q.

## 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 *Natural Plastic*. 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 *Natural Plastic* inside of the bacteria. We separate the *Natural Plastic* 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 110 million pound annual capacity commercial scale plant, or the Commercial Manufacturing Facility, that will produce biodegradable *Natural Plastic* out of corn sugar, an abundant agriculturally-produced renewable resource. We are currently producing pre-commercial quantities of *Natural Plastic* jointly with ADM at a pilot plant having a capacity of around 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 *Natural Plastic* and biomass feedstock for the production of ethanol or other biofuels. For this system, we are engineering switchgrass to produce *Natural Plastic* 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

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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 of September 30, 2006, our deficit accumulated from inception to date was \$58.7 million and total stockholders' deficit was \$53.6 million.

### Initial Public Offering

On November 15, 2006, we issued and sold all of the 6,800,000 shares of our common stock that we registered under a Registration Statement on Form S-1 (File No. 333-135760), which was declared effective by the SEC on November 9, 2006, in an initial public offering at an offering price of \$14.00 per share less underwriting discounts and commissions and offering costs. On November 16, 2006, the underwriters exercised the option to purchase an additional 1,020,000 shares of common stock from us at the offering price of \$14.00 per share less underwriting discounts and commissions. Concurrent with the initial public offering, Archer Daniels Midland Company, or ADM, purchased 535,714 shares of common stock at \$14.00 per share in a private placement. The offering of the common stock (including the exercise by the underwriters of their over-allotment option and the sale of the ADM shares) resulted in gross proceeds of \$117.0 million and net proceeds of approximately \$107.0 million to us after deducting underwriting discounts and commissions of approximately \$7.6 million and related estimated offering costs of \$2.3 million.

On September 20, 2006, a 0.8173-for-1 reverse stock split was approved by the Board of Directors and was effective on November 1, 2006. Except as otherwise indicated, all information in our condensed consolidated financial statements has been adjusted to reflect such reverse stock split.

### 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 British Petroleum, or BP, in February 2005 relating to the research and development of our switchgrass program. In exchange for us completing certain research and development activities, the agreement with BP provided that they pay us \$0.5 million 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. This alliance with BP was terminated during the first quarter of 2006.

As of September 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 of \$1.6 million, 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 and amounts will be recognized proportionally over the

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period that the final services are provided over the estimated remaining term of the Commercial Alliance Agreement.

We received the following payments from these arrangements to offset operating cash needs during 2004 and 2005 and first nine 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;
- support payments of \$3.1 million from ADM in July 2006;

- cost sharing payments from ADM for pilot manufacturing plant construction and operations of \$0.6 million during 2005 and an additional \$0.8 million during the first nine months ended September 30, 2006; and
- upfront payment of \$1.0 million and three subsequent quarterly payments of \$0.5 million each, totaling \$2.5 million in payments from BP during 2005 and 2006. Payments of \$0.5 million and \$2.0 million were received in 2006 and 2005, respectively.

## United States Government Contracts and Grants

As of September 30, 2006, gross proceeds of \$2.0 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:

<u>Program Title</u>	<u>Funding Agency</u>	<u>Total government funds (in \$M)</u>	<u>Total received through September 30, 2006 (in \$M)</u>	<u>Remaining amount to be received as of September 30, 2006 (in \$M)</u>	<u>Contract/Grant Expiration</u>
Biomass Biorefinery for the Production of Polymers and Fuel	Department of Energy(1)	\$ 7.48	\$ 6.32	\$ 1.02	Apr. 2007
Industrial Genome Engineering	Department of Commerce	\$ 1.64	\$ 1.64	\$ —	Jul. 2005
Advanced Biorefinery Feedstocks	Department of Agriculture	\$ 2.00	\$ 2.00	\$ —	Oct. 2006
PHA Bioplastic Packaging Materials	SERDP(2)	\$ 1.01	\$ 0.13	\$ 0.88	Aug. 2008
Blow Molded Bioproducts from Natural Plastics	Department of Agriculture	\$ 0.08	\$ —	\$ 0.08	Dec. 2007
<b>Total</b>		<b>\$ 12.21</b>	<b>\$ 10.09</b>	<b>\$ 1.98</b>	

- (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.

## 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 materially from these estimates.

Our significant accounting policies are more fully described in Note 3 to our consolidated financial statements included in our Registration Statement on Form S-1, as amended (Registration No. 333-135760), which was declared effective by the SEC on November 9, 2006.

## 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 *Natural Plastic* 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 September 30, 2006, payments received from ADM totaling \$9.33 million have been recorded as deferred revenue, including non-refundable up-front payments totaling \$3.0 million, \$2.0 million in milestone payments, \$3.1 million in support 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 had been released from any future obligations under this agreement.

Fees to license the use of our 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 we recognize 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.

	Three Months Ended September 30, 2006	Nine Months Ended September 30, 2006
Expected dividend yield	—	—
Risk-free interest rate	4.90%	4.29-4.97%
Expected option term (in years)	6.1	6.1
Volatility	75%	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 our stock price does not best represent the expected volatility of the stock price. Until November 2006, we were a private company and therefore lacked 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 September 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 valuation model and, ultimately, the expense that will be recognized over the life of the option. SFAS 123R also requires that we recognize compensation expense for only the portion of options that are expected to vest. Therefore, we have estimated expected forfeitures of stock options with the adoption of SFAS 123R. In developing a forfeiture rate estimate, we considered our historical experience, our growing employee base and the limited liquidity of our 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 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.

## Results of Operations

### Comparison of Three and Nine Months Ended September 30, 2006 and 2005

#### Revenues

Total revenues were \$0.4 million for the three months ended September 30, 2006 as compared with \$0.6 million for the three months ended September 30, 2005. Revenues were derived primarily from government grants and totaled approximately \$0.4 million and \$0.5 million for the three months

ended September 30, 2006 and September 30, 2005 respectively, a decrease of \$0.1 million. The decrease of \$0.1 million was primarily related to the completion of the Advanced Technology Program and the United States Department of Agriculture grant programs in 2005, partially offset by a new grant program for the Strategic Environmental Research and Development Program..

Total revenues were \$4.2 million for the nine months ended September 30, 2006 as compared with \$2.1 million for the nine months ended September 30, 2005. Total grant revenue was approximately \$1.5 million for the nine months ended September 30, 2006 as compared to approximately \$1.9 million for the nine months ended September, 2005. The decrease of approximately \$0.4 million was due to the completion of the Advanced Technology Program and the United States Department of Agriculture program in 2005 and the first quarter of 2006, respectively, and was offset in part by new grant programs in 2006 and increased Department of Energy activity. Total research and development revenue was approximately \$2.5 million for the nine months ended September 30, 2006 as compared to approximately \$0.03 million for the nine months ended September, 2005. The increase of approximately \$2.5 million was

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primarily related to deferred revenue associated with the BP arrangement being recognized in full during the first quarter of 2006 when the joint development arrangement was terminated. Total license and royalty revenue was approximately \$0.22 million for the nine months ended September 30, 2006 as compared to approximately \$0.19 million for the nine months ended September, 2005. The increase of approximately \$0.03 million was due to timing of license and royalty payments received from Tepha.

We expect the revenues from government grants to fluctuate due to availability of funding from the government 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. Our collaborative arrangement with ADM is complex and has 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 under our collaborative arrangements with ADM as revenue until future years. We expect to recognize revenue at the time of the first commercial sale of *Natural Plastic* and all amounts will be recognized proportionally over the period that final services are provided over the estimated remaining term of the Commercial Alliance Agreement.

### 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.

Total research and development expenses were \$2.8 million for the three months ended September 30, 2006 as compared with \$1.3 million for the three months ended September 30, 2005. The increase was primarily due to the ramp up of pilot material production of our *Natural Plastic* material, increased product development activities, increased research and development personnel and expenses related to research on our microbial fermentation and switchgrass platforms.

Total research and development expenses were \$7.5 million for the nine months ended September 30, 2006 as compared with \$4.1 million for the nine months ended September 30, 2005. The increase of \$3.4 million was primarily due to the increased production of pilot material of our *Natural Plastic* material, increased product development activities, increased research and development personnel and expenses related to research on our microbial fermentation and switchgrass platforms.

We expect to incur increasing research and development expenses in future periods as we expand and continue our pilot manufacturing and product development activities. The potential for commercial success of our *Natural Plastic* may be impacted by numerous factors, including our continued collaboration with ADM, properties of *Natural Plastic*, and successful development of manufacturing capability and commercial viability of *Natural Plastic*.

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

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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.

### 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 management 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.

Total general and administration expenses were \$2.0 million for the three months ended September 30, 2006 as compared with \$1.2 million for the three months ended September 30, 2005. The increase of \$0.8 million was primarily due to increases in salary and related expenses associated with the hiring of additional sales, marketing, finance personnel and consultants for our sales and marketing initiatives, as well as to provide administrative infrastructure to support being a public company.

Total general and administrative expenses were \$5.8 million for the nine months ended September 30, 2006 as compared with \$3.3 million for the three months ended September 30, 2005. The increase of \$2.5 million was primarily due to hiring of additional sales, marketing, finance personnel and consultants for our marketing initiatives and administration needs, \$0.03 million in stock compensation expense due to adoption of SFAS No. 123R, and \$0.9 million in compensation expense related to options issued in prior years which are subject to variable accounting. These expenses also include patent prosecution fees for our 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.

### **Liquidity and Capital Resources**

Since inception but prior to our initial public offering, we have financed our operations primarily through private placements of equity securities, receiving aggregate net proceeds from such sales totaling \$61.4 million, not including revenues from government grants and our arrangement with BP totaling \$16.2 million, and payments arising from our strategic alliance with ADM of \$9.5 million as of September 30, 2006. As of September 30, 2006, we had \$15.7 million in cash, cash equivalents, restricted cash, and short-term investments. Cash in excess of immediate requirements is invested in short-term instruments with regard to liquidity and capital preservation.

#### **Initial Public Offering**

On November 9, 2006, we completed our initial public offering. Presented below is selected pro forma condensed consolidated balance sheet data as of September 30, 2006:

- on an actual basis; and

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- on a pro forma as adjusted basis to reflect:

- the conversion of all of our outstanding preferred stock into shares of common stock;
- the receipt by us of net proceeds of \$86.2 million from the sale of the 6,800,000 shares of common stock offered by us in our initial public offering at an initial public offering price of \$14.00 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 535,714 ADM shares in a concurrent private placement at a price of \$14.00 per share; and
- the receipt by us of net proceeds of \$13.3 million from the exercise of the underwriters' over-allotment option to purchase 1,020,000 shares of common stock at the initial offering price of \$14.00 per share less underwriting discounts and commissions.

#### **As of September 30, 2006**

**(In thousands)**

	<b>Actual</b>	<b>Pro forma as adjusted</b>
Cash and short-term investments	\$ 15,325	\$ 122,341
Total assets	21,384	128,400
Long-term obligations	1,160	1,160
Long-term deferred revenue	9,622	9,622
Total liabilities	13,514	13,514
Redeemable convertible preferred stock	61,442	—
Accumulated deficit	(58,740)	(58,740)
Total stockholders' equity	53,572	160,588

#### **Operating Activities**

Net cash used in operating activities was \$2.7 million and \$3.3 million during the first nine months in 2006 and 2005, respectively. The net cash used in each of these periods primarily reflects net loss for these periods, offset in part by activity during the nine months ended September 30, 2006 which consisted primarily of an increase of \$0.7 million in depreciation, \$1.2 million of non-cash stock-based compensation, \$4.0 million in deferred revenue and changes in operating assets and liabilities. During the first nine months of 2006, we received a \$0.5 million final payment from the joint development arrangement with BP, and \$2.0 million in milestone payments and \$0.8 million in reimbursements related to pilot manufacturing construction and operation costs from ADM in conjunction with our alliance agreement. Additionally, we received \$3.2 million in support payments from ADM pursuant to the Commercial Alliance Agreement. During the nine months ended September 30, 2005 we received \$1.5 million and \$0.2 million in payments from the joint development arrangement with BP and alliance agreement with ADM, respectively. All payments from ADM related to our collaborative arrangement are recorded as deferred revenue.

#### **Investing Activities**

Net cash used in investing activities was \$8.9 million and \$0.5 million during the first nine months in 2006 and 2005, respectively. Investing activities consist primarily of purchases and sales of marketable securities and capital purchases. Capital expenditures for the nine months ended September 30, 2006 consisted primarily of \$0.2 million of purchases of equipment to support our research, pilot manufacturing, and office equipment, as well as \$0.9 million of leasehold improvements. Leasehold improvements for the

nine months ended September 30, 2006 consist primarily of \$0.4 million for the continuing construction and completion of our greenhouse in the first half of 2006 and \$0.4 million related to construction and continuing modification costs of our pilot manufacturing facility. During the nine months ended September 30, 2005, investing activities consisted primarily of capital expenditures, the majority of which were leasehold improvements of \$0.4 million primarily related to the start of construction on our greenhouse to support our switchgrass program as well as beginning construction costs of our pilot manufacturing facility.

#### Financing Activities

Net cash provided by financing activities was \$16.0 million and \$4.4 million during the first nine months of 2006 and 2005, respectively. During the nine months ended September 30, 2006, we received net proceeds of \$16.8 million from the issuance of our Series 05 preferred stock financing, offset by \$1.1 million in deferred initial public offering costs commencing in 2006. During the nine months ended September 30, 2005, we received net proceeds of \$4.8 million from the issuance of our Series 04 preferred stock financing, offset in part by completed repayment of a convertible promissory note of \$0.3 million.

#### 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 in excess of our revenues to commercialize our *Natural Plastic*, 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 our initial public offering, will be sufficient to meet our anticipated cash requirements with respect to the initial commercial launch of our *Natural Plastic* 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 need 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 *Natural Plastic*, 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 formulation of *Natural Plastic* 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 *Natural Plastic* 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 *Natural Plastic*;

- the revenue generated by sales of our *Natural Plastic*;
- 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 *Natural Plastic* 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.

**Contractual Obligations** The following table summarizes our contractual obligations at September 30, 2006 and the effects such obligations are expected to have on our liquidity and cash flows in our future periods:

#### Payments Due by Period

	Total	Less Than 1 Year	1-3 Years	3-5 Years	More Than 5 Years
Contractual Obligations:					
Operating lease obligations	\$ 7,643,734	\$ 247,046	\$ 1,976,370	\$ 1,976,370	\$ 3,443,948
Purchase obligations	\$ 225,000	—	\$ 50,000	\$ 50,000	\$ 125,000
	<u>\$ 7,843,734</u>	<u>\$ 247,046</u>	<u>\$ 2,026,370</u>	<u>\$ 2,026,370</u>	<u>\$ 3,568,948</u>

#### Off-Balance Sheet Arrangement



As of September 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.

### **Related Party Transactions**

We have recorded license and royalty revenue from Tephra, Inc., a related party. Additionally, we recorded an impairment charge on our investment in Tephra. We also have various transactions with our alliance partner ADM, a related party. We granted an option to the spouse of one of our directors, a related party, in connection with a consulting agreement. For more information on our related party transactions, please see Note 9 to our audited financial statements included in our registration statement on Form S-1 (File No. 333-135760).

### **Recent Accounting Pronouncements**

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

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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.

In September 2006, the FASB issued SFAS No. 157, *Fair Value Measurements*. SFAS No. 157 defines fair value, establishes a framework for measuring fair value in generally accepted accounting principles, and expands disclosures about fair value measurements. The standard is effective for financial statements issued for fiscal years beginning after November 15, 2007 and interim periods within those fiscal years. We do not believe that the adoption of SFAS No. 157 in the first quarter of 2008 will have a material impact on our financial statements.

### **Item 3. Quantitative and Qualitative Disclosures About Market Risk**

We had unrestricted cash, cash equivalents, short-term investments and restricted cash totaling \$15.8 million at September 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 September 30, 2006 all of our investments were held in money market accounts and short-term instruments.

### **Item 4. Controls and Procedures**

#### ***Evaluation of Disclosure Controls and Procedures.***

The Company's management, with the participation of our chief executive officer and chief financial officer, has evaluated the effectiveness of the Company's disclosure controls and procedures (as defined in Rules 13a-15(e) or 15d-15(e) under the Securities Exchange Act of 1934, as amended (the "Exchange Act") as of the end of the period covered by this report. Based on such evaluation, our chief executive officer and chief financial officer have concluded that, as of the end of such period, the Company's disclosure controls and procedures were effective in ensuring 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, on a timely basis, and is accumulated and communicated to the Company's management, including the Company's chief executive officer and chief financial officer, as appropriate to allow timely decisions regarding required disclosure.

#### ***Changes in Internal Controls over Financial Reporting***

No change in the Company's internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) occurred during the third quarter of 2006 that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting.

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## **PART II. OTHER INFORMATION**

### **Item 1. 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 at our cost 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 guarantee 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.

### **Item 1A. Risk Factors**

Our operations and financial results are subject to various risks and uncertainties that could materially adversely affect our business, financial condition, results of operations and the trading price of our common stock.

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

We are currently producing *Natural Plastic* using our fermentation platform in relatively small quantities, at pilot scale, for use in marketing activities. The current and anticipated methods for manufacturing *Natural Plastic*, 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 *Natural Plastic* in plants, namely switchgrass, though we are only operating at research scale. We cannot predict the cost of producing *Natural Plastic* 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 *Natural Plastic* at a commercial scale in a timely or economical manner using either of our technology platforms.

*Natural Plastic* 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 *Natural Plastic*, 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 for the production of *Natural Plastic* through microbial fermentation, or the Commercial Manufacturing Facility,

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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 *Natural Plastic* 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 *Natural Plastic* economically on a commercial scale or in commercial volumes, our commercialization of *Natural Plastic* 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 *Natural Plastic* in switchgrass.**

In addition to our development and scale-up work to produce *Natural Plastic* through fermentation, we are also at an early stage of development of technology and a process to produce *Natural Plastic* 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 *Natural Plastic* in crops has focused primarily on the genetic engineering required to cause the crops to aggregate *Natural Plastic* in the plant mass during the life cycle of the plant. We have not yet achieved a high enough concentration of *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 *Natural Plastic* 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 we believe may be useful in efforts to engineer the crops so that upon completion of the harvest and recovery of *Natural Plastic*, the residual material, or biomass, can be readily converted into fuel. 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 *Natural Plastic* 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 *Natural Plastic* and the distribution of profits, if any, to us will be delayed.

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

If demand for *Natural Plastic* 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 *Natural Plastic* to resist biodegradation for a certain period of time in particular environments;
- the willingness and speed at which potential customers qualify *Natural Plastic* 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 *Natural Plastic* manufactured by ADM and we will use

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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.

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**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 *Natural Plastic* 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 *Natural Plastic* 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 September 30, 2006, our accumulated deficit was approximately \$58.7 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 *Natural Plastic*. We currently expect the Commercial Manufacturing Facility to become operational in 2008, and until such time, our revenues from sales of *Natural Plastic* 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 *Natural Plastic* 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 *Natural Plastic* in crops and other products, or if sales of such *Natural Plastic* 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 *Natural Plastic* 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.

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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 September 30, 2006 we used \$11.6 million in cash, cash equivalents and investment securities to fund our operating and investing activities. Although we believe our existing cash resources of \$15.3 million as of September 30, 2006 plus the proceeds of this offering and the sale of the ADM Shares and anticipated payments from the strategic alliance with ADM of \$1.6 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 *Natural Plastic*, 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

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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.

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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 *Natural Plastic* 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 *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 *Natural Plastic* 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 *Natural Plastic* 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 *Natural Plastic*, 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.**

*Natural Plastic* 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 *Natural Plastic* 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 *Natural Plastic* 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 are a 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 Form 10-Q.

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 for the three months ended September 30, 2006 was an increase in net loss by \$0.1 million and a \$0.04 increase to basic and diluted net loss per share. The effect of adopting SFAS No. 123R for the nine months ended September 30, 2006 was an increase in net loss by \$0.3 million and a \$0.10 increase to basic and diluted net loss per shares. The total compensation cost related to these options not yet recognized in the financial statements is approximately \$1.6 million to be expensed over the next 3.51 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 Relating to Owning Our Common Stock**

**An active trading market for our common stock may not be available on a consistent basis to provide you with adequate liquidity. Our stock price may be extremely volatile, and you could lose a significant part of your investment.**

Prior to November 10, 2006, there was no public market for our common stock. An active trading market for shares of our common stock may not be available or be sustained on a consistent basis. The initial public offering price for our common stock was determined by negotiations between us and the underwriters and may not be indicative of prices that will prevail in the open market. The public trading price for our common stock 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;

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- 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. The valuations of many biotechnology companies without consistent product revenues and earnings are extraordinarily high based on conventional valuation standards, such as price to earnings and price to sales ratios. These trading prices and valuations may not be sustained. Any negative change in the public's perception of the prospects of biotechnology companies could depress our stock price regardless of our results of operations. These factors may materially and adversely affect the market price of our common stock.

**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. As of November 15, 2006, the closing of the initial public offering and the sale of the ADM Shares in a concurrent private placement, we had approximately 18,435,639 shares of common stock outstanding. The 5,800,000 shares sold in the initial public offering are 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 are available for sale pursuant to Rule 144, Rule 144(k) and Rule 701, as follows:

**Number of Shares  
(as of November 15, 2006)**

213,552	shares were 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 November 10, 2006, the date of the 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 November 10, 2006, 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 issued 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, had rights with respect to the registration of these

shares of common stock with the SEC. 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 directors and management collectively control approximately 30.56% of our outstanding common stock.**

Our directors and executive officers and their affiliates collectively control approximately 30.56% of our outstanding common stock. 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.

## **Item 2. Unregistered Sales of Equity Securities and Use of Proceeds**

### **Use of Proceeds from Registered Securities**

On November 15, 2006, we issued and sold all of the 6,800,000 shares of our common stock that we registered under a Registration Statement on Form S-1 (File No. 333-135760), which was declared effective by the SEC on November 9, 2006, in an initial public offering at an offering price of \$14.00 per share. On November 16, 2006, the underwriters exercised the option to purchase an additional 1,020,000 shares of common stock from us at the offering price of \$14.00 per share less underwriting discounts and commissions. Concurrent with the initial public offering, Archer Daniels Midland Company, or ADM, purchased 535,714 shares of common stock at \$14.00 per share in a private placement. The offering of the common stock (including the exercise by the underwriters of their over-allotment option and the sale of the ADM shares) resulted in gross proceeds of \$117.0 million and net proceeds of approximately \$107.0 million to us after deducting underwriting discounts and commissions of approximately \$7.6 million and related offering costs of an estimated \$2.3 million. The book-running manager for the offering was Piper Jaffray & Co. and Jeffries & Company, Thomas Weisel Partners LLC and Ardour Capital Investments, LLC acted as representatives of the underwriters. No payments were made to directors,

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officers or persons owning ten percent or more of our common stock or to their associates, or to our affiliates, other than payments in the ordinary course of business to officers for salaries and to non-employee directors as compensation for board or board committee service.

As of December 8, 2006, all of the net proceeds remained available and were primarily invested in money market accounts or marketable securities. Pending any use, as described below, we plan to invest the net proceeds in investment-grade, short-term, interest-bearing securities.

We intend to use the net proceeds 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 *Natural Plastic* 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 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.

## **Item 3. Defaults Upon Senior Securities**

None.

## **Item 4. Submission of Matters to a Vote of Security Holders**

On November 3, 2006, in connection with our initial public offering, our stockholders approved the following matters by written consent: (i) the adoption of our Amended and Restated Certificate of Incorporation to provide for certain changes consistent with our becoming a public company and to effect a .8173-for-1 reverse split of our common stock to be effective prior to the closing of the public offering; (ii) the election of Edward M. Muller, Matthew Strobeck and Robert L. Van Nostrand to serve as Class I directors until the annual meeting of stockholders to be held in 2007 or until his earlier death, resignation or removal; (iii) the election of Jack W. Lasersohn, Jay Kouba, Ph.D. and Oliver P. Peoples, Ph.D. to serve as Class II directors until the annual meeting of stockholders to be held in 2008 or until his earlier death, resignation or removal; (iv) the election of Edward M. Giles, Anthony J. Sinskey, Sc.D. and James J. Barber to serve as Class III directors until the annual meeting of stockholders to be held in 2009 or until his earlier death, resignation or removal; (v) the adoption of our Amended and Restated By-laws to provide for certain changes consistent with our becoming a public company; (vi) the adoption of our Amended and Restated Certificate of Incorporation to eliminate the terms of our preferred stock

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outstanding to be effective upon the closing of the public offering; and (vii) the adoption of our 2006 Stock Option and Incentive Plan. All such actions were effected pursuant to an action by written consent of our stockholders pursuant to Section 228 of the Delaware General Corporation Law.

A total of 7,786,584 shares of our stock out of 14,749,713 shares issued and outstanding (on an as-if-converted basis and without giving effect to the .8173-for-1 reverse split of our common stock ) voted in favor of these matters.

**Item 5. Other Information**

None

**Item 6. Exhibits**

- 3.1 Second Amended and Restated Certificate of Incorporation. (Incorporated by reference to Exhibit 3.2 to the Registrant's Registration Statement on Form S-1, as amended (File No. 333-135760).)
- 3.2 Amended and Restated Bylaws. (Incorporated by reference to Exhibit 3.3 to the Registrant's Registration Statement on Form S-1, as amended (File No. 333-135760).)
- 4.1 Specimen Common Stock Certificate. (Incorporated by reference to Exhibit 4.1 to the Registrant's Registration Statement on Form S-1, as amended (File No. 333-135760).)
- 31.1 Rule 13a-14(a)/15d-14(a) Certification (furnished herewith).
- 31.2 Rule 13a-14(a)/15d-14(a) of Certification (furnished herewith).
- 32.1 Section 1350 Certification (furnished herewith).

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**SIGNATURES**

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

METABOLIX, INC.

December 12, 2006

By: /s/ JAMES J. BARBER  
James J. Barber  
*President and Chief Executive Officer*  
*(Principal Executive Officer)*

December 12, 2006

By: /s/ THOMAS G. AUCHINCLOSS, JR.  
Thomas G. Auchincloss  
*Vice President and Chief Financial Officer*  
*(Principal Financial Officer)*

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**Exhibit Index**

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- 32.1 Section 1350 Certification (furnished herewith).

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## CERTIFICATION

I, James J. Barber, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Metabolix, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:
  - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - b) [reserved];
  - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures as of the end of the period covered by this report based on such evaluation; and
  - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):
  - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: December 12, 2006

/s/ JAMES J. BARBER

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*President and Chief Executive Officer*  
*(Principal Executive Officer)*

## CERTIFICATION

I, Thomas Auchincloss, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Metabolix, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the registrant and have:
  - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - b) [reserved];
  - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures as of the end of the period covered by this report based on such evaluation; and
  - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent functions):
  - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: December 12, 2006

/s/ THOMAS AUCHINCLOSS

*Vice President and Chief Financial Officer  
(Principal Financial Officer)*

## CERTIFICATION

In connection with the Quarterly Report on Form 10-Q of Metabolix, Inc. (the "Company") for the period ending September 30, 2006 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), we, James J. Barber, the Principal Executive Officer of the Company and Thomas G. Auchincloss, the Principal Financial Officer of the Company, hereby certify, pursuant to 18 U.S.C. 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, to our knowledge that:

(1) the Report fully complies with the requirements of Section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934, as amended, and

(2) the information in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Dated: December 12, 2006

/s/ JAMES J. BARBER

*President and Chief Executive Officer*

*(Principal Executive Officer)*

Dated: December 12, 2006

/s/ THOMAS AUCHINCLOSS

*Vice President and Chief Financial Officer*

*(Principal Financial Officer)*