### AMERICAN WOODMARK CORP

Form 10-Q August 28, 2013

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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 July 31, 2013

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: 000-14798

American Woodmark Corporation

(Exact name of registrant as specified in its charter)

Virginia 54-1138147

(State or other jurisdiction of (I.R.S. Employer Identification No.)

incorporation or organization)

3102 Shawnee Drive, 22601

Winchester, Virginia

(Address of principal executive (Zip Code)

offices)

(540) 665-9100

(Registrant's telephone number, including area code)

Not Applicable

(Former name, former address and former fiscal year, if changed since last report)

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

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

Large accelerated filer Non-accelerated filer	(Do not check if a smaller reporting company)	Accelerated filer x Smaller reporting company
Indicate by check mark whethe Exchange Act). Yes No	r the registrant is a shell company (as defined by l X	Rule 12b-2 of the
Indicate the number of shares o date.	outstanding of each of the issuer's classes of comm	non stock, as of the latest practicable
As of August 26, 2013, 15,090	0,927 shares of the Registrant's Common Stock v	vere outstanding.

# AMERICAN WOODMARK CORPORATION

# FORM 10-Q

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### PART I. FINANCIAL INFORMATION

### Item 1. Financial Statements

### AMERICAN WOODMARK CORPORATION

### CONDENSED CONSOLIDATED BALANCE SHEETS

(in thousands, except share and per share data)

(Unaudited)

	July 31, 2013	April 30, 2013
ASSETS		
Current Assets		
Cash and cash equivalents	\$ 100,440	\$ 96,971
Customer receivables, net	45,276	39,044
Inventories	30,767	29,338
Prepaid expenses and other	2,806	3,084
Deferred income taxes	8,823	9,481
Total Current Assets	188,112	177,918
Property, plant and equipment, net	73,884	74,064
Promotional displays, net	6,138	5,811
Deferred income taxes	28,768	29,262
Other assets	6,930	6,938
TOTAL ASSETS	\$ 303,832	\$ 293,993
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current Liabilities		
Accounts payable	\$ 23,749	\$ 23,306
Current maturities of long-term debt	1,231	1,155
Accrued compensation and related expenses	21,519	26,213
Accrued marketing expenses	10,890	10,159
Other accrued expenses	10,018	8,275
Total Current Liabilities	67,407	69,108
Long-term debt, less current maturities	23,618	23,594
Defined benefit pension liabilities	53,015	53,696
Other long-term liabilities	1,416	1,400
Shareholders' Equity		
Preferred stock, \$1.00 par value; 2,000,000 shares authorized, none issued Common stock, no par value; 40,000,000 shares authorized; issued and	0	0
outstanding shares: at July 31, 2013: 15,065,140; at April 30, 2013: 14,822,580	112,519	107,165

Retained earnings	77,835	71,180
Accumulated other comprehensive loss -		
Defined benefit pension plans	(31,978)	(32,150)
Total Shareholders' Equity	158,376	146,195
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY	\$ 303,832	\$ 293,993

See notes to condensed consolidated financial statements.

# AMERICAN WOODMARK CORPORATION

### CONDENSED CONSOLIDATED STATEMENTS OF INCOME

(in thousands, except share and per share data)

(Unaudited)

	Three Months Ended July 31,	
	2013	2012
Net sales	\$ 178,095	\$ 148,252
Cost of sales and distribution	144,380	126,209
Gross Profit	33,715	22,043
Selling and marketing expenses	14,484	14,520
General and administrative expenses	8,401	5,639
Restructuring charges, net	82	777
Insurance proceeds	(94)	0
Operating Income	10,842	1,107
Interest expense	186	151
Other income	(26)	(59)
Income Before Income Taxes	10,682	1,015
Income tax expense	4,027	454
Net Income	\$ 6,655	\$ 561
Net Earnings Per Share		
Weighted Average Shares Outstanding Basic Diluted	14,949,406 15,373,260	14,415,608 14,576,158
Net earnings per share Basic Diluted	\$ 0.45 \$ 0.43	\$ 0.04 \$ 0.04

See notes to condensed consolidated financial statements.

### AMERICAN WOODMARK CORPORATION

### CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

(in thousands)

(Unaudited)

Three Months
Ended
July 31,
2013 2012

Net income \$ 6,655 \$ 561

Other comprehensive income, net of tax:
Change in pension benefits, net of deferred taxes of \$(110) and \$(90),
respectively 172 141

Total Comprehensive Income \$ 6,827 \$ 702

See notes to condensed consolidated financial statements.

### AMERICAN WOODMARK CORPORATION

### CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS

(in thousands)

(Unaudited)

	Three Mon	ths Ended
	July 31,	2012
ODED ATTIMO A CITY WITHING	2013	2012
OPERATING ACTIVITIES	<b>.</b>	h = c 1
Net income	\$ 6,655	\$ 561
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	3,542	3,873
Net gain on disposal of property, plant and equipment	(27)	(5)
Gain on sales of assets held for sale	0	(57)
Gain on insurance recoveries	(94)	0
Stock-based compensation expense	861	985
Deferred income taxes	1,438	416
Pension contributions in excess of expense	(398)	(1,330)
Tax benefit from stock-based compensation	(197)	0
Other non-cash items	(319)	(732)
Changes in operating assets and liabilities:		
Customer receivables	(6,441)	(1,342)
Inventories	(1,497)	(2,159)
Prepaid expenses and other assets	191	(632)
Accounts payable	443	1,690
Accrued compensation and related expenses	(4,694)	(4,127)
Other accrued expenses	2,797	(913)
Net Cash Provided (Used) by Operating Activities	2,260	(3,772)
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INVESTING ACTIVITIES		
Payments to acquire property, plant and equipment	(1,851)	(2,185)
Proceeds from sales of property, plant and equipment	50	1
Proceeds from insurance recoveries	94	0
Proceeds from sales of assets held for sale	0	1,777
Investment in promotional displays	(1,243)	(1,456)
Net Cash Used by Investing Activities	(2,950)	(1,863)
EDVANCING A CENTURYES		
FINANCING ACTIVITIES	(22.4)	(105)
Payments of long-term debt	(224)	(185)
Proceeds from issuance of common stock	4,186	0
Tax benefit from stock-based compensation	197	0
Net Cash Provided (Used) by Financing Activities	4,159	(185)
Net Increase (Decrease) in Cash and Cash Equivalents	3,469	(5,820)

Cash and Cash Equivalents, Beginning of Period

96,971

66,620

Cash and Cash Equivalents, End of Period

\$ 100,440 \$ 60,800

See notes to condensed consolidated financial statements.

AMERICAN	WOODMARK	CORPORATION

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

(Unaudited)

NOTE A--BASIS OF PRESENTATION

The accompanying unaudited condensed consolidated financial statements have been prepared in accordance with U.S. generally accepted accounting principles ("U.S. GAAP") for interim financial information and with the instructions to Form 10-Q and Article 10 of Regulation S-X. Accordingly, they do not include all of the information and footnotes required by U.S. GAAP for complete consolidated financial statements. In the opinion of management, all adjustments (consisting of normal recurring accruals) considered necessary for a fair presentation have been included. Operating results for the three-month period ended July 31, 2013 are not necessarily indicative of the results that may be expected for the fiscal year ending April 30, 2014. The unaudited condensed consolidated financial statements should be read in conjunction with the audited consolidated financial statements and notes in the Company's Annual Report on Form 10-K for the fiscal year ended April 30, 2013 filed with the U.S. Securities Exchange Commission (SEC).

#### NOTE B--NEW ACCOUNTING PRONOUNCEMENTS

In February 2013, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2013-02, "Comprehensive Income (Topic 220): Reporting Amounts Reclassified Out of Accumulated Other Comprehensive Income," which requires an entity to provide information about the amounts reclassified out of accumulated other comprehensive income by component. In addition, an entity is required to present, either on the face of the statement where net income is presented or in the notes, significant amounts reclassified out of accumulated other comprehensive income by the respective line items of net income if the amount reclassified is required under U.S. GAAP to be reclassified to net income in its entirety in the same reporting period. The ASU does not change the current requirements for reporting net income or other comprehensive income in financial statements. The ASU is effective prospectively for fiscal years and interim periods within those years beginning after December 15, 2012. The Company adopted this guidance effective May 1, 2013 with no significant impact on the Company's results of operations or financial position.

NOTE C--NET EARNINGS PER SHARE

The following table sets forth the computation of basic and diluted net earnings per share:

	T	hree Mor	th	s Ended
	Jı	ıly 31,		
(in thousands, except per share amounts)		2013		2012
Numerator used in basic and diluted net earnings				
per common share:				
Net income	\$	6,655	\$	561
Denominator:				
Denominator for basic net earnings per common				
share - weighted-average shares		14,949		14,416
Effect of dilutive securities:				
Stock options and restricted stock units		424		160
Denominator for diluted net earnings per common				
share - weighted-average shares and assumed				
conversions		15,373		14,576
Net earnings per share				
Basic	\$	0.45	\$	0.04
Diluted	\$	0.43	\$	0.04

Potentially dilutive securities of 0.1 million and 1.7 million shares for the three-month periods ended July 31, 2013 and 2012, respectively, were excluded from the calculation of net earnings per share, as the effect would be anti-dilutive.

#### NOTE D--STOCK-BASED COMPENSATION

The Company has various stock-based compensation plans. During the quarter ended July 31, 2013, the Board of Directors of the Company approved grants of non-statutory stock options and service-based and performance-based restricted stock units (RSUs) to key employees. The employee non-statutory stock option grants totaled 60,500 shares of the Company's common stock with an exercise price of \$36.74 per share. The options vest evenly over a three-year period and have a ten-year contractual term. The employee performance-based RSUs totaled 75,600 units and the employee service-based RSUs totaled 25,200 units. The performance-based RSUs entitle the recipients to receive one share of the Company's common stock per unit granted if applicable performance conditions are met and the recipient remains continuously employed with the Company until the units vest. The service-based RSUs entitle the recipients to receive one share of the Company's common stock per unit granted if they remain continuously employed with the Company until the units vest. All of the Company's RSUs granted to employees cliff-vest three years from the grant date.

For the three-month periods ended July 31, 2013 and 2012, stock-based compensation expense was allocated as follows:

	Three Months	
	Ended	
	July 31,	
(in thousands)	2013	2012
Cost of sales and distribution	\$ 140	\$ 177
Selling and marketing expenses	219	241
General and administrative expenses	502	567
Stock-based compensation expense	\$ 861	\$ 985

During the quarter ended July 31, 2013, the Board of Directors of the Company also approved grants of 9,486 cash-settled performance-based restricted stock tracking units (RSTUs) and 3,264 service-based RSTUs for more junior level employees who previously received RSU grants under the Company's shareholder approved plan. The RSTUs cliff-vest three years from the grant date. Since the RSTUs will be settled in cash, the grant date fair value of these awards is recorded as a liability until the date of payment. The fair value of each cash-settled RSTU award is remeasured at the end of each reporting period and the liability is adjusted, and related expense recorded, based on the new fair value. The Company recognized expense of \$17 thousand related to RSTUs for the three-month period ended July 31, 2013.

# NOTE E--CUSTOMER RECEIVABLES

The components of customer receivables were:

	July 31,	April 30,
(in thousands)	2013	2013
Gross customer receivables	\$ 47,838	\$ 41,397
Less:		
Allowance for doubtful accounts	(145)	(148)
Allowance for returns and discounts	(2,417)	(2,205)
Net customer receivables	\$ 45,276	\$ 39,044

#### **NOTE F--INVENTORIES**

The components of inventories were:

	July 31,	April 30,
(in thousands)	2013	2013
Raw materials	\$ 12,321	\$ 11,823
Work-in-process	17,362	17,170
Finished goods	12,066	11,318
Total FIFO inventories	41,749	40,311
Reserve to adjust inventories to LIFO value	(10,982)	(10,973)
Total LIFO inventories	\$ 30,767	\$ 29,338

Interim LIFO calculations are based on management's estimates of expected year-end inventory levels and costs. Since these items are estimated, interim results are subject to the final year-end LIFO inventory valuation.

### NOTE G--PRODUCT WARRANTY

The Company estimates outstanding warranty costs based on the historical relationship between warranty claims and revenues. The warranty accrual is reviewed monthly to verify that it properly reflects the remaining obligation based on the anticipated expenditures over the balance of the obligation period. Adjustments are made when actual warranty claim experience differs from estimates. Warranty claims are generally made within two months of the original shipment date.

The following is a reconciliation of the Company's warranty liability:

	Three Months Ended		
	July 31,		
(in thousands)	2013	2012	
Beginning balance at May 1	\$ 1,795	\$ 1,885	
Accrual	2,546	2,257	

Settlements (2,596) (2,160)

Ending balance at July 31 \$ 1,745 \$ 1,982

NOTE H--CASH FLOW

Supplemental disclosures of cash flow information:

Three Months

Ended

July 31,

(in thousands) 2013 2012

Cash paid during the period for:

Interest \$ 143 \$ 97 Income taxes \$ 127 \$ 110

#### NOTE I--PENSION BENEFITS

Effective April 30, 2012, the Company froze all future benefit accruals under the Company's hourly and salary defined-benefit pension plans.

Net periodic pension cost consisted of the following for the three months ended July 31, 2013 and 2012:

Three Months Ended July 31,

(in

thousands) 2013
Interest Critical Accounting Policies and Management Estimates

cost

The SEC defines critical accounting policies as those that are, in management s view, important to the portrayal of our financial condition and results of operation and demanding of management s judgment. Our discussion and analysis of financial condition and results of operations are based on our consolidated financial statements, which have been prepared in accordance with United States generally accepted accounting principles. The preparation of these financial statements requires us to make estimates on experience and on various assumptions that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from those estimates.

A discussion of the material implications of uncertainties associated with the methods, assumptions and estimates underlying our critical accounting polices is as follows:

#### Revenue Recognition

Our license and collaboration agreements may contain multiple elements, including license and technology access fees, research and development funding, manufacturing revenue, cost-sharing, milestones and royalties. The deliverables under such an arrangement are evaluated under Accounting Standards Codification, or ASC, 605-25, *Multiple-Element Arrangements*. Effective January 1, 2011, we adopted ASU 2009-13, Multiple-Deliverable Revenue Arrangements, or ASU 2009-13, which amended the guidance in ASC 605-25 on the accounting for arrangements involving the delivery of more than one element. Pursuant to the new standard, each required deliverable is evaluated to determine whether it qualifies as a separate unit of accounting based on whether the deliverable has stand alone value to the customer. The arrangement s consideration that is fixed or determinable is then allocated to each separate unit of accounting based on the relative selling price of each deliverable. In general, the consideration allocated to each unit of accounting is recognized as the related goods or services are delivered, limited to the consideration that is not contingent upon future deliverables.

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We adopted this new accounting standard on a prospective basis for agreements containing multiple elements entered into on or after January 1, 2011, and for any agreements entered into prior to January 1, 2011, but materially modified on or after that date.

The primary impact of adopting the new standard is expected to be the earlier recognition of revenue for multiple element arrangements. The adoption of ASU 2009-13 did not have a material impact on our consolidated results of operations for the year ended December 31, 2011, or on our financial position as of December 31, 2011. The impact of adopting this new accounting standard is dependent on the terms and conditions of any future arrangements that we may enter into that include multiple elements and arrangements entered into prior to January 1, 2011 that are materially modified. Depending on the terms of any such arrangements, the adoption of this accounting standard may have a material impact on our consolidated results of operations or financial position as it may have the potential effect of less revenue deferral for new collaborations than we have historically experienced. We recognized revenue of \$7.9 million for the year ended December 31, 2011 and deferred revenue of \$3.0 million as of December 31, 2011 pertaining to collaborations which were entered into prior to our adoption of ASU 2009-13 and which were not modified on or after January 1, 2011. The performance period for our multiple element arrangements has concluded.

For agreements entered into prior to January 1, 2011 and not materially modified thereafter, we continue to apply our prior accounting policy with respect to such arrangements. Under this policy, the deliverables under the arrangement are evaluated to assess whether they have standalone value and objective and reliable evidence of fair value, and if so, are accounted for as a single unit. We then recognize revenue for each unit based on the culmination of the earnings process under ASC 605-S25, issued as Staff Accounting Bulletin, or SAB, Topic 13, and our estimated performance period for the single units of accounting based on the specific terms of each collaborative agreement. We subsequently adjust the estimated performance periods, if appropriate, on a prospective basis based upon available facts and circumstances. Future changes in estimates of the performance period may materially impact the timing of future revenue recognized. Amounts received prior to satisfying the revenue recognition criteria for contract revenues are recorded as deferred revenue in the accompanying balance sheets. Reimbursement amounts (other than those accounted for using collaboration accounting) paid to us are recorded on a gross basis in the statements of operations as contract revenues.

Effective January 1, 2011, we adopted ASU 2010 17, *Revenue Recognition Milestone Method*. The adoption of the new standard did not have a material impact on our consolidated results of operations for the year ended December 31, 2011 or on our financial position as of December 31, 2011 as we had been recognizing revenue from at-risk, performance milestones that are substantive in the period that the milestone is achieved, as defined in the respective contracts.

We entered into collaboration agreements with Pfizer and RTI that contain multiple elements and deliverables. For a description of the collaboration agreement and the determination of contract revenues, see Note E to our audited consolidated financial statements incorporated by reference into this prospectus.

Also included in contract revenue are license fees received from Bristol-Myers Squibb, which are specifically set forth in the license and collaboration agreement as amounts due to us based on our completion of certain tasks (e.g., delivery and acceptance of a cell line) and development milestones (e.g., clinical trial Phases), and as such, are not based on estimates that are susceptible to change. Such amounts are invoiced and recorded as revenue as tasks are completed and as milestones are achieved.

Similarly, grant revenue consists of funding under cost reimbursement programs primarily from federal and state sources for qualified research and development activities performed by us, and as such, are not based on estimates that are susceptible to change. Such amounts are invoiced (unless prepaid) and recorded as revenue as tasks are completed.

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#### **Collaborative Arrangements**

Collaborative arrangements that involve cost or future profit sharing are reviewed to determine the nature of the arrangement and the nature of the collaborative parties businesses. The arrangements are also reviewed to determine if one party has sole or primary responsibility for an activity, or whether the parties have shared responsibility for the activity. If responsibility for an activity is shared and there is no principal party, then the related costs of that activity are recognized by us on a net basis in the statement of operations (e.g., total cost less reimbursement from collaborator). If we are deemed to be the principal party for an activity, then the costs and revenues associated with that activity are recognized on a gross basis in the statement of operations. The accounting may be susceptible to change if the nature of a collaborator s business changes. Currently, our only collaboration accounted for on a net basis is our cost-sharing collaboration with Angiotech, which was terminated in 2011.

#### Clinical Trial Costs

Clinical trial costs are accrued based on work performed by outside contractors, who manage and perform the trials. We obtain initial estimates of total costs based on enrollment of subjects, project management estimates and other activities. Actual costs are typically charged to us and recognized as the tasks are completed by the contractor, and if we are invoiced based on progress payments as opposed to actual costs, we develop estimates of work completed to date. Accrued clinical trial costs may be subject to revisions as clinical trials progress, and any revisions are recorded in the period in which the facts that give rise to the revisions become known.

#### Investments in Available-for-Sale Securities

We determine the appropriate classification of investment securities at the time of purchase and re-evaluate such designation as of each balance sheet date. Our investments typically consist primarily of United States government obligations and corporate debt securities, which are classified as available-for-sale and are valued based on quoted prices in active markets for identical assets (Level 1). Available-for-sale securities are carried at fair value, with the unrealized gains and losses, net of tax, reported as a component of accumulated other comprehensive income. The amortized cost of debt securities is adjusted for amortization of premiums and accretion of discounts to maturity. Such amortization or accretion is included in interest income. Realized gains and losses on available-for-sale securities are included in interest income. The cost of securities sold is based on the specific identification method. Interest earned on securities classified as available-for-sale is included in interest income. Since the elements related to accounting for these investments are reflected on monthly statements, the amounts are not based on estimates that are susceptible to change. None of our financial assets are in markets that are not active.

#### Stock-Based Compensation

We recognize stock-based compensation expense on the straight-line method and use a Black-Scholes option-pricing model to estimate the grant-date fair value of share-based awards. The expected term of options granted represent the period of time that option grants are expected to be outstanding. We use the simplified method to calculate the expected life of option grants given our limited history and beginning in 2010, determine volatility by using our historical stock volatility. Prior to 2010, we determined volatility by using the historical stock volatility of other companies with similar characteristics since we did not have meaningful historical volatility of our own stock at that time. Estimates of fair value are not intended to predict actual future events or the value ultimately realized by persons who receive equity awards.

Forfeitures are estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates and if our expectations on forfeitures changes. If actual forfeitures vary from the estimate, we will recognize the difference in compensation expense in the period the actual forfeitures occur or when options vest.

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All of the aforementioned estimates and assumptions are evaluated on a quarterly basis and may change as facts and circumstances warrant. Changes in these assumptions can materially affect the estimate of the fair value of our share-based payments and the related amount recognized in our financial statements.

#### Recently Issued Accounting Standards Not Yet Adopted at December 31, 2011

In May 2011, the FASB issued changes to fair value measurement. This change clarifies the concepts related to highest and best use and valuation premise, blockage factors and other premiums and discounts, the fair value measurement of financial instruments held in a portfolio and of those instruments classified as a component of shareholders equity. The guidance includes enhanced disclosure requirements about recurring Level 3 fair value measurements, the use of nonfinancial assets, and the level in the fair value hierarchy of assets and liabilities not recorded at fair value. The provisions are effective prospectively for interim and annual periods beginning on or after December 15, 2011 and became effective for us on January 1, 2012. Early application was prohibited. This required changes in presentation only and did not have a material impact on our consolidated financial statements.

In June 2011, the FASB issued changes to the presentation of comprehensive income. These changes give an entity the option to present the total of comprehensive income, the components of net income, and the components of other comprehensive income either in a single continuous statement of comprehensive income or in two separate but consecutive statements; the option to present components of other comprehensive income as part of the statement of changes in shareholders—equity was eliminated. The items that must be reported in other comprehensive income or when an item of other comprehensive income must be reclassified to net income were not changed. Additionally, no changes were made to the calculation and presentation of earnings per share. These changes became effective for us on January 1, 2012. We chose to present comprehensive income in a single continuous statement. Other than the change in presentation, which is further described elsewhere in this prospectus under—Selected Consolidated Financial Data,—the adoption of this pronouncement did not have an impact on our consolidated financial statements.

#### Quantitative and Qualitative Disclosures about Market Risk

#### Interest Rate Risk

Our exposure to interest rate risk is related to our investment portfolio and our borrowings. Fixed rate investments and borrowings may have their fair market value adversely impacted from changes in interest rates. Due in part to these factors, our future investment income may fall short of expectations. Further, we may suffer losses in investment principal if we are forced to sell securities that have declined in market value due to changes in interest rates. We invest our excess cash primarily in debt instruments of the United States government and its agencies, and corporate debt securities. As of June 30, 2012, we had no investments. We have been investing conservatively due to the current economic conditions and have prioritized liquidity and the preservation of principal in lieu of potentially higher returns. As a result, we have experienced no losses on the principal of our investments.

We enter into loan arrangements with financial institutions when needed and when available to us. At June 30, 2012, we had no borrowings outstanding other than a forgivable note payable associated with local grant funding bearing fixed, forgivable interest of 4.25% per annum.

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#### **BUSINESS**

We are an international biotechnology company that is focused primarily in the field of regenerative medicine. We are committed to the discovery and development of best-in-class therapies designed to extend and enhance the quality of human life We have established a portfolio of therapeutic product development programs to address significant unmet medical needs in multiple disease areas. We are developing our lead platform product, MultiStem®, a patented and proprietary allogeneic stem cell product that has been evaluated in two completed Phase I clinical trials and is currently being evaluated in two ongoing Phase II clinical trials. Our current clinical development programs are focused on treating inflammatory & immune disorders, neurological conditions, cardiovascular disease, and other conditions. These represent major areas of clinical need, as well as substantial commercial opportunities.

We believe MultiStem represents a breakthrough in the field of regenerative medicine and stem cell therapy and could be used to treat a range of disease indications. MultiStem is a patented and proprietary product that enhances tissue repair and healing in multiple ways, including reducing inflammatory damage, protecting tissue that is at risk following acute or ischemic injury, and promoting formation of new blood vessels in regions of ischemic injury. The cells comprising MultiStem appear to be responsive to the environment in which they are administered, homing to sites of injury and active disease response and producing proteins that may provide benefit in acute or chronic conditions. In contrast to traditional pharmaceutical products or biologics that generally act through a single biological mechanism of action, the MultiStem product can enhance healing and tissue repair through multiple distinct mechanisms acting simultaneously, by producing a range of therapeutic factors and dynamically responding to the needs of the body resulting in a more effective therapeutic response.

The MultiStem product is unique among regenerative medicine approaches, because it can be manufactured on a large scale, may be administered in an off-the-shelf manner with minimal processing, and can augment healing in multiple ways, providing biological potency other cell therapy approaches cannot. Additionally, the MultiStem product has demonstrated a consistent safety profile in both preclinical and clinical studies. Like drugs and biologics, the product is cleared from the body over time, enhancing product safety relative to other types of stem cell therapy. While the product does not permanently engraft in the patient, the therapeutic effects of treatment with MultiStem cells appear to be quite durable.

We believe the therapeutic and commercial potential for MultiStem to be very broad, applying to many areas of significant unmet medical need. We are pursuing opportunities in several potential multi-billion dollar markets. While traditional pharmaceuticals or biologic therapies typically may be used to treat only a single disease or narrowly defined set of related conditions, MultiStem appears to have far broader potential and could be developed in different formulations and with different delivery approaches to efficiently treat a range of disease indications.

We have already evaluated the use of MultiStem as a potential treatment for a range of disease indications. Working with an international network of leading investigators and prominent research and clinical institutions, and through our own internal efforts, we have explored the potential for MultiStem to be used in acute and chronic forms of inflammatory & immune disorders, neurological conditions, cardiovascular disease, certain pulmonary conditions, and other areas.

To date, we have successfully advanced MultiStem product candidates into five clinical stage programs, each of which addresses a significant area of medical need, and represents a large commercial market opportunity. MultiStem has been evaluated in two completed clinical trials, one exploring the potential to treat patients that have suffered a heart attack and the other evaluating the potential to reduce GvHD, as well as other complications, and to provide supportive care to patients being treated for leukemia or related conditions. MultiStem is currently being evaluated in two additional clinical programs in the inflammatory & immune disease and neurological areas. In one study, which is being conducted with our

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partner Pfizer, MultiStem is being administered to patients with IBD. In another ongoing study, we are evaluating the potential to treat patients that have suffered neurological damage from a stroke. In addition, a leading clinical center in Europe, and a research collaborator, has recently received authorization to conduct an initial clinical trial evaluating administration of MultiStem in patients that have received a solid organ transplant.

In addition to our MultiStem programs, we have applied our pharmaceutical discovery capabilities to identify and develop novel pharmaceuticals to treat obesity, related metabolic conditions such as diabetes, and certain neurological indications such as schizophrenia, as well as small molecule compounds that may be used to enhance the production or therapeutic effectiveness of MultiStem or related products, increase the product s biological potency for certain indications and lead to second or third generation products in the regenerative medicine area. Our 5HT2c agonist program for obesity works by the same mechanism as Lorcaserin, which was recently approved by the FDA for the treatment of obesity. However, we believe our compounds may have the potential for providing superior weight loss performance, while also achieving a superior safety and tolerability profile. In addition, we have demonstrated our compounds are complementary with other agents that have been approved by the FDA for treating obesity. Furthermore, certain compounds that we developed may also have relevance in other disease areas, such as the treatment of schizophrenia. We are actively exploring partnership opportunities for our 5HT2c program in born the obesity and schizophrenia areas.

#### **Business Strategy**

Our principal business objective is to discover, develop and commercialize novel therapeutic products for disease indications that represent significant areas of clinical need and commercial opportunity. The key elements of our strategy are outlined below:

Efficiently Conduct Clinical Development to Establish Clinical Proof of Concept and Biological Activity with our Lead Product Candidates. MultiStem represents a novel therapeutic modality for the treatment of inflammatory & immune system disorders, neurological conditions and cardiovascular disease, as well as in other areas. MultiStem may be administered like other biologics, intravenously, via catheter, or by local injection. The cells appear to be responsive to their environment, homing to sites of injury and active disease response and producing proteins that may provide benefit in acute or chronic conditions. Additionally, MultiStem cell therapy may deliver therapeutic benefit through several distinct mechanisms of action, including reducing inflammatory damage, protecting tissue that is at risk following acute or ischemic injury, and promoting formation of new blood vessels in regions of ischemic injury. We are conducting a number of clinical studies with the intent to establish proof of concept and/or proof of biological activity in a number of important disease areas where the cell therapies would be expected to have benefit inflammatory & immune system dysfunctions, neurological conditions and cardiovascular disease. Our focus is on conducting well-designed studies early in the clinical development process to establish a robust foundation for subsequent development, partnership and expansion into complementary areas. We are committed to a rigorous clinical and regulatory framework, which we believe has helped to advance our programs efficiently, and is also a result of the quality of our regulatory submissions and transparency in our discussions with the FDA have resulted in a successful regulatory partnership that has helped to advance our programs efficiently.

Continue to Refine and Improve our Manufacturing and Related Processes and Deepen our Understanding of Therapeutic Mechanisms of Action. A key aspect of MultiStem is its substantial expansion capacity ex vivo relative to other cell types. This enables large scale production of the clinical product, which enables greater consistency, specificity and cost of goods advantages over other cell therapies. We plan to build on this intrinsic biological advantage by continuing to advance and optimize our production and process development

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approaches, further developing new manufacturing approaches including our bioreactor platform, and optimizing the plant to bedside supply chain to support late stage development and commercialization. Additionally, we will continue to refine our understanding of our products—activities and mechanisms of action to enable optimization of administration and dosing and to prepare the foundation for product enhancements and next generation opportunities.

Enter into Licensing or Product Co-Development Arrangements in Certain Areas, while Out-Licensing Opportunities in Non-Core Areas. In addition to our internal development efforts, an important part of our product development strategy is to work with collaborators and partners to accelerate product development, reduce our development costs, and broaden our commercialization capabilities. We have entered into licensing and product co-development arrangements with qualified commercial partners to achieve these objectives. We anticipate that this strategy will help us to develop a portfolio of high quality product development opportunities, enhance our clinical development and commercialization capabilities, and increase our ability to generate value from our proprietary technologies. Over the past decade, we have entered into technology licensing arrangements and established product commercialization and co-development partnerships with companies such as Pfizer, Angiotech, Bristol-Myers Squibb, Johnson & Johnson, Wyeth and RTI. These partnerships generate revenue and provide capital that allows us to advance certain programs further in development.

Efficiently Explore New High Potential Therapeutic Applications, Leveraging Third-Party Research Collaborations and our Results from Related Areas. Our product candidates have shown promise in multiple disease areas, including in treating inflammatory & immune disorders, neurological conditions, cardiovascular disease, and other areas. We are committed to exploring potential clinical indications where our therapies may achieve best-in-class profile, and where we can address significant unmet medical needs. In order to achieve this goal, over the past decade, we have established collaborative research relationships with investigators from many leading research and clinical institutions across the United States and Europe, including the Cleveland Clinic, Case Western Reserve University, University of Minnesota, the Medical College of Georgia, the University of Oregon Health Sciences Center, the University of Texas Health Science Center at Houston, the University of Pittsburgh Medical Center, KUL, and other institutions. Through this network of collaborations, we have studied MultiStem in a range of preclinical models that reflect various types of human disease or injury in the cardiovascular, neurological, and immunological areas. These collaborative relationships have enabled us to cost effectively explore where MultiStem may have therapeutic relevance, and how it may be utilized to advance treatment over current clinical care. Additionally, we have shown that we can leverage clinical safety data and preclinical results from some programs to support accelerated clinical development efforts in other areas, saving substantial development time and resources compared to traditional drug development where generally each program is separately developed.

Continue to Expand our Intellectual Property Portfolio. We have a broad intellectual property estate that covers our proprietary products and technologies, as well as methods of production and methods of use. Our intellectual property is important to our business and we take significant steps to protect its value. We have ongoing research and development efforts, both through internal activities and through collaborative research activities with others, which aim to develop new intellectual property and enable us to file patent applications that cover new applications of our existing technologies or product candidates, including MultiStem and other opportunities.

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#### **Our Current Programs**

By applying our proprietary MultiStem cell therapy product, we have established therapeutic product development programs treating inflammatory & immune disorders, neurological conditions, cardiovascular disease, and other conditions. To date, we have advanced five programs to the clinical development stage, including the following:

Inflammatory Bowel Disease: IBD affects an estimated 4 million patients or more in the United States, Europe, and Japan. Current therapies for treating IBD consist of pharmaceutical and biologic drugs, representing an annual market of more than \$5 billion globally. Currently available therapies provide temporary relief or are not effective for many patients, and novel approaches are needed to improve the standard of care and help patients avoid surgical intervention. MultiStem is being evaluated in an ongoing Phase II clinical study involving administration of MultiStem to patients suffering from UC the most common form of IBD. This study is being conducted with our partner, Pfizer, in UC patients who have an inadequate response or are refractory to current treatment, and is a double blind, placebo controlled trial that began enrolling patients in 2011. Enrollment of the trial is ongoing and designed to include approximately 130 patients, with initial results expected to be reported in 2013.

Ischemic Stroke: Ischemic stroke affects approximately 15 million people globally each year and approximately 2 million in the United States, Europe and Japan combined. The clot-dissolving drug tPA must be administered within 3 to 4 hours after the stroke, and as a result of this narrow window, a limited number of patients are treated with it. We are evaluating in a Phase II clinical study the administration of MultiStem to patients one to two days after they have suffered an ischemic stroke. In preclinical studies, administration of a single dose of MultiStem, even several days after a stroke, resulted in significant and durable improvements. This double blind, placebo-controlled trial is being conducted at leading stroke centers across the United States and may include sites in Europe. The study is expected to include approximately 136 patients. We completed the first patient cohorts, and the independent safety monitoring committee found that MultiStem was safe and well tolerated at both of the doses evaluated. Patient enrollment is ongoing and for the remainder of the trial, patients will be randomized to receive either high dose MultiStem or placebo. We believe this represents a potential market opportunity of more than \$15 billion annually.

Acute Myocardial Infarction: We have evaluated the administration of MultiStem in a Phase I clinical study to patients that have suffered an AMI. In 2010, we announced preliminary results for this study, demonstrating a favorable safety profile and encouraging signs of improvement in heart function among patients that exhibited severely compromised heart function prior to treatment. One-year follow-up data suggested that the benefit observed was sustained over time. We have completed preliminary planning for a Phase II trial, which has been discussed with the FDA. Our plans to move the AMI program forward into subsequent development will depend on the availability of capital resources, progress in our other clinical studies and our business development activities.

Hematopoietic Stem Cell Transplant / GvHD: We have completed a Phase I clinical study of the administration of MultiStem to patients suffering from leukemia or certain other blood-borne cancers in which patients undergo radiation therapy and then receive a hematopoietic stem cell transplant. Such patients are at risk for serious complications, including GvHD, an imbalance of immune system function caused by transplanted immune cells that attack various tissues and organs in the patient. In 2011 and in February 2012, we released data from the study, which demonstrated the safety of MultiStem in this indication and suggested that MultiStem may have a beneficial effect in reducing the incidence and severity of GvHD, as well as providing other benefits. This program has been assigned

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orphan drug designation from the FDA, which provides us with seven years of market exclusivity upon approval, and certain other benefits. We met with the FDA to discuss the results of the clinical study and our proposed plans for the next phase of clinical development in this area. We are currently preparing our detailed clinical study plans and look forward to finalizing our design and undertaking operational planning. Based on current plans, we intend to be ready to start this study in the second half of 2013, but the initiation will depend on the progress in our clinical trials and the achievement of certain business development and financial objectives. There are approximately 25,000 bone marrow or peripheral blood stem cell allografts performed annually, but we believe many more transplants could be performed if the risks of GvHD could be meaningfully reduced. We believe this indication represents a potential market opportunity of \$500 million annually or more.

We are also collaborating with a leading transplant group at the University of Regensburg in Germany that has recently obtained authorization to initiate an institutional sponsored clinical trial exploring the administration of MultiStem in patients following a liver transplant. We plan to provide limited financial support for this investigator-sponsored Phase I study and provide clinical grade product to conduct the trial. According to a report by Reuter s Business Insight, in 2009, approximately 91,000 organ transplants were conducted. We estimate that this represents a potential market of more than \$1.5 billion annually.

In addition to our current and anticipated clinical development activities, we are engaged in preclinical development and evaluation of MultiStem in other disease indications in the inflammatory & immune disorder, neurological and cardiovascular disease areas. We conduct such work both through our own internal research efforts and through a broad network of collaborations we have established with investigators at leading research institutions across the United States and in Europe.

We are in discussions with third parties about collaborating in the development of MultiStem for our current clinical programs (outside of IBD) and preclinical programs and may, under the right terms, enter into one or more business partnership(s) to advance the programs.

We have also collaborated with RTI on the development of products for certain orthopedic applications in the bone graft substitutes market using our stem cell technologies. RTI s product development activities are progressing, and in September 2012, we amended our agreement with RTI to accelerate \$2.0 million of contingent milestone payments in connection with ongoing technical support to assist RTI in its initial product launch. As a result, we will receive these milestone payments in 2012, and in addition, RTI will compensate us for this technical assistance. We will also receive royalty revenue from product sales when they occur, as well as potential additional milestone payments.

We are also engaged in the development of novel small molecule therapies to treat obesity and other conditions. Currently, we are focused on the development of potent, highly selective compounds that act through stimulation of a specific receptor in the brain, the 5HT2c serotonin receptor. We are conducting preclinical evaluation of novel compounds that we have developed that exhibit favorable attributes, including outstanding receptor selectivity, as well as greater potency and activity than other 5HT2c agonists. We have also demonstrated complementarity of our compounds with other agents and believe these compounds could achieve best in class weight loss, as well as a superior safety and tolerability profile. Furthermore, we have evaluated certain compounds that exhibit a particular type of selectivity profile in preclinical models of schizophrenia and observed that these compounds exhibit potent effects. We are in discussions with multiple companies and may elect to enter into a partnership to advance the development of our 5HT2c agonist program, either for the treatment of obesity, schizophrenia, or both indications.

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Regenerative Medicine Programs

MultiStem A Novel Therapeutic Modality

We are developing a proprietary non-embryonic, allogeneic stem cell product candidate, MultiStem, that we believe has potential utility for treating a broad range of diseases and could have widespread application in the field of clinical regenerative medicine. Unlike traditional bone marrow transplants or other stem cell therapies, MultiStem may be manufactured on a large scale and may be administered without tissue matching or the need for immune suppression, analogous to type O blood. Potential applications of MultiStem include the treatment of cardiovascular disease, neurological disease or injury and conditions involving the immune system, including autoimmune disease and other conditions. We believe that MultiStem represents a significant advancement in the field of stem cell therapy and could have broad clinical application. We currently have open INDs for the study of MultiStem in distinct clinical indications, and a collaborating institution recently obtained authorization in Europe to initiate a clinical program through an investigator sponsored clinical trial application, obtained with our permission and support.

MultiStem is a patented biologic product that is manufactured from human stem cells obtained from adult bone marrow, although these cells may alternatively be obtained from other tissue sources, which are also covered under our intellectual property. The product consists of a special class of human stem cells that have the ability to express a range of therapeutically relevant proteins and other factors, as well as form multiple cell types. Factors expressed by MultiStem have the potential to deliver a therapeutic benefit in several ways, such as the reduction of inflammation, regulation of immune system function, protection of damaged or injured tissue, the formation of new blood vessels in regions of ischemic injury and augmenting tissue repair and healing in other ways. Like drugs, these cells may be stored for an extended period of time (in frozen form) and used off-the-shelf. Following administration, the cells have been shown to express multiple therapeutically relevant proteins, but unlike a traditional transplant, are subsequently cleared from the body over time like a drug or biologic.

The therapeutic benefit of bone marrow transplantation has been recognized for decades, and its clinical use has grown since Congress passed the National Organ Transplant Act in 1984 and the National Marrow Donor Registry was established in 1990. However, widespread bone marrow or stem cell transplantation has yet to become a reality. Some of the limitations that have prevented broader clinical application of bone marrow or stem cell transplantation include the requirement for tissue matching between donor and recipient, the typical need for one donor for each patient (a reflection of the inability to expand cells in a controlled and reproducible manner), frequent use of immune suppressive drugs to avoid rejection or immune system complications, the inability to efficiently produce significant quantities of stem cells and a range of potential safety issues.

A stem cell therapy that has the potential to address the challenges mentioned above could represent a breakthrough in the field of regenerative medicine, since it could greatly expand the clinical application of stem cell therapy or other forms of regenerative medicine. In 2003, we acquired technology originally developed at the University of Minnesota related to a novel stem cell type, MAPC, that may be isolated from adult bone marrow as well as other nonembryonic tissues. Over the past several years, we have further developed this technology and the manufacturing of these cells for use in ongoing clinical trials. We refer to the current product platform as MultiStem. During several years of preclinical work, MultiStem has demonstrated the potential to address many of the fundamental limitations observed with traditional bone marrow or hematopoietic stem cell transplants.

We believe that MultiStem represents a potential best-in-class stem cell therapy because it exhibits each of the following characteristics based on research and development to date:

**Broad Plasticity and Multiple Potential Mechanisms of Action.** MultiStem cells have a demonstrated ability in animal models to form a range of cell types and also appear to be

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able to deliver therapeutic benefit through multiple mechanisms, such as producing factors that protect tissues against damage and inflammation, as well as enhancing or playing a direct role in revascularization or tissue regeneration.

Large Scale Production. Unlike conventional stem cells, such as blood-forming or hematopoietic stem cells, mesenchymal stem cells, or other cell types, MultiStem cells may be produced on a large scale, processed, and cryogenically preserved, and then used clinically in a rapid and efficient manner. Material obtained from a single donor may be used to produce hundreds of thousands or millions of individual doses, representing a yield far greater than other stem cells have been able to achieve.

Off-the-Shelf Utility. Unlike traditional bone marrow or hematopoietic stem cell transplants that require extensive genetic matching between donor and recipient, MultiStem is administered without tissue matching or the requirement for immune suppressive drugs. MultiStem is administered as a cryogenically preserved allogeneic product, meaning that these cells are not genetically matched between donor and recipient. This feature, combined with the ability to establish large MultiStem banks, could make it practical for clinicians to efficiently deliver stem cell therapy to a large number of patients.

*Safety.* Other stem cell types, such as embryonic stem cells or induced pluripotent stem cells have shown the capacity to form ectopic tissue or teratomas, which are tumor-like growths. These could pose serious safety risks to patients. In contrast, MultiStem cells have shown a consistent and outstanding safety profile that has been compiled over several years of preclinical study in a range of animal models by a variety of investigators and that is supported by emerging clinical data.

At each step of the MultiStem production process, cells are analyzed according to pre-established criteria to ensure that a consistent, well characterized product candidate is produced. Cells are harvested from a pre-qualified donor and then expanded to form a Master Cell Bank from which we subsequently produce clinical grade material. In multiple animal models, MultiStem has been shown to be non-immunogenic, and is administered without the genetic matching that is typically required for conventional bone marrow or stem cell transplantation.

The distinctive profile of MultiStem allows us to pursue multiple high value commercial opportunities from a single product platform. Based upon work that we and independent collaborators have conducted over the past several years, we believe that MultiStem has the potential to treat a range of distinct disease indications, including ischemic injury and cardiovascular disease, certain neurological diseases, autoimmune disease, transplant support (including in oncology patients and solid organ transplant areas), and a range of orphan disease indications. As a result, we believe we will be able to leverage our foundation of safety and efficacy data to add clinical indications efficiently, enabling us to reduce development costs and timelines substantially.

MultiStem for Treating Immune System Disorders, and Neurological Conditions and Cardiovascular Disease

Healthcare represents a significant part of the global economy. In the United States, it represented approximately 18% of all economic activity in 2009, or about \$2.49 trillion dollars annually. However, the United States, along with many other nations, is experiencing an unprecedented demographic shift that is resulting in a significantly expanded population of older individuals. According to United States Census data, in the next few years there will be a dramatic increase in the number of individuals over the age of 65, as this segment of the population increases from 40.2 million individuals in 2010 to more than 72 million people in 2030, representing an increase of approximately 80%. The aging of the population will create enormous financial pressure on the healthcare system in the United States and other countries around the world, resulting in significant clinical challenges, but also resulting in substantial commercial opportunities.

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Data from the National Center for Health Statistics shows that as people get older, they are more susceptible to a variety of age related conditions, including heart disease, stroke, certain forms of cancer, diabetes, progressive neurological disorders, various chronic inflammatory & immune conditions, renal disease and a range of others. As a consequence, as people get older they spend far more on healthcare on average they spend three to seven times more on healthcare annually at age 65 than when they are young and healthy. According to the Alliance for Aging Research, 83% of healthcare spending is associated with chronic conditions, and other research shows that 62% of healthcare spending is associated with multiple chronic conditions. Traditional medical approaches have failed to adequately address this problem.

Working with independent investigators at a number of leading institutions, such as the Cleveland Clinic, University of Minnesota, the National Institutes of Health, the Medical College of Georgia, the University of Oregon Health Sciences Center, the University of Texas Health Science Center at Houston, KUL and other institutions. Through this network of collaborations, we have studied MultiStem in a range of preclinical models that reflect various types of human disease or injury in the cardiovascular, neurological, and immunological areas. To date, we and our collaborators have published research results illustrating the potential benefits of MultiStem in a range of indications including myocardial infarction, vascular disease, ischemic stroke, TBI, brain damage due to restricted blood flow in newborns, spinal cord injury, and bone marrow transplant support/GvHD. In addition, we have explored and intend to further explore, the potential application of MultiStem in the treatment of a range of other conditions, including other forms of cardiovascular disease, neurological conditions, and immune related disorders.

As stated above, we have consistently observed that MultiStem is safe and effective in animal models. As a result, we have advanced MultiStem to clinical development stage in four clinical indications or disease areas: treatment of IBD (initially focused on UC); support in the hematologic malignancy setting to reduce certain complications associated with traditional bone marrow or HSC transplantation; treatment for stroke caused by a blockage of blood flow in the brain; and treatment of damage caused by myocardial infarction. Additionally, in collaboration with a leading transplant center in Europe, a fifth program in the solid organ transplant area has been advanced to clinical development.

We may expand to other clinical indication areas as results warrant and resources permit.

#### Immunological Disorders MultiStem for IBD and HSC Transplant Support

Inflammatory & immune disorders also represent a significant burden to society. There are over 80 recognized autoimmune disorders, which are conditions caused by an acute or chronic imbalance in the immune system. In these conditions, cells of the immune system begin to attack certain tissues or organs in the body, resulting in tissue damage and loss of function. Some inflammatory & immune conditions are associated with aging related conditions (e.g., rheumatoid arthritis), but some are due to other causes that may be genetic, environmental or a combination of both (e.g., Type 1 diabetes, IBD). Still other conditions may reflect complications associated with the treatment of other conditions (e.g., GvHD, a frequent complication associated with transplant procedures used to treat leukemia or related blood-borne cancers). Each of these conditions shares certain biological characteristics, in that the immune system imbalance results from the inappropriate activation of certain populations of immune cells that results in significant tissue damage and destruction. This immune imbalance may result in a complex cascade of inflammation that can result in pain, progressive tissue deterioration and loss of function. While currently available immunomodulatory drugs have proven to be effective for many patients, they have failed to adequately address the needs of many other patients that suffer from inflammatory & immune disorders.

In multiple studies, MultiStem has shown potent immunomodulatory properties, including the ability to reduce active inflammation through various modes of action, and restore immune system imbalance.

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Accordingly, we believe that MultiStem could have broad application in the area of treating immune system disorders, including certain autoimmune diseases and other conditions, including GvHD, which is a frequent immunological complication associated with bone marrow or HSC transplantation.

In 2009, we entered into a collaboration agreement with Pfizer to develop and commercialize MultiStem for the treatment of IBD for the worldwide market. IBD is a group of inflammatory and autoimmune conditions that affect the colon and small intestine, typically resulting in severe abdominal pain, weight loss, vomiting and diarrhea. The most common forms of the disease include UC and Crohn s disease, which are estimated to affect 4 million people or more in the United States, five major European markets (United Kingdom, Germany, France, Italy and Spain) and Japan. Chronic IBD can be a severely debilitating condition, and advanced cases may require surgery to remove the affected region of the bowel, and may also require temporary or permanent colostomy or ileostomy. In many cases, surgery does not achieve a permanent cure, and patients suffer a return of the disease. In 2011, enrollment commenced in our Phase II clinical study being conducted with our partner, Pfizer, to administer MultiStem to patients suffering from UC.

Another area of focus is the use of MultiStem as adjunctive treatment for HSC/bone marrow transplant used as therapy in hematologic malignancy. For many types of cancer, such as leukemia or other blood-borne cancers, treatment typically involves radiation therapy or chemotherapy, alone or in combination. Such treatment can substantially deplete the cells of the blood and immune system, by reducing the number of stem cells in the bone marrow from which they arise. The more intense the radiation treatment or chemotherapy, the more severe the resulting depletion is of the bone marrow, blood, and immune system. Other tissues may also be affected, such as cells in the digestive tract and in the pulmonary system. The result may be severe anemia, immunodeficiency, substantial reduction in digestive capacity, and other problems that may result in significant disability or death.

One strategy for treating the depletion of bone marrow is to perform a peripheral blood stem cell transplant or a bone marrow transplant. This approach may augment the patient s ability to form new blood and immune cells and provide a significant survival advantage. However, finding a closely matched donor is frequently difficult or even impossible. Even when such a donor is found, in many cases there are immunological complications, such as GvHD, which may result in serious disability or death.

Working with leading experts in the stem cell and bone marrow transplantation field, we have studied MultiStem in animal models of radiation therapy and GvHD. In multiple animal models, MultiStem has been shown to be non-immunogenic, even when administered without the genetic matching that is typically required for conventional bone marrow or stem cell transplantation. Furthermore, in animal model systems testing immune reactivity of T-cells against unrelated donor tissue, MultiStem has been shown to suppress the T-cell-mediated immune responses that are an important factor in causing GvHD. MultiStem-treated animals also displayed a significant increase in survival relative to controls. As a result, we believe that the administration of MultiStem in conjunction with or following standard HSC transplantation may have the potential to reduce the incidence or severity of complications and may enhance gastrointestinal function, which is frequently compromised as a result of radiation treatment or chemotherapy.

We completed a Phase I clinical trial examining the safety and tolerability of a single dose or repeat dosing of MultiStem administered intravenously to patients receiving a bone marrow or hematopoietic stem cell transplant as part of their treatment of leukemia or other hematological condition. The trial was an open label, multicenter trial that involved leading experts in the field of bone marrow transplantation. In February 2012, we announced the top-line results from the trial. We observed a consistent safety profile in both the single and multiple dose arms of the study, and at all dose levels tested. Although the trial was not specifically designed to demonstrate efficacy, we also observed

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clinically meaningful improvement in medically important parameters relative to historical clinical experience, including reduced incidence and severity of acute GvHD, improved relapse free survival, no graft failures, and enhanced engraftment rates relative to other forms of treatment.

In September 2010, we announced that we had been granted orphan drug designation by the FDA for MultiStem in the prevention of GvHD. We met with the FDA to review the results from the Phase I trial and discuss plans for the next phase of clinical development, which could include a Phase II/III study of MultiStem for GvHD prophylaxis and HSCT support. We are currently preparing our detailed clinical study plans and look forward to finalizing our design and undertaking operational planning. Based on current plans, we intend to be ready to start this study in the second half of 2013, but the initiation will depend on the progress in our clinical trials and the achievement of certain business development and financial objectives.

#### Neurological Disease MultiStem for Ischemic Stroke

Another focus of our regenerative medicine program is the use of MultiStem for the treatment of neurological injury as a result of acute or chronic conditions. Neurological injury and disease represents an area of significant unmet medical need, a major burden on the healthcare system, and also represents a huge commercial opportunity.

Many neurological conditions require extensive long-term therapy, and many require extended hospitalization and/or institutional care, creating an enormous cost burden. Stroke represents an area where the clinical need is particularly significant, since it represents a leading cause of death and significant long term disability. Currently, there are approximately 800,000 individuals in the United States that suffer a stroke each year, more than two million stroke victims in the United States, Europe and Japan combined, and approximately 15 million people that suffer a stroke each year globally. The vast majority of these (approximately 85% to 90%) are ischemic strokes, that are caused by a blockage of blood flow in the brain, that cuts off the supply of oxygen and nutrients, resulting in eventual tissue loss and long-term damage and disability. The remainder of these are hemorrhagic strokes, which occur when a blood vessel bursts and bleeding into the brain ensues.

Studies show that in recent years there has been a dramatic rise in ischemic strokes among young adults (i.e., individuals in the 25 to 45 age group), which is likely due to a combination of rising rates of obesity and other factors. Unfortunately, current therapeutic options for ischemic stroke victims are limited, as the only available therapy, a clot dissolving agent or thrombolytic, must be administered within several hours of the occurrence of the stroke. As a consequence of this limited time window, only a small percentage of stroke victims are treated with the currently available therapy most simply receive supportive or palliative care. The long-term costs of stroke are substantial, with many patients requiring extended hospitalization, extended physical therapy or rehabilitation (for those patients that are capable of entering such programs), and many require long-term institutional or family care. Similarly, there are other acute and progressive neurological conditions that require substantial healthcare resources, with limited existing treatment options that are only marginally clinically effective.

We have published research with independent collaborating investigators that demonstrates that MultiStem conveys biological benefits in preclinical models of ischemic stroke, as well as other models of neurological damage and injury, including TBI, neonatal hypoxic ischemia (a cause of neurological damage in infants), and spinal cord injury. We have also conducted preclinical work in other neurological areas, and have been awarded grants to support work in areas such as the indications described above and for evaluating the potential of MultiStem to treat chronic conditions such as Multiple Sclerosis, or MS, or Parkinson s disease. Our research has shown that MultiStem conveys benefits through distinct mechanisms, including reducing inflammatory damage, protecting at risk tissue at the site of injury, and through direct neurotrophic effects that stimulate the recovery of damaged neurons. As a result, we believe that MultiStem may have relevance to multiple forms of neurological injury and disease.

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Our initial clinical focus in the neurological area involves evaluating administration of MultiStem to treat ischemic stroke. Ischemic stroke is a leading cause of death and disability globally, and accounts for approximately 85% of all strokes. Recent progress toward the development of safer and more effective treatments for ischemic stroke has been disappointing. Despite the fact that ischemic stroke is one of the leading causes of death and disability in the United States, there has been little progress toward the development of treatments that improve the prognosis for stroke victims. The only FDA-approved drug currently available for ischemic stroke is the anti-clotting factor, tPA. According to current clinical guidelines, tPA must be administered to stroke patients within several hours after the occurrence of the ischemic stroke to remove the clot while minimizing potential risks, such as bleeding into the brain. Administration of tPA after three to four hours is not recommended, since it can cause cerebral bleeding or even death. Given this limited therapeutic window, it is estimated that less than 5% of ischemic stroke victims in the United States currently receive treatment with tPA.

In preclinical studies conducted by investigators, including at both the University of Minnesota, the Medical College of Georgia, and the University of Texas Health Science Center at Houston, significant functional improvements have been observed in rodents that have undergone an experimentally induced stroke, or that have incurred significant neurological damage due to similar types of ischemic events, such as a result of neonatal hypoxic ischemia or TBI, and then received treatment with MultiStem. Published research has demonstrated that administration of MultiStem even one week after a surgically induced stroke results in substantial long-term therapeutic benefit, as evidenced by the improvement of treated animals compared with controls in a battery of tests examining mobility, strength, fine motor skills, and other aspects of neurological functional improvement.

Based on the research we and our collaborators have conducted, we believe MultiStem conveys significant benefits through several mechanisms, including reduction of inflammation and immune system modulation in the ischemic area, and the protection and rescue of damaged or injured cells, including neuronal tissue. Research results presented at the 2011 and 2012 American Heart Association International Stroke Conference by collaborators from the University of Texas Health Science Center at Houston demonstrated that administration of MultiStem 24 hours following a stroke reduced inflammatory damage in the brain and resulted in significant functional improvement, and that some of these results were achieved by reducing the inflammatory response emanating from the spleen. These results confirm that MultiStem treatment is well tolerated, does not require immunosuppression and results in a robust and durable therapeutic benefit, and are consistent with prior results that show MultiStem can provide significant benefits even when administered up to one week after the initial stroke event.

We are currently enrolling patients in a 136-patient Phase II clinical trial exploring the administration of MultiStem to patients that have suffered an ischemic stroke. In this trial, MultiStem is administered 24 to 36 hours after a stroke has occurred. If shown to be safe and effective, this would represent a significant extension of the treatment window relative to existing standard of care and could provide an important new therapeutic option for stroke patients. We believe that the potential market for a new therapy to treat stroke could be \$15 billion or more annually.

We are also interested in the application of MultiStem for other neurological indications that represent areas of significant unmet medical need, such as TBI, which represents the leading cause of disability among children and young adults, and a leading cause of death. Approximately 1.7 million cases of TBI are seen in the United States each year, nearly half a million cases of which are children age 0 to 14 years old. The CDC estimates that more than 5.3 million individuals are living with a disability and have a long-term or lifelong need for help to perform activities of daily living as a result of a TBI. The annual direct and indirect costs for TBI are approximately \$60 billion a year, according to the National Institute of Neurological Disorders and Stroke, which is part of the National Institutes of Health. In preclinical studies of TBI, administration of MultiStem dramatically reduced the extent of damage caused by a TBI,

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and promoted accelerated healing of the blood-brain barrier. Early in 2012, we announced grant funding aggregating \$3.6 million to further advance our MultiStem programs and cell therapy platform, including further development of MultiStem for the treatment of TBI and further development of our cell therapy formulations and manufacturing capabilities.

We are also conducting preclinical work exploring the application of MultiStem toward in other neurological indications. In June 2010, we announced that we and collaborators at the Center for Stem Cell and Regenerative Medicine and Case Western Reserve University were awarded \$1.0 million through the Ohio Third Frontier Biomedical Program to support preclinical and translational research into the treatment of spinal cord injury, or SCI, with MultiStem. In October 2011, we announced the award of grant funding of up to \$640,000 to investigate the potential for MultiStem to treat chronic progressive MS based on initial results in preclinical models. In October 2012, in collaboration with scientists from Case Western Reserve University, and with the support of Fast Forward and the National Multiple Sclerosis Society, we reported research results that demonstrate the potential benefits of MultiStem therapy for treating MS. In standard preclinical models of MS, researchers observed that MultiStem administration results in sustained behavioral improvements, arrests the demyelination process that is central to the pathology of MS, and supports remyelination of affected axons.

#### Cardiovascular Disease Evaluating MultiStem for Treating Damage from a Heart Attack

Cardiovascular disease is an area of significant clinical need that is expected to expand significantly in the years ahead. Despite treatment advances in recent years, cardiovascular disease remains the leading cause of death, and represents one of the leading causes of disability around the world. In the United States, approximately 1,255,000 patients suffer a heart attack each year, and approximately 5.7 million individuals in the United States are currently suffering from heart failure. Another eight million suffer from peripheral arterial disease, which is associated with significant morbidity and mortality. According to projections published recently by the American Heart Association in February 2011 in the journal *Circulation*, aggregate costs for treating heart disease in the United States are expected to soar in the coming years. In 2010, annual direct costs for treating cardiovascular disease were \$273 billion, but by 2030 these are expected to nearly triple, to a projected \$818 billion per year. This increase will occur primarily as a result of the aging population, and may not fully reflect the impact of the dramatic escalation in obesity rates that has occurred for both adults and children in recent years, which could further exacerbate the long-term challenges and increase costs associated with cardiovascular disease and other conditions.

In a Phase I clinical trial, we have explored the use of MultiStem as a treatment for damage caused by AMI. Myocardial infarction is one of the leading causes of death and disability in the United States. Myocardial infarction is caused by the blockage of one or more arteries that supply blood to the heart. Such blockages can be caused, for example, by the rupture of an atherosclerotic plaque deposit. According to the American Heart Association 2012 Statistical Update, there were approximately 935,000 cases of myocardial infarction that occurred in the United States in 2008 and approximately 7.9 million individuals living in the United States that had previously suffered a heart attack. In addition, there were approximately 812,000 deaths that occurred from all forms of cardiovascular disease, including 462,000 individuals that died as a result of coronary heart disease or heart failure. A variety of risk factors are associated with an elevated risk of myocardial infarction or atherosclerosis, including age, high blood pressure, smoking, sedentary lifestyle and genetics. While advances in the diagnosis, prevention and treatment of heart disease have had a positive impact, there is clearly room for improvement myocardial infarction remains a leading cause of death and disability in the United States and the rest of the world.

MultiStem has been studied in validated animal models of AMI, including at both the Cleveland Clinic and the University of Minnesota. Investigators demonstrated that the administration of allogeneic MultiStem into the hearts of animals damaged by experimentally induced heart attacks resulted in

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significant functional improvement in cardiac output and other functional parameters compared with animals that received placebo or no treatment. Furthermore, the administration of immunosuppressive drug was not required and provided no additional benefit in this study, and supports the concept of using MultiStem as an allogeneic product.

Working with a contract research organization, we completed additional preclinical studies in established pig models of AMI using catheter delivery and examining various factors such as the route and method of MultiStem administration, dose ranging, and timing of treatment. In 2008, we initiated a multicenter, open-label Phase I clinical trial in this indication, and the study is now completed. In July 2010, we announced the preliminary results from this trial, which showed that MultiStem was well tolerated at all dose levels and exhibited a favorable safety profile. In addition, patients that received treatment with MultiStem exhibited meaningful improvements in cardiovascular function, including left ventricular ejection fraction, wall motion scores, and other parameters. These results were recently published in *Circulation Research* in November 2011.

#### Pharmaceutical Programs

Novel 5HT2c Agonists for the Treatment of Obesity and Other Conditions

Obesity is a substantial contributing factor to a range of diseases that represent the major causes of death and disability in the developed world today. Individuals that are clinically obese have elevated rates of cardiovascular disease, stroke, certain types of cancer and diabetes. According to the CDC, the incidence of obesity in the United States has increased at an epidemic rate during the past 20 years. CDC now estimates that almost 70% of all Americans are overweight, including more than one-third that are considered clinically obese. The percentage of young people who are overweight has more than tripled since 1980. There has also been a dramatic rise in the rate of obesity in Europe and Asia. Despite the magnitude of this problem, current approaches to clinical obesity are largely ineffective, and we are aware of relatively few new therapeutic approaches in clinical development.

We are developing novel pharmaceutical treatments for obesity, which are compounds designed to act by stimulating a key receptor in the brain that regulates appetite and food intake the 5HT2c receptor. The role of this receptor in regulating food intake is well understood in both animal models and humans. In 1996, Wyeth launched the anti-obesity drug Redux® (dexfenfluramine), a non-specific serotonin receptor agonist that was used with the stimulant phentermine in a combination commonly known as fen-phen. This diet drug combination gained rapid and widespread acceptance in the clinical marketplace and was shown to be highly effective at regulating appetite, reducing food intake, and causing significant weight loss. Unfortunately, in addition to stimulating the 5HT2c receptor, Redux also stimulated the 5HT2b receptor that is found in the heart. The activation of 5HT2b by Redux is believed to have caused significant cardiovascular problems in a number of patients and, as a result, Redux was withdrawn from the market in 1997.

Since the withdrawal of Redux from the market, several groups have published research and clinical data that implicate stimulation of the 5HT2b receptor as the underlying cause of the cardiovascular problems. These findings suggest that highly selective compounds that stimulate the 5HT2c receptor, but that do not appreciably stimulate the 5HT2b receptor, could be developed that maintain the desired appetite suppressive effects without the cardiovascular toxicity. Recent clinical data supports this hypothesis and also suggests that the 5HT2c agonists may also cause a statistically significant reduction in the amount of sugar in the blood, as measured by fasting blood glucose and HbA1c levels, which are both clinically relevant measures for patients suffering from diabetes.

Recently, the FDA approved Lorcaserin, a 5HT2c agonist, for the treatment of obesity. We believe this represents a significant event for our program because it illustrates that the FDA recognizes and agrees with the concept that 5HT2c agonists that display appropriate selectivity, biological activity and clinical safety are approvable for indications such as obesity.

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Our drug development program is focused on creating potent and selective compounds that stimulate the 5HT2c receptor, but that avoid the 5HT2b receptor and other receptors, such as 5HT2a. Our specific goal has been to develop an orally administered pill that reduces appetite by stimulating the 5HT2c receptor, but that does not stimulate the 5HT2b receptor, the 5HT2a receptor, or other receptors that could cause adverse side effects. Based on extensive preclinical studies that we have conducted with compounds that we have generated, we have demonstrated the ability to develop compounds that are highly potent and selective for the 5HT2c receptor, and that lack activity at either 5HT2a or 5HT2b. We believe that this achievement represents a significant advance in the field, and that the potency and selectivity profile displayed by compounds we are developing will result in substantially better efficacy and a cleaner safety and tolerability profile in clinical trials, as well as a more convenient dosing schedule than other 5HT2c agonist programs including Lorcaserin. We also evaluated certain of our compounds when administered as a monotherapy or in conjunction with other weight loss agents, and have observed effectiveness with both approaches and complementarity with other agents. We are conducting preclinical evaluation of novel compounds that we have developed that exhibit outstanding receptor selectivity and are working toward the selection of a clinical development candidate for this program.

Certain potent and highly selective compounds that we have developed display a profile that we believe may have utility in treating schizophrenia. We evaluated some of these compounds in preclinical models of schizophrenia and have observed that they exhibit efficacy in these models.

We are currently exploring partnering opportunities for this program and may elect to enter into a partnership to advance the development of this program for the treatment of obesity and related indications, schizophrenia, or multiple indications.

Other Small Molecule Programs & Key Technologies

In addition to our other programs, we believe that there are significant opportunities for synergy between our small molecule platform and related capabilities and our MultiStem technology. Specifically, we believe that substantial opportunities exist for identifying and utilizing small molecule modulators of therapeutically relevant biological activity exhibited by MultiStem or other stem cell types. We believe that applying our capabilities in both areas could lead to next generation product development opportunities, including more potent stem cell based therapies that have been optimized for use in specific indication areas.

In addition to our current product development programs, we developed our patented RAGE technology that provides us with the ability to produce human cell lines that express specific, biologically well validated drug targets without relying upon cloned and isolated gene sequences. While our RAGE technology is not a therapeutic product, it is a commercial technology that we have successfully applied for the benefit of our partners and that we have also used for our own internal drug development programs. Modern drug screening approaches typically require the physical isolation and structural modification of a gene of interest, an approach referred to as gene cloning, in order to create a cell line that expresses a drug target of interest. Researchers may then use the genetically modified cell line to identify pharmaceutical compounds that inhibit or stimulate the target of interest. The RAGE technology enables us to turn on or amplify the expression of a drug target without having to physically clone or isolate the gene. In effect, the technology works through the random insertion of tiny, proprietary genetic switches that randomly turn genes on without requiring their physical isolation, or any advance knowledge of their structure. This technology provides us with broad freedom to work with targets that may be otherwise unavailable as a result of intellectual property restrictions on the use of specific cloned and isolated genes. Over the past several years, we have produced cell lines that express drug targets in a range of disease areas such as metabolic disease, infectious disease, oncology, cardiovascular disease, inflammation, and central nervous system disorders. Many of these were produced for drug development programs at major pharmaceutical companies that we have collaborated with, such as Bristol-Myers Squibb, and some have been produced for our internal drug development programs.

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#### **Collaborations and Partnerships**

#### Pfizer

Late in 2009, we entered into a collaboration agreement with Pfizer to develop and commercialize MultiStem for the treatment of IBD for the worldwide market. Under the terms of the agreement, we received a non-refundable up-front cash payment of \$6.0 million from Pfizer and will receive research funding and support during the initial phase of the collaboration. In addition, we are also eligible to receive milestone payments of up to \$105 million upon the successful achievement of certain development, regulatory and commercial milestones, though there can be no assurance that we will achieve these milestones, and no significant milestone payments were received as of June 30, 2012. We are responsible for manufacturing and Pfizer pays us for manufacturing product for clinical development and commercialization purposes. Pfizer has responsibility for development, regulatory and commercialization and will pay us tiered royalties on worldwide commercial sales of MultiStem IBD products. Alternatively, in lieu of royalties and certain commercialization milestones, we may elect to co-develop with Pfizer and the parties will share development and commercialization expenses and profits/losses on an agreed basis beginning at Phase III clinical development.

The Pfizer collaboration does not have a specific termination date, but will terminate upon the last to expire royalty term, unless terminated earlier by either party. Either party can terminate the agreement for an uncured material breach or default. Pfizer is permitted to terminate the agreement upon advance written notice to us if we sustain certain turnover levels for employees working on the program, if our license with the University of Minnesota is terminated, if we experience a specified change of control event, or in its sole discretion. We can terminate the agreement if a certain milestone event has not occurred by a defined period of time, or if we reasonably believe that Pfizer has failed to satisfy its obligations to progress the development of the program. Following termination of the agreement by us, all licenses granted to Pfizer to develop and commercialize MultiStem for IBD will terminate, other than certain more limited research licenses, and ownership of regulatory and clinical data will revert to us. Following termination of the agreement by Pfizer, the licenses granted to Pfizer will remain in effect according to their terms, unless the termination is due to our breach, employee turnover or termination of the license with University of Minnesota, in which case payments to us will be reduced from what was otherwise payable. Also, if Pfizer terminates in its sole discretion, then Pfizer retains its obligation to fund our research and development costs as set forth in the agreement.

#### RTI

In 2010, we entered into an agreement with RTI to develop and commercialize MAPC technology-based biologic implants for certain orthopedic applications in the bone graft substitutes market. Under the terms of our RTI agreement, we are entitled to a \$5.0 million license fee in installments, of which \$3.0 million was received in 2010 and 2011, and \$2.0 million was contingent upon future events. In September 2012, RTI agreed to make these \$2.0 million license fee payments by December 31, 2012, and we agreed to provide RTI with certain technical support. In accordance with the agreement, we are also eligible to receive an additional \$35.5 million in cash payments upon the successful achievement of certain commercial milestones, though there can be no assurance that such milestones will be achieved. In addition, we will receive tiered royalties on worldwide commercial sales of implants using our technologies.

### Angiotech

In November 2011, we reached an agreement with Angiotech to terminate the collaboration agreement and license between the parties, reflecting a change in Angiotech s business and financial strategy. As a result of the termination, we regained ownership of all rights for developing our stem cell technologies and products for cardiovascular disease indications, including AMI, congestive heart failure, chronic ischemia, and peripheral vascular disease, and Angiotech no longer has any license rights or options with

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respect to our technologies and products. Angiotech made its final cost-sharing payment in 2011 in connection with collaboration activities and has no further obligations to us. Though the termination will affect our future costs of development for ongoing cardiovascular programs, such as AMI, it significantly improves our ability to explore cardiovascular and more comprehensive collaborative development and commercialization arrangements with other pharmaceutical, biotechnology and medical products companies. In the case of a new AMI collaboration, Angiotech will be entitled to a future payment from us equal to a percentage of cash license fee payments we receive within the first six months from a third-party related to such AMI collaboration, and is not entitled to other downstream payments, such as milestone payments, royalties or any profit-sharing payments. The future payment, if any, will be either (i) 25% of third-party license fees if an AMI collaboration is established prior to the initiation of enrollment in a Phase II AMI clinical trial and within 12 months of the termination agreement, (ii) 15% of third-party license fees if an AMI collaboration is established after the initiation of enrollment in a Phase II AMI clinical trial, but before we have spent \$5.0 million on the clinical trial, and within 24 months of the termination agreement, or (iii) 10% of third-party license fees up to a maximum of \$5.0 million to Angiotech if an AMI collaboration is established after the initiation of enrollment in a Phase II AMI clinical trial, and after we have spent \$5.0 million on the clinical trial, and within 36 months of the termination agreement.

#### **Bristol-Myers Squibb**

In 2000, we entered into a collaboration with Bristol-Myers Squibb to provide cell lines expressing well validated drug targets produced using our RAGE technology for compound screening and development. This initial collaboration was expanded in 2002 and again in 2006, and was in its final phase as amended in 2009. Bristol-Myers Squibb uses the cell lines in its internal drug development programs and, in exchange, we receive license fee and milestone payments and will be entitled to receive royalties on the sale of any approved products. Depending on the use of a cell line by Bristol-Myers Squibb and the progress of drug development programs benefiting from the use of such a cell line, we may receive as much as approximately \$5.5 million per cell line in additional license fees and milestone payments, though we cannot assure you that any further milestones will be achieved or that we will receive any additional milestone payments. In 2008, Bristol-Myers Squibb successfully advanced into Phase II clinical development a drug candidate discovered using a target provided by us, thereby triggering a clinical development milestone payment to us.

We remain entitled to receive license fees for targets that were delivered to Bristol-Myers Squibb under our completed collaboration, as well as milestone payments and royalties on compounds developed by Bristol-Myers Squibb using our technology, though there can be no assurance that we will achieve any such milestones or royalties. As of June 30, 2012, we received an aggregate amount of \$1.7 million in milestone payments and \$9.6 million in license fees since the inception of our collaboration with Bristol-Myers Squibb.

The Bristol-Myers Squibb collaboration does not have a specific termination date, but will terminate when Bristol-Myers Squibb no longer has an obligation to pay us royalties, which obligation generally continues until the later of the expiration of the Bristol-Myers Squibb patent covering an approved product and ten years after commercial sales of that product began. Though we expect Bristol-Myers Squibb to file for and be issued patents for products developed under the collaboration, we are not aware of any patents issued to Bristol-Myers Squibb covering any potential products related to the collaboration. If either party breaches its material obligations and fails to cure that breach within 60 days after notice from the non-breaching party, the non-breaching party may terminate the collaboration.

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#### Competition

We face significant competition with respect to the various dimensions of our business. With regard to our efforts to develop MultiStem as a novel stem cell therapy, currently, there are a number of companies that are actively developing stem cell products, which encompass a range of different cell types, including embryonic stem cells, umbilical cord stem cells, adult-derived stem cells and processed bone marrow derived cells.

Osiris is currently engaged in Phase II and Phase III clinical trials involving Prochymal, an allogeneic stem cell product based on mesenchymal stem cells, or MSCs, that are obtained from healthy consenting donors, and are administered without tissue matching. However, in contrast to MultiStem, MSCs display greater donor to donor variability, limited expansion potential, and limited biological plasticity. In November 2008, Osiris announced a partnership in which Genzyme acquired development rights to Prochymal and Chondrogen for certain markets outside the United States and Canada in exchange for \$130 million in license fees, up to \$1.25 billion in clinical and sales milestones, and royalties. In February 2011, Sanofi acquired Genzyme, and in October 2012, Sanofi announced that the partnership had been terminated, and Osiris had regained commercial development rights to Prochymal and Chondrogen.

Mesoblast is currently engaged in clinical trials evaluating the safety and efficacy of Revascor, an allogeneic stem cell product based on mesenchymal stem cell precursors that are obtained from healthy consenting donors. These cells also appear to display limited expansion potential and biological plasticity. In December 2010, Mesoblast announced a partnership with Cephalon, Inc., or Cephalon, in which Cephalon paid an upfront license fee of \$130 million, and agreed to invest an additional \$220 million in equity for a 19.9% stake in Mesoblast. In addition, total regulatory milestone payments to Mesoblast could reach \$1.7 billion, assuming that the agreement results in commercial treatments for conditions including congestive heart failure, AMI, Parkinson s disease and Alzheimer s disease. In October 2011, Teva Pharmaceuticals announced that it had acquired Cephalon.

Other public companies are developing stem-related therapies, including Aastrom Biosciences, Stem Cells Inc., Johnson & Johnson, Celgene, Advanced Cell Technology, Inc., CRYO-CELL International, Inc., Pluristem and Cytori. In addition, private companies, such as Gamida Cell Ltd., Plureon Corporation, NeoStem, Inc., Tigenix NV and others, are also developing cell therapy related products or capabilities. Given the magnitude of the potential opportunity for stem cell therapy, we expect competition in this area to intensify in the coming years.

We also face competition in our efforts to develop compounds for the treatment of obesity. Recently, two new treatments were approved by the FDA for the treatment of obesity, Belviq (Lorcaserin), which was developed by Arena Pharmaceuticals, and Qsymia (a proprietary combination of phentermine and topiramate), which was developed by Vivus. Prior to these recent approvals, there was one approved therapeutic product on the market for obesity, Xenical (also known as Alli), which is marketed by Roche. Potential side effects associated with taking Xenical / Alli include cramping, intestinal discomfort, flatulence, diarrhea, and leakage of oily stool. Another obesity drug, Meridia, was approved for clinical use and marketed by Abbott Pharmaceuticals, but was withdrawn from the market due to concerns regarding increased risk of cardiovascular disease and stroke among patients taking the drug.

There are many other companies that have previously attempted or are attempting to develop novel treatments for obesity, and a wide range of approaches are being taken. Some of these companies include large, multinational pharmaceutical companies such as Bristol-Myers Squibb, Merck & Co., Inc., Roche, Sanofi, GlaxoSmithKline, Eli Lilly and Company and others. There are also a variety of biotechnology companies developing treatments for obesity, including Orexigen Therapeutics, Neurosearch, Amgen Inc., or Amgen, Regeneron Pharmaceuticals, Inc., Nastech Pharmaceutical Company, Alizyme plc, Amylin Pharmaceuticals, Inc., Neurocrine Biosciences, Inc., Shionogi & Co., Ltd., Metabolic Pharmaceuticals Limited, Kyorin Pharmaceutical Co., Ltd., and others. It is likely that, given the

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magnitude of the market opportunity, many companies will continue to focus on the obesity area, and that competition will remain high. If we are successful at developing a 5HT2c agonist as a safe and effective treatment for obesity, it is likely that other companies will attempt to develop safer and more effective compounds in the same class, or will attempt to combine therapies in an effort to establish a safer and more effective therapeutic product.

We believe our most significant competitors are fully integrated pharmaceutical companies and biotechnology companies that have substantially greater financial, technical, sales, marketing, and human resources than we do. These companies may succeed in obtaining regulatory approval for competitive products more rapidly than we can for our products. In addition, our competitors may develop technologies and products that are cheaper, safer or more effective than those being developed by us or that would render our technology obsolete. Furthermore, some of these companies may feel threatened by our activities and attempt to delay or impede our efforts to develop our products or apply our technologies.

### **Intellectual Property**

We rely on a combination of patent applications, patents, trademarks, and contractual provisions to protect our proprietary rights. We believe that to have a competitive advantage, we must develop and maintain the proprietary aspects of our technologies. Currently, we require our officers, employees, consultants, contractors, manufacturers, outside scientific collaborators and sponsored researchers, and other advisors to execute confidentiality agreements in connection with their employment, consulting, or advisory relationships with us, where appropriate. We also require our employees, consultants, and advisors who we expect to work on our products to agree to disclose and assign to us all inventions conceived during the work day, developed using our property, or which relate to our business. We currently have an aggregate of 129 patents for our technologies.

We have a broad patent estate with claims directed to compositions, methods of production, and methods of use of certain non-embryonic stem cells and related technologies. We acquired ownership of part of our stem cell technology and intellectual property as a result of our 2003 acquisition of a holding company, which held the rights to the technology originally discovered at the University of Minnesota. We also have an exclusive license to additional MAPC-related inventions (or in other words, improvements) developed by the University of Minnesota through May 2009, and, under a collaborative research agreement with KUL, we have an exclusive license to MAPC-related inventions developed at KUL using the MAPC technology or intellectual property or that result from sponsored research funded by us. We also own and license additional intellectual property develop by us and others. Our broad intellectual property portfolio consists of more than 78 issued patents (of which eleven are United States patents) and more than 183 global patent applications around our stem cell technology and MultiStem product platform. This includes nine United States patents and 39 international patents that apply to MAPC and related products, such as MultiStem. The current intellectual property estate, which incorporates additional filings and may broaden over time, could provide coverage for our stem cell product candidates, manufacturing processes and methods of use through 2030 and beyond. Furthermore, an extended period of market exclusivity may apply for certain products (e.g., exclusivity periods for orphan drug designation or biologics).

We have established a broad intellectual property portfolio related to our functional genomics technologies and small molecule product candidates. We have a broad patent estate with claims directed to compositions, methods of making, and methods of using our small molecule drug candidates. We have six United States patents and two patent applications with broad claims directed to selective 5HT2c agonists discovered at Athersys that currently provide patent coverage through as late as 2029. From our Histamine H3 program, we have six United States patents with broad claims directed to compounds discovered at Athersys from two distinct chemical series that currently provide patent coverage through as late as 2028. In addition, we currently have 35 issued patents (sixteen United States patents and

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nineteen international patents) and three patent applications relating to compositions and methods for the RAGE technology that currently provide patent coverage through as late as 2017, and four United States patents and seven patent applications relating to human proteins and candidate drug targets that we identified through the application of RAGE and our other technologies that currently provide patent coverage through as late as 2022. The RAGE technology was developed by Dr. John Harrington and other Athersys scientists internally in the mid-1990s.

We believe that we have broad freedom to use and commercially develop our technologies and product candidates. However, if successful, a patent infringement suit brought against us may force us or any of our collaborators or licensees to stop or delay developing, manufacturing, or selling potential products that are claimed to infringe a third party s intellectual property, unless that party grants us rights to use its intellectual property. In such cases, we may be required to obtain licenses to patents or proprietary rights of others to continue to commercialize our products. However, we may not be able to obtain any licenses required under any patents or proprietary rights of third parties on acceptable terms, or at all. Even if we were able to obtain rights to the third party s intellectual property, these rights may be non-exclusive, thereby giving our competitors access to the same intellectual property. Ultimately, we may be unable to commercialize some of our potential products or may have to cease some of our business operations as a result of patent infringement claims, which could severely harm our business.

### **Research and Development**

Our research and development costs, which consist primarily of costs associated with external clinical trial costs, preclinical study fees, manufacturing costs, salaries and related personnel costs, legal expenses resulting from intellectual property application processes, and laboratory supply and reagent costs, were \$10.6 million for the six months ended June 30, 2012, \$18.9 million in 2011, \$14.8 million in 2010 and \$11.9 million in 2009.

### **Government Regulation**

Any products we may develop and our research and development activities are subject to stringent government regulation in the United States by the FDA and, in many instances, by corresponding foreign and state regulatory agencies. The European Union, or EU, has vested centralized authority in the European Medicines Agency and Committee on Proprietary Medicinal Products to standardize review and approval across EU member nations.

These regulatory agencies enforce comprehensive statutes, regulations and guidelines governing the drug development process. This process involves several steps. Initially, a company must generate preclinical data to show safety before human testing may be initiated. In the United States, a drug company must submit an IND to the FDA prior to securing authorization for human testing. The IND must contain adequate data on product candidate chemistry, toxicology and metabolism and, where appropriate, animal research testing to support initial safety.

A Clinical Trial Agreement, or CTA, is the European equivalent of the IND. CTA requirements are issued by each competent authority within the European Union and are enacted by local laws and Directives.

Any of our product candidates will require regulatory approval and compliance with regulations made by United States and foreign government agencies prior to commercialization in such countries. The process of obtaining FDA or foreign regulatory agency approval has historically been extremely costly and time consuming. The FDA regulates, among other things, the development, testing, manufacture, safety, efficacy, record keeping, labeling, storage, approval, advertising, promotion, sale, and distribution of biologics and new drugs.

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The standard process required by the FDA before a pharmaceutical agent may be marketed in the United States includes:

preclinical tests in animals that demonstrate a reasonable likelihood of safety and effectiveness in human patients;

submission to the FDA of an IND, which must become effective before clinical trials in humans can commence. If Phase I clinical trials are to be conducted initially outside the United States, a different regulatory filing is required, depending on the location of the trial;

adequate and well controlled human clinical trials to establish the safety and efficacy of the drug or biologic in the intended disease indication;

for drugs, submission of a New Drug Application, or NDA, or a Biologic License Application, or BLA, with the FDA; and

FDA approval of the NDA or BLA before any commercial sale or shipment of the drug. Preclinical studies can take several years to complete, and there is no guarantee that an IND based on those studies will become effective to permit clinical trials to begin. The clinical development phase generally takes five to seven years, or longer, to complete (i.e., from the initiation of Phase I through completion of Phase III studies). After successful completion of clinical trials for a new drug or biologic product, FDA approval of the NDA or BLA must be obtained. This process requires substantial time and effort and there is no assurance that the FDA will accept the NDA or BLA for filing and, even if filed, that the FDA will grant approval. In the past, the FDA s approval of an NDA or BLA has taken, on average, one to two years, but in some instances may take substantially longer. If questions regarding safety or efficacy arise, additional studies may be required, followed by a resubmission of the NDA or BLA. Review and approval of an NDA or BLA can take up to several years.

In addition to obtaining FDA approval for each product, each drug manufacturing facility must be inspected and approved by the FDA. All manufacturing establishments are subject to inspections by the FDA and by other federal, state, and local agencies, and must comply with good manufacturing practices, or GMP, requirements. We do not currently have any GMP manufacturing capabilities, and will rely on contract manufacturers to produce material for any clinical trials that we may conduct.

We must also obtain regulatory approval in other countries in which we intend to market any drug. The requirements governing conduct of clinical trials, product licensing, pricing, and reimbursement vary widely from country to country. FDA approval does not ensure regulatory approval in other countries. The current approval process varies from country to country, and the time spent in gaining approval varies from that required for FDA approval. In some countries, the sale price of the drug must also be approved. The pricing review period often begins after market approval is granted. Even if a foreign regulatory authority approves a drug product, it may not approve satisfactory prices for the product.

In addition to regulations enforced by the FDA, we are also subject to regulation under the Occupational Safety and Health Act, the Environmental Protection Act, the Toxic Substances Control Act, the Resource Conservation and Recovery Act, and other present and potential future federal, state, or local regulations. Our research and development involves the controlled use of hazardous materials, chemicals, biological materials, and various radioactive compounds. Although we believe that our safety procedures for handling and disposing of such materials currently comply in all material respects with the standards prescribed by state and federal regulations, the risk of accidental contamination or injury from these materials cannot be completely eliminated. In the event of such an accident, we could be held liable for any damages that result and any such liability could exceed our available

resources.

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#### **Employees**

We believe that our success will be based on, among other things, the quality of our clinical programs, our ability to invent and develop superior and innovative technologies and products, and our ability to attract and retain capable management and other personnel. We have assembled a high quality team of scientists, clinical development managers, and executives with significant experience in the biotechnology and pharmaceutical industries.

As of September 30, 2012, we employed 48 employees, 17 with Ph.D. degrees. In addition to our employees, we also use the service and support of outside consultants and advisors. None of our employees is represented by a union, and we believe relationships with our employees are good.

#### **Legal Proceedings**

From time to time, we may become subject to various legal proceedings that are incidental to the ordinary conduct of our business. Currently, there are no such proceedings.

#### **Properties**

Our principal offices are located at 3201 Carnegie Avenue in Cleveland, Ohio. We currently lease approximately 45,000 square feet of space for our corporate offices and laboratories, with state-of-the-art laboratory space. The lease began in 2000 and currently expires in March 2013, and we expect to extend the lease option periods. Our rent is \$267,000 per year and our rental rate has not changed since the lease inception in 2000. Also, we currently lease office and laboratory space for our Belgian subsidiary. The lease currently expires on December 31, 2012, and we have an option to renew annually through December 2014. The annual rent in Belgium is subject to adjustments based on an inflationary index. Our annual rent in Belgium was \$93,000 in 2011.

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#### MANAGEMENT

#### **Executive Officers and Directors**

The following table sets forth certain information regarding our executive officers and directors as of September 30, 2012:

Name	Age	Position
Gil Van Bokkelen, Ph.D.	51	Chief Executive Officer and Chairman
William (BJ) Lehmann, Jr., J.D.	46	President and Chief Operating Officer
John J. Harrington, Ph.D.	45	Chief Scientific Officer, Executive Vice President and
		Director
Robert J. Deans, Ph.D.	61	Executive Vice President, Regenerative Medicine
Laura K. Campbell, CPA	48	Vice President of Finance
Lee E. Babiss	56	Director
Ismail Kola	55	Director
Lorin J. Randall	68	Director
Kenneth H. Traub	51	Director
Jack L. Wyszomierski	56	Director

Dr. Van Bokkelen co-founded Athersys in October 1995 and has served as our Chief Executive Officer and Chairman since August 2000. Dr. Van Bokkelen served as Chief Executive Officer and Director since Athersys founding. Prior to May 2006, he also served as Athersys President. Dr. Van Bokkelen is the current Chairman of the Alliance for Regenerative Medicine, a Washington D.C. based consortium of companies, patient advocacy groups, disease foundations, and clinical and research institutions that are committed to the advancement of the field of regenerative medicine. He is also the Chairman of the Board of Governors for the National Center for Regenerative Medicine, and has served on a number of other boards, including the Biotechnology Industry Organization s ECS board of directors (from 2001 to 2004, and from 2008 to present). He received his Ph.D. in Genetics from Stanford University, his B.A. in Economics from the University of California at Berkeley, and his B.A. in Molecular Biology from the University of California at Berkeley. Dr. Van Bokkelen brings to the Board leadership, extensive business, operating, financial and scientific experience, and tremendous knowledge of our Company and the biopharmaceutical industry. Dr. Van Bokkelen also brings his broad strategic vision for our Company to the Board of Directors and his service as the Chairman and CEO of Athersys creates a critical link between management and the Board, enabling the Board to perform its oversight function with the benefit of management s perspectives on the business. In addition, having the CEO, and Dr. Van Bokkelen, in particular, on our Board of Directors provides our Company with ethical, decisive and effective leadership.

Mr. Lehmann joined Athersys in September 2001 and has served as our President and Chief Operating Officer since June 2006. Prior to that time, Mr. Lehmann was Athersys Executive Vice President of Corporate Development and Finance from August 2002 until June 2006, when he became Athersys President and Chief Operating Officer. From 1994 to 2001, Mr. Lehmann was with McKinsey & Company, Inc., an international management consulting firm, where he worked extensively with new technology and service-based businesses in the firm s Business Building practice. Prior to joining McKinsey, he worked at Wilson, Sonsini, Goodrich & Rosati, a Silicon Valley law firm, and worked with First Chicago Corporation, a financial institution. Mr. Lehmann received his J.D. from Stanford University, his M.B.A. from the University of Chicago, and his B.A. from the University of Notre Dame.

*Dr. Harrington* co-founded Athersys in October 1995 and has served as our Chief Scientific Officer, Executive Vice President and Director since our founding. Dr. Harrington led the development of the RAGE technology as well as its application for gene discovery, drug discovery and commercial protein

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production applications. He is a listed inventor on over 20 issued or pending United States patents, has authored numerous scientific publications, and has received numerous awards for his work, including being named one of the top international young scientists by MIT Technology Review in 2002. Dr. Harrington has overseen the therapeutic product development programs at Athersys since their inception, and during his career, he has also held positions at Amgen and Scripps Clinic. He received his B.A. in Biochemistry and Cell Biology from the University of California at San Diego and his Ph.D. in Cancer Biology from Stanford University. Dr. Harrington s scientific experience and deep understanding of our Company, combined with his drive for innovation and excellence, position him well to serve on the Board of Directors.

*Dr. Deans* joined Athersys in February 2003 to lead the Company s regenerative medicine research and development activities and has served as our Executive Vice President since June 2011. Prior to that time, Dr. Deans was Vice President of Regenerative Medicine, until he was named Senior Vice President of Regenerative Medicine in June 2006, and Executive Vice President in June 2011. Dr. Deans is highly regarded as an expert in stem cell therapeutics, with over twenty years of experience in this field. From 2001 to 2003, Dr. Deans worked for early-stage biotechnology companies. Dr. Deans was formerly the Vice President of Research at Osiris, a biotechnology company, from 1998 to 2001 and Director of Research and Development with the Immunotherapy Division of Baxter International, Inc., a global healthcare company, from 1992 to 1998. Dr. Deans was also previously on faculty at USC Medical School in Los Angeles, between 1981 and 1998, in the departments of Microbiology and Neurology at the Norris Comprehensive Cancer Center. Dr. Deans was an undergraduate at MIT, received his Ph.D. at the University of Michigan, and did his post-doctoral work at UCLA in Los Angeles.

Ms. Campbell joined Athersys in January 1998 and has served as our Vice President of Finance since June 2006. Ms. Campbell joined Athersys initially as Controller, followed by Director of Finance and Senior Director of Finance, and has served as Vice President of Finance since June 2006. Prior to joining Athersys, she was at Ernst & Young LLP, a public accounting firm, for 11 years, in the firm s audit practice. During her tenure with Ernst & Young LLP, Ms. Campbell specialized in entrepreneurial services and the biotechnology industry sector and participated in several initial public offerings. Ms. Campbell received her B.S., with distinction, in Business Administration from The Ohio State University.

*Dr. Babiss* has served as our Director since August 2010. Dr. Babiss is currently Chief Scientific Officer and Executive Vice President of Global Laboratory Services of PPD, Inc., a contract research organization, where he has served since February 2010, providing strategic direction and scientific leadership. Dr. Babiss was formerly President and Director of Global Pharmaceutical Research at Roche in Switzerland, a pharmaceutical company, from 1998 until his appointment at PPD, Inc. Prior to Roche, Dr. Babiss spent seven years with Glaxo, Inc., now GlaxoSmithKline, a pharmaceutical company, where he held senior positions, including Vice President of Biological Sciences and Genetics. Dr. Babiss received his doctorate in Microbiology from Columbia University and completed his postdoctoral fellowship at the Rockefeller University, where he served as an assistant and associate professor. Dr. Babiss has received numerous fellowship awards and grants and serves on several scientific advisory committees. Dr. Babiss has authored over 60 technical publications in scientific and medical journals. Dr. Babiss brings over 20 years of experience developing and leading research and development programs. His strategic leadership and product development knowledge provide a valuable perspective to the Board.

*Dr. Kola* has served as a Director since October 2010. Dr. Kola serves as Executive Vice President of UCB S.A. in Belgium, a biopharmaceutical company dedicated to the development of innovative medicines focused on the fields of central nervous system and immunology disorders, and President of UCB New Medicines, UCB s discovery research through proof-of-concept organization, since November 2009. Dr. Kola was formerly Senior Vice President, Discovery Research and Early Clinical Research & Experimental Medicine at Schering-Plough Research Institute, the pharmaceutical research arm of

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Schering-Plough Corporation, and Chief Scientific Officer at Schering-Plough Corporation, a pharmaceutical company, from March 2007 until his appointment at UCB. Prior to Schering-Plough, Dr. Kola held senior positions from January 2003 to March 2007 at Merck, a pharmaceutical company, where he was Senior Vice President and Site Head, Basic Research. From 2000 to 2003, Dr. Kola was Vice President, Research, and Global Head, Genomics Science and Biotechnology, at Pharmacia Corporation. Prior to his position with Pharmacia, Dr. Kola spent 15 years as Professor of Human Molecular Genetics and was Director of the Centre for Functional Genomics and Human Disease at Monash Medical School in Australia. Dr. Kola received his Ph.D. in Medicine from the University of Cape Town, South Africa, his B.Sc. from the University of South Africa, and his B.Pharm. from Rhodes University, South Africa. Dr. Kola currently serves on the boards of directors of Astex Therapeutics (NASDAQ: ASTX) since May 2010, Biotie Therapies (and previously Synosia who merged with Biotie) since February 2011, and previously served on the board of directors of Ondek Pty Ltd from 2009 to 2011 and Promega Corporation from 2003 to 2007. Dr. Kola has authored 160 technical publications in scientific and medical journals and is the named inventor on at least a dozen patents. Dr. Kola holds Adjunct Professorships of Medicine at Washington University in St. Louis, Missouri, and Monash University Medical School; a Foreign Adjunct Professorship at the Karolinska Institute in Stockholm, Sweden; and was elected William Pitt Fellow at Pembroke College, Cambridge University, United Kingdom in 2008. Dr. Kola has also been appointed a Visiting Professor at Oxford University, Nuffield School of Medicine, Oxford UK since September 2012. For more than 20 years, Dr. Kola has created a bridge between the scientific and academic worlds though various projects funded by renowned institutes, and Dr. Kola s experience and leadership in taking numerous drugs from the research stage to market or late stage development brings a unique and valuable perspective to our Board.

Mr. Randall has served as a Director since September 2007. Mr. Randall is an independent financial consultant and previously was Senior Vice President and Chief Financial Officer of Eximias Pharmaceutical Corporation, a development-stage drug development company, from 2004 to 2006. From 2002 to 2004, Mr. Randall served as Senior Vice President and Chief Financial Officer of i-STAT Corporation, a publicly-traded manufacturer of medical diagnostic devices that was acquired by Abbott Laboratories in 2004. From 1995 to 2001, Mr. Randall was Vice President and Chief Financial Officer of CFM Technologies, Inc., a publicly-traded manufacturer of semiconductor manufacturing equipment. Mr. Randall currently serves on the boards of directors of Acorda Therapeutics, Inc. (NASDAQ: ACOR) since 2006, where he serves as chairman of the audit committee and is a member of the compensation and nominations and governance committees, Nanosphere, Inc. (NASDAQ: NSPH) since 2008, where he serves as chairman of the audit committee, and Tengion, Inc. (OTCQB: TNGN) since 2008, where he serves as chairman of the audit committee and a member of the compensation committee. He previously served on the board of directors of Opexa Therapeutics, Inc. (NASDAQ: OPXA) from 2007 to 2009, where he served as chair of the audit committee. Mr. Randall received a B.S. in accounting from The Pennsylvania State University and an M.B.A. from Northeastern University. Mr. Randall s strong financial and human resources background and his service on the audit and compensation committees of other companies provides expertise to the Board, including an understanding of financial statements, compensation policies and practices, corporate finance, developing and maintaining effective internal controls, accounting, employee benefits, investments and capital markets. These qualities also formed the basis for the Board s decision to appoint Mr. Randall as chairman of the Audit Committee and the Compensation Committee.

*Mr. Traub* has served as a Director since June 2012. Mr. Traub has been the President and Chief Executive Officer of Ethos Management LLC, a private consulting and investment firm since 2009. Mr. Traub served as President, Chief Executive Officer and a director of American Bank Note Holographics, Inc., or ABNH, a global leader in product and document security, from 1999 until its sale in 2008 to JDS Uniphase Corporation, or JDSU, a provider of optical products and measurement solutions for the communications industry. Mr. Traub managed the rebuilding, growth and sale of ABNH. Following the sale of ABNH, Mr. Traub served as vice president of JDSU in 2008. In 1994,

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Mr. Traub co-founded Voxware, Inc., a pioneer in Voice over IP, and acted as its Executive Vice President, Chief Financial Officer and director until January 1998. Prior to Voxware, he was Vice President of Finance of Trans-Resources, Inc. Mr. Traub currently serves on the boards of the following publicly traded companies: MRV Communications, Inc. (OTC: MRVC) since November 2011 and as Chairman since January 2012 where he is a member of the Audit Committee, Compensation Committee and Nominating and Governance Committee; iPass Inc. (NASDAQ: IPAS) since June 2009, where he is a member of the Compensation Committee and Corporate Governance and Nominating Committee; DSP Group, Inc. (NASDAQ: DSPG) since May 2012; and MIPS Technologies, Inc. (NASDAQ: MIPS) since December 2011 where he is a member of the Audit Committee. Mr. Traub also served on the board of Phoenix Technologies Ltd. (NASDAQ: PTEC) from November 2009 through its sale in December 2010, where he was a member of the Audit Committee and Compensation Committee. Mr. Traub received a Master s in Business Administration from Harvard Business School in 1988 and a Bachelor of Arts degree from Emory University in 1983. As a director for Athersys, Mr. Traub contributes his extensive experience and expertise in managing and growing companies to maximize shareholder value.

Mr. Wyszomierski has served as a Director since June 2010 and is currently retired. From 2004 until his retirement in June 2009, Mr. Wyszomierski served as the Executive Vice President and Chief Financial Officer of VWR International, LLC, a supplier and distributor of laboratory supplies, equipment and supply chain solutions to the global research laboratory industry. From 1982 to 2004, Mr. Wyszomierski held positions of increasing responsibility within the finance group at Schering-Plough Corporation, a pharmaceutical company, culminating with his appointment as Executive Vice President and Chief Financial Officer in 1996. Prior to joining Schering-Plough, he was responsible for capitalization planning at Joy Manufacturing Company, a producer of mining equipment, and was a management consultant at Data Resources, Inc., a distributor of economic data. Mr. Wyszomierski currently serves on the board of directors of Xoma Corporation (NASDAQ: XOMA) since 2010, where he serves as chairman of the compensation committee and as a member of the audit committee, Unigene Laboratories, Inc. (OTC:UGNE) since 2012, where he serves as chairman of the audit committee, and Exelixis, Inc. (NASDAQ: EXEL) since 2004, where he serves as chairman of the audit committee. Mr. Wyszomierski holds a M.S. in Industrial Administration and a B.S. in Administration, Management Science and Economics from Carnegie Mellon University. Mr. Wyszomierski s extensive financial reporting, accounting and finance experience and his service on the audit committees of other public companies, as well as his experience in the healthcare and life sciences industries, provides financial expertise to the Board, including an understanding of financial statements, corporate finance, developing and maintaining effective internal controls, accounting, investments and capital markets.

#### **Director Independence**

The Board reviews the independence of each Director at least annually. During these reviews, the Board will consider transactions and relationships between each Director (and his or her immediate family and affiliates) and the Company and our management to determine whether any such transactions or relationships are inconsistent with a determination that the Director was independent. The Board conducted its annual review of Director independence to determine if any transactions or relationships exist that would disqualify any of the individuals who serve as a Director under the rules of The NASDAQ Capital Market or require disclosure under Securities and Exchange Commission, or SEC, rules. Based upon the foregoing review, the Board determined the following individuals are independent under the rules of The NASDAQ Capital Market: Lee E. Babiss, Ismail Kola, Lorin J. Randall, Kenneth H. Traub and Jack L. Wyszomierski. In making this determination with respect to Dr. Babiss, the Board determined that the provision of certain contract research services to the Company by PPD, Inc., of which Dr. Babiss serves as an executive officer, did not create a material relationship or impair the independence of Dr. Babiss because Dr. Babiss receives no material direct or indirect benefit from such transactions, which were undertaken in the ordinary course of business. Currently, we have two members of management who also serve on the Board: Dr. Van Bokkelen, who is also our Chairman and

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Chief Executive Officer, and Dr. Harrington, who is our Executive Vice President and Chief Scientific Officer. Neither Dr. Van Bokkelen nor Dr. Harrington is considered independent under the independence rules of The NASDAQ Capital Market.

### **Compensation Discussion and Analysis**

#### **Executive Summary**

This section discusses the principles underlying our executive compensation policies and decisions and the most important factors relevant to an analysis of these policies and decisions. It provides qualitative information regarding the manner and context in which compensation is awarded to and earned by our named executive officers, which include Dr. Gil Van Bokkelen, our Chief Executive Officer, Ms. Laura Campbell, our Vice President of Finance, Mr. William (B.J.) Lehmann, Jr., our President and Chief Operating Officer, Dr. John Harrington, our Executive Vice President and Chief Scientific Officer, and Dr. Robert Deans, our Executive Vice President of Regenerative Medicine, and places in perspective the data presented in the compensation tables and narratives that follow.

We are an international biotechnology company that is focused in the field of regenerative medicine. We are committed to the discovery and development of best-in-class therapies designed to extend and enhance the quality of human life, and we have established a portfolio of therapeutic product development programs to address significant unmet medical needs in multiple disease areas. As further discussed in this section, our compensation and benefit programs help us attract, retain and motivate individuals who will maximize our business results by working to meet or exceed established company or individual objectives. In addition, we reward our executive officers for meeting certain developmental milestones, such as completing advancements in product candidate development, strategic partnerships or other financial transactions that add to our capital resources or create value for stockholders.

The following are the highlights of our 2011 compensation and benefit programs:

increased the base salaries of our named executive officers; and

made awards of cash bonuses to our named executive officers.

The following discussion and analysis of our compensation and benefit programs for 2011 should be read together with the compensation tables and related disclosures that follow this section. This discussion includes forward-looking statements based on our current plans, considerations, expectations and determinations about our compensation program. Actual compensation decisions that we may make for 2012 and beyond may differ materially from our recent past.

#### Compensation Objectives and Philosophy

Our compensation programs are designed to:

recruit, retain, and motivate executives and employees that can help us achieve our core business goals;

provide incentives to promote and reward superior performance throughout the organization;

facilitate stock ownership and retention by our executives and other employees; and

promote alignment between executives and other employees and the long-term interests of stockholders.

The Compensation Committee seeks to achieve these objectives by:

establishing a compensation program that is market competitive and internally fair;

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linking performance with certain elements of compensation through the use of equity grants, cash performance bonuses or other means of compensation, the value of which is substantially tied to the achievement of company goals; and

when appropriate, given the nature of our business, rewarding our executive officers for both company and individual achievements with discretionary bonuses.

#### Components of Compensation

Our executive compensation program includes the following elements:

Base salary;

Cash bonuses:

Long-term equity incentive plan awards; and

Retirement and health insurance benefits.

Our Compensation Committee has not adopted any formal or informal policies or guidelines for allocating compensation between long-term and currently paid-out compensation, between cash and non-cash compensation or among different forms of non-cash compensation. We consider competitive practices, relative management level and operating responsibilities of each executive officer when determining the compensation elements to reward his or her ability to impact short-term and long-term results.

## Role of the Chief Executive Officer

Historically, our Chief Executive Officer has taken the lead in providing our Board of Directors with advice regarding executive compensation. For 2011, the Compensation Committee considered recommendations from our Chief Executive Officer regarding the compensation for and performance of our executive officers in relation to company-specific strategic goals that were established by the Compensation Committee and approved by the Board of Directors related to potential bonus payments and salary adjustments. The Compensation Committee considers the recommendations made by our Chief Executive Officer because of his knowledge of the business and the performance of the other executive officers. The Compensation Committee is not bound by the input it receives from our Chief Executive Officer. Instead, the Compensation Committee exercises independent discretion when making executive compensation decisions. We describe and discuss the particular compensation decisions made by the Compensation Committee regarding the 2011 compensation of our named executive officers below under Elements of Executive Compensation.

### Elements of Executive Compensation

*Base Salary.* We pay base salaries to attract executive officers and provide a basic level of financial security. We establish base salaries for our executives based on the scope of their responsibilities, taking into account competitive market compensation paid by other companies for similar positions. Base salaries are generally reviewed annually, with adjustments based on the individual s responsibilities, performance and experience during the year. This review generally occurs each year following an annual review of individual performance.

In 2011, the Compensation Committee and the Board of Directors approved that each of the named executive officers be entitled to receive a 3.52% increase in such officer s salary for 2011 as compared to 2010 based primarily on Company performance for the year ending December 31, 2010. Effective April 1, 2011, Dr. Deans salary was further increased to a base of \$300,000 per annum based on his performance.

In 2011, the Compensation Committee and the Board of Directors approved that the Chief Executive Officer will be entitled to receive a 6.30% increase in salary for 2012 as compared to 2011, an adjustment based primarily on competitive information provided to the Compensation Committee by its independent compensation consultant. Also for 2012, the Compensation Committee and the Board of Directors approved that each of the named executive officers be entitled to receive an increase in such officer s salary for 2012 as compared to 2011 based primarily on company performance for the year ended December 31, 2011. The increases are as follows: Mr. Lehmann 3.5%; Dr. Harrington 3.0%; Dr. Deans 2.5% (taking into consideration his salary adjustment in April 2011); and Ms. Campbell 2.75%.

Cash Bonuses. We utilize annual incentive bonuses to reward officers and other employees for achieving financial and operational goals and for achieving individual annual performance objectives. These objectives vary depending on the individual executive and employee, but relate generally to strategic factors, including establishment and maintenance of key strategic relationships, advancement of our product candidates, identification and advancement of additional programs or product candidates, and to financial factors, including raising capital and improving our results of operations.

In 2005, in connection with a restructuring of our internal programs, the Board established an incentive program designed to retain and motivate our executives. The program provided for payments to the executives upon the occurrence of certain business transactions and time-limited financing milestones. The program continues to provide the named executive officers financial participation in the event of certain merger or acquisition or asset sale transactions. In the event of a defined transaction, we would be obligated to make a payment to the named executive officers representing five percent of the consideration received from the transaction, and in the event of a stock-based transaction, the executives would receive fifty percent of any payments due to them in stock. There were no payments under this program in 2011.

In addition, given the nature of our business, when appropriate, we reward our executive officers with discretionary bonuses. Discretionary bonuses were paid to our named executive officers in 2012, for the year ended December 31, 2011, as described in the following paragraph.

The Compensation Committee recommended and the Board approved a cash bonus incentive program for the year ended December 31, 2011 for our named executive officers. Under the 2011 incentive program, each participant is eligible to earn a target bonus of a specified percentage of the named executive officer s salary during the award term, weighted on the achievement of specific corporate goals, with the remainder based on individual/functional performance, as set forth below:

		Weighted on		
	Target Bonus	<b>Corporate Goals</b>	<b>Functional Performance</b>	
Dr. Van Bokkelen	40%	100%	0%	
Dr. Harrington	33%	80%	20%	
Mr. Lehmann	33%	80%	20%	
Dr. Deans	30%	60%	40%	
Ms. Campbell	25%	60%	40%	

The evaluation of goal achievement is at the discretion of the Compensation Committee of the Board of Directors based on input from the Chief Executive Officer (with respect to the named executive officers other than the Chief Executive Officer, whose bonus potential is based 100% on achievement of specified corporate goals). The 2011 corporate goals included progress on MultiStem clinical development, execution against the established budget and operating plan, and achievement of one or more strategic partnerships. However, any bonus ultimately paid under the 2011 incentive program is at the discretion of the Board of Directors based on the recommendation of the Compensation Committee, after good faith consideration of executive officer performance, overall company performance, market

conditions and cash availability. There was no formally adopted plan document for the 2011 incentive program, although the Compensation Committee recommended and the Board of Directors approved the specific corporate goals, target bonus levels and weightings between corporate and functional performance. The Compensation Committee and the Board of Directors agreed that each of our named executive officers would be entitled to a bonus under the 2011 incentive program as a result of individual performance and the achievement of operational and strategic objectives in 2011, specifically the achievement of patient enrollment goals for the Company s clinical trials and other program development goals, resulting in the payment of bonuses based on a percentage of such officers 2011 base salaries as follows:

	Bonus Achieved	Cash l	Bonus Paid
Dr. Van Bokkelen	9.9%	\$	40,000
Dr. Harrington	7.8%	\$	27,000
Mr. Lehmann	7.8%	\$	27,000
Dr. Deans	8.1%	\$	24,300
Ms. Campbell	6.8%	\$	15,300

For the year ending December 31, 2012, the Compensation Committee recommended and the Board of Directors approved a similar cash bonus incentive plan for our named executive officers. The 2012 plan has no change to the target bonus percentage or the functional performance weightings for our named executive officers. The 2012 corporate goals include advancing and achieving enrollment goals for our clinical programs for MultiStem, executing against the established operating plan and capital acquisition objectives, and advancement of strategic partnership and program activities.

Long-Term Incentive Program. We believe that we can encourage superior long-term performance by our executive officers and employees through encouraging them to own, and assisting them with the acquisition of, our common stock. Our equity compensation plans provide our employees, including named executive officers, with incentives to help align their interests with the interests of our stockholders. We believe that the use of common stock and stock-based awards offers the best approach to achieving our objective of fostering a culture of ownership, which we believe will, in turn, motivate our named executive officers to create and enhance stockholder value. We have not adopted stock ownership guidelines, but our equity compensation plans provide a principal method for our executive officers to acquire equity in our Company.

Our equity compensation plans authorize us to grant, among other types of awards, options, restricted stock and restricted stock units to our employees, Directors and consultants. Historically, we elected to use stock options as our primary long-term equity incentive vehicle. To date, we have not granted any restricted stock or restricted stock units under our equity compensation plans to our named executive officers or Directors. However, in 2011, we granted restricted stock units to our other employees. We expect to continue to use equity-based awards as a long-term incentive vehicle because we believe:

equity-based awards align the interests of our executives with those of our stockholders, support a pay-for-performance culture, foster an employee stock ownership culture and focus the management team on increasing value for our stockholders;

the value of equity-based awards is based on our performance, because all the value received by the recipient of equity-based awards is based on the growth of our stock price;

equity-based awards help to provide a balance to the overall executive compensation program because, while base salary and our discretionary annual bonus program focus on short-term performance, vesting equity-based awards reward increases in stockholder value over the longer term; and

the vesting period of equity-based awards encourages executive retention and efforts to preserve stockholder value.

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In the past, in determining the number of equity-based awards to be granted to executives, we took into account the individual s position, scope of responsibility, ability to affect results and stockholder value, the individual s historic and recent performance and the value of equity-based awards in relation to other elements of the individual executive s total compensation. Currently, awards of equity-based awards are granted from time to time under the guidance and approval of the Compensation Committee and the Board of Directors. The Compensation Committee and the Board of Directors periodically review and approve equity-based awards to executive officers based upon a review of competitive compensation data, an assessment of individual performance, a review of each executive s existing long-term incentives, retention considerations and a subjective determination of the individual s potential to positively impact future stockholder value. No equity-based awards were conferred to our named executive officers in 2011

Retirement and Health Insurance Benefits. Consistent with our compensation philosophy, we maintain benefits for our executive officers, including medical, dental, vision, life and disability insurance coverage and the ability to contribute to a 401(k) retirement plan. The executive officers and employees have the ability to participate in these benefits at the same levels. We began making employer contributions to our 401(k) retirement plan in 2011 and contributed approximately \$88,000 in 2011. We provide such retirement and health insurance benefits to our employees to retain qualified personnel. In addition, Dr. Van Bokkelen, Dr. Harrington, Mr. Lehmann, Dr. Deans and Ms. Campbell also receive company-paid life insurance benefits in the amounts of \$2 million for Dr. Van Bokkelen, Dr. Harrington and Mr. Lehmann, and \$1 million for Dr. Deans and Ms. Campbell. These additional life insurance policies are provided to these officers due to their extensive travel requirements and contributions to our company. We have no current plans to change the level of these benefits provided to our named executive officers.

#### Severance Arrangements

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See the disclosure under Potential Payments Upon Termination or Change of Control for more information about severance arrangements with our named executive officers. We provide such severance arrangements to attract and retain qualified personnel.

## **Employment Agreements and Arrangements**

We believe that entering into employment agreements with each of our named executive officers was necessary for us to attract and retain talented and experienced individuals for our senior level positions. In this way, the employment agreements help us meet the initial objective of our compensation program. Each agreement contains terms and arrangements that we agreed to through arms-length negotiation with our named executive officers. We view these employment agreements as reflecting the minimum level of compensation that our named executive officers require to remain employed with us, and thus the bedrock of our compensation program for our named executive officers. For more details of our employment agreements and arrangements, see the disclosure under 2011 Summary Compensation Table.

The 2005 incentive program for our named executive officers provides substantial equity participation in the event of the sale of the Company or substantially all of its assets. The Compensation Committee believes that this program coupled with existing, vested stock option holdings provides strong equity incentives to our named executive officers.

## General Tax Deductibility of Executive Compensation

We structure our compensation program to comply with Internal Revenue Code Section 162(m). Under Section 162(m) of the Internal Revenue Code, there is a limitation on tax deductions of any publicly-held corporation for individual compensation to certain executives of such corporation exceeding \$1.0 million in any taxable year, unless the compensation is performance-based. The Compensation Committee

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manages our incentive programs to qualify for the performance-based exemption; however, it also reserves the right to provide compensation that does not meet the exemption criteria if, in its sole discretion, it determines that doing so advances our business objectives.

## 2011 Summary Compensation Table

The following table and narrative set forth certain information with respect to the compensation earned during the fiscal year ended December 31, 2011 by our named executive officers.

			Bonus	Option Awards		All Other	
Name and Principal Position (a)	Year (b)	<b>Salary</b> (\$) (c)	(\$) (d)	(\$) <sup>(1)</sup> (f)	C	Compensation (\$) (i)	Total (j)
Gil Van Bokkelen,	2011	\$ 404,500	\$ 40,000	\$ (	) :	\$ 12,620	\$ 457,120
Chief Executive	2010	\$ 390,741	\$ 52,750	\$ (	) :	\$ 9,620	\$ 453,111
Officer <sup>(2)</sup>	2009	\$ 383,079	\$ 76,616	\$ 98,250	) :	\$ 5,000	\$ 562,945
Laura Campbell,	2011	\$ 225,365	\$ 15,300	\$ (	) :	\$ 5,109	\$ 245,774
Vice President	2010	\$ 217,699	\$ 29,389	\$ (	) :	\$ 2,109	\$ 249,197
of Finance	2009	\$ 213,430	\$ 42,686	\$ 68,775	5 5	\$ 0	\$ 324,891
William (BJ) Lehmann, Jr.,	2011	\$ 346,714	\$ 27,000	\$ (	) :	\$ 4,673	\$ 378,387
President and	2010	\$ 334,921	\$ 45,214	\$ (	) :	\$ 1,673	\$ 381,808
Chief Operating Officer	2009	\$ 328,354	\$ 65,671	\$ 88,425	5 5	\$ 1,000	\$ 483,450
John Harrington,	2011	\$ 346,714	\$ 27,000	\$ (	) :	\$ 4,355	\$ 378,069
Chief Scientific Officer	2010	\$ 334,921	\$ 45,214	\$ (	) :	\$ 1,355	\$ 381,490
and Executive Vice	2009	\$ 328,354	\$ 65,671	\$ 88,425	5 3	\$ 1,000	\$ 483,450
President <sup>(2)</sup>							
Robert Deans,	2011	\$ 292,898	\$ 24,300	\$ (	) :	\$ 5,620	\$ 322,818
Executive Vice President,	2010	\$ 262,355	\$ 35,418	\$ (	) :	\$ 5,620	\$ 303,393
Regenerative Medicine	2009	\$ 257,211	\$ 51,442	\$ 78,600	)	\$ 6,000	\$ 393,253

<sup>(1)</sup> Amounts in column (f) do not necessarily reflect compensation actually received by our named executive officers. The amounts in column (f) reflect the full grant date fair value of the equity awards made during the fiscal year ended December 31, 2009 in accordance with Accounting Standards Codification 718, or ASC 718. Assumptions used in the calculation of these amounts are included in the notes to the audited consolidated financial statements included in the Company s Annual Report on Form 10-K for the fiscal year ended December 31, 2011.

**Employment Agreements and Arrangements** 

<sup>(2)</sup> Drs. Van Bokkelen and Harrington also served as our Directors for 2011, 2010 and 2009, but did not receive any compensation as our Directors.

*Dr. Gil Van Bokkelen.* On December 1, 1998, we entered into a one-year employment agreement, effective April 1, 1998, with Dr. Gil Van Bokkelen, to serve initially as President and Chief Executive Officer. The agreement automatically renews for subsequent one-year terms on April 1 of each year unless either party gives notice of termination at least thirty days before the end of any term. Under the terms of the agreement, Dr. Van Bokkelen was entitled to an initial base salary of \$150,000, which may be increased at the discretion of the Board of Directors, and an annual discretionary incentive bonus of up to 33% of his base salary. His salary for 2012 is \$430,000 and his target annual incentive bonus is 40% of his base salary. Dr. Van Bokkelen also received options to purchase shares of Common Stock upon his employment that were terminated in 2007, and his current stock options are described in the table below. Dr. Van Bokkelen is also entitled to life insurance coverage for the benefit of his family in the amount of at least \$1.0 million (which is \$2.0 million for 2012) and is provided the use of a company automobile for business use. For more information about severance arrangements under the agreement, see the disclosure under Potential Payments Upon Termination or Change of Control. Dr. Van Bokkelen has also entered into a non-competition and confidentiality agreement with us under which, during his employment and for a period of 18 months thereafter, he is restricted from, among other things, competing with us.

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Dr. John J. Harrington. On December 1, 1998, we entered into a one-year employment agreement, effective April 1, 1998, with Dr. John J. Harrington to serve initially as Executive Vice President and Chief Scientific Officer. The agreement automatically renews for subsequent one-year terms on April 1 of each year unless either party gives notice of termination at least thirty days before the end of any term. Under the terms of the agreement, Dr. Harrington was entitled to an initial base salary of \$150,000, which may be increased at the discretion of the Board of Directors, and an annual discretionary incentive bonus of up to 33% of his base salary. His salary for 2012 is \$357,116 and his target annual incentive bonus is 33% of his base salary. Dr. Harrington also received options to purchase shares of Common Stock upon his employment that were terminated in 2007, and his current stock options are described in the table below. Dr. Harrington is also entitled to life insurance coverage for the benefit of his family in the amount of at least \$1.0 million (which is \$2.0 million for 2012). For more information about severance arrangements under the agreement, see the disclosure under Potential Payments Upon Termination or Change of Control. Dr. Harrington has also entered into a non-competition and confidentiality agreement with us under which, during his employment and for a period of 18 months thereafter, he is restricted from, among other things, competing with us.

Laura K. Campbell. On May 22, 1998, we entered into a two-year employment agreement with Laura K. Campbell to serve initially as Controller. The agreement automatically renews for subsequent one-year terms on May 22 of each year unless either party gives notice of termination at least thirty days before the end of any term. Under the terms of the agreement, Ms. Campbell was entitled to an initial base salary of \$70,200, which may be increased at the discretion of the Board of Directors. Her salary for 2012 is \$231,562 and her target annual incentive bonus is 25% of her base salary. Ms. Campbell also received options to purchase shares of Common Stock upon her employment that were terminated in 2007, and her current stock options are described in the table below. For more information about severance arrangements under the agreement, see the disclosure under Potential Payments Upon Termination or Change of Control.

William (B.J.) Lehmann, Jr. On January 1, 2004, we entered into a four-year employment agreement with Mr. Lehmann to serve initially as Executive Vice President of Corporate Development and Finance. The agreement automatically renews for subsequent one-year terms on January 1 of each year unless either party gives notice of termination at least thirty days before the end of any term. Under the terms of the agreement, Mr. Lehmann was entitled to an initial base salary of \$250,000, which may be increased at the discretion of the Board of Directors. His salary for 2012 is \$358,849 and his target annual incentive bonus is 33% of his base salary. Mr. Lehmann also received options to purchase shares of Common Stock upon his employment that were terminated in 2007, and his current stock options are described in the table below. For more information about severance arrangements under the agreement, see the disclosure under Potential Payments Upon Termination or Change of Control. Mr. Lehmann has also entered into a non-competition and confidentiality agreement with us under which, during his employment and for a period of six months thereafter, he is restricted from, among other things, competing with us.

Dr. Robert Deans. On October 3, 2003, we entered into a four-year employment agreement with Dr. Robert Deans to serve initially as Vice President of Regenerative Medicine. The agreement automatically renews for subsequent one-year terms on October 3 of each year unless either party gives notice of termination at least thirty days before the end of any term. Under the terms of the agreement, Dr. Deans was entitled to an initial base salary of \$200,000, which may be increased at the discretion of the Board of Directors, and an annual discretionary incentive bonus of up to 30% of his base salary. His salary for 2012 is \$307,500 and his target annual incentive bonus is 30% of his base salary. Dr. Deans also received options to purchase shares of Common Stock upon his employment that were terminated in 2007, and his current stock options are described in the table below. For more information about severance arrangements under the agreement, see the disclosure under Potential Payments Upon Termination or Change of Control. Dr. Deans has also entered into a non-competition and

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confidentiality agreement with us under which, during his employment and for a period of six months thereafter, he is restricted from, among other things, competing with us.

### **Equity Compensation Plans**

In June 2007, we adopted two equity compensation plans, which authorize the Board of Directors, or a committee thereof, to provide equity-based compensation in the form of stock options, restricted stock, restricted stock units and other stock-based awards, which are used to attract and retain qualified employees, Directors and consultants. Equity awards are granted from time to time under the guidance and approval of the Compensation Committee. Total awards under these plans, as amended, are limited to 5,500,000 shares of common stock.

#### 401(k) Plan

We have a tax-qualified employee savings and retirement plan, also known as a 401(k) plan that covers all of our employees. Under our 401(k) plan, eligible employees may elect to reduce their current compensation by up to the statutorily prescribed annual limit, which was \$16,500 in both 2011 and 2010, and have the amount of the reduction contributed to the 401(k) plan. The trustees of the 401(k) plan, at the direction of each participant, invest the assets of the 401(k) plan in designated investment options. We may make matching or profit-sharing contributions to the 401(k) plan in amounts to be determined by the Board of Directors. We made matching contributions to the 401(k) plan during fiscal 2011 at a maximum rate of fifty cents for every dollar of the first 6% of participant contributions, up to a dollar maximum of \$3,000 per participant, which amounted to approximately \$88,000 in 2011. We did not make any matching or profit-sharing contributions to the 401(k) plan during fiscal 2010 or 2009. The 401(k) plan is intended to qualify under Section 401 of the Internal Revenue Code, so that contributions to the 401(k) plan and income earned on the 401(k) plan contributions are not taxable until withdrawn, and so that any contributions we make will be deductible when made.

#### Outstanding Equity Awards at 2011 Fiscal Year-End

The following table sets forth outstanding options held by our named executive officers at December 31, 2011.

		0	Option Awards	
	Number			
	of	Number of		
	Securities	Securities		
	Underlying	Underlying		
	Unexercised	Unexercised		
	Options	Options	Option	
	(#)	(#)	Exercise	<b>Option Expiration</b>
	Exercisable	Unexercisable	Price	Date
Name (a)	<b>(b)</b>	(c)	(\$)(e)	<b>(f)</b>
Gil Van Bokkelen	712,500	0	\$ 5.00	June 8, 2017 <sup>(1)</sup>
	25,000	0	\$ 5.28	December 23, 2019 <sup>(2)</sup>
Laura Campbell	200,000	0	\$ 5.00	June 8, 2017 <sup>(1)</sup>
	17,500	0	\$ 5.28	December 23, 2019 <sup>(2)</sup>
William (BJ) Lehmann, Jr.	400,000	0	\$ 5.00	June 8, 2017 <sup>(1)</sup>
	22,500	0	\$ 5.28	December 23, 2019 <sup>(2)</sup>
John Harrington	700,000	0	\$ 5.00	June 8, 2017 <sup>(1)</sup>
	22,500	0	\$ 5.28	December 23, 2019 <sup>(2)</sup>
Robert Deans	240,000	0	\$ 5.00	June 8, 2017 <sup>(1)</sup>
	20,000	0	\$ 5.28	December 23, 2019 <sup>(2)</sup>

(1)

These options were granted on June 8, 2007, vested at a rate of 40% on the grant date and vested 20% in each of the three years thereafter (on a quarterly basis), and were fully exercisable on June 8, 2010.

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(2) These options were granted on December 23, 2009, vested at a rate of 25% per quarter and were fully exercisable on December 24, 2010.

#### 2011 Options Exercised and Stock Vested

None of our named executive officers exercised any stock options during 2011. As of December 31, 2011, our named executive officers did not have any other stock awards other than options.

#### Potential Payments Upon Termination or Change in Control

Under their employment agreements, the named executive officers may be entitled to certain potential payments upon termination. In the event that an executive officer is terminated without cause or terminates employment for good reason, as defined in the agreements, we would be obligated to pay full base salary and other benefits for a defined period, subject to mitigation related to other employment. For Dr. Gil Van Bokkelen and Dr. John Harrington, the defined payment period is 18 months and, for all other executive officers, the period is six months. We would also be obligated to continue the participation of Dr. Gil Van Bokkelen and Dr. John Harrington in all other medical, life and employee welfare benefit programs for a period of eighteen months at our expense, to the extent available and possible under the programs.

The agreements define cause to mean willful and continuous neglect of such executive officer s duties or responsibilities or willful misconduct by the executive officer that is materially and manifestly injurious to Athersys. Good reason includes, among other things, demotion, salary reduction, relocation, failure to provide an executive officer with adequate and appropriate facilities and termination by the executive officer within 90 days of a change in control. A change in control occurs when (1) a person or group of persons purchases 50% or more of our consolidated assets or a majority of our voting shares, or (2) if, following a public offering, the directors of Athersys immediately following the offering no longer constitute a majority of the Board of Directors. Upon a change in control, or if the named executive officer should die or become permanently disabled, all unvested stock options become immediately vested and exercisable. As of December 31, 2011, none of the named executive officers held unvested stock options.

In the event that an executive officer is terminated for cause or as a result of death, we would be obligated to pay full base salary and other benefits, including any unpaid expense reimbursements, through the date of termination, and would have no further obligations to the executive officer. In the event that an executive officer is unable to perform duties as a result of a disability, we would be obligated to pay full base salary and other benefits until employment is terminated and for a period of twelve months from the date of such termination.

Additionally, in 2005, in connection with the restructuring of the Company s internal programs, the Board of Directors established an incentive program intended to promote retention and motivation of our executives. The program provides the named executive officers financial participation in the event of certain merger or acquisition or asset sale transactions, obligating us to make a payment to the named executive officers representing five percent of the consideration received from the transaction.

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The table below reflects the amount of compensation payable to each named executive officer in the event of termination of such executive s employment, pursuant to such executive s employment agreement. The amounts shown assume that such termination was effective as of December 31, 2011 and thus includes amounts earned through such time and are estimates of the amounts that would be paid out to executives upon their termination:

	Executive Benefit and		Termination Without Cause or		
	Payments Upon		untary For Good		
	Separation		leason <sup>(1)</sup>		
Gil Van Bokkelen	Cash Severance Payment	\$	606,750		
	Continuation of Benefits	\$	23,944		
	Total	\$	630,694		
William (BJ) Lehmann, Jr.	Cash Severance Payment	\$	173,357		
William (Dg) Deminam, gr.	Continuation of Benefits	Ψ	173,337		
	Continuation of Benefits				
			.===		
	Total	\$	173,357		
John Harrington	Cash Severance Payment	\$	520,071		
	Continuation of Benefits	\$	23,944		
	Total	\$	544,015		
	2000	Ψ	011,013		
Robert Deans	Cook Savananaa Daymant	¢	150,000		
Robert Deans	Cash Severance Payment Continuation of Benefits	\$	150,000		
	Continuation of Benefits	\$			
	Total	\$	150,000		
Laura Campbell	Cash Severance Payment	\$	112,682		
	Continuation of Benefits	\$			
	<del></del>	T			
	Total	\$	112,682		
	Total	Φ	112,002		

<sup>(1)</sup> Does not include any amounts payable upon a change in control pursuant to the incentive program established in 2005 as described on the preceding page.

## **Director Compensation Table for 2011**

The following table summarizes compensation paid to our non-employee Directors in 2011:

	Fees 1	Earned or	Option	
	Paid	l in Cash	Awards	Total
Name(a)	(	( <b>\$</b> )( <b>b</b> )	$(\$)^{(1)}(\mathbf{d})$	(\$)(h)
Lee E. Babiss	\$	47,250	\$ 34,950	\$ 82,200
Ismail Kola	\$	44,625	\$ 34,950	\$ 79,575
George M. Milne, Jr.	\$	52,625	\$ 34,950	\$ 87,575
Lorin J. Randall	\$	66,500	\$ 34,950	\$ 101,450

Jack L. Wyszomierski \$ 53,125 \$ 34,950 \$ 88,075

(1) Amounts in column (d) do not necessarily reflect compensation actually received by our Directors. The amounts in column (d) reflect the full grant date fair value of the equity awards made during the fiscal year ended December 31, 2011, in accordance with ASC 718. Assumptions used in the calculation of these amounts are included in the notes to the 2011 audited consolidated financial statements included in the Company s Annual Report on Form 10-K for the fiscal year ended December 31, 2011. The Directors had option awards outstanding as of December 31, 2011 for shares of Common Stock as follows: Lee Babiss 90,000; Ismail Kola 90,000; George Milne 135,000; Lorin Randall 135,000; and Jack Wyszomierski 90,000.

Under our Director compensation program for non-employee Directors prior to 2011, new Directors received an initial stock option grant to purchase 75,000 shares of common stock at fair market value on the date of grant, which options vest at a rate of 50% in the first year (on a quarterly basis) and 25% in each of the two years (on a quarterly basis) thereafter. Effective April 1, 2011, after consultation with the independent compensation advisor, the Board approved a revised initial grant for new directors equal to 30,000 shares of common stock, which options vest at a rate of 50% in the first year (on a quarterly basis) and 25% in each of the two years (on a quarterly basis) thereafter.

Additionally, the non-employee Directors receive, at each anniversary of service, an option award to purchase 15,000 shares of common stock at fair market value on the date of grant. These additional awards vest at a rate of 50% in the first year (on a quarterly basis), and 25% in each of the two years (on a quarterly basis) thereafter. Effective April 1, 2011, after consultation with the independent compensation advisor, the Board approved a change to the vesting schedule for anniversary stock option awards such that new awards vest quarterly over a one-year period, with such anniversary awards issued in June of each year, in connection with our annual stockholder meeting. In June 2011, all five of our non-employee Directors each received such an anniversary stock option award. Also, effective April 1, 2011, all new initial and anniversary stock option awards granted to non-employee Directors have a term of ten years and upon the termination of the Director s service, the Director will have 18 months in which to exercise the vested portion of his options prior to forfeiture.

For 2010, the non-employee Directors also received cash compensation of \$30,000 per year, paid quarterly, plus daily fees of \$1,500 for participating in person, or \$500 for participating by telephone, at Board meetings. The chair of the Audit Committee received additional cash compensation of \$10,000 per year, paid quarterly, and the chair of the Compensation Committee received additional cash compensation of \$6,000 per year, paid quarterly. All Audit Committee and Compensation Committee members also received additional meeting fees of \$1,000 for participating in person, or \$500 for participating by telephone, at each Audit Committee or Compensation Committee meeting. Directors, however, could not receive more than \$2,500 in any one day for participation in Board and committee meetings. Effective April 1, 2011, the Board approved a revised cash compensation program for Directors with annual retainers paid quarterly as set forth below, with no meeting fees:

Board Member	\$ 40,000
Audit Committee Chairman	\$ 15,000
Audit Committee Member	\$ 7,500
Compensation Committee Chairman	\$ 10,000
Compensation Committee Member	\$ 5,000
Nominations and Corporate Governance Committee Chairman	\$ 6,000
Nominations and Corporate Governance Committee Member	\$ 3,000

Directors are reimbursed for reasonable out-of-pocket expenses incurred while attending Board of Director and committee meetings.

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#### CERTAIN RELATIONSHIPS AND RELATED-PARTY TRANSACTIONS

We give careful attention to related person transactions because they may present the potential for conflicts of interest. We refer to related person transactions as those transactions, arrangements, or relationships in which:

we were, are or are to be a participant;

the amount involved exceeds \$120,000; and

any of our directors, director nominees, executive officers or greater-than five percent stockholders (or any of their immediate family members) had or will have a direct or indirect material interest.

To identify related person transactions in advance, we rely on information supplied by our executive officers, Directors and certain significant stockholders. We maintain a comprehensive written policy for the review, approval or ratification of related person transactions, and our Audit Committee reviews all related person transactions identified by us. The Audit Committee approves or ratifies only those related person transactions that are determined by it to be, under all of the circumstances, in the best interest of our company and its stockholders. No related person transactions occurred in the last three fiscal years that required a review by the Audit Committee.

In November 2011, we entered into the Aspire Purchase Agreement with Aspire Capital, which provides that Aspire Capital is committed to purchase up to an aggregate of \$20.0 million of shares of our common stock over a two-year term, subject to our election to sell any such shares, and the terms and conditions set forth therein. As part of the Aspire Purchase Agreement, Aspire Capital made an initial investment of \$1.0 million in us through the purchase of 666,667 shares of our common stock at \$1.50 per share, and received 266,667 additional shares as compensation for its commitment. As a result of this transaction, combined with shares of our common stock that Aspire Capital held prior to the November 2011 transaction, Aspire Capital became one of our largest stockholders, owning more than 5% of our shares of common stock outstanding upon completion of the transaction.

As of September 30, 2012, we sold an additional 800,000 shares to Aspire Capital pursuant to the Aspire Purchase Agreement at an average price of \$1.57 per share. Also, in our March 2012 private placement, Aspire Capital purchased an additional 966,184 shares of common stock and five-year warrants to purchase 966,184 shares of common stock with an exercise price of \$2.07 per share. The securities were sold in multiples of a fixed combination of one share of common stock and a warrant to purchase one share of common stock at an offering price of \$2.07 per fixed combination, for a total purchase price to Aspire Capital of approximately \$2.0 million.

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#### BENEFICIAL OWNERSHIP OF COMMON STOCK

The following table sets forth certain information known to us regarding the beneficial ownership of our common stock as of October 15, 2012 by:

each person known by us to beneficially own more than 5% of our common stock;

each of our directors;

each of our named executive officers; and

all of our directors and executive officers as a group.

We have determined beneficial ownership in accordance with the rules of the SEC. In computing the number of shares beneficially owned by a person and the percentage ownership of that person, shares of common stock that could be issued upon the exercise of outstanding options and warrants held by that person that are exercisable within 60 days of October 15, 2012 are considered outstanding. These shares, however, are not considered outstanding when computing the percentage ownership of each other person.

Percentage ownership calculations for beneficial ownership for each person or entity are based on 30,052,843 shares of common stock outstanding as of October 15, 2012.

Except as indicated in the footnotes to this table and pursuant to state community property laws, each stockholder named in the table has sole voting and investment power for the shares shown as beneficially owned by them.

	Number of	
Name of Beneficial Owner	Shares	Percent of Class
Greater Than 5% Stockholders		
Radius Venture Partners and affiliates <sup>(1)</sup>	1,600,000	5.3%
Aspire Capital Fund, LLC <sup>(2)</sup>	2,261,200	7.5%
Sabby Management, LLC <sup>(3)</sup>	2,036,956	6.8%
Directors, Director Nominees and Executive Officers		
Gil Van Bokkelen <sup>(4)</sup>	976,986	3.2%
Lee Babiss <sup>(5)</sup>	79,688	*
John Harrington <sup>(6)</sup>	819,144	2.7%
Ismail Kola <sup>(7)</sup>	75,000	*
Lorin Randall <sup>(8)</sup>	60,938	*
Kenneth Traub <sup>(9)</sup>	3,750	*
Jack Wyszomierski <sup>(10)</sup>	79,688	*
Laura Campbell <sup>(11)</sup>	240,563	*
Robert Deans <sup>(12)</sup>	264,000	*
William (BJ) Lehmann, Jr. (13)	429,400	1.4%
All directors and executive officers as a group (10 persons)	3,029,157	9.3%

<sup>\*</sup> Less than 1%.

<sup>(1)</sup> A Schedule 13D/A filed with the SEC on May 7, 2008 reported that Radius Venture Partners (defined below) beneficially owned 1,600,000 shares (800,000 shares beneficially owned by Radius Venture Partners II, L.P., or Radius II, 103,766 shares beneficially owned by Radius Venture Partners III, L.P., or Radius III, and 696,234 shares beneficially owned by Radius

Venture Partners III QP, L.P., or Radius III QP) of common stock. Radius Venture Partners II, LLC is the general partner of Radius II.

Radius Venture Partners III, LLC (which together with Radius Venture Partners II, LLC, we refer to as Radius Venture Partners) is the general partner of Radius III and Radius III QP. Daniel C. Lubin and Jordan S. Davis are the managing members of Radius

footnotes continued on following page

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Venture Partners. Radius II has the sole power to vote or direct the vote and to dispose or direct the disposition of the shares beneficially owned by Radius II. Messrs. Lubin and Davis, by virtue of their positions as managing members of the general partner of Radius II, may be deemed to have the shared power to vote or direct the vote of and shared power to dispose or direct the disposition of the shares held by Radius II. Radius III has the sole power to vote or direct the disposition of the shares beneficially owned by Radius III, and Radius III QP has the sole power to vote or direct the vote and to dispose or direct the disposition of the shares beneficially owned by Radius III QP. Messrs. Lubin and Davis, by virtue of their positions as managing members of the general partner of Radius III and Radius III QP, may be deemed to have the shared power to vote or direct the vote of and shared power to dispose or direct the disposition of the shares beneficially owned by Radius III and Radius III QP. Additionally, each of Daniel C. Lubin, Jordan S. Davis, Radius Venture Partners II, LLC and Radius Venture Partners III, LLC disclaim beneficial ownership of the shares beneficially owned by Radius II, Radius III and Radius III QP. The address for Radius Venture Partners and its affiliates is 400 Madison Avenue, 8th Floor, New York, New York 10017.

- (2) To our knowledge, Aspire Capital has direct beneficial ownership of 2,261,200 shares of common stock. Aspire Capital also holds warrants to purchase 1,066,084 shares of common stock; however, these warrants are exercisable only if the holder beneficially owns less than 4.99% of the outstanding shares of common stock and, therefore, the shares underlying these warrants are not beneficially owned by Aspire Capital as of the date hereof. Aspire Capital Partners, LLC, or Aspire Partners, as the managing member of Aspire Capital, SGM Holdings Corp., or SGM, as the managing member of Aspire Partners, Steven G. Martin, the president and sole shareholder of SGM and a principal of Aspire Partners, Erik J. Brown, a principal of Aspire Partners, and Christos Komissopoulos, a principal of Aspire Partners, may be deemed to have shared voting and investment power over shares of common stock owned by Aspire Capital. Each of Aspire Partners, SGM, Mr. Martin, Mr. Brown and Mr. Komissopoulos disclaims beneficial ownership of the shares of common stock held by Aspire Capital. The address for Aspire Capital and its affiliates is 155 North Wacker Drive, Suite 1600, Chicago, Illinois 60606.
- (3) A Schedule 13G filed with the SEC on October 9, 2012 reported that Sabby Management, LLC beneficially owned 2,036,956 shares (1,512,423 shares beneficially owned by Sabby Healthcare Volatility Master Fund, Ltd. and 524,533 shares beneficially owned by Sabby Volatility Warrant Master Fund, Ltd.) of common stock.
- (4) Includes vested options for 737,500 shares of common stock at a weighted average exercise price of \$5.01 per share.
- (5) Includes vested options for 79,688 shares of common stock at a weighted average exercise price of \$3.02 per share.
- (6) Includes vested options for 722,500 shares of common stock at a weighted average exercise price of \$5.01 per share.
- (7) Includes vested options for 75,000 shares of common stock at a weighted average exercise price of \$2.72 per share.
- (8) Includes vested options for 60,938 shares of common stock at a weighted average exercise price of \$2.20 per share.
- (9) Includes vested options for 3,750 shares of common stock at a weighted average exercise price of \$1.43 per share.
- (10) Includes vested options for 79,688 shares of common stock at a weighted average exercise price of \$2.94 per share.
   (11) Includes vested options for 217,500 shares of common stock at a weighted average exercise price of \$5.02 per share.
- 12) Includes vested options for 260,000 shares of common stock at a weighted average exercise price of \$5.02 per share.
- (13) Includes vested options for 422,500 shares of common stock at a weighted average exercise price of \$5.01 per share.

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## DESCRIPTION OF CAPITAL STOCK

We are authorized to issue 100,000,000 shares of common stock, par value \$0.001 per share, and 10,000,000 shares of preferred stock, par value \$0.001 per share.