

## **Management Discussion and Analysis of Financial Condition and Results of Operations (As of September 20, 2011)**

*This MD&A contains projections and other forward-looking statements regarding future events. Such statements are predictions, which may involve known and unknown risks, uncertainties and other factors, which could cause the actual events or results and company plans and objectives to differ materially from those expressed. For information concerning factors affecting the Company's business, the reader is referred to the documents that the Company files from time to time with applicable Canadian securities and regulatory authorities.*

This discussion and analysis of the results of operations of Quest PharmaTech Inc. (“Quest” or the “Company”) should be read in conjunction with the unaudited consolidated financial statements and accompanying notes for the three and six months ended July 31, 2011 and the audited consolidated financial statements for the years ended January 31, 2011 and January 31, 2010. This discussion and analysis provides an update to the discussion and analysis prepared for the year ended January 31, 2011. The unaudited consolidated financial statements have been prepared in accordance with generally accepted accounting principles in Canada (IFRS GAAP) and have not been reviewed by the Company’s auditors. This discussion and analysis provides information on the operations of Quest on a consolidated basis. All amounts are expressed in Canadian dollars unless otherwise noted and references to the term “year” refer to the fiscal year ended January 31<sup>st</sup>. Additional information related to the Company is on SEDAR at [www.sedar.com](http://www.sedar.com).

### **2011 Development Highlights:**

**Continued progression with the Phase IIb multicentre study for the treatment of advanced ovarian cancer in Italy. Regulatory submission for two additional centers is in progress.**

**The Company will provide an update on its Oregovomab program at the 2<sup>nd</sup> Biennial Meeting of the Asian Society of Gynaecologic Oncology in Seoul, South Korea in November 2011.**

**Continued to support the financial position of the Company through debt financing of up to \$1,000,000 from an officer of the Company, of which \$985,000 has been drawn to date. In addition, the Company received debt financing of \$100,000 from an independent director of the Company.**

## Overview

Quest is committed to building shareholder value through the discovery, development and commercialization of new pharmaceutical products. It is developing a portfolio of product candidates for the treatment of cancer by combining immunotherapeutic antibodies with chemotherapy, photodynamic therapy, radioimmunotherapy or immunoadjuvants. Quest is also developing a series of products for the treatment of cancer and dermatological conditions, based on its SonoLight Technology platform.

### Products under Development - Proprietary Technology:

Quest is developing high affinity monoclonal antibodies targeting certain tumor associated antigens that are presented in various cancers including ovary, pancreas, lung, breast, prostate and stomach. Quest believes that it can apply its portfolio of antibodies oncology product candidates to prolong, amplify and shape anti-tumor immune responses to increase the clinical benefits of its proprietary antibodies for the treatment of cancer. The following modalities are critical to that approach:

**Chemo Enhanced Immuno-Therapy** – combining antibodies with chemotherapy can potentially further complement and enhance the treatment outcome compared to antibody treatment alone.

**Combination Therapy** – combining antibodies with a booster compound (adjuvant) that improves the immune system's response – compared to antibody treatment alone - can potentially complement and enhance the therapeutic outcome.

**SonoLight Technology** – is based on a unique non-toxic family of photosensitizing and sonosensitizing, small molecular weight compounds called Hypocrellin, isolated from a parasitic fungus that grows on bamboo trees in China. Quest's products are expected to offer high selectivity and efficacy with minimal side effects. Quest is also developing these compounds as an adjuvant to cancer immunotherapy.

### Current Clinical Programs:

#### Antibody Immunotherapy

Quest is developing the high affinity monoclonal antibody Oregovomab (*MAb B43.13*) for the treatment of ovarian cancer. Oregovomab targets the circulating tumor-associated antigen CA125, which is shed from the surface of human epithelial ovarian cancer cells; the antibodies induce broad cellular and humoral immune responses against CA125 via complex formation. Clinical testing conducted to date has shown that front-line carboplatin-paclitaxel administered in combination with Oregovomab immunotherapy results in more vigorous immune response to the immunization than observed with Oregovomab in the post front-line mono-immunotherapy maintenance setting. There is a growing appreciation in the cancer immunotherapy community that cytotoxic therapy can provide the immune system better access to injured cells and also dampen the immune suppressive pathways that serve to turn off immune reactions. The

Company believes further clinical trials are warranted with Oregovomab in combination with front-line chemotherapy for the treatment of ovarian cancer.

### **Clinical Trial Strategy**

Taking advantage of the availability of clinical grade Oregovomab (anti CA125 antibody), Quest is conducting one and is planning to conduct two other proof-of-concept clinical trials to establish these principles to ultimately lead to the design of a definitive combinatorial product registration.

An 80 patient multicentre Italian cooperative trial to establish evidence for the clinical benefit associated with enhanced specific T cell immunity achievable by combining Oregovomab with carboplatin and paclitaxel in the initial treatment of advanced ovarian cancer (front-line).

A 30 patient clinical trial to evaluate the ability of a TLR-3 agonist (Ampligen), to enhance the strength of the Oregovomab immune response with front-line chemotherapy generated in advanced ovarian cancer patients.

A 30 patient U.S. trial will use gemcitabine, another cytotoxic agent, with neoadjuvant immunotherapy in a cohort of patients with CA125 associated partially resectable pancreatic cancer.

One of the endpoints in all the three clinical trials is the induction of CA125 specific T cells as measured by a well validated ELISPOT assay. Since, CA125 specific T cells induction has been correlated with progression free survival and overall survival in our previous 40 patient Oregovomab combination therapy clinical trial, we are hoping to use this assay as a surrogate marker to get expedited product approval.

### **Product Pipeline**

Quest's pipeline of product candidates consists of four other monoclonal antibodies targeting certain tumor antigens that are presented in a variety of cancers including such cancers as breast, lung, pancreas, stomach and, prostate etc. Quest already has in its possession proprietary antibodies against MUC1, PSA, CA19.9 and TAGG72. These antibodies in the platform will undergo continuing preclinical development in anticipation of rapid clinical development, once the initial Oregovomab studies establish the validity of the proof-of-concept. It is noted that a Phase I clinical trial with anti-MUC1 antibody in 17 patients with metastatic cancer, including multiple myeloma, demonstrated the activation of anti-tumor immunity in those patients.

### **SonoLight Technology**

**SonoLight Technology for Dermatology Applications :** The Company's lead product, SL017, is a topical formulation indicated for dermatology applications. Recently the Company made a strategic decision to focus its development efforts towards oncology and is therefore looking to out-license its dermatology pipeline of products.



has debt of \$500,000 in the form of a convertible debenture (exercisable at \$0.25 and due on September 22, 2011) and demand loans of \$1,010,000 (September 20, 2011 - \$1,085,000).

### Revenues:

The following table identifies the changes in revenue for the three and six months ended July 31, 2011 compared to the three and six months ended July 31, 2010.

Revenue	For the three months ended July 31			For the six months ended July 31		
	2010	2009	Increase (decrease)	2010	2009	Increase (decrease)
	\$	\$	\$	\$	\$	\$
Market distribution rights	2,000	2,000	-	4,000	4,000	-
Total revenue from operations	2,000	2,000	-	4,000	4,000	-

### Expenses

The following table identifies the changes in general and administrative expense for the three and six months months ended July 31, 2011 compared to the three and six months ended July 31, 2010.

General and administrative expenses	For the three months ended July 31			For the six months ended July 31		
	2011	2010	Increase (decrease)	2011	2010	Increase (decrease)
	\$	\$	\$	\$	\$	\$
Salaries, wages and benefits	45,778	61,674	(15,896)	94,189	138,521	(44,332)
Audit fees	-	-	-	170	1,160	(990)
Legal fees	1,093	270	823	1,393	675	718
Other support costs	70,507	4,736	65,771	72,577	8,185	64,392
Travel	7,338	5,030	2,308	25,371	21,868	3,503
Consulting	12,500	12,500	-	25,000	25,000	-
Rent	3,424	4,009	(585)	7,191	7,073	118
Insurance	3,594	3,038	556	7,170	6,075	1,095
Public company related costs	13,473	6,602	6,871	20,673	15,455	5,218
Depreciation	539	770	(231)	1,078	1,540	(462)
Total general and administrative expenses	158,246	98,629	59,617	254,812	225,552	29,260

Overall, general and administrative costs have increased in 2011 compared to 2010, primarily due to an increase in other support costs which includes \$68,000 in stock based compensation. Salaries, wages and benefits decreased due to decreased staffing levels in 2011 compared to 2010.

The following table identifies the changes in research and development (R&D) expense for the three and six months ended July 31, 2011 compared to the three and six months ended July 31, 2010.

Research and development expenses	For the three months ended July 31			For the six months ended July 31		
	2011	2010	Increase (decrease)	2011	2010	Increase (decrease)
	\$	\$	\$	\$	\$	\$
Sub-contract, consulting and clinical trials	49,129	155,863	(106,734)	72,172	205,930	(133,758)
Salaries, wages and benefits	30,864	44,213	(13,349)	67,049	103,783	(36,734)
Legal (patent prosecution)	9,103	4,686	4,417	23,724	31,212	(7,488)
Rent	9,131	9,355	(224)	17,920	16,503	1,417
Other R&D costs	27,178	20,536	6,642	47,230	42,677	4,553
Supplies	629	2,267	(1,638)	1,400	6,249	(4,849)
Depreciation	28,781	25,839	2,942	57,563	51,678	5,885
<b>Gross research and development expenses</b>	<b>154,815</b>	<b>262,759</b>	<b>(107,944)</b>	<b>287,058</b>	<b>458,032</b>	<b>(170,974)</b>
Less						
Alberta Finance – SR&ED tax credits	(51,879)	-	51,879	(51,879)	-	51,879
<b>Research and development expense (net)</b>	<b>102,936</b>	<b>262,759</b>	<b>(159,823)</b>	<b>235,179</b>	<b>458,032</b>	<b>(222,853)</b>

Overall, R&D costs have decreased in 2011 compared to 2010 due to a decrease in expenditures for the Company's clinical trial activities. Most of this decrease is reflected in the sub-contract, consulting and clinical trial costs. Salaries, wages and benefits costs have decreased in 2011 compared to 2010 due to a decrease in R&D staff levels.

### Summary of Quarterly Results

The following table presents unaudited selected financial information for each of the last eight quarters ended July 31, 2011.

	Q2, fiscal 2012	Q1, fiscal 2012	Q4, fiscal 2011	Q3, fiscal 2011	Q2, fiscal 2011	Q1, fiscal 2011	Q4, fiscal 2010	Q3, fiscal 2010
	\$	\$	\$	\$	\$	\$	\$	\$
Revenue	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000
Net income (loss) for the period	(296,687)	(265,211)	(365,489)	(265,216)	(383,400)	(339,668)	(368,815)	(274,154)
Basic and diluted income (loss) per share (1)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)	(0.00)	(0.01)	(0.00)

(1) Quarterly losses per share are not additive and may not equal annual loss per share reported. This is due to the effect of shares issued during the year on the weighted average number of shares outstanding for the full year.

## Stock-Based Compensation Expense

During the three and six months ended July 31, 2011, the Company granted a total of 1,950,000 and 2,050,000 (2010 – 250,000 and 350,000) stock options, as per the Company's Stock Option Plan. In 2011, 100,000 options were granted to non-employees and 1,950,000 to employees, all at an exercise price of \$0.10 per share and all vesting immediately. The options granted in 2010 were to non-employees, all at an exercise price of \$0.10 per share and all vesting immediately. The fair value of these options, totaling \$78,000 and \$82,000, respectively in 2011 (2010 - \$11,000 and \$17,000), was recognized as an expense and credited to contributed surplus for the three and six months ended July 31, 2011 and 2010.

## Capital Expenditures

Expenditures on capital assets were \$nil for the three and six months ended July 31, 2011 and 2010.

## Deferred Revenue

The Company has recorded deferred revenue of \$81,667 in connection with amounts received for market distribution rights that relate to future periods. This amount relates to the Company's market distribution rights for Asian hair removal and is being recognized over a remaining 10.05 year period.

## Outstanding Share Data

The Company has the following securities outstanding as at September 20, 2011:

Common shares issued and outstanding at July 31, 2011	73,197,580
Stock options outstanding as at July 31, 2011	6,990,000
Stock options granted since July 31, 2011	100,000
Stock options expired since July 31, 2011	-
Stock options outstanding as at September 20, 2011	7,090,000
Common shares issuable upon conversion of \$500,000 convertible debenture	2,000,000

Fully diluted common shares are 82,287,580, assuming the exercise of all stock options and the conversion of the convertible debenture.

## Financial Instruments

**Fair Value** - Given their short-term maturity, the fair value of cash and cash equivalents, accounts receivable, marketable securities, accounts payable and accrued liabilities and the convertible debenture approximate the carrying value. The fair values of the Company's financial instruments are measured using a Level 1 classification (quoted prices in active markets).

**Foreign Currency Risk** - The Company has assets and liabilities that are denominated in foreign currencies and that are exposed to the financial risk of earnings fluctuation arising from changes in foreign exchange rates and the degree of volatility of those rates. The Company does not consider its exposure to foreign currency risk to be significant and currently does not use derivative instruments to reduce its exposure to foreign currency risk.

**Liquidity Risk** - Company's exposure to liquidity risk is dependent on its ability to raise funds to meet its commitments and sustain its operations. The Company controls liquidity risk by managing its working capital and by securing additional funds through equity, debt or partnering transactions.

**Credit Risk** - Financial instruments that subject the Company to credit risk consist primarily of cash and cash equivalents and accounts receivable. To minimize its exposure to credit risk for cash equivalents, the Company invests surplus cash in fully guaranteed short term deposits with its financial banker, a major Canadian bank. As the Company is primarily involved in research and development, the Company's exposure to credit risk related to accounts receivable is not considered to be significant. At July 31, 2011, approximately 88% of accounts receivable were due from one organization under a provincial government program.

**Market Risk** - The Company owns investments in common shares of publicly traded companies that subject the Company to market risk. As market prices change, the Company's income and the value of its marketable securities are affected. The Company expects that its exposure to market risk will be short lived as the investments are viewed as temporary in nature.

**Interest Rate Risk** - Interest rate risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate because of changes in market interest rates. Financial assets and financial liabilities with variable interest rates expose the Company to cash flow interest rate risk. The Company's cash and cash equivalents are comprised of highly liquid deposits or investments that earn interest at market rates. Interest on the long-term debt is at fixed rates. Consequently, the Company is exposed to fair value changes on long-term debt when the market rate of interest changes. Accounts receivable, accounts payable and accrued liabilities bear no interest. The Company manages its interest rate risk by maximizing the interest income earned on excess funds while maintaining the liquidity necessary to conduct operations on a day-to-day basis.

### **Liquidity and Capital Resources**

The Company's ability to continue as a going concern is uncertain and is dependent upon its ability to raise additional capital to successfully complete its research and development programs, commercialize its technologies, conduct clinical trials and receive regulatory approval for its products.

At July 31, 2011 cash and cash equivalents were \$14,101 as compared to \$13,394 at January 31, 2011. At September 20, 2011, the Company had cash and cash equivalents of approximately \$25,000.

During the six month period ended July 31, 2011, the Company recognized revenue of \$4,000 related to market distribution rights.

Cash used in operating activities was \$126,014 and \$238,484, respectively, for the three and six months ended July 31, 2011 compared to \$256,036 and \$561,788 for the three and six months ended July 31, 2010.

The Company has negotiated various extensions to the maturity date of the \$500,000 convertible debenture which is now due September 22, 2011. The interest rate and conversion rate remain unchanged at 9% per annum and \$0.25 per common share, respectively.

In February, 2010, the Company secured demand loan financing of up to \$1,000,000 from one of its officers. This demand loan financing bears interest at 8% per annum, interest payable monthly and is unsecured with no fixed terms of repayment. The principal is to be repaid upon the Company receiving sufficient future licensing fees, equity financing or other revenues. To date, the Company has drawn \$985,000 on this demand loan financing.

In March and May, 2011, the Company secured additional demand loan financing of \$100,000 from an independent director of the Company. This demand loan financing bears interest at 8% per annum, interest payable monthly and is unsecured with principal repayment to be made 30 days after demand.

The Company continues to implement a disciplined approach to containing costs and is focusing on programs aimed at achieving near-term goals.

Quest's funding needs will vary as its drug development products move into and through clinical trials. Based on current operating budgets, management believes that the capital resources of the Company should be sufficient to fund operations into the fourth quarter of fiscal 2012.

The Company will seek additional capital through the sale of the remaining non-core assets, further equity financings, licensing arrangements involving its core technologies and strategic partnerships.

### **Contractual Obligations**

In the normal course of operations, Quest has entered into several contracts providing for the following payments over the following fiscal years:

	Payments due by year				
	Total	Within 1 year	2 – 3 years	4 – 5 years	After 5 years
	\$	\$	\$	\$	\$
Operating leases	36,694	36,694	-	-	-
Research & development and other contracts	740,423	175,285	322,936	242,202	-
Total contractual obligations	777,117	211,979	322,936	242,202	-

### **Demand Loans and Related Party Transactions**

During fiscal 2011, the Company entered into a demand loan agreement with Dr. Ragupathy Madiyalakan, CEO and a director of the Company, to provide up to \$1,000,000 in 8% annual interest bearing demand loan financing to be used for the Company's operating expenditures. This financing is unsecured, has no fixed terms of repayment, with interest payable monthly. The principal is to be repaid upon the Company receiving sufficient future licensing fees, equity

financing or other revenues. To date, the Company has drawn \$985,000 on this financing through a wholly-owned company of Dr. Madiyalakan.

During April and May, 2011, the Company received demand loan financing of \$100,000 from Mr. Ian McConnan, an independent director of the Company. The loan is 8% annual interest bearing, unsecured with principal payable 30 days after demand and interest payable monthly.

## **Accounting Pronouncements for Recent Adoption**

### **International Financial Reporting Standards**

The Company has adopted International Financial Reporting Standards (“IFRS”) at February 1, 2011, with a transition date of February 1, 2010. To facilitate this process and ensure that the full impact of the conversion was understood and managed reasonably, in 2010 the Company completed a conversion project and monitored the ongoing impact of IFRS on its financial statements. The Company chose its accounting policies and monitored the impact of IFRS on its information systems, internal controls and business operations. During fiscal 2011, the Company completed the opening balance sheet. IFRS uses a conceptual basis similar to Canadian GAAP, but there are some significant differences on recognition, measurement and disclosures. The Company also expects IFRS to have an ongoing impact on financial reporting, business processes, internal controls and information systems.

### **Disclosure Controls and Procedures**

The management of Quest is responsible for establishing and maintaining disclosure controls and procedures for the Company and is continuing with the implementation of disclosure controls and procedures, to provide reasonable assurance that material information relating to the Company, including its consolidated subsidiaries, is made known to Quest management particularly during the period in which the annual filings are being prepared.

### **Internal Control Over Financial Reporting**

The Company’s management is responsible for establishing and maintaining adequate internal control over financial reporting. Management has taken steps to improve the procedures and provide maintenance related to an effective design for the Company’s internal controls and procedures over financial reporting.

Management continues to note weaknesses in internal controls over financial reporting including those related to the limited number of accounting staff members resulting in a lack of segregation of duties.

Management will continue with the implementation of procedures aimed at minimizing the risk of material error in its financial reporting and will seek outside expertise when the need arises.

### **Risks and Uncertainties**

Going concern uncertainty - The Company’s financial statements have been prepared on a going concern basis which presumes the realization of assets and discharge of liabilities in the normal course of business for the foreseeable future. The Company has experienced significant

operating losses and cash outflows from operations since its inception. The Company's ability to continue as a going concern is uncertain and is dependent upon its ability to raise additional capital to successfully complete its research and development programs, commercialize its technologies and conduct clinical trials and receive regulatory approvals for its products. It is not possible at this time to predict the outcome of these matters.

Quest's proprietary technologies are in various stages of development and some technologies have not received regulatory approval to begin clinical trials. It will be necessary for the Company to produce sufficient preclinical data in order to receive regulatory approval to begin clinical trials. There is no assurance that regulatory approval will be received to begin clinical trials. For the proprietary technologies that have received regulatory approval to begin clinical trials, future success will depend upon the ability of the Company to move the products through clinical trials, the effect and safety of these products, the timing and cost to receive regulatory and marketing approvals and the filing and maintenance of patent claims.

Quest's proprietary technologies have exposure to risks associated with commercialization. Even after product approval is obtained, there is no assurance that the Company will have a sufficient market for its products or the working capital required for commercialization.

The Company maintains clinical trial liability and product liability insurance; however, it is possible that this coverage may not provide full protection against all risks.

The Company may be exposed to risks associated with malfunctioning equipment, catastrophic events and other events within and outside of the Company's control. The Company maintains insurance believed to be adequate to cover any eventuality, but there is no guarantee that coverage will be sufficient for all purposes.

To a large degree, the Company's success is dependant upon attracting and retaining key management and scientific personnel to further the Company's drug development programs. There is a risk that required personnel may not be available to the Company when needed and, as a result, this may have a negative impact on the Company.

Quest must continue to raise additional capital by issuing new share capital through equity financing, licensing arrangements and/or strategic partnerships. The Company's ability to raise additional capital will depend upon the progress of moving its drug development products into and through clinical trials and the strength of the equity markets, which are uncertain. There can be no assurance that additional capital will be available.