ProtoKinetix, Inc. Form 10-Q August 14, 2012

UNITED STATES SECURITIES AND EXCHANGE C OMMISSION

WASHINGTON, D.C. 20549

FORM 10-Q

| 101 | MVI 10-Q | | | | | | | |
|--|--|--|--|--|--|--|--|--|
| [X] QUARTERLY REPORT UNDER SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 For the quarterly period ended June 30,2012 | | | | | | | | |
| [] TRANSITION REPORT UNDER SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 For the transition period from to | | | | | | | | |
| Commission File Number: 0-32917 | | | | | | | | |
| PROTOKINETIX, INC. | | | | | | | | |
| <u>Nevada</u> | 94-335502 <u>6</u> | | | | | | | |
| (State or other jurisdiction of | (I.R.S. Employer | | | | | | | |
| incorporation or organization) | Identification No.) | | | | | | | |
| | olkestone Way | | | | | | | |
| West Vancouver, Britis | sh Columbia Canada V7S 2Y6 | | | | | | | |
| (Address of principal exec | cutive offices, including zip code) | | | | | | | |
| Registrant s telephone number, including area code | e: (604) 926-6627 | | | | | | | |
| Securities registered pursuant to Section 12(b) of the A | | | | | | | | |
| Securities registered pursuant to Section 12(g) of the A | | | | | | | | |
| | d all reports required to be filed by Section 13 or 15(d) of the | | | | | | | |
| | s (or for such shorter period that the registrant was required to | | | | | | | |
| | a filing requirements for the past 90 days. Yes X No | | | | | | | |
| The such reports), and (2) has been subject to such | Timing requirements for the past 50 days. Tes 110 | | | | | | | |
| Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a small reporting company. | | | | | | | | |
| Large accelerated filer Accelerated filer | Non-accelerated filer Smaller reporting company | | | | | | | |
| Indicate by a check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act. Yes $_$ No $\underline{\mathbf{X}}$ | | | | | | | | |
| | D IN BANKRUPTCY PROCEEDINGS DURING THE NG FIVE YEARS | | | | | | | |
| | reports required to be filed by Section 12, 13, or 15(d) of the rities under a plan confirmed by a court. Yes No | | | | | | | |

APPLICABLE ONLY TO CORPORATE ISSUERS

State the number of shares outstanding of each of the issuer s classes of common equity, as of the latest practicable date:

132,012,433 common shares outstanding, \$0.0000053 par value, at August 13, 2012

PROTOKINETIX, INC.

Balance Sheets at June 30, 2012 and December 31, 2011

Statements of Operations for the three and six months ended June 30, 2012 and 2011 and for the period from December 23, 1999 (Date of Inception) to June 30, 2012

Statements of Stockholder s Deficit for the Period from December 31, 2011 to June 30, 2012

Statements of Cash Flows for the six months ended June 30, 2012 and 2011 and for the Period from December 23, 1999 (Date of Inception) to June 30, 2012

Notes to Financial Statements

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PROTOKINETIX, INC.

(A Development Stage Company)

BALANCE SHEETS

| | | June 30, 2012 | I | December 31, 2011 |
|--|----|------------------|----|-------------------|
| ASSETS | | | | |
| Comment Assets | | | | |
| Current Assets Cash | \$ | 15,026 | Φ | 4,512 |
| Prepaid expenses | Ψ | 731 | Ψ | 18,731 |
| Accounts receivable (Note 3) | | 3,923 | | 6,528 |
| Tiecounts receivable (rvote 3) | | 3,723 | | 0,520 |
| Total current assets and total assets | \$ | 19,680 | \$ | 29,771 |
| | | , , , , , | | - , |
| | | | | |
| | | | | |
| | | | | |
| LIABILITIES AND STOCKHOLDERS' DEFICIT | | | | |
| ~ * * * * * * * * * * * * * * * * * * * | | | | |
| Current Liabilities | Φ. | 112.076 | Ф | 150 201 |
| Accounts payable | \$ | 113,876 | \$ | 153,391 |
| Short-term loan (Note 4) | | 47,000 | | 36,735 |
| Convertible note payable (Note 5) | | 300,000 | | 300,000 |
| Total current liabilities | | 460,876 | | 490,126 |
| Total Current Habilities | | 400,870 | | 490,120 |
| Stockholders' Deficiency | | | | |
| Common stock, \$0.0000053 par value; 200,000,000 common | | | | |
| shares authorized; 132,012,433 and 119,512,433 shares issued | | | | |
| and outstanding for June 30, 2012 and December 31, 2011 | | | | |
| respectively | | 709 | | 643 |
| Share subscriptions received in advance | | 25,000 | | 25,000 |
| Additional paid-in capital | | 24,665,600 | | 24,540,666 |
| Deficit accumulated during the development stage | | (25,132,505) | | (25,026,664) |
| | | | | |
| Total stockholders deficit | | (441,196) | | (460,355) |
| | | | | |
| Total liabilities and stockholders deficit | \$ | 19,680 | \$ | 29,771 |
| See Notes to Financial Statement | ts | | | |
| 2 | | | | |
| 3 | | | | |

PROTOKINETIX, INC.

(A Development Stage Company)

STATEMENTS OF OPERATIONS

For the Three and Six Months Ended June 30, 2012 and 2011, and for the Period from December 23, 1999 (Date of Inception) to June 30, 2012

| | | Three Months Ended June 30, 2012 | | Three Months Ended June 30, 2011 | | Six Months Ended June 30, 2012 | | Six Months Ended June 30, 2011 | | Cumulative During the Development Stage |
|-------------------------------------|----|--|----|----------------------------------|----|---------------------------------|----|--|----|--|
| Revenues | \$ | - | \$ | - | \$ | - | \$ | - | \$ | 2,000 |
| General and administrative expenses | | | - | | - | | - | | т | _, |
| Licenses | | - | | _ | | - | | _ | | 3,379,756 |
| Professional fees | | 3,300 | | 23,691 | | 12,724 | | 28,091 | | 3,556,199 |
| Consulting fees | | 1,500 | | 118,674 | | 18,000 | | 186,263 | | 13,364,782 |
| Research and development | | - | | _ | | - | | - | | 2,657,591 |
| General and administrative | | 28,683 | | 44,292 | | 63,117 | | 88,305 | | 1,670,189 |
| Interest | | 6,000 | | - | | 12,000 | | _ | | 156,162 |
| | | | | | | | | | | |
| | | 39,483 | | 186,657 | | 105,841 | | 302,659 | | 24,782,679 |
| | | | | | | | | | | |
| Other Income | | - | | - | | - | | - | | 15,000 |
| Write-off of accounts payable | | - | | - | | - | | - | | 8,640 |
| Loss on debt settlement | | - | | - | | - | | (330,000) | | (330,000) |
| | | | | | | | | | | |
| | | - | | - | | - | | (330,000) | | (306,360) |
| | | | | | | | | | | |
| Loss from continuing operations | | (39,483) | | (186,657) | | (105,841) | | (632,659) | | (25,089,039) |
| | | | | | | | | | | |
| | | | | | | | | | | |
| Discontinued Operations | | | | | | | | | | |
| Loss from operations of the | | - | | - | | - | | - | | (43,466) |
| discontinued segment | | (50.405) | | (1055==) | | | | (555 550) | | (2.2.1.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2 |
| Net loss for the period | \$ | (39,483) | \$ | (186,657) | \$ | (105,841) | \$ | (632,659) | \$ | (25,132,505) |
| | ٨ | (0.04) | Φ. | (0.04) | Φ. | (0.04) | Φ. | (0.04) | | |
| Net Loss per Share (basic and | \$ | (0.01) | \$ | (0.01) | \$ | (0.01) | \$ | (0.01) | | |
| diluted) | | | | | | | | | | |
| Weighted eveness shows | | | | | | | | | | |
| Weighted average shares | 12 | 21,937,091 | Ç | 93,594,851 | | 121,937,091 | | 93,594,851 | | |
| Outstanding (basic and diluted) | | | | | | | | | | |

See Notes to Financial Statements

PROTOKINETIX, INC. STATEMENTS OF STOCKHOLDERS EQUITY (DEFICIENCY) For the Period from December 31, 2011 to June 30, 2012

| | Comm | non Stock | | Additional Paid-in | Subs Rec | Stock criptions eived in vance | Defice Accumulation During Development | lated the | | | |
|---|-------------|-----------|----------|-----------------------|-------------|---|--|--------------|--------------|--|--|
| | Shares | A | mount | Capital | | | Stage | | Total | | |
| Balance, December 31, 2011 | 119,512,433 | \$ | 643 | \$ 24,540,666 | \$ | 25,000 | \$ (25,026 | ,664) | \$ (460,355) | | |
| Issuance of common stock from private placement | 12,500,000 | | 66 | 124,934 | | - | | - | 125,000 | | |
| Net loss for the period | - | | - | - | | - | (105 | 5,841) | (105,841) | | |
| Balance, June 30, 2012 | 132,012,433 | \$ | 709 | \$ 24,665,600 | | 25,000 | \$ (25,132 | 2,505) | \$ (441,196) | | |
| | | Se | ee Notes | to Financial Sta | tements | | | | | | |

PROTOKINETIX, INC.

STATEMENTS OF CASH FLOWS

For the Six Months Ended June 30, 2012 and 2011, and for the Period from December 23, 1999 (Date of Inception) to June 30, 2012

| | | 2012 | 2011 | Cumulative During the Development Stage |
|---|------|-----------|--------------|---|
| Cash Flows from Operating Activities | | | | |
| Net loss for period | \$ | (105,841) | \$ (632,659) | \$ (25,132,505) |
| Adjustments to reconcile net loss to net cash used in operating | | | | |
| activities | | | | |
| Depreciation expense | | - | - | 3,388 |
| Write-off of accounts payable | | - | - | (8,640) |
| Loss on settlement of debt | | - | 330,000 | 330,000 |
| Issuance and amortization of common stock for services | | - | 86,263 | 18, 724,973 |
| Issuance and amortization of warrants for services | | - | - | 2,629,730 |
| Issuance and amortization of stock options for services | | - | - | 222,817 |
| Changes in operating assets and liabilities | | | | (2.022) |
| Accounts receivable | | 2,605 | (4,333) | (3,923) |
| Prepaid expenses | | 18,000 | - | 64,994 |
| Accounts payable | | (39,515) | 53,587 | 122,516 |
| Net cash used in operating activities | | (124,751) | (167,142) | (3,046,650) |
| Cash Flows from Investing Activities | | | | |
| Purchase of computer equipment | | - | - | (3,388) |
| Net cash used in investing activities | | - | - | (3,388) |
| Cash Flows from Financing Activities | | | | |
| Short-term loan proceeds | | 10,265 | 104,731 | 47,000 |
| Warrants exercised | | - | - | 812,314 |
| Stock options exercised | | - | - | 100,500 |
| Issuance of common stock for cash | | 125,000 | - | 1,355,250 |
| Share subscriptions received in advance | | - | 50,000 | 150,000 |
| Loan proceeds | | - | - | 600,000 |
| | | | | |
| Net cash provided by financing activities | | 135,265 | 154,731 | 3,065,064 |
| Net change in cash | | 10,514 | (12,411) | 15,026 |
| Cash, beginning of period | | 4,512 | 14,412 | - |
| Cash, end of period | \$ | 15,026 | \$ 2,001 | \$ 15,026 |
| | | | | |
| Cash paid for interest | \$ | - | \$ - | \$ 50,222 |
| | | | | |
| Cash paid for income taxes | \$ | - | \$ - | \$ - |
| | | | | |
| Supplementary information - non-cash transactions: | | | | |
| Note payable converted to common stock | \$ | - | \$ - | \$ 330,000 |
| Common stock issued for prepaid consulting services | | - | 33,000 | 2,231 |
| Common stock issued to settle convertible debt | | - | 300,000 | 300,000 |
| Shares issued to settle debt | | - | - | 25,000 |
| See Notes to Financial St | atam | ante | | |

See Notes to Financial Statements

PROTOKINETIX, INC.

(A Development Stage Company)

NOTES TO FINANCIAL STATEMENTS June 30, 2012

Note 1. Organization and Significant Accounting Policies

Organization

ProtoKinetix, Inc. (the "Company"), a development stage company, was incorporated under the laws of the State of Nevada on December 23, 1999. The Company is a medical research company whose mission is the advancement of human health care.

In 2003, the Company entered into an assignment of license agreement (the "Agreement") with BioKinetix, Inc., an Alberta, Canada, corporation. The Agreement provided the Company with an exclusive assignment of all of the rights (the "Rights") that BioKinetix possessed relating to two proprietary technologies that are being developed for the creation and commercialization of "superantibodies," an enhancement of antibody technology that makes ordinary antibodies much more lethal. In consideration, the Company's Board of Directors authorized the Company to issue 16,000,000 shares of its common stock to the shareholders of BioKinetix.

The Company is also currently researching the benefits and feasibility of proprietary synthesized Antifreeze Glycoproteins ("AFGP"). In preliminary studies, AFGP has demonstrated an ability to protect and preserve human cells at temperatures below freezing.

Interim Period Financial Statements

The financial statements included in this Form 10-Q are unaudited and have been prepared in accordance with generally accepted accounting principles of the United States for the six months ended June 30, 2012 and 2011 and the cumulative period from December 23, 1999 to June 30, 2012 and with the instructions to Form 10-Q. Certain information and footnote disclosure normally included in financial statements prepared in accordance with accounting principles generally accepted in the United States have been condensed or omitted pursuant to such SEC rules and regulations. The interim period financial statements should be read together with the audited financial statements and accompanying notes included in the Company's audited financial statements for the year ended December 31, 2011. In the opinion of the Company, the unaudited financial statements contained herein contain all adjustments (consisting of a normal recurring nature) necessary to present a fair statement of the results of the interim periods presented. The results of operations for the interim periods are not necessarily indicative of the results of operations to be expected for the full year.

Going Concern

As shown in the financial statements, the Company has not developed a commercially viable product, has not generated any revenues to date and has incurred losses since inception, resulting in a net accumulated deficit at June 30, 2012. These factors raise substantial doubt about the Company's ability to continue as a going concern.

The Company needs additional working capital to continue its medical research or to be successful in any future business activities and continue to pay its liabilities. Therefore, continuation of the Company as a going concern is dependent upon obtaining the additional working capital necessary to accomplish its objective. Management is presently engaged in seeking additional working capital.

The accompanying financial statements do not include any adjustments to the recorded assets or liabilities that might be necessary should the Company fail in any of the above objectives and is unable to operate for the coming year.

Use of Estimates

Preparation of financial statements in conformity with generally accepted accounting principles in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. Actual results could differ from those estimates. The more significant accounting estimates inherent in the preparation of the Company's financial statements include estimates as to valuation of equity related instruments issued.

Earnings per Share and Potentially Dilutive Securities

Basic loss per share is computed by dividing the net loss available to common stockholders by the weighted average number of common shares outstanding in the period. The Company's stock split 1:75 on August 24, 2001. In April 2002, the Board of Directors approved a 2.5 for 1 split of the Company's stock. The accompanying financial statements are presented on a post-split basis. Diluted loss per share takes into consideration common shares outstanding (computed under basic earnings per share) and potentially dilutive securities. The effect of 15,830,000 (June 30,2011: 5,780,000) outstanding warrants, and nil (June 30, 2011: 250,000) outstanding options and debt convertible into 12,000,000 (2011: 12,000,000) common shares was not included in the computation of diluted earnings per share for all periods presented because it was anti-dilutive due to the Company's losses. Common stock issuable is considered outstanding as of the original approval date for purposes of earnings per share computations.

Share-Based Compensation

The Company has granted warrants and options to purchase shares of the Company's common stock to various parties for consulting services. The fair values of the warrants and options issued have been estimated using the Black-Scholes option-pricing model.

The Company measures stock-based compensation for all stock-based awards at fair value on the date of grant and recognition of compensation over the service period for awards expected to vest. The fair value of stock options is determined using the Black-Scholes option-pricing model.

The Company accounts for stock compensation arrangements at their fair value on the measurement date. The measurement of stock-based compensation is subject to periodic adjustment as the underlying instruments vest. The fair value of stock options is estimated using the Black-Scholes valuation model and the compensation charges are amortized over the vesting period.

Fair Value of Financial Instruments

Financial instruments, including cash, accounts payable, short-term loan and convertible note payable are carried at cost, which management believes approximates fair value due to the short-term nature of these instruments.

The Company measures the fair value of financial assets and liabilities based on the guidance of Fair Value Measurements which defines fair value, establishes a framework for measuring fair value, and expands disclosures about fair value measurements. Effective January 1, 2008, the Company adopted the policy for financial assets and liabilities, as well as for any other assets and liabilities that are carried at fair value on a recurring basis. The adoption of the provisions of this accounting policy did not materially impact the Company s financial position and results of operations.

The policy defines fair value as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. The policy also establishes a fair value hierarchy, which requires an

entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. The policy describes three levels of inputs that may be used to measure fair value:

- Level 1 quoted prices in active markets for identical assets or liabilities
- Level 2 quoted prices for similar assets and liabilities in active markets or inputs that are observable
- Level 3 inputs that are unobservable (for example cash flow modeling inputs based on assumptions)

Financial instruments measured at fair value on the balance sheet are summarized in levels of fair value hierarchy as follows:

| Assets | Level 1 | Level 2 | Level 3 | | Total |
|--------|--------------|---------|---------|---|--------------|
| Cash | \$ 15,026 | \$ - | \$ | _ | \$ 15,026 |

Recent Accounting Pronouncements

The management of the Company has considered all recent accounting pronouncements issued and believes that these recent pronouncements will not have a material effect on the Company s financial statements.

Note 2. Discontinued Operations

In 2003, the Company signed the licensing agreement described in Note 1. This agreement changed the Company's business plan to that of a medical research company. Accordingly, the operating results related to the Company's research prior to the licensing agreement have been presented as discontinued operations in these financial statements for all periods presented.

Note 3. Accounts Receivable

The accounts receivable is refundable harmonized sales tax (HST) paid on purchases.

Note 4. Short Term Loan

The short term loan is unsecured, non-interest bearing and is payable on demand.

Note 5. Convertible Note Payable

On July 1, 2011, the Company executed a loan agreement under which the Company issued to a corporation an 8% convertible promissory note in exchange for \$300,000. The note holder has the right to demand payment of outstanding principal and interest at any time with a 30-day grace period. The note is due and payable no later than June 30, 2016, and is convertible into shares of the Company's common stock at \$0.025 per share. No beneficial conversion feature was applicable to this convertible note.

Note 6. Share-Based Compensation

In 2003, the Company adopted its 2003 and 2004 Stock Incentive Plans. Each plan provides for the issuance of incentive and non-qualified shares of the Company's stock to officers, directors, employees, and non-employees. The Board of Directors determines the terms of the shares or options to be granted, including the number of shares or options, the exercise price, and the vesting schedule, if applicable. There were no shares issued during the six months ended June 30, 2012.

Note 7. Stock Options

There were no stock option transactions during the six month period ended June 30, 2012.

At June 30, 2012, there were no stock options outstanding:

Note 8. Warrants

There were 12,500,000 warrant issued during the six month period ended June 30, 2012.

At June 30, 2012, the following warrants were outstanding:

| Number of Warrants | Exercise price | Expiry Date |
|--------------------|----------------|------------------|
| 500,000 | \$ 0.50 | July 12, 2012 |
| 1,300,000 | 0.50 | August 1, 2012 |
| 1,530,000 | 0.15 | February 9, 2013 |
| 12,500,000 | 0.03 | January 15, 2014 |
| | | |

15,830,000

Note 9. Stockholders Deficiency

The Company is authorized to issue 200,000,000 shares of \$0.0000053 par value common stock. Each holder of common stock has the right to one vote but does not have cumulative voting rights. Shares of common stock are not subject to any redemption or sinking fund provisions, nor do they have any preemptive, subscription or conversion rights. Holders of common stock are entitled to receive dividends whenever funds are legally available and when declared by the board of directors, subject to the prior rights of holders of all classes of stock outstanding having priority rights as to dividends. No dividends have been declared or paid as of June 30, 2012.

During the six month period ended June 30, 2012, the Company issued 12,500,000 units to the share subscription holders for which the share subscriptions of \$125,000 have been received. Each unit consists of one common share and one warrant to purchase the company s stock. The warrants have an exercise price of \$0.03 and expire January 15, 2014.

ITEM 2. MANAGEMENT S DISCUSSION AND ANALYSIS OR PLAN OF OPERATIONS

FORWARD-LOOKING STATEMENTS

This discussion and analysis in this Quarterly Report on Form 10-Q should be read in conjunction with the accompanying unaudited Financial Statements and related notes for the six months ended June 30, 2012 and 2011 and for the period from December 23, 1999 to June 30, 2012. Our discussion and analysis of our financial condition and results of operations are based upon our unaudited financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of any contingent liabilities at the financial statement date and reported amounts of revenue and expenses during the reporting period. We review our estimates and assumptions on an on-going basis. Our estimates are based on our historical experience and other assumptions that we believe to be reasonable under the circumstances. Actual results are likely to differ from those estimates under different assumptions or conditions, but we do not believe such differences will materially affect our financial position or results of operations. Our critical accounting policies, the policies we believe are most important to the presentation of our financial statements and require the most difficult, subjective and complex judgments, are outlined below in Critical Accounting Policies, and have not changed significantly.

In addition, certain statements made in this report may constitute forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. These forward-looking statements involve known or unknown risks, uncertainties and other factors that may cause the actual results, performance, or achievements of the Company to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements. Specifically, but not limited to, 1) our ability to obtain necessary regulatory approvals for our products; and 2) our ability to increase revenues and operating income, is dependent upon our ability to develop and sell our products, general economic conditions, and other factors. You can identify forward-looking statements by terminology such as "may," "will," "should," "expects," "intends," "plans," "anticipates," "believes," "estimates," "predicts," "potential," "continues" or the negative of these terms or other comparable terminology. We base these forward-looking statements on our expectations and projections about future events, which we derive from the information currently available to us. Such forward-looking statements relate to future events or our future performance. Although we believe that the expectations reflected-in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, performance or achievements. Forward-looking statements are only predictions. The forward-looking events discussed in this Quarterly Report, the documents to which we refer you, and other statements made from time to time by us or our representatives, may not occur, and actual events and results may differ materially and are subject to risks, uncertainties, and assumptions about us. For these statements, we claim the protection of the bespeaks caution doctrine. The forward-looking statements speak only as of the date hereof, and we expressly disclaim any obligation to publicly release the results of any revisions to these forward-looking statements to reflect events or circumstances after the date of this filing.

Critical Accounting Policies

Our critical and significant accounting policies, including the assumptions and judgments underlying them, are disclosed in the Notes to the Financial Statements. These policies have been consistently applied in all material respects. The preparation of the financial statements in conformity with generally accepted accounting principles in the United States requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reported period. Actual results could differ from those estimates. See our audited financial statements and notes thereto which contain accounting policies and other disclosures required by accounting principles, generally accepted in the United States of America.

Important Disclosures and Disclaimers.

Please note that ProtoKinetix, Inc. (the "Company") is a research and product development stage company that has not yet sold any products. The Company had \$0 in revenues for the Period ending June 30,2012.

It is important to understand that although the Company (as is discussed below) is focused on various promising scientific and business development efforts, to date, we have not yet marketed a product. Ongoing testing of the AAGP molecule with three amino acids joined to a monosaccharide by a gemdifluride bond continues to show that there is significant promise in the field of medicine of preserving cells, tissue and organs from various stresses. The antiaging properties and the protective effect of AAGP—also is of significant interest to the cosmetic and skin care industries. Tests have confirmed that the AAGP—molecule improves the harvest of cells from cryopreservation by 30% to 120%. We believe there is a market for AAGP—to preserve cells, particularly various stem cells, and we will continue testing with potential customers. At the same time we are taking steps to improve the manufacturing process to reduce costs and improve purity and biochemical activity.

Our progress to date has been achieved notwithstanding the inherent risks relating to the science, applications, market opportunities and commercial relationships. The progress of the business has and will continue to be dependent on having appropriate human and sufficient financial resources which have and will be uncertain.

Overview

ProtoKinetix owns the world-wide rights to a family of anti-aging glycopeptides, trademarked as AAGPs . In scientific studies and tests AAGPs have demonstrated the ability to enhance the health and extend the life of biologically sensitive cells which have been subjected to severe stress conditions under laboratory controlled test conditions. AAGPs are stable and non-toxic.

Since 2005, ProtoKinetix has primarily focused on scientific research, however recently the company has been in the process of directing major efforts to the practical side of commercial validation and product development initiatives, particularly in regenerative medicine and the preservation of stem cells and other biological products and tools used in medical applications. The commercial applications for AAGPs in large markets such as skincare/cosmetic products and targeted health care solutions are numerous. ProtoKinetix is currently working with researchers, business leaders and advisors and commercial entities to bring AAGP to market.

Native AFGP Compound

AFGP (Anti-Freeze Glycoprotein) is found in nature as a compound produced by some fish, insects, reptiles, bacteria and plants that enable survival in freezing temperatures.

One of the many accomplishments from pioneering research of the U.S. Antarctic Program was the discovery, in the early sixties, that fish living year-long in subzero temperature are extremely resistant to freezing. The substances that prevent these fish from freezing were isolated, characterized and designated as antifreeze glycoproteins or AFGP. Various kinds of AFGP were isolated from many species of fishes, and in some amphibians, plants and insects. All of the AFGPs share a common characteristic that prevents ice crystals from growing and connecting to each other. Research has also confirmed a cell membrane stabilizing characteristics of native AFGP.

There has been much scientific research done in an attempt to synthetically replicate AFGPs in research institutions because the protective properties of AFGPs could have commercial applications, primarily in food and crop preservation at freezing temperatures. The native antifreeze glycoproteins are very large molecules that are often made up of a repeating series of smaller molecules, glycoproteins. Glycoproteins are often very biologically active, but they are inherently quite unstable. The oxygen-glycosidic link is readily cleaved by glycosidases, resulting in a low bio-availability of these glycoconjugate based molecules.

Scientific research prior to AAGP has focused on building a stable and more efficient compound with a strong bond.

AAGP The Core Technology of ProtoKinetix

AAGP Invention

Dr. Geraldine Castelot-Deliencourt, along with Dr. Jean-Charles Quirion at the Research Institute of Organic Chemistry in Rouen, France, developed a patented process to stabilize the oxygen-glycosidic bond in these sugar based molecules. This patented process replaces the weaker oxygen bond with a C-F2 mimetic. The resultant molecules are biologically active and stable over a pH range of 2 to 13. They are not broken down by glycosidases.

AAGP Toxicity Tests

Tests have shown cells that have been exposed to AAGP at low and high concentrations have remained viable. A common viability test used on cell cultures using trypan blue dye exclusion method has been used to show AAGP non-toxicity.

AAGP Stability Tests

AAGP molecules have remained stable when subjected to three tests:

- 1. pH ranging from a strong acid level of 1.8 (stronger than stomach acid) to a strong alkali level of 13.8. (the pH scale is calibrated from 1, highly acidic, to 14, highly alkali);
- 2. Enzymatic action using protease, which targets the amino acid bonds, and glycosidase, which targets the amino acid bonds, and glycosidase, which targets the sugar molecules; and
- 3. Temperatures ranging from -196°C (cryopreservation) to +37°C (body temperature).

Stress Tests on 12 Different Cell Lines

Cell lines are selected for their high level of sensitivity. Cell lines are also selected for their potential role in adding value in medical app