HEPALIFE TECHNOLOGIES INC
Form 424B3
August 07, 2006

Filed Pursuant to Rule 424(b)(3)

File Number 333-131256

**PROSPECTUS SUPPLEMENT NO. 1**

**Prospectus Supplement No. 1 dated August 7, 2006**

**to the Prospectus dated February 16, 2006**

**(Registration No. 333-131256)**

**HEPALIFE TECHNOLOGIES, INC.**

This Prospectus Supplement No. 1 supplements our Prospectus dated February 16, 2006. The shares that are the subject of the Prospectus have been registered to permit their sale to the public by Fusion Capital Fund II, LLC. The prices at which Fusion Capital may sell its shares will be determined by the prevailing market price for the shares or in negotiated transactions. We will not receive proceeds from the sale of our shares by Fusion Capital.

Our common stock is quoted on the Over-The-Counter Bulletin Board under the symbol HPLF.OB The closing sale price for our common stock as reported on the Over-the-Counter Bulletin Board on August 4, 2006, was $1.11.

You should read this Prospectus Supplement No. 1 together with the Prospectus. This Prospectus Supplement is qualified by reference to the Prospectus except to the extent that the information in this Prospectus Supplement updates and supersedes the information contained in the Prospectus.

This Prospectus Supplement includes the following documents, as filed by us with the Securities and Exchange Commission:

- The attached Annual Report on Form 10-K of HepaLife Technologies, Inc. for the year ended December 31, 2005 filed with the Securities and Exchange Commission on April 13,

2006

- The attached Current Report on Form 8-K of HepaLife Technologies, Inc. dated June 15, 2006, filed with the Securities and Exchange Commission on June 21, 2006.

Purchase of the shares involves certain risks. See "Risk Factors" beginning on page 6 of the Prospectus and the risk factors included in our Annual Report on Form 10-K for the year ended December 31, 2005.

**Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the accuracy or adequacy of this Prospectus Supplement. Any representation to the contrary is a criminal offense.**

**The date of this Prospectus Supplement is August 7, 2006.**

**UNITED STATES**

**SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

# FORM 10-K

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

**For the fiscal year ended December 31, 2005**

**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: 000-29819**

## HEPALIFE TECHNOLOGIES, INC.

(Exact name of registrant as specified in its charter)

## FLORIDA

(State or other jurisdiction of incorporation)

## 58-2349413

(I.R.S. Employer Identification No.)

**1628 West 1st Avenue, Suite 216, Vancouver, British Columbia, V6J 1G1**

(Address of principal executive offices)

**(800) 518-4879**

(Registrant s telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

**Common Stock, $.001 par value per share**

(Title of Each Class)

**Over The Counter Bulletin Board (OTCBB)**

(Name of exchange on which registered)

Securities registered pursuant to Section 12(g) of the Act: **None**

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

Yes [ ] No [X]

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 of Section 15(d) of the Act.

Yes [ ] No [X]

Indicate by check mark whether the registrant: (1) has filed all reports required by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to

file such reports), and (2) has been subject to such filing for the past 90 days. Yes [X] No [_]

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (229.405 of this chapter) is not contained herein, and will not be contained, to the best of the registrant's knowledge, in definitive

proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. [X]

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer. (Check one):

Large Accelerated Filer

[ ]

Accelerated Filer

[ ]

Non-accelerated Filer

[X]

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act).

Yes [ ] No [X]

Aggregate market value of the voting and non-voting common equity held by non-affiliates computed by reference to the price at which the common equity was last sold on April 6, 2006: $24,895,658.

Number of shares of Common Stock, $0.001 par value, outstanding as of April 6, 2006: 70,870,564.

Documents incorporated by reference: None.

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## PART I

### ITEM 1. BUSINESS.

#### Forward-Looking Statements

Except for the historical information presented in this document, the matters discussed in this Form 10-K for the fiscal year ending December 31, 2005, this report contains forward-looking statements. Such forward-looking statements include statements regarding, among other things, (a) our projected sales and profitability, (b) our growth strategies, (c) anticipated trends in our industry, (d) our future financing plans, and (e) our anticipated needs for working capital. Forward-looking statements, which involve assumptions and describe our future plans, strategies, and expectations, are generally identifiable by use of the words may, will, should, expect, anticipate, estimate, believe, int or the negative of these words or other variations on these words or comparable terminology. This information may involve known and unknown risks, uncertainties, and other factors that may cause our actual results, performance, or achievements to be materially different from the future results, performance, or achievements expressed or implied by any forward-looking statements. These statements may be found under Management's Discussion and Analysis of Financial Condition and Results of Operations, Business, Properties, as well as in this report generally. Actual events or results may differ materially from those discussed in forward-looking statements as a result of various factors, including, without limitation, the risks outlined under Risk Factors and matters described in this report generally. In light of these risks and uncertainties, there can be no assurance that the forward-looking statements contained in this filing will in fact occur.

#### The Company

We are a Florida corporation, formed in 1997 under the name Zeta Corporation. We changed our name on April 17, 2003, to more accurately reflect our business. We are authorized to issue up to 300,000,000 shares of common stock (of which 70,870,564 were issued and outstanding on April 6, 2006) and 1,000,000 shares of preferred stock (none of which has been issued).

#### Description of Business

We are an early stage, research and development based biotechnology company focused on the identification, development and eventual commercialization of technologies and products for liver toxicity detection and the treatment of various forms of liver dysfunction and disease. We currently do not directly conduct any of our research and development activities. Rather, once a technology has been identified, we fund the research and development activities relating to the technology with the intention of ultimately, if warranted, licensing, commercializing and marketing the subject technology. We do not have, and may never develop, any commercialized products. We have not generated any revenue from our current operations and do not expect to do so for the foreseeable future.

Our sponsored research is being conducted pursuant to a Cooperative Research and Development Agreement ( CRADA ) with the United States Department of Agriculture s (the USDA ) Agricultural Research Service. Currently, we are concentrating our sponsored research and development efforts on developing an artificial liver device and in-vitro toxicology and pre-clinical drug testing platforms.

HepaLife s ongoing sponsored research and development work is being conducted at two USDA laboratories, the Growth Biology Laboratory and the Biotechnology and Germplasm Laboratory, both located at the Beltsville Agricultural Research Center in Beltsville, Maryland.

**Artificial Liver Device**

We are working towards optimizing the hepatic (liver) functionality of a porcine cell line, and subclones thereof, which we refer to as the PICM-19 Cell Line. The PICM-19 Cell Line was developed and patented by USDA s Agricultural Research Service scientists. U.S. Patent #5,532,156 (Hepatocyte Cell Line Derived from the Epiblast

of Pig Blastocysts ) was issued on July 2, 1996, and U.S. Patent #5,866,420 (Artificial liver device) was issued on February 2, 1999.

The hepatic characteristics of the PICM-19 Cell Line have been demonstrated to have potential application in the production of an artificial liver device, which application was also developed and patented by USDA s Agricultural Research Service scientists for potential use by human patients with liver failure.

**In-Vitro Toxicology Testing**

The PICM-19 Cell Line, grown in-vitro, can synthesize liver specific proteins such as albumin and transferrin, and display enhanced liver-specific functions, such as ureagenesis (conversion of ammonia to urea) and cytochrome P450 (a family of over 60 enzymes the body uses to break down toxins and make blood) activity. The P-450 enzyme systems are key components in the overall hepatic detoxification pathway of drugs and other xenobiotics (toxic foreign chemicals which can be both man-made and natural chemicals, such as pesticides and pollutants). Likewise, ureagenesis is another important hepatic function since urea production is required for the detoxification of ammonia derived from the catabolism (breakdown of complex organic molecules into simpler components) of a number of nitrogen containing compounds. As a result, we believe the PICM-19 Cell Line could be an important element in developing in-vitro toxicological and pre-clinical drug testing platforms that could more accurately determine the potential toxicity and metabolism of new pharmacological compounds in the liver.

**Our Strategy**

Our sponsored research is focused on optimizing the hepatic functionality of the PICM-19 Cell Line, and subclones thereof, for use in the production of an artificial liver device for human patients with liver failure. The successful adaptation and application of an optimized PICM-19 Cell Line, along with the development of an artificial liver device, would allow us to target the estimated 25 million Americans that are or have been afflicted with liver and biliary disease.

Based upon our assessment of the information and data obtained in connection with our decision to enter into the CRADA and subsequently obtained from our ongoing sponsored research efforts, we anticipate that an artificial liver device, once approved for use by appropriate regulatory agencies, could be used either as a temporary artificial liver for patients awaiting a liver transplant, thus lengthening the time they have available while an organ donor is located, or it could provide support for post-transplantation patients until a grafted liver functions adequately to sustain the patient. Additionally, an artificial liver device could also be used as support for patients with chronic liver disease, thus allowing their own liver time to heal and regenerate, as well as providing immediate temporary support for those

patients suffering from acute liver failure, as is the case with drug overdoses.

Assuming we succeed in our sponsored research and development efforts into the optimization of the PICM-19 Cell Line, the development of an artificial liver device incorporating the optimized PICM-19 Cell Line and in obtaining a license pursuant to our CRADA, we will explore a number of commercial opportunities, including, but not limited to: the outright sale of our technology, joint venture partnerships with health care companies, or our direct marketing and selling of the products, if any, derived from the sponsored research and development efforts.

We are also targeting the toxicological and pre-clinical drug testing markets through the development of in-vitro toxicological and pre-clinical drug testing platforms using the PICM-19 Cell Line. Resulting in part from the limitations of current testing methodology, safety problems relating to drug usage are often discovered only during clinical trials, and unfortunately, sometimes after marketing. Hepatotoxicity, or liver damage caused by medications and other chemical compounds, is the single most common reason leading to drug withdrawal or refusal of drug approval by the FDA, generally resulting in substantial costs to the manufacturer.

Our commercial success will depend on our ability and the ability of our sublicensees, if any, to compete effectively in product development areas such as, but not limited to, safety, efficacy, ease of use, patient or customer compliance, price, marketing and distribution. There can be no assurance that competitors will not

succeed in developing products that are more effective than any that may ultimately be derived from our sponsored research and development efforts or that would render any such product obsolete and non-competitive.

**Our Intended Markets**

Assuming the results from our sponsored ongoing research and development efforts prove successful, and subject or our receiving regulatory approvals, we, based upon our discussions with representatives of the USDA, the USDA s Agriculture Research Service scientists and the related input from our advisory board scientists, believe that we will have the potential to address two important market segments:

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the liver disease market through the development of an artificial liver device; and

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the toxicological and pre-clinical drug testing market through the development of in-vitro toxicological and pre-clinical drug testing platforms that may more accurately determine the potential toxicity and metabolism of new pharmacological compounds in the liver.

Our ability to achieve profitability is dependent in part on ultimately obtaining regulatory approvals for products, if any, which are derived from our sponsored research and development efforts, and then entering into agreements for the commercialization of any such products. There can be no assurance that such regulatory approvals will be obtained or such agreements will be entered into. The failure to obtain any such necessary regulatory approvals or to enter into any such necessary agreements could delay or prevent us from achieving profitability and would have a material adverse effect on the business, financial position and results of our operations. Further, there can be no assurance that our operations will become profitable even if products, if any, which are derived from our sponsored research and development efforts, are commercialized.

If FDA and other approvals are ultimately obtained with respect to any product submitted by us in the future for approval, we expect to market and sell any such product through distribution, co-marketing, co-promotion or sublicensing arrangements with third parties. We have no experience in sales, marketing or distribution of biotechnology products and our current management and staff is not trained in these areas.

To date, we have no such agreements. To the extent that we enter into distribution, co-marketing, co-promotion or sublicensing arrangements for the marketing and sale of any such products, any revenues received by us will be dependent on the efforts of third parties. If any of such parties were to breach or terminate their agreement with us or otherwise fail to conduct marketing activities successfully, and in a timely manner, the commercialization of products, if any, derived from our research and development efforts would be delayed or terminated.

*Liver Disease and the Need for an Artificial Liver Device*

There is widespread agreement among the medical community that a rescue or bridging device that could supply short-term liver support to patients suffering acute liver failure due to disease or chemical toxicity is a necessary tool for viable treatment options. The need for such a device is increasing world wide. As mentioned above, it is believed that the major impediment to developing such a device is the availability of an optimal cell or cell line that could provide sustained liver function. Our overall goal is to provide a complete system to hospital centers that will be ready to use when a patient is diagnosed with insufficient liver function. The core of our system will be a bioreactor or cell culture device that could house and maintain a healthy population of liver cells from the PICM 19 Cell Line, or subclones thereof, with high metabolic activity in sufficient quantity to provide adequate hepatic detoxification functions. To ensure biological integrity and to maintain the highest quality of the bioreactor s liver cells, we would supply fully functional bioreactors that would incorporate, or be compatible with, presently used dialysis devices so that the patient s plasma could be effectively detoxified by transit through the bioreactor before being returned to the patient.

The National Institutes of Health ( NIH ) has estimated that one quarter of Americans will suffer from a liver or biliary disease at some point in their lifetime. These findings have been corroborated by other health organizations which have indicated that an estimated 25 million Americans are or have been afflicted with liver or biliary diseases. According to the National Institutes of Health (NIH-NIDDK), it is estimated that expenses of approximately $10 billion annually are incurred in the treatment of liver disease and associated conditions. Based

on published data, we believe that over $1.5 billion of this market represents the most acute patient population in urgent need of an artificial liver device. We are not aware of any negative reports, data or findings regarding the potential benefits of an effective artificial liver device.

Among those in greatest need, are the 6,169 Americans who underwent liver transplantation procedures in 2004 at a cost of $250,000 per surgery, notwithstanding pre- and post-operative expenses (American Liver Foundation); this market segment alone amounts to $1.54 billion per year.

In addition, the United Network for Organ Sharing estimates that 17,440 persons were awaiting liver transplants as of September 2005. If this waiting list patient population were able to undergo liver transplantation, these patients would account for an additional $4.36 billion in additional to medical care costs.

Causes of liver disease and related conditions include:

*Alcohol Abuse*

Of the nearly 14 million estimated Americans that either abuse alcohol or are alcoholics, approximately 10 to 20% are expected to develop cirrhosis of the liver, one of the leading causes of death among young and middle-age adults in the United States. Individuals with cirrhosis are particularly prone to developing fatal bacterial infections and cancer of the liver.

*Drug Induced Conditions*

Adverse drug reactions are an increasingly important clinical problem in medicine today and rank among the ten most common causes of death. While drug induced liver injury occurs in all age groups, a greater percentage occurs in the elderly, where five out of six persons 65 and older are taking at least one medication and almost half are of the elderly take three or more.

*Hepatitis*

According to publicly available statistical information, approximately 15-25% (upwards of 312,500 Americans) of the estimated 1.25 million chronically infected hepatitis B sufferers will die from chronic liver disease. Globally, an estimated 300 million people are infected with hepatitis B, causing approximately 1,000,000 deaths per year.

Of the estimated 4.5 million Americans infected with hepatitis C, for which at this time there is no known cure, an estimated 70-80% will develop chronic liver disease and of these, approximately 20% will die. The annual health care costs for the affected U.S. population with chronic hepatitis C alone has been estimated to be as high as $9 billion, compared to annual cost of $360 million for hepatitis B sufferers.

*Other Medical Conditions*

In addition to alcohol abuse, drug overdoses and hepatitis, other causes of liver disease include primary biliary cirrhosis, hemochromatosis, Wilson s disease, alpha1-antitrypsin deficiency, glycogen storage disease, autoimmune hepatitis, cardiac cirrhosis and schistosomiasis.

For people with severe liver failure, orthotopic liver transplantation is the most prescribed and effective treatment therapy available today. At present, there are upwards of 17,000 adults and children medically approved and waiting for liver transplants in the United States. Unfortunately, there are just over 5,000 livers available for transplant annually. Due to a severe shortage of organ donors, the waiting time for potential liver recipients could be as long as two to three years, with 20-30% of these patients not surviving the waiting period.

For persons who receive liver transplants, it is estimated that approximately 30% will die within 5 years of transplantation. The balance will require immunosuppressive drugs, rendering them susceptible to life threatening infections such as kidney failure and increased risk of cancer.

Because of limited treatment options, a low number of donor organs, the high price of transplants and follow up costs, a growing base of hepatitis, alcohol abuse, drug overdoses, and other factors that result in liver disease, we believe that a market opportunity for an artificial liver device able to remove toxins and improve immediate and long-term survival exists at this time.

*The Need for Improved In Vitro Toxicology Testing*

In 2003 alone, the inability to accurately predict toxicity early in drug development cost the pharmaceutical industry a record $8 billion. In particular, hepatotoxicity, or liver damage caused by medications and other chemical compounds, is the single most common reason leading to drug withdrawal or refusal of drug approval by the FDA. In fact, about one third of all potential drugs fail pre-clinical or clinical trials due to the toxic nature of the compounds being tested, accounting for an estimated $70 million (20%) of total research and development costs per drug.

The pharmaceutical industry has sought ways to identify liver toxicity at earlier stages of drug development, preferably without animal testing, often considered expensive and inaccurate, and socially contentious. As a result, cell-based testing has emerged as a low-cost, early toxicity detection tool in ADME-Tox research.

We believe that our in-vitro toxicology testing technology can reasonably target the broad in-vitro toxicology testing market, a segment expected to reach $1.96 billion by 2007 at an average annual growth rate of 12.1% (Business Communications Company, Inc; B-110R; The Market for in Vitro Toxicology Testing; Samuel Brauer PhD; June 2003).

**Employees**

At December 31, 2005, HepaLife had 1 full-time employee and 3 part-time employees. In addition, through the Company s Cooperative Research and Development Agreement, 2 USDA full time research scientist and 2 part-time senior research scientists. To the best of the Company's knowledge, none of the Company's officers or directors is bound by restrictive covenants from prior employers. None of the Company's employees are represented by labor unions or other collective bargaining groups. We consider relations with our employees to be good. We plan to retain and utilize the services of outside consultants for additional research, testing, regulatory and legal compliance and other services.

**ITEM 1A. RISK FACTORS.**

*We have sought to identify what we believe to be the most significant risks to our business. However, we cannot predict whether, or to what extent, any of such risks may be realized nor can we guarantee that we have identified all possible risks that might arise. Investors should carefully consider all of such risk factors before making an investment decision with respect to our Common Stock. We provide the following cautionary discussion of risks, uncertainties and possible inaccurate assumptions relevant to our business. These are factors that we think could cause our actual results to differ materially from expected results. Other factors besides those listed here could adversely affect us.*

*We Have Experienced Significant Losses And Expect Losses To Continue For The Foreseeable Future.*

We have yet to establish any history of profitable operations. We have incurred annual operating losses of $2,813,602, $1,435,613, and $1,102,723 respectively, during the past three fiscal years of operation. As a result, at December 31, 2005, we had an accumulated deficit of $6,561,373. We had no revenues during the last five fiscal years and we do not expect to generate revenues from our operations for the foreseeable future. Our profitability will require the successful completion of our sponsored research, development efforts and the subsequent commercialization of our products, if any, derived from our sponsored research and development activities regarding our artificial liver device and in-vitro toxicology testing methodologies. No assurances can be given when this will occur or that we will ever be profitable.

*To date most of our operating losses have been related to expenditures related to our advertising and investor relations program rather than to our sponsored research and development program.*

Since inception through December 31, 2005, we have expended a total of $2,792,701 in connection with our advertising and investor relations representing approximately 42% of our total expenses for the period as compared to total research and development expenditures of $546,137 or approximately 8% of our total expenses for the period. In 2005, we expended an additional $696,282 on our advertising and investor relations program and only $261,691 on our research and development activities. If we continue to expend funds in such a disproportionate manner, we may not have sufficient capital for the completion of our obligations under the CRADA or for the acquisition and development of new technologies. This would have an adverse affect on our operations and potential profitability, in which case we may need to substantially curtail or cease our research and development activities.

*We Currently Do Not Have, And May Never Develop, Any Commercialized Products.*

We currently do not have any commercialized products or any significant source of revenue. We have invested substantially all of our time and resources over the last three years in identification, research and development of technologies and products for liver toxicity detection and the treatment of various forms of liver dysfunction and disease. The technologies, which are the subject of our ongoing sponsored research programs, will require additional development, clinical evaluation, regulatory approval, significant marketing efforts and substantial additional investment (beyond the $807,828 to which we have committed under the terms of our CRADA) before they can provide us with any revenue. We cannot currently estimate with any accuracy the amount of these funds because it may vary significantly depending on the results of our current sponsored research and development activities, product testing, costs of acquiring licenses, changes in the focus and direction of our research and development programs, competitive and technological advances, the cost of filing, prosecuting, defending and enforcing patent claims, the regulatory process, manufacturing, marketing and other costs associated with the commercialization of products following receipt of approval from regulatory bodies and other factors.

Our efforts may not lead to commercially successful products for a number of reasons, including:

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we may not be able to obtain regulatory approvals or the approved indication may be narrower than we seek;

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our technologies or products, if any, derived from our research and development efforts may not prove to be safe and effective in clinical trials;

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physicians may not receive any reimbursement from third-party payors, or the level of reimbursement may be insufficient to support widespread adoption of any products derived from our research and development efforts;

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any products that may be approved may not be accepted in the marketplace by physicians or patients;

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we may not have adequate financial or other resources to complete the development and commercialization of products derived from our research and development efforts;

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we may not be able to manufacture our products in commercial quantities or at an acceptable cost; and

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rapid technological change may make our technologies and products derived from those technologies obsolete.

*We Will Require Additional Financing To Sustain Our Operations And Without It We Will Not Be Able To Continue Operations.*

Our independent auditors have added an explanatory paragraph to their audit opinion issued in connection with the financial statements for the years ended December 31, 2005 and 2004, relative to our ability to continue as a going concern. Our ability to obtain additional funding will determine our ability to continue as a going concern. Our financial statements do not include any adjustments that might result from the outcome of this uncertainty.

At December 31, 2005, we had a working capital deficit of $1,255,331. We have an operating cash flow deficit of $1,332,440 in 2005, $1,364,209 in 2004 and $1,022,501 in 2003. Although we believe that we have sufficient financial resources and commitments to sustain our current level of research and development activities,, any

expansion, acceleration or continuation of such activities will require additional capital which may not be available to us, if at all, on terms and conditions that we find acceptable.

On January 20, 2006, we entered into a new common stock purchase agreement with Fusion Capital Fund II, LLC pursuant to which Fusion Capital has agreed, so long as no event of default exists, to purchase on each trading day $25,000 of our common stock up to an aggregate of $15.0 million over a 30 month period subject to earlier termination at our discretion. In our discretion, we may elect to sell more of our common stock to Fusion Capital than the minimum daily amount. The purchase price of the shares of common stock will be equal to a price based upon the future market price of the common stock without any fixed discount to the market price. Fusion Capital does not have the right or the obligation to purchase shares of our common stock in the event that the price of our common stock is less than $0.50.

*We May Not Be Able To Repay Loans We Have Received From Harmel S. Rayat, Our President, Director And Majority Stockholder, To Fund Our Operation.*

We have borrowed an aggregate of $1,150,000 from Harmel S. Rayat, our president, director and majority stockholder, pursuant to his $1,600,000 loan commitment to us. The loans are due upon the receipt of the written demand from Mr. Rayat. The loans bear interest at the rate of 8.50% per annum. We do not currently have sufficient capital on hand to repay these loans. We may prepay these loans, at any time, without penalty. We expect to repay these amounts from the proceeds we receive under the common stock purchase agreement with Fusion Capital. There is no assurance that we will be able to repay all or a part of these loans or obtain any additional loans from Mr. Rayat in the event we do not receive the proceeds from Fusion Capital.

*The Success Of Our Sponsored Research And Development Program Is Uncertain And We Expect To Be Engaged In Research And Development Efforts For A Considerable Period Of Time Before We Will Be In A Position, If Ever, To Develop And Commercialize Products Derived From Our Sponsored Research Program.*

We expect to continue our current sponsored research and development program through at least 2007. Research and development activities, by their nature, preclude definitive statements as to the time required and costs involved in reaching certain objectives. Actual costs may exceed the amounts ($807,828) we have budgeted and actual time may exceed our expectations. If our research and development requires more funding or time than we anticipate, then we may have to reduce technological development efforts or seek additional financing. There can be no assurance that we will be able to secure any necessary additional financing or that such financing would be available to us on favorable terms. Additional financings could result in substantial dilution to existing stockholders. Even if we are able to fully fund our research and development program, there is no assurance that, even upon successful completion of our program, we will ever be able to commercialize products if any, derived from our research efforts or that we will be able to generate any revenues from operations.

*Our Sponsored Research and Development Program Is In The Preliminary Development Stage And The Results We Attain May Not Prove To Be Adequate For Purposes of Developing and Commercializing Any Products Or Otherwise To Support A Profitable Business Venture.*

Our sponsored research and development program is in the preliminary development stage. Our program is targeting specifically in-vitro toxicology and drug testing platforms and the development of an artificial liver device. We will require significant further research, development, testing and regulatory approvals and significant additional investment (beyond the $807,828 to which we have committed under the terms of our CRADA) before we will be in a position to attempt to commercialize products derived from our research and development program. We cannot currently estimate with any accuracy the amount of these funds because it may vary significantly depending on the results of our current sponsored research and development activities, product testing, costs of acquiring licenses, changes in the focus and direction of our research and development programs, competitive and technological advances, the cost of filing, prosecuting, defending and enforcing patent claims, the regulatory process, manufacturing, marketing and other costs associated with commercialization of products following receipt of approval from regulatory bodies and other factors.

There can be no assurances that our early stage sponsored research will be successful. The ultimate results of our ongoing research program may demonstrate that the technologies being researched by us may be ineffective,

unsafe or unlikely to receive necessary regulatory approvals, if ever. If such results are obtained, we will be unable to create marketable products or generate revenues and we may have to cease operations.

We have not submitted any products or any technologies that are the subject of, or result from, our research and development activities for regulatory approval or clearance. Even if our research is successful, the process of obtaining necessary U.S. Food and Drug Administration ( FDA ) approvals or clearances can take years and is expensive and full of uncertainties. Additionally, approved products are subject to continuing FDA requirements relating to quality control and quality assurance, maintenance of records, reporting of adverse events and product recalls, documentation, labeling and promotion of medical products. Compliance with such continued regulatory oversight may prove to be costly and may limit our ability to attain profitable operations.

*We May Not Be Granted An Exclusive License Under Our CRADA With The USDA s Agricultural Research Service.*

We are a party to a CRADA with the USDA s Agricultural Research Service which grants us an option to negotiate an exclusive license to any invention or other intellectual property conceived or reduced to practice under the CRADA which is patentable or otherwise protectable under Title 35 of the United States Code or under the patent laws of a foreign country. There can be no assurance that such a license will be granted to us or that we can obtain a license on terms favorable to us. If we do not obtain an exclusive license, our ability to generate revenue would be materially adversely affected.

We expect to enter into additional research agreements and licenses in the future that relate to important technologies that may be necessary for the development and commercialization of related and unrelated products. These agreements and licenses may impose various commercialization, indemnification, royalty, insurance and other obligations on us, which, if we fail to comply, may result in the termination of these agreements and licenses or make the agreements and licenses non-exclusive, which could affect our ability to exploit important technologies that are required for successful development of products, if any, derived from our ongoing sponsored research and development programs.

*Our CRADA With The USDA s Agricultural Research Service May Be Terminated By Either Party At Any Time By Giving Written Notice Of Not Less Than Sixty Calendar Days Prior To The Desired Termination Date.*

Our current sponsored research and development program is based entirely on our CRADA with the USDA s Agricultural Research Service. The termination date of the CRADA is September 30, 2007. However, the CRADA provides that it may be terminated unilaterally by either us or the USDA s Agricultural Research Service upon written

notice of not less than sixty calendar days prior to the desired termination date. This means that the USDA s Agricultural Research Service could terminate the CRADA even if we are not in default under the terms of the Agreement. If the USDA s Agricultural Research Service were to do so, our business and future prospects would be materially adversely affected.

*Currently, We Do Not Directly Conduct Any Of Our Research And Development Activities And Therefore We Will Have Minimal Control Over Such Research.*

We rely primarily on the USDA s Agricultural Research Service to conduct, monitor and assess our sponsored research. We will have no control over the specifics of and possible direction that the research may take. Accordingly, there can be no assurance that the USDA s Agricultural Research Service will conduct our sponsored research in a manner that will lead to the commercial development of any products.

We are also dependent upon the services of certain key scientific personnel who are not employed by us, including the principal investigators with respect to our on going research regarding both the treatment of liver disease (and related conditions), including the development of an artificial liver device, and in-vitro toxicology testing technologies. The loss of the services provided by such persons could have a materially adverse effect on us, unless qualified replacements could be found. We have no control over whether our principal investigators or other scientific personnel will choose to remain involved with our projects. Since these individuals are not bound by contract to us nor employed by us directly, they might move on to other research or positions.

*We Are Subject To Substantial Government Regulation Which Could Materially Adversely Affect Our Business.*

We have yet to develop any products for submission for regulatory approval. If any such products are submitted for approval, they must undergo rigorous preclinical and clinical testing and an extensive regulatory approval process before they can be marketed. This process makes it longer, harder and more costly to bring any products to market; moreover, we cannot guarantee that approval will be granted. The pre-marketing approval process can be particularly expensive, uncertain and lengthy. Many products for which FDA have never been approved for marketing. In addition to testing and approval procedures, extensive regulations also govern marketing, manufacturing, distribution, labeling and record-keeping procedures. If we do not comply with applicable regulatory requirements, such violations could result in warning letters, non-approval, suspensions of regulatory approvals, civil penalties and criminal fines, product seizures and recalls, operating restrictions, injunctions and criminal prosecution.

Delays in, or rejection of, FDA or other government entity approval may also adversely affect our business. Such delays or rejection may be encountered due to, among other reasons, government or regulatory delays, lack of efficacy during clinical trials, unforeseen safety issues, slower than expected rate of patient recruitment for clinical trials, inability to follow patients after treatment in clinical trials, inconsistencies between early clinical trial results and results obtained in later clinical trials, varying interpretations of data generated by clinical trials, or changes in regulatory policy during the period of product development in the United States. In the United States more stringent FDA oversight in product clearance and enforcement activities could result in our experiencing longer approval cycles, more uncertainty, greater risk and significantly higher expenses. Even if regulatory approval for any product is granted, this approval may entail limitations on uses for which any such product may be labeled and promoted. It is possible, for example, that we may not receive FDA approval to market products based on our sponsored research and development efforts for broader or different applications or to market updated products that represent extensions of any such product. In addition, we may not receive FDA approval to export any such product in the future, and countries to which products are to be exported may not approve them for import.

Any manufacturing facilities would also be subject to continual review and inspection. The FDA has stated publicly that compliance with manufacturing regulations will be scrutinized more strictly. A governmental authority may challenge our compliance with applicable federal, state and foreign regulations. In addition, any discovery of previously unknown problems with any of our sponsored research and development efforts or products derived from such research and development, or facilities may result in marketing, sales and manufacturing restrictions, being imposed, as well as possible enforcement actions.

From time to time, legislative or regulatory proposals are introduced that could alter the review and approval process relating to our research and development programs and products, if any, derived from such research. It is possible that the FDA will issue additional regulations further restricting the sale of our products, if any, derived from our research and development efforts. Any change in legislation or regulations that govern the review and approval process relating to could make it more difficult and costly to obtain approval, or to produce, market, and distribute such products, if any, derived from our research and development efforts, even if approved.

*We May Be Required To Comply With Rules Regarding Animal Testing and This May Limit the Success of Our Research and Development Program.*

Our sponsored research and development efforts involve laboratory animals. We may be adversely affected by changes in laws, regulations or accepted procedures applicable to animal testing or by social pressures that would restrict the use of animals in testing or by actions against our collaborators or us by groups or individuals opposed to such testing.

*Our Sponsored Research and Development Program Uses Cells Derived From Pigs, Which Could Prevent The FDA Or Other Health Regulatory Agencies From Approving Products, If Any, Derived From Our Research and Development Efforts.*

Because pigs carry genetic material of the porcine endogenous retrovirus ( PERV ), our use of cells derived from pigs carries a risk of transmitting viruses harmless to pigs, but deadly to humans. This may result in the FDA or

other health regulatory agencies not approving products, if any, derived from our sponsored research and development efforts or subsequently banning any further use of any such products should health concerns arise after any such product was approved. At this time, it is unclear whether we will be able to obtain clinical and product liability insurance that covers the PERV risk.

*We May Be Liable For Contamination Or Other Harm Caused By Materials That We Handle, And Changes In Environmental Regulations Could Cause Us To Incur Additional Expense.*

Our sponsored research and development programs do not generally involve the handling of potentially harmful biological materials or hazardous materials, but they may occasionally do so. The USDA s Agricultural Research Service and we are subject to federal, state and local laws and regulations governing the use, handling, storage and disposal of hazardous and biological materials. If violations of environmental, health and safety laws occur, we could be held liable for damages, penalties and costs of remedial actions. These expenses or this liability could have a significant negative impact on our business, financial condition and results of operations. We may violate environmental, health and safety laws in the future as a result of human error, equipment failure or other causes. Environmental laws could become more stringent over time, imposing greater compliance costs and increasing risks and penalties associated with violations. We may be subject to potentially conflicting and changing regulatory agendas of political, business and environmental groups. Changes to or restrictions on permitting requirements or processes, hazardous or biological material storage or handling might require an unplanned capital investment or relocation. Failure to comply with new or existing laws or regulations could harm our business, financial condition and results of operations.

*Even If We Were To Secure Regulatory Approval In The Future For Any Product Derived From Our Sponsored Ongoing Research Efforts, We Lack Sales and Marketing Experience and Will Likely Rely On Third Parties For Such Services.*

Our ability to achieve profitability is dependent in part on ultimately obtaining regulatory approvals for products, if any, which are derived from our sponsored research and development efforts, and then entering into agreements for the commercialization of any such products. There can be no assurance that such regulatory approvals will be obtained or such agreements will be entered into. The failure to obtain any such necessary regulatory approvals or to enter into any such necessary agreements could delay or prevent us from achieving profitability and would have a material adverse effect on the business, financial position and results of our operations. Further, there can be no assurance that our operations will become profitable even if products, if any, which are derived from our sponsored research and development efforts, are commercialized.

If FDA and other approvals are ultimately obtained with respect to any product submitted by us in the future for approval, we expect to market and sell any such product through distribution, co-marketing, co-promotion or

sublicensing arrangements with third parties. We have no experience in sales, marketing or distribution of biotechnology products and our current management and staff is not trained in these areas. To date, we have no such agreements. To the extent that we enter into distribution, co-marketing, co-promotion or sublicensing arrangements for the marketing and sale of any such products, any revenues received by us will be dependent on the efforts of third parties. If any of such parties were to breach or terminate their agreement with us or otherwise fail to conduct marketing activities successfully, and in a timely manner, the commercialization of products, if any, derived from our research and development efforts would be delayed or terminated.

*We May Not Be Able To Attract And Retain Qualified Personnel Either As Employees Or As Consultants; Without Such Personnel, We May Not Be Successful In Commercializing The Results Of Our Ongoing Research And Development Efforts.*

Competition for qualified employees among companies in the biotechnology industry is intense. Our future success depends upon our ability to attract, retain and motivate highly skilled employees. Our present management has no clinical or other experience in the development of biotechnology products. Attracting desirable employees will require us to offer competitive compensation packages, including possible stock options. In order to successfully commercialize the results of our ongoing research and development efforts or products, if any, derived from our research program we must substantially expand our personnel, particularly in the areas of clinical trial management, regulatory affairs, business development and marketing. There can be no assurance that

we will be successful in hiring or retaining qualified personnel. Managing the integration of new personnel and our growth generally could pose significant risks to our development and progress. The addition of such personnel may result in significant changes in our utilization of cash resources and our development schedule.

*We Expect To Operate In A Highly Competitive Market; We May Face Competition From Large, Well-Established Companies With Significant Resources; And, We May Not Be Able To Compete Effectively.*

Our commercial success will depend on our ability and the ability of our sublicensees, if any, to compete effectively in product development areas such as, but not limited to, safety, efficacy, ease of use, patient or customer compliance, price, and marketing and distribution. There can be no assurance that competitors will not succeed in developing products that are more effective than any products derived from our research and development efforts or that would render such products obsolete and non-competitive.

The biotechnology industry is characterized by intense competition, rapid product development and technological change. Most of the competition that we encounter will come from companies, research institutions and universities who are researching and developing technologies and potential products similar to or competitive with our own.

These companies enjoy numerous competitive advantages over us, including:

- significantly greater name recognition;

- established relations with healthcare professionals, customers and third-party payors;

- established distribution networks;

- additional lines of products, and the ability to offer rebates, higher discounts or incentives to gain a competitive advantage;

- greater experience in conducting research and development, manufacturing, clinical trials, obtaining regulatory approval for products, and marketing approved products; and

- greater financial and human resources for product development, sales and marketing, and patent litigation.

As a result, we may not be able to compete effectively against these companies or their products.

*We May Become Subject To Claims Of Infringement Or Misappropriation Of The Intellectual Property Rights Of Others, Which Could Prohibit Us From Commercializing Products Based On Our Sponsored Research And Development Program, Require Us To Obtain Licenses From Third Parties Or To Develop Non-Infringing Alternatives, And Subject Us To Substantial Monetary Damages And Injunctive Relief.*

We do not have any patents regarding any of our sponsored research and development activities. We may not be able to assert any rights, under our CRADA, to any patents held by the USDA s Agriculture Research Service. Third parties could, in the future, assert infringement or misappropriation claims against us with respect to our current sponsored research and development program or future products, if any, derived from our sponsored research and development program. Whether a product infringes a patent involves complex legal and factual issues, the determination of which is often uncertain. Therefore, we cannot be certain that we have not infringed the intellectual property rights of such third parties.

Any infringement or misappropriation claim could cause us to incur significant costs, could place significant strain on our financial resources, divert management s attention from our business and harm our reputation. If the relevant patents were upheld as valid and enforceable and we were found to infringe, we could be prohibited from continuing our research and development activities and from marketing or selling products, if any, derived from our sponsored research and development efforts unless we could obtain licenses to use the technology covered by the patent or are able to design around the patent. We may be unable to obtain a license on terms acceptable to us, if at all, and we may not be able to commercialize any products. A court could also order us to pay compensatory damages for such infringement, plus prejudgment interest and could, in addition, treble the compensatory damages and award attorney fees. These damages could be substantial and could harm our reputation, business, financial condition and operating results. Depending on the nature of the relief ordered by the court, we could become liable for additional damages to third parties.

*We May Be Exposed To Product Liability Claims For Which We Do Not Have Any Insurance Coverage.*

Because our activities involve the researching, developing and testing of new technologies; and in the future we may be involved either directly or indirectly in the manufacturing and distribution of products, if any, derived from our sponsored research and development efforts, we may be exposed to the financial risk of liability claims in the event that the use of any such product results in personal injury, misdiagnosis or death. We may be subject to claims against us even if the apparent injury is due to the actions of others. There can be no assurance that we will not experience losses due to product liability claims in the future, or that adequate insurance will be available in sufficient amounts, at an acceptable cost, or at all. A product liability claim, product recall or other claim, or claims for uninsured liabilities or in excess of insured liabilities, may have a material adverse effect on our business, financial condition and results of operations. These liabilities could prevent or interfere with our product commercialization efforts. Defending a suit, regardless of merit, could be costly, could divert management attention and might result in adverse publicity, which could result in the withdrawal of, or inability to recruit, clinical trial volunteers, or result in reduced acceptance of products derived from our sponsored research and development activities in the market.

We do not currently carry any insurance. If a claim against us results in a large monetary judgment, which we cannot pay, we may have to cease operations.

*Failure To Obtain Third Party Reimbursement For Products Derived From Our Sponsored Research and Development Efforts Could Limit Our Revenue.*

In the United States, success in obtaining payment for a new product from third parties, such as insurers, depends greatly on the ability to present data which demonstrates positive outcomes and reduced utilization of other products or services, as well as cost data which shows that treatment costs using the new product are equal to or less than what is currently covered for other products. If we are unable to obtain favorable third party reimbursement and patients are unwilling or unable to pay for such products or services out-of-pocket, it could limit our revenue and harm our business.

*Mr. Harmel S. Rayat, Our President, Chief Executive Officer, Chief Financial Officer, Principal Accounting Officer And Director, Is Able To Substantially Influence All Matters Requiring Approval By Our Stockholders, Including The Election Of Directors.*

As of April 6, 2006, Mr. Rayat beneficially owned approximately 69% of our outstanding common stock. Accordingly, he is able to substantially influence virtually all matters requiring approval by our stockholders, including the election of directors. Our Articles of Incorporation do not provide for cumulative voting in the election of directors and, therefore, although they are able to vote, our other stockholders should not expect to be able to elect any directors to our board of directors.

*We Rely On Our Management, The Loss Of Whose Services Could Have A Material Adverse Affect On Our Business.*

We rely upon the services of our board of directors and management, in particular those of Mr. Harmel S. Rayat, the loss of which could have a material adverse affect on our business and prospects. Competition for qualified personnel to serve in a senior management position is intense. If we are not able to retain our directors and management, or attract other qualified personnel, we may not be able to fully implement our business strategy; failure to do so would have a materially adverse impact on our future prospects.

We currently have no employment agreements with any of our officers and directors imposing any specific condition on our officers and directors regarding their continued employment by us. Our officers and directors are also officers, directors and employees of other companies, and we may have to compete with such other companies for their time, attention and efforts. Except for Mr. Rayat, none of our officers and directors is expected to spend more than approximately five (5%) of his time on our business affairs. Mr. Rayat will not be spending his full time and effort on our business affairs because he is engaged in other business activities. We do not expect Mr. Rayat to spend more than twenty (20%) of his time on our business affairs. If Mr. Rayat s

other business activities, from time to time, require more of Mr. Rayat s time, he may have less time to spend on our business affairs and our operations could suffer as a result. We do not maintain key man insurance on any of our directors or officers.

*Future Sales Of Our Common Stock May Decrease Our Stock Price.*

We have previously issued a total of 70,870,564, shares of common stock, of which 55,039,683, are eligible for resale under Rule 144 of the Securities Act. In addition, we have also registered a substantial number of shares of common stock that are issuable upon the exercise of options. If holders of options choose to exercise their purchase rights and sell shares of common stock in the public market all at once or in a short time period, the prevailing market price for our common stock may decline. Future public sales of shares of common stock may adversely affect the market price of our common stock or our future ability to raise capital by offering equity securities.

*Our Stock Price Historically Has Been Volatile And May Continue To Be Volatile.*

The market price of our common stock has been and is expected to continue to be highly volatile. Factors, many of which are beyond our control, include, in addition to other risk factors described in this section, the announcements of technological innovations by us or other companies, regulatory matters, new or existing products or procedures, concerns about our financial position, operating results, litigation, government regulation, developments or disputes relating to agreements, patents or proprietary rights, and general economic, industry and market conditions may have a significant impact on the market price of our stock. In addition, potential dilutive effects of future sales of shares of common stock by our stockholders and by us, including Fusion Capital pursuant to this prospectus and subsequent sale of common stock by the holders options could have an adverse effect on the market price of our shares.

Volatility in the market price for particular companies has often been unrelated or disproportionate to the operating performance of those companies. Broad market factors may seriously harm the market price of our common stock, regardless of our operating performance. In addition, securities class action litigation has often been initiated following periods of volatility in the market price of a company's securities. A securities class action suit against us could result in substantial costs, potential liabilities, and the diversion of management's attention and resources. To the extent our stock price fluctuates and/or remains low, it could cause you to lose some or all of your investment and impair our ability to raise capital through the offering of additional equity securities.

*Our Common Is A "Penny Stock" And Because "Penny Stock Rules Will Apply, You May Find It Difficult To Sell The Shares Of Our Common Stock You Acquired In This Offering.*

Our common stock is a penny stock as that term is defined under Rule 3a51-1 of the Securities Exchange Act of 1934. Generally, a "penny stock" is a common stock that is not listed on a securities exchange and trades for less than $5.00 a share. Prices often are not available to buyers and sellers and the market may be very limited. Penny stocks in start-up companies are among the riskiest equity investments. Broker-dealers who sell penny stocks must provide purchasers of these stocks with a standardized risk-disclosure document prepared by the U.S. Securities & Exchange Commission. The document provides information about penny stocks and the nature and level of risks involved in investing in the penny stock market. A broker must also give a purchaser, orally or in writing, bid and offer quotations and information regarding broker and salesperson compensation, make a written determination that the penny stock is a suitable investment for the purchaser, and obtain the purchaser's written agreement to the purchase. Many brokers choose not to participate in penny stock transactions. Because of the penny stock rules, there is less trading activity in penny stock and you are likely to have difficulty selling your shares.

*Our Common Shares Are Thinly Traded, So You May Be Unable To Sell At Or Near Ask Prices Or At All If You Need To Sell Your Shares To Raise Money Or Otherwise Desire To Liquidate Your Shares.*

Our common shares have historically been sporadically or "thinly-traded" on the OTCBB, meaning that the number of persons interested in purchasing our common shares at or near ask prices at any given time may be relatively small or non-existent. As of April 6, 2006, our average trading volume per day for the past three months was approximately 49,867 shares a day with a high of 164,200 shares traded and a low of 6,000 shares traded.

This situation is attributable to a number of factors, including the fact that we are a small company which is relatively unknown to stock analysts, stock brokers, institutional investors and others in the investment community that generate or influence sales volume, and that even if we came to the attention of such persons, they tend to be risk-averse and would be reluctant to follow an unproven company such as ours or purchase or recommend the purchase of our shares until such time as we became more seasoned and viable. As a consequence, there may be periods of several days or more when trading activity in our shares is minimal or non-existent, as compared to a seasoned issuer which has a large and steady volume of trading activity that will generally support continuous sales without an adverse effect on share price. We cannot give you any assurance that a broader or more active public trading market for our common shares will develop or be sustained, or that current trading levels will be sustained.

*Compliance With Changing Regulation Of Corporate Governance And Public Disclosure May Result In Additional Expenses.*

Keeping abreast of, and in compliance with, changing laws, regulations and standards relating to corporate governance and public disclosure, including the Sarbanes-Oxley Act of 2002, new SEC regulations and, in the event we are ever approved for listing on either NASDAQ or a registered exchange, NASDAQ and stock exchange rules, will require an increased amount of management attention and external resources. We intend to continue to invest all reasonably necessary resources to comply with evolving standards, which may result in increased general and administrative expenses and a diversion of management time and attention from revenue-generating activities to compliance activities.

*We Do Not Intend To Pay Dividends For The Foreseeable Future.*

We currently intend to retain future earnings, if any, to support the development and expansion of our business and do not anticipate paying cash dividends in the foreseeable future. Our payment of any future dividends will be at the discretion of our board of directors after taking into account various factors, including but not limited to our financial condition, operating results, cash needs, growth plans and the terms of any credit agreements that we may be a party to at the time. Accordingly, investors must rely on sales of their common stock after price appreciation, which may never occur, as the only way to realize their investment. Investors seeking cash dividends should not purchase the units offered by us pursuant to this prospectus.

**ITEM 2. PROPERTIES.**

Our principal office is currently located at 1628 West First Avenue, Suite 216, Vancouver, British Columbia, Canada, V6J 1G1. A private corporation controlled by Mr. Harmel S. Rayat, our president, chief executive and financial officer, principal accounting officer, director and majority stockholder, owns these premises; the premises are provided to us without charge. We share these facilities with several other companies with which Mr. Rayat is affiliated. This arrangement has been in place for all periods covered by the financial statements included in this prospectus and has not had any adverse impact on our operations.

The only activities which we conduct at these premises relate solely to administrative and accounting functions, virtually all of which are computerized and require limited space and clerical assistance for their execution.

All of our sponsored research and development activities are conducted in facilities located at the Growth Biology Laboratory BARC-East, Bldg. 200, Room 202, Beltsville, Maryland 20705 and at the Biotechnology and Germplasm Laboratory BARC-East, Bldg. 200, Room 13, Beltsville, Maryland 20705. These facilities, which also include space for any support personnel that we may assign to the project, are provided to us under the terms of the CRADA.

We believe that in light of our current financial condition and level of activity, the Vancouver office is adequate and suffices for our general corporate and administrative operations, and the research and support facilities in Maryland are adequate for the current level of our sponsored research and development program. We intend to reassess, from time to time, our office and research facility requirements as the results of our research program and financing efforts may require.

**ITEM 3. LEGAL PROCEEDINGS.**

The Company is not party to any current legal proceedings.

**ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS.**

There were no matters submitted to a vote of the security holders in the fourth quarter of 2005. It is our intention to schedule a shareholder s meeting to elect directors and transact any additional business in the second or third quarter of 2006.

## PART II

### ITEM 5. MARKET FOR COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

Market Information

The Company's Common Stock is listed on the OTC Bulletin Board under the symbol "HPLF". The following table sets forth the high and low sale prices for the periods indicated:

| | High | Low |
|---|---|---|
| First Quarter 2003 | $0.70 | $0.20 |
| Second Quarter 2003 | $1.77 | $0.44 |
| Third Quarter 2003 | $2.18 | $1.51 |
| Fourth Quarter 2003 | $3.59 | $1.74 |

First Quarter 2004

$3.62

$2.55

Second Quarter 2004

$2.99

$1.47

Third Quarter 2004

$2.91

$1.95

Fourth Quarter 2004

$5.80

$2.06

First Quarter 2005

$4.97

$2.38

Second Quarter 2005

$3.12

$1.80

Third Quarter 2005

$2.10

$1.40

Fourth Quarter 2005

$2.20

$1.35

January 1, 2006 April 6, 2006

$1.62

$0.98

As of April 6, 2006, there were approximately 62 stockholders of record of the Company's Common Stock. We are engaged in a highly dynamic industry, which often results in significant volatility of our common stock price.

Dividend Policy

We have never paid cash dividends on our capital stock and do not anticipate paying any cash dividends in the foreseeable future, but intend to retain our capital resources for reinvestment in our business. Any future determination to pay cash dividends will be at the discretion of the board of directors and will be dependent upon our financial condition, results of operations, capital requirements and other factors as the board of directors deems relevant. Our board of directors has the right to authorize the issuance of preferred stock, without further shareholder approval, the holders of which may have preferences over the holders of the Common Stock as to payment of dividends.

Securities Authorized for Issuance Under Equity Compensation Plans

| Plan Category | (a) Number of Securities to be issued upon exercise of outstanding options, warrants and rights | (b) Weighted-average exercise price of outstanding options, warrants and rights | (c) Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) |
|---|---|---|---|
| Equity compensation plans | | | |

approved by security holders

16,848,000

$1.295

20,925,000

Equity compensation plans not

approved by security holders

---

Total

16,848,000

$1.295

20,925,000

**ITEM 6. SELECTED FINANCIAL DATA**

FIVE-YEAR STATEMENT OF OPERATIONS

| | Years Ended December 31 | | | | |
|---|---|---|---|---|---|
| | 2001 | 2002 | 2003 | 2004 | 2005 |
| Revenues | $ - | $ - | $ - | $ - | $ - |
| General and administrative | | | | | |
| Management fees and consulting fees Related party | 144,000 | 144,600 | 28,500 | 9,500 | 29,925 |
| Investor Relations | - | 119,500 | 960,003 | 1,016,916 | 696,282 |
| Other operating expense | 21,936 | 21,823 | 73,767 | 259,572 | 409,371 |
| Research and Development | - | 91,500 | 41,400 | 151,546 | 261,691 |
| Stock offering costs | - | - | - | - | 1,420,796 |

| | | | | | |
|---|---|---|---|---|---|
| Total General and Administrative Expenses | 165,936 | 377,423 | 1,103,670 | 1,437,534 | 2,818,065 |
| Other Income | | | | | |
| Interest Income | (5,572) | (1,951) | (947) | (1,921) | (4,463) |
| Provision for Income Taxes | - | - | - | - | - |
| Net Loss Available to Common Stockholders | ($160,364) | ($375,472) | ($1,102,723) | ($1,435,613) | ($2,813,602) |
| Basic and Diluted Loss Per Common Share | ($0.00) | ($0.01) | ($0.02) | ($0.02) | ($0.04) |
| Weighted Average Common Shares Outstanding | 45,409,680 | 52,723,277 | 57,817,305 | 64,610,777 | 69,314,822 |

**ITEM 7. MANAGEMENT S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATION**

**Discussion and Analysis**

*The following discussion and analysis is based upon our financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States, and should be read in conjunction with our financial statements and related notes. The preparation of these financial statements requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue and expenses, and related disclosure of contingent assets and liabilities. Management bases its estimates on historical experience and on various other assumptions that are believed to be 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 these estimates under different assumptions or conditions. In addition, the following discussion and analysis contains forward-looking statements that involve risks and uncertainties, including, but not limited to, those discussed in Risk Factors, Forward Looking Statements, and elsewhere in this prospectus.*

**Overview**

We are an early stage, research and development based, biotechnology company focused on the identification, development and eventual commercialization of technologies and products for liver toxicity detection and the treatment of various forms of liver dysfunction and disease. We currently do not directly conduct any of our own research and development activities. Rather, once a technology has been identified, we fund the research and development activities relating to the technology with the intention of ultimately, if warranted, licensing, commercializing and marketing the subject technology.

Our sponsored research is being conducted pursuant to our CRADA with the USDA's Agricultural Research Service.

Currently, we are concentrating our efforts on developing an artificial liver device and in-vitro toxicology and pre-clinical drug testing platforms.

Artificial Liver Device

We are working towards optimizing the hepatic functionality of a porcine cell line, and subclones thereof, which we refer to as the PICM-19 Cell Line. The PICM-19 Cell Line was developed and patented by USDA Agricultural Research Service scientists. The hepatic characteristics of the PICM-19 Cell Line have been demonstrated to have potential application in the production of an artificial liver device. U.S. Patent #5,532,156 (Hepatocyte Cell Line Derived from the Epiblast of Pig Blastocysts ) was issued on July 2, 1996, and U.S. Patent 5,866,420 (Artificial liver device) was issued on February 2, 1999, both in the name of The United States of America as represented by the Secretary of Washington, DC.

In-Vitro Toxicology Testing

The PICM-19 Cell Line, grown in-vitro, can synthesize liver specific proteins such as albumin and transferrin and display enhanced liver-specific functions, such as ureagenesis (conversion to ammonia to urea) and cytochrome P450 activity. Consequently, we believe the PICM-19 Cell Line could be an important element in developing in-vitro toxicological and pre-clinical drug testing platforms that could more accurately determine the potential toxicity and metabolism of new pharmacological compounds in the liver.

Critical Accounting Policies

Our discussion and analysis of our financial condition and results of operations are based on our financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States. The preparation of these financial statements requires us to make estimates and judgments that affect the

reported amounts of assets, liabilities and expenses and related disclosures. We review our estimates on an ongoing basis.

We consider an accounting estimate to be critical if it requires assumptions to be made that were uncertain at the time the estimate was made; and changes in the estimate or different estimates that could have been made could have a material impact on our results of operations or financial condition. While our significant accounting policies are described in more detail in the notes to our financial statements included in this prospectus, we believe the following accounting policies to be critical to the judgments and estimates used in the preparation of our financial statements.

General and Administrative Expenses

Our general and administrative expenses consist primarily of personnel related costs, legal costs, including intellectual property, investor relations, accounting costs, and other professional and administrative costs.

Research and Development Costs

Research and development costs represent costs incurred to develop our technology incurred pursuant to our CRADA with the USDA s Agricultural Research Service and include salaries and benefits for research and development personnel, allocated overhead and facility occupancy costs, contract services and other costs. We charge all research and development expenses to operations as they are incurred. We do not track research and development expenses by project.

**Results of Operations**

We have yet to establish any history of profitable operations. We have not generated any revenues from operations during the past 5 years and do not expect to generate any revenues for the foreseeable future. We have incurred annual operating losses of $2,813,602, $1,435,613 and $1,102,723 respectively, during the past three fiscal years of operation. As a result, at December 31, 2005, we had an accumulated deficit of $6,561,373. Our profitability will require the successful completion of our research and development programs, and the subsequent commercialization of the results or of products derived from such research and development efforts. No assurances can be given when this will occur or that we will ever be profitable.

Our independent auditors have added an explanatory paragraph to their audit opinion issued in connection with the financial statements for the years ended December 31, 2005 and 2004, relative to our ability to continue as a going concern. Our ability to obtain additional funding will determine our ability to continue as a going concern. Our financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Results of Operations for Years Ended December 31, 2005 and 2004

We had no revenues in 2005 and 2004. Our general and administrative expenses increased 99% to $2,556,374 in 2005, from $1,285,988 in the same period in 2004. This increase was primarily attributable to the stock offering expense that incurred in the Fusion Capital transaction with the issuance of signing shares and commitment shares.

During the years ended December 31, 2005 and 2004, our investor relations costs represented approximately 25% and 71%, respectively, of our total expenses.

In 2005, we also incurred $261,691 in research and development expenses, an increase of 73%, compared to $151,546 of research and development costs that we incurred in 2004. The increase in research and development costs was the result of our making a total of four payments of $65,422.80 ($261,691 in the aggregate) under our CRADA.

Interest income increased 132% to $4,463 in 2005, from $1,921 during the same period in 2004. This was the result of higher average cash balances maintained during 2005.

Our net loss in 2005 increased 96% to $2,813,602, from $1,435,513 in 2004. This increase was primarily attributable to the stock offering expense that incurred in the Fusion Capital transaction with the issuance of signing shares and commitment shares.

Our operations in 2005 were funded from net loan proceeds in the amount of $150,000 from Mr. Harmel S. Rayat, and $682,100 from the proceeds from the sale of our common stock upon exercise of outstanding options and warrants. In addition, at December 31, 2005, we had a net operating loss carry forward for federal income tax purposes of approximately $2,300,000, which expires at various dates through 2025. The extent of any potential tax benefits to us from the operating loss carry forward is not presently ascertainable.

Liquidity and Capital Resources for Years Ended December 31, 2005 and 2004

At December 31, 2005, the Company had a cash balance of $107,263, compared to a cash balance of $613,523 at December 31, 2004.

During 2005, the Company used $1,332,440 of net cash from operating activities, as compared to $1,364,209 of net cash in 2004.

Net cash provided by financing activities was $832,100 for 2005 compared to $1,666,620 for 2004. The Company has financed its operations primarily from cash on hand, through loans from shareholders and proceeds from stock option and warrant exercises.

At his time, except for our agreement with Fusion Capital, we have no agreements or understandings with any third party regarding any financings.

As of March 30, 2006, Fusion Capital had purchased 358,423 shares of common stock for an aggregate of $375,000.

Results of Operations for Years Ended December 31, 2004 and 2003

We had no revenues in 2004 and 2003. Our general and administrative expenses increased 21% to $1,285,988 in 2004, from $1,062,270 in the same period in 2003. This increase was primarily attributable to an increase of $56,913 in investor relations costs to $1,016,916, as compared to $960,003 in 2003 related primarily to fees paid to, and reimbursement of disbursements, inclusive of mailing costs, incurred by the Company s investor relations firm, National InfoSystems Inc., totaling $1,016,916, as follows: as follows: aggregate monthly fees of $ 68,563 to National InfoSystems; direct mail advertising costs of $700,000; email advertising costs of $234,353.and media marketing costs of $14,000.

During the years ended December 31, 2004 and 2003, our investor relations costs represented approximately 71% and 87%, respectively, of our total expenses.

In 2004, we also incurred $151,546 in research and development expenses, an increase of 266%, compared to $41,400 of research and development costs that we incurred in 2003. The increase in research and development costs was the result of our making a total of three payments, consisting of two payments of $65,423 ($130,846 in the aggregate) and one payment of $20,700, under our CRADA.

Interest income increased 103% to $1,921 in 2004, from $947 during the same period in 2003. This was the result of higher average cash balances maintained during 2004.

Our net loss in 2004 increased 30% to $1,435,613, from $1,102,723 in 2003. The increase in our net loss was principally caused by increased research and development expenses and investor relations costs as noted above.

Our operations in 2004 were funded from net loan proceeds in the amount of $275,000 from Mr. Harmel S. Rayat, and $1,391,620 from the proceeds from the sale of our common stock upon exercise of outstanding options and warrants. In addition, at December 31, 2004, we had a net operating loss carry forward for federal income tax

purposes of approximately $570,000, which expires at various dates through 2024. The extent of any potential tax benefits to us from the operating loss carry forward is not presently ascertainable.

Liquidity and Capital Resources for Years Ended December 31, 2004 and 2003

At December 31, 2004, the Company had a cash balance of $613,523, compared to a cash balance of $312,201 at December 31, 2003.

During 2004, the Company used $1,364,209 of net cash from operating activities, as compared to $1,022,501 of net cash in 2003.

Net cash provided by financing activities was $1,666,620 for 2004 compared to $1,306,100 for 2003. The Company has financed its operations primarily from cash on hand, through loans from shareholders and proceeds from stock option and warrant exercises.

**Cooperative Agreement**

On November 1, 2002, we entered into a CRADA with the USDA s Agricultural Research Service and committed to pay a total of $292,727 to USDA s Agricultural Research Service over a two-year period ending February 19, 2005. On May 24, 2004, we amended the CRADA, and agreed to pay a total of $807,828 through September 30, 2007, of which $153,600 had already been paid under the original agreement.

Effective on November 28, 2002, we amended our CRADA, in writing, to provide for the addition of Dr. Thomas Caperna as a co authorized departmental officer s designated representative.

Effective on July 12, 2003, we amended our CRADA, in writing, to reflect the change of our name from Zeta Corporation to HepaLife Technologies, Inc.

In February 2004, we orally amended our CRADA to modify the payment schedule so as to delay payment of installments due in August and November of 2004 and thereafter until and unless funds are actually required.

*Contractual Responsibilities under the CRADA*

Under the terms of the CRADA, as amended, the USDA s Agricultural Research Service is responsible for:

- Hiring one post-doctoral research associate, one support scientist, and one technician for a 2 to 3 year period.

- Providing laboratory and office space for the research associate.

- Providing a fully equipped cell culture laboratory and protein chemistry laboratory.

- Providing experimental animals (pigs) and slaughter facilities.

- Acquiring specific laboratory equipment, e.g., rotating cell culture system and supplies to conduct the CRADA objectives.

- Conducting research on the optimization of the PICM-19 Cell Line, or its derivative cell lines (or related pig epiblast-derived cell lines), as an in-vitro pig liver cell model, and adapt the PICM-19 liver Cell Line technology to an extracorporeal liver assist device and to in-vitro formats for metabolic, toxicological, and carcinogenicity assay.

- Preparing progress reports on project objectives.

- Preparing and submit technical reports for publication.

- Providing access to 1850 square feet of laboratory space in the Beltsville Agricultural Research Center for our personnel assigned to work on the project.

- Providing utilities, services, and general support to our personnel, on an as needed and available basis.

We, in turn, our responsible for:

- Providing funds for one post-doctoral research associate, one support scientist, and one technician for a 2 to 3 year period.

- Providing funds for project related laboratory equipment, supplies, and off site research services such as electron microscopy and bioreactor component manufacturing.

- Providing funds for position advertisement and travel expenses for position interviews.

- Providing funds for professional activities of research associate such as travel to meetings and project specific training activities.

- Preparing and filing patent applications.

Generally, the terms of the CRADA also require our interaction with USDA s Agricultural Research Service personnel on the technical details involved with pig liver cell culture development, providing the necessary funds for the purpose above, preparing and filing any patent applications, and reviewing reports and implementing procedures for the development of an artificial liver device utilizing the pig liver cell line. There has not been any material change in the relative responsibilities of the parties to the CRADA since its execution.

*Payment Requirements and Budget Under the CRADA*

Under the terms of the CRADA, we are obligated to make payments aggregating $807,828.00 to the USDA s Agricultural Research Service over the term of the CRADA, as listed below:

| **Amount** | **Date Due** |
| --- | --- |
| $65,422.80 | on or before August 1, 2004; |
| $65,422.80 | on or before November 1, 2004; |
| $65,422.80 | on or before February 1, 2005; |
| $65,422.80 | on or before May 1, 2005; |
| $65,422.80 | on or before August 1, 2005; |
| $65,422.80 | on or before November 1, 2005; |
| $65,422.80 | on or before February 1, 2006; |
| $65,422.80 | on or before May 1, 2006; |
| $65,422.80 | on or before August 1, 2006; |
| $65,422.80 | on or before November 1, 2006 |

In February 2004, we orally amended our CRADA to modify the payment schedule so as to delay payment of installments due in August and November of 2004 and thereafter until and unless funds are actually required.

The payments are to fund salaries, equipment, travel and other indirect costs of one post-doctoral researcher, one support scientist, and one technician up to September 30, 2007, as well as funds for the associated laboratory supplies and professional activities involved with conducting the CRADA objectives.

More specifically the agreed to budget for the CRADA contemplates the expenditure of these funds substantially as follows:

| **BUDGET CATEGORY** | **AMOUNT** |
|---|---|
| A. Salaries and Wages | $408,400.00 |
| B. Equipment | $28,025.00 |

| | |
|---|---|
| C. Materials and Supplies | $265,500.00 |
| D. Travel | |
| 1. Domestic | $14,000.00 |
| 2. Foreign | |
| E. Facilities | -0- |
| F. Other Direct Costs | $11,126.00 |
| G. TOTAL DIRECT COSTS | $727,051.00 |
| H. Indirect Costs | $80,777.00 |
| I. TOTAL COSTS | $807,828.00 |

*Research Objectives of the CRADA.*

The initial research objectives of the CRADA included:

-

Developing feeder-cell-independent and serum-free medium cell culture systems allowing the growth and differentiation of the PICM-19 Cell Line, or subclones or subpopulations of the PICM-19 Cell Line, under defined conditions.

As of the date of this 10-K, the PICM-19 Cell Line has been assayed for its response to several specific growth factors and cell attachment factors. Two specific growth stimulating factors have been identified and two attachment factors that enable the attachment and maintenance of the PICM-19 Cell Lines have been identified.

-

Developing spheroid cultures (self-assembling balls of cells) of the PICM-19 Cell Line without STO feeder cells and testing of rotating cell culture system for production and maintenance of spheroids.

As of the date of this 10-K,, this objective has been redirected to the testing of PICM-19 Cell Line growth and maintenance on various types of commercially available glass or plastic micro- and macro-spheres. One type each of plastic microsphere and macrosphere has been successfully tested and are now in use in a model flow-through bioreactor that is currently in its testing phase.

-

Investigating effects of accessory cells obtained from pig liver on the PICM-19 Cell Line growth, differentiation, and metabolic function.

As of the date of this 10-K, these studies are not anticipated to be necessary for completion of the CRADA objectives and accordingly, are not longer deemed a priority.

-

Assaying the PICM-19 Cell Line and spheroids for liver specific functions by measuring P450 activity, liver enzyme activities, urea production, and ammonia clearance.

As of the date of this 10-K, P450 activity, urea production, and ammonia clearance activity of the PICM-19 cell line and three derivative cell lines (PICM-19H, PICM-19-3BT, PICM-19HA) have been confirmed and completed. Gamma-glutamyltranspeptidase enzyme (a key bile duct enzyme for the processing of inflammatory and anti-inflammatory molecules) activity has been confirmed and completed in the PICM-19 cell line and in two of the three PICM-19 derivative cell lines. Gamma-glutamylcysteine synthetase (a secondary detoxification liver enzyme) activity assays are on-going.

-

Assaying the PICM-19 Cell Line liver specific protein synthesis and secretion by protein

identification techniques. As of the date of this prospectus, liver specific protein synthesis by the PICM-19 cell line has been completed. Several liver specific proteins secreted by the PICM-19 cells were identified by Western blotting, 2-D gel electrophoresis, and mass spectrophotometric analysis.

-

Developing and testing, by in-vitro assay, flow-through bioreactors that enable the growth, differentiation, and maintenance of metabolic function of the PICM-19 Cell Line, or its derivative cell

lines, over long term culture (1-3 months). As of the date of this prospectus, three flow-through bioreactor model systems incorporating the PICM-19 cells are being tested for cell viability, ammonia clearance activity, P450 enzyme activity, and urea production activity.

-

Developing and testing multi-well cell culture formats for the in-vitro assay of the effects of various test compounds on the metabolism and viability of the PICM-19 Cell Line derived hepatocytes or bile ductules (liver cell channels).

As of the date of this 10-K, multi-cell cell culture formats have been successfully tested and P-450 enzyme assays are currently being tested and standardized in 6-well, 24-well, and 96-well formats.

-

Genetically engineering the PICM-19 Cell Line to create derivative cell lines containing gene reporter constructs, e.g., green fluorescent protein (GFP) based constructs, so that GFP expression is linked to various cell metabolic responses or stimulation of various cell signal transduction pathways.

As of the date of this 10-K, STO cell lines have been created by genetic engineering that express GFP and the neomycin-resistance gene. The construction of GFP and RFP (red fluorescent protein) mammalian expression vectors under the control of the alpha-fetoprotein promoter is currently underway for use in the genetic engineering of the PICM-19 Cell Line.

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Developing cell transformation assay formats to demonstrate and enable the utilization of the PICM-19 Cell Line for the study of mutagenic or carcinogenic processes.

As of the date of this 10-K, this aspect of the CRADA has the lowest priority and no work is anticipated on this aspect of the project for at least two years.

*Ownership of Developed Technologies Under the CRADA*

Under the terms of the CRADA all rights, title and interest in any subject invention made solely by USDA s Agricultural Research Service employees are owned by USDA s Agricultural Research Service, solely by us are owned by us, and any such inventions are owned jointly by us and USDA s Agricultural Research Service if made jointly by USDA s Agricultural Research Service and us. Under the CRADA, we have an option to negotiate an exclusive license in each subject invention owned or co-owned by USDA s Agricultural Research Service for one or more field (s) of use encompassed by the CRADA. The option terminates when and if we fail to:

- submit a complete application for an exclusive license within sixty days of being notified by USDA s Agricultural Research Service of an invention being available for licensing; or

- submit a good faith written response to a written proposal of licensing terms within forty five days of such proposal.

The USDA s Agricultural Research Service has the first option to prepare and prosecute patent or Plant Variety Protection Certificate applications, on subject inventions that are owned or co-owned by the USDA s Agricultural Research Service, which option may be waived in whole or in part.

Although the termination date of the CRADA is September 30, 2007, the CRADA is subject to earlier termination at any time by mutual consent. Moreover, either party may unilaterally terminate the entire agreement at any time by giving the other party written notice not less than sixty calendar days prior to the desired termination date. To date, we have neither given nor received any such written notice.

**Plan of Operation**

The essential elements of our business plan are centered upon the utilization of the PICM-19 Cell Line in two separate biomedical applications, namely the development of an artificial liver device and in vitro toxicological testing platforms.

*Artificial Liver Device*

To help liver failure patients survive long enough to receive a liver transplant or recover without a transplant by exploiting the well known regenerative powers of the liver, a number of artificial liver devices are currently being developed and tested using living pig or human liver cells and various filtering or dialysis mechanisms. Since the liver is the only organ in the human body that can regenerate itself, artificial liver devices are intended to temporarily perform the function of a human liver, such as removing toxins from the body, thus giving the patient s own liver valuable time to recover and regenerate. Unfortunately, artificial liver technologies have not lived up to their initial promise as a consequence of problems relating to their inability to grow liver cells quickly and safely and with inconsistent results from filtering devices. Culturing and maintaining such cells have proven difficult; once removed from the body, they soon lose their normal functioning attributes.

To date, the cellular components of artificial liver devices that are being tested have been based on freshly isolated porcine hepatocytes (liver cells), human immortal tumor cells, or poorly defined stem-like cells prepared from fresh human adult liver tissue. It is widely recognized that the greatest hindrance to the development of a completely functional artificial liver device is the lack of an appropriately defined cell line that will provide the functions of an intact liver.

We are working towards optimizing the hepatic (liver) functionality of a porcine cell line and subclones thereof, which we refer to as the PICM-19 Cell Line. The PICM-19 Cell Line was developed and patented by USDA Agricultural Research Service scientists. Thus far, we have demonstrated that cells from the PICM-19 Cell Line are highly metabolic and are capable of clearing toxic levels of ammonia from the culture environment in a static culture system (ammonia is a highly toxic molecule and a major causative agent of hepatic coma in patients with acute liver failure). A unique metabolic feature of PICM-19 cells is also the production of urea, which is the product of an enzymatic pathway only present in hepatocytes and which is not found in any hepatic tumor cell lines.

Based upon our assessment of the information and data obtained in connection with our decision to enter into the CRADA and subsequently obtained from our ongoing sponsored research efforts, we believe the PICM-19 Cell Line has the required attributes to address the need for an appropriately defined cell line for incorporation into an artificial liver device. Key among these attributes is the PICM-19 Cell Line s ability to differentiate into bile duct cells and hepatocytes (which comprise most of the liver and perform the vital metabolic and detoxification functions of the liver), which have been shown to have several liver specific functions such as the production of serum proteins and P450 enzymes (the key components in the overall hepatic detoxification pathway of drugs and other xenobiotics or foreign substances).

In our view, additional advantages of the PICM-19 Cell Line include, but are not limited to:

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the PICM-19 Cell Line is not tumor-causing, a feature not only critical to nutrient metabolism research, but one which the cell line has retained even after years in continuous culture;

-

the PICM-19 Cell Line does what other cell lines do not do; it stops dividing and matures into functioning hepatocytes or bile ducts as normal cells do in the body (i.e., not cancerous in nature);

-

because the PICM-19 Cell Line is a cell line, it will grow (divide in two) over and over again so that a potentially unlimited number of cells can be created;

-

the ability of the PICM-19 Cell Line to continuously increase in number means that the cells can be studied to "define" their stability of form and function and defined also in being free of harmful agents such as toxins, viruses, bacteria, and fungi;

-

because the PICM-19 Cell Line is a growing population of cells, individuals (cells) within the population that have superior attributes can be searched for and isolated;

-

current methods of genetic engineering can be applied to the cells for the creation of derivative cell lines which are more advantageous in various ways for incorporation into an artificial liver device, and finally,

-

the PICM-19 Cell Line could also be useful for toxicological studies as an alternative to animal testing where specific information is needed on how toxic various substances are to liver and bile duct cells.

As a result of these hepatic characteristics and advantages noted above, we believe the PICM-19 Cell Line, and subclones thereof, has potential application in the production of an artificial liver device, which application was also developed and patented by USDA Agricultural Research Service scientists for potential use by human patients with liver failure.

The subclone of the PICM-19 Cell Line that is in current use (PICM-19H) has been in continuous culture for more than three years and has been passaged (subdivided and expanded) over 120 times. These cells have been selected and defined with respect to their rapid growth capacity and their liver cell function. A recently discovered significant feature of the cell line is its ability to maintain function after storage at room temperature for greater than 1 week. This will aid in the shipment and storage of bioreactors, devices which could house and maintain liver cells. All current available data has been attained from PICM-19H cells grown in a monolayer cell culture format with static growth medium. Therefore, it is imperative to research and develop the means to grow the cells in a three dimensional format so that the bioreactor will provide enough surface area for effective interaction with a patient s plasma. Experiments assessing the growth and function of the PICM-19H cells using a variety of known three dimensional cell matrices is under current investigation. In addition, model bioreactors are currently being tested for flow dynamics and the effects of flowing growth medium on the morphology and function of the PICM-19H cells.

All of our sponsored research objectives relate to optimization and definition of the PICM-19 Cell Line, and subclones thereof, with respect to applications and use in an artificial liver device or for toxicity testing. These include evaluation of:

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Attachment, growth and metabolism of PICM-19 cells on porous and semi-porous substrates such as microcarrier beads;

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Various coatings and attachment factors in conjunction with matrix materials;

-

Genetic and metabolic stability of the cells over time;

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Characteristics of the cells in model flow-through culture systems;

-

Metabolic integrity of the cells in the presence of specific-disease-state human plasma;

-

Optimum age of cultures to obtain the highest metabolic activity;

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Bioreactor design parameters, including optimization of flow, sheer force, media components and oxygen input;

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Optimum conditions for the induction and measurement of known P450 enzymes and other detoxification enzymes in multi-well plates;

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Potential for inserting a reporter gene system into the genome to facilitate rapid-high through-put toxicity testing, and

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Novel co-culture systems to address potential toxic interactions among different

cell types.

There is no assurance that we will achieve all or any of our goals.

*In Vitro Toxicology and Drug Testing*

Hepatocytes, the major cell type comprising the liver, perform the important task of metabolizing or detoxifying drug compounds that enter the body. This is accomplished primarily through cytochrome P450 enzymes that are abundantly expressed in hepatocytes. Therefore, hepatocytes grown in-vitro have application for the rapid screening of multiple drug candidates to predict their potential liver toxicity and liver-specific pharmacological characteristics prior to clinical testing.

We believe the ability of the PICM-19 Cell Line, which is also concurrently being tested by us for use in an artificial liver device, to differentiate into either hepatocytes or bile duct cells (two key cell types of the liver) and to synthesize liver specific proteins, such as albumin and transferrin, as well as display enhanced liver-specific functions, such as ureagenesis and cytochrome P450 activity, could be important to the development of in-vitro toxicological and pre-clinical drug testing platforms that could more accurately determine the potential toxicity and metabolism of new pharmacological compounds in the liver.

According to FDA recommendations, all drugs and newly developed chemicals require rigorous toxicity testing before approval can be granted. Since the liver is the primary site of chemical detoxification as well as the tissue

where many compounds are activated into highly toxic substances, much attention has been placed upon development of an in-vitro model liver system for drug testing. Currently available test systems utilize either cells isolated from rat, pig or human livers or use available tumor cell lines or proprietary modified tumor cell lines. Ultimately, these systems lack either stability, reproducibility (primary cell isolates) or the ability to fully represent the complete set of hepatic functions (tumor cell lines). These drawbacks do not appear to exist with the PICM-19H cell line as these cells were naturally derived from porcine embryonic stem cells and have demonstrated functional stability in long term culture. We could supply plates (96-, 24-, 12-, or 6- well formats) of PICM-19H cells to clients who wish to run their in-house toxicity tests. Alternatively, standard in-house tests could be performed using client-provided test substances. In the latter case, data would be collected, and analyzed by our staff on a fee- for-service basis. Current posted prices for providing a fully confluent 96 well plate of tumor cells designed for toxicity testing is approximately $500.

We are currently establishing toxicity testing profiles of the PICM-19H cells in multi-well plate formats to provide baseline data of specific liver function responses for the cell line. This data will enable potential interested users, e.g., pharmacology and chemical companies, to assess the potential utility of the PICM-19H cells in an in-vitro liver function system for their drug or chemical metabolic profiling needs. Known inducers of detoxifier proteins (P-450 enzymes) are being used to test and compare the responses of PICM-19H cells to known animal data and other available liver cell lines. The ability of the cells to form secondary detoxified products and to make urea (a non-toxic product of ammonia metabolism) is currently being characterized.

Due to the "start up" nature of our business, we expect to incur losses as we continue conducting our ongoing sponsored research and product development programs. We will require additional funding to continue our research and product development programs, to conduct preclinical studies and clinical trials, for operating expenses, to pursue regulatory approvals for our product candidates, for the costs involved in filing and prosecuting patent applications and enforcing or defending patent claims, if any, for any possible acquisitions or new technologies, and we may require additional funding to establish manufacturing and marketing capabilities in the future. We may seek to access the public or private equity markets whenever conditions are favorable. We may also seek additional funding through strategic alliances and other financing mechanisms. We cannot assure you that adequate funding will be available on terms acceptable to us, if at all. If adequate funds are not available, we may be required to curtail significantly one or more of our research or development programs or obtain funds through arrangements with collaborators or others. This may require us to relinquish rights to certain of our technologies or product candidates. To the extent that we are unable to obtain third-party funding for such expenses, we expect that increased expenses will result in increased losses from operations. We cannot assure you that we will successfully develop our products under development or that our products, if successfully developed, will generate revenues sufficient to enable us to earn a profit.

**Related Party Transactions**

*Management fees*

During 2005, the Company incurred $11,300 (2004 - $9,500, 2003 - $28,500) in management fees to directors of the Company. Included in accounts payable - related parties at December 31, 2005 is management fees of $27,000 (2004: $28,600, 2003 - $27,000) incurred in previous years.

*Notes Payable*

At a Board of Directors meeting held on May 28, 2003, the Company s Board of Directors agreed to accept a loan of up to $750,000 from a Company director and major stockholder. Proceeds from the loan, which will be drawn down on a as needed basis , will be used to fund the Company s research and development commitments, legal and audit fees, investor and public relations costs and other ongoing working capital requirements.

On May 29, 2003, the Company drew down $300,000 from the loan commitment and issued an unsecured promissory note bearing interest at a rate of 7.25% per annum, due on May 29, 2004.

On August 27, 2003, the Company drew down an additional $350,000 from the loan commitment and issued an unsecured promissory note bearing interest at a rate of 7.00% per annum, due on August 28, 2004.

On November 19, 2003, the Company drew down $75,000 from the loan commitment and issued an unsecured promissory note bearing an interest rate of 7.00%, due on November 19, 2004.

The Company accrued $19,666 interest expense in 2003 in respect to the above promissory notes, which is included in accounts payable at December 31, 2003.

Total unsecured promissory notes issued in 2003 of $725,000 bearing interest at rates ranging from 7.00% to 7.25% were repaid in 2004 including accrued interest of $51,500.

On August 27, 2004, the Company drew down $300,000 from the loan commitment and issued an unsecured promissory note bearing an interest rate of 7.50%, due on August 27, 2005.

In December 2004, a director and majority shareholder of the Company paid $700,000 in investor relations fees on behalf of the Company. The Company issued an unsecured promissory note bearing interest at a rate of 8.50% per annum, which is due on September 1, 2006.

As of December 31, 2004, the notes payable of $1,000,000 was made up from unsecured loans of $300,000 and $700,000, bearing interest at the rate of 7.50% and prime plus 3% respectively, due to a director and major shareholder of the Company. The entire amounts of principal and interest accrued are due and payable on demand. As of December 31, 2004, accrued and unpaid interest on these notes was $7,184.

On January 26, 2005, the Company repaid $300,000 with interest of $9,432.

On March 8, 2005, the Company issued an unsecured promissory note to the same director and major shareholder of the Company for $250,000 bearing interest at the rate of 8.5% per annum and due on March 8, 2006.

On December 5, 2005, the Company issued an unsecured promissory note to the same director and major shareholder of the Company for $200,000 bearing interest at the rate of 8.5% per annum and due on December 5, 2006.

As of December 31, 2005, the notes payable of $1,150,000 was made up from unsecured loans of $250,000, $700,000 and $200,000, all bearing interest at the rate of 8.50%, due to a director and major shareholder of the Company. Accrued and unpaid interest on these notes was $78,301.

On January 18, 2006, the Company has agreed, in consideration of Mr. Rayat s undertaking to increase his loan commitment to the Company by an additional $100,000, to $1,600,000, to convert all of the loans to demand loans. The notes are due and payable upon the receipt of written demand from Mr. Rayat.

*Amounts payable to related parties*

Included in accounts payable - related parties is $28,056 (2004 - $17,272, 2003 - $nil) payable to a majority stockholder for expenses incurred on behalf of the Company, of which $28,056 (2004: $12,595, 2003 - $nil) is payable to the same director and majority shareholder.

*Rent Expenses*

The Company's office is located at Suite 216, 1628 West 1st Avenue, Vancouver, British Columbia, Canada. These premises are owned by a privately held corporation controlled by a director and officer of the Company. At present, the Company pays no rent. The fair value of the rent has not been included in the financial statements because the amount is immaterial.

**ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK**

Our exposure to market risk is confined to our cash equivalents and short-term investments. We invest in high-quality financial instruments; primarily money market funds, federal agency notes, and US Treasury obligations,

with the effective duration of the portfolio within one year which we believe are subject to limited credit risk. We currently do not hedge interest rate exposure. Due to the short-term nature of our investments, we do not believe that we have any material exposure to interest rate risk arising from our investments.

**ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA.**

**Index to Financial Statements**

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**REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

To the Board of Directors

HepaLife Technologies, Inc.

Vancouver BC, Canada

We have audited the accompanying balance sheet of HepaLife Technologies, Inc. (a development stage company) as of December 31, 2005, and the related statements of operations, stockholders' deficiency, and cash flows for the year ended December 31, 2005, and for the period from October 21, 1997 (date of inception) to December 31, 2005. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits. The financial statements for the period from October 21, 1997 (date of inception) through December 31, 2004, were audited by other auditors whose report, dated March 15, 2005, expressed an unqualified opinion (modified for going concern considerations). Those financial statements showed an accumulated deficit for the period of $3,747,771. The other auditors' report has been furnished to us, and our opinion, insofar as it relates to the amounts included for such prior periods, is based solely on the report of such other auditors.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Company has determined that it is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audit included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, based on our audit and the report of other auditors, the financial statements referred to above present fairly, in all material respects, the financial position of HepaLife Technologies, Inc. (a development stage company) as of December 31, 2005, and the results of its operations and its cash flows for the years ended December 31, 2005, and for the period from October 21, 1997 (date of inception) to December 31, 2005, in conformity with accounting principles generally accepted in the United States.

The accompanying financial statements have been prepared assuming the Company will continue as a going concern. As discussed in Note 1 to the financial statements, the Company has experienced recurring losses from operations since inception, has a working capital deficit, and has a deficit accumulated during the development stage. These conditions raise substantial doubt about the Company's ability to continue as a going concern. Management's plans regarding these matters are also described in Note 1. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

/s/ Peterson Sullivan PLLC

March 30, 2006

Seattle, Washington

## REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

**To the Board of Directors and Stockholders of**

HEPALIFE TECHNOLOGIES, INC.

(formerly Zeta Corporation)

(A development stage company)

We have audited the balance sheet of HepaLife Technologies, Inc. (formerly Zeta Corporation) (A development stage company) ( the Company ) as at December 31, 2004 and the related statements of stockholders equity (deficiency), operations and cash flows for the years ended December 31, 2004 and 2003 and the cumulative data from October 21, 1997 (inception) to December 31, 2004. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audit. The Company s financial statements for the period from October 21, 1997 (inception) to December 31, 2002 were audited by other auditors whose report, dated March 3, 2003, expressed an unqualified opinion, has been furnished to us. Our opinion, insofar as it relates to the amounts included for cumulative data from October 21, 1997 (inception) to December 31, 2002, is based solely on the report of the other auditors.

We conducted our audit in accordance with standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provide a reasonable basis for our opinion.

In our opinion, these financial statements present fairly, in all material respects, the financial position of the Company as at December 31, 2004 and the results of its operations and its cash flows for the years ended December 31, 2004 and 2003 and the cumulative data from October 21, 1997 (inception) to December 31, 2004 in conformity with generally accepted accounting principles in the United States of America.

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 to the financial statements, the Company is a development stage company since inception on October 21, 1997, and has incurred significant recurring net losses since then resulting in a substantial accumulated deficit, which raise substantial doubt about its ability to continue as a going concern. The Company is devoting substantially all of its present efforts in establishing its business. Management s plans regarding these matters are also disclosed in Note 1 to the financial statements. The ability to meet its future financing requirements and the success of future operations cannot be determined at this time. These financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Vancouver, Canada

*MOORE STEPHENS ELLIS FOSTER LTD.*

March 15, 2005

Chartered Accountants

**HEPALIFE TECHNOLOGIES, INC.**
(A Development Stage Company)

**BALANCE SHEETS**
**December 31, 2005 and 2004**

| **(Expressed in U.S. Dollars)** | 2005 | 2004 |
|---|---|---|
| **ASSETS** | | |
| **Current assets** | | |
| Cash | $ 107,263 | $ 613,523 |
| Total current assets | 107,263 | 613,523 |
| **Fixed Assets**, net (Note 3) | 5,674 | 828 |
| **Total assets** | $ 112,937 | $ 614,351 |
| **LIABILITIES** | | |
| **Current** | | |
| Accounts payable and accrued liabilities (Note 4) | $ 106,237 | $ 100,243 |
| Accounts payable - related parties (Note 4) | 106,357 | 53,059 |
| Notes payable - related party (Note 4) | 1,150,000 | 1,000,000 |
| **Total liabilities** | 1,362,594 | 1,153,302 |
| **STOCKHOLDERS' EQUITY** | | |
| **Stockholders' Deficiency** | | |
| Preferred stock: $0.10 par value; Authorized: 1,000,000 | | |
| Issued and outstanding: none | - | - |
| Common stock: $0.001 par value; Authorized: 300,000,000 | | |
| Issued and outstanding: 70,064,430 (2004: 67,817,832) | 70,065 | 67,818 |
| Additional paid-in capital | 5,241,651 | 3,141,002 |

| | | |
|---|---|---|
| Loss accumulated during the development stage | (6,561,373) | (3,747,771) |
| **Total stockholders' deficiency** | (1,249,657) | (538,951) |
| **Total liabilities and stockholders' deficiency** | $ 112,937 | $ 614,351 |

(The accompanying notes are an integral part of these financial statements)

**HEPALIFE TECHNOLOGIES, INC.**
(A Development Stage Company)

**STATEMENTS OF OPERATIONS**
**for the years ended December 31, 2005, 2004 and 2003**
**and from Inception (October 21, 1997) to December 31, 2005**

| **(Expressed in U.S. Dollars)** | 2005 | 2004 | 2003 | From Inception (October 21, 1997) to December 31, 2005 |
|---|---|---|---|---|
| **Revenue** | $ - | $ - | $ - | $ - |
| **Expenses** | | | | |
| Administrative and general | 66,887 | 92,269 | 10,302 | 289,286 |
| Depreciation | 1,074 | 261 | 583 | 4,806 |
| Interest on promissory note | 80,546 | 39,021 | 19,666 | 139,233 |
| Interest, bank charges and foreign exchange loss | 2,819 | 925 | 792 | 5,382 |
| Professional fees- accounting and legal | 161,554 | 12,139 | 37,506 | 243,064 |
| Management and consulting fees (Note 4) | 29,925 | 9,500 | 28,500 | 939,239 |
| Research and development (Note 5) | 261,691 | 151,546 | 41,400 | 546,137 |
| Salary and benefits | 30,185 | 26,352 | - | 56,537 |
| Shareholder and investor relations | 696,282 | 1,016,916 | 960,003 | 2,792,701 |
| Stock offering costs | 1,420,796 | - | - | 1,420,796 |
| Transfer agent and filing | 906 | 637 | 4,918 | 7,622 |
| Travel | 65,400 | 87,968 | - | 153,368 |
| | 2,818,065 | 1,437,534 | 1,103,670 | 6,598,171 |
| **Operating Loss** | (2,818,065) | (1,437,534) | (1,103,670) | (6,598,171) |

| | | | | |
|---|---|---|---|---|
| **Other income and expenses** | | | | |
| Interest income | 4,463 | 1,921 | 947 | 36,798 |
| | 4,463 | 1,921 | 947 | 36,798 |
| **Net loss available to common shareholders** | $ (2,813,602) | $ (1,435,613) | $ (1,102,723) | $ (6,561,373) |
| **Loss per share -** basic and diluted | $ (0.04) | $ (0.02) | $ (0.02) | |
| **Weighted average number of common shares** | | | | |
| **outstanding** - basic and diluted | 69,314,822 | 64,610,777 | 57,817,305 | |

(The accompanying notes are an integral part of these financial statements)

**HEPALIFE TECHNOLOGIES, INC.**

(A Development Stage Company)

**STATEMENTS OF STOCKHOLDERS' DEFICIENCY**
**from Inception (October 31, 1997) to December 31, 2005**

| **(Expressed in U.S. Dollars)** | Common Stock Shares | Amount | Additional paid-in capital | Loss accumulated during development stage | Total Stockholders' equity (deficiency) |
|---|---|---|---|---|---|
| Common stock issued for service rendered at $0.00025 per share, October 21, 1997 | 12,000,000 | $ 12,000 | $ (9,000) | $ - | $ 3,000 |
| Common stock issued for cash at $0.0625 per share during 1997 | 1,200,000 | 1,200 | 73,800 | - | 75,000 |
| Comprehensive income | | | | | |
| Income from inception (October 21, 1997) to December 31, 1997 | - | - | - | 42 | 42 |
| Balance, December 31, 1997 | 13,200,000 | 13,200 | 64,800 | 42 | 78,042 |
| Common stock issued for service rendered at $0.025 per share, December 15, 1998 | 16,000,000 | 16,000 | 384,000 | - | 400,000 |
| Comprehensive income | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| (loss) | | | | | |
| Loss, year ended December 31, 1998 | - | - | - | (471,988) | (471,988) |
| Balance, December 31, 1998 | 29,200,000 | 29,200 | 448,800 | (471,946) | 6,054 |
| Common stock issued for cash at $0.025 per share, March 1999 | 12,000,000 | 12,000 | 288,000 | - | 300,000 |
| Comprehensive income (loss) | | | | | |
| Loss, year ended December 31, 1999 | - | - | - | (121,045) | (121,045) |
| Balance, December 31, 1999 | 41,200,000 | 41,200 | 736,800 | (592,991) | 185,009 |
| Comprehensive income (loss) | | | | | |
| Loss, year ended December 31, 2000 | - | - | - | (80,608) | (80,608) |
| Balance, December 31, 2000 | 41,200,000 | 41,200 | 736,800 | (673,599) | 104,401 |
| Conversion of debt to equity at $0.015 per share, July 31, 2001 | 8,933,332 | 8,933 | 125,067 | - | 134,000 |
| Comprehensive income (loss) | | | | | |
| Loss, year ended December 31, 2001 | - | - | - | (160,364) | (160,364) |
| Balance, December 31, 2001 | 50,133,332 | 50,133 | 861,867 | (833,963) | 78,037 |

| | | | | | |
|---|---|---|---|---|---|
| Common stock issued for services at $0.06 per share, April 23, 2002 | 10,000 | 10 | 590 | - | 600 |
| Conversion of debt to equity at $0.05 per share, April 26, 2002 | 2,160,000 | 2,160 | 105,840 | - | 108,000 |
| Common stock issued for investor relations services at $0.05 per share, July 25, 2002 | 2,390,000 | 2,390 | 117,110 | - | 119,500 |
| Conversion of debt to equity at $0.05 per share, December 18, 2002 | 1,920,000 | 1,920 | 94,080 | - | 96,000 |
| Comprehensive income (loss) Loss, year ended December 31, 2002 | - | - | - | (375,472) | (375,472) |
| Balance, December 31, 2002 | 56,613,332 | 56,613 | 1,179,487 | (1,209,435) | 26,665 |
| Common stock issued pursuant to exercise of stock options during the year at between $0.07 to $2.11 per share | 282,500 | 283 | 398,317 | - | 398,600 |
| Common stock issued pursuant to exercise of share purchase warrants in November 2003 at $0.025 per share | 7,300,000 | 7,300 | 175,200 | - | 182,500 |
| Comprehensive income (loss) Loss, year ended December 31, 2003 | - | - | - | (1,102,723) | (1,102,723) |

| | | | | | |
|---|---|---|---|---|---|
| Balance, December 31, 2003 | 64,195,832 | 64,196 | 1,753,004 | (2,312,158) | (494,958) |
| Common stock issued pursuant to exercise of stock options during the year between $0.07 to $2.11 per share | 1,622,000 | 1,622 | 1,339,998 | - | 1,341,620 |
| Common stock issued pursuant to exercise of share purchase warrants in December 2004 at $0.025 per share | 2,000,000 | 2,000 | 48,000 | - | 50,000 |
| Comprehensive income (loss) | | | | | |
| Loss, year ended December 31, 2004 | - | - | - | (1,435,613) | (1,435,613) |
| Balance, December 31, 2004 | 67,817,832 | 67,818 | 3,141,002 | (3,747,771) | (538,951) |
| Common stock issued pursuant to exercise of stock options in March 2005 at $3.10 per share | 50,000 | 50 | 154,950 | - | 155,000 |
| Common stock issued pursuant to exercise of stock options in May 2005 at $2.11 per share | 45,000 | 45 | 94,905 | - | 94,950 |

| | | | | | |
|---|---|---|---|---|---|
| Common stock issued pursuant to exercise of stock options in June 2005 at $2.11 per share | 100,000 | 100 | 210,900 | - | 211,000 |
| Common stock issued pursuant to exercise of stock options in October 2005 at $2.11 per share | 40,000 | 40 | 84,360 | - | 84,400 |
| Common stock issued pursuant to exercise of stock options in March 2005 at $2.11 per share | 50,000 | 50 | 105,450 | - | 105,500 |
| Common stock issued pursuant to exercise of share purchase warrants in March 2005 at $0.025 per share | 1,250,000 | 1,250 | 30,000 | - | 31,250 |
| Restricted common stock issued in June 2005 pursuant to share purchase agreement | 20,000 | 20 | 37,580 | - | 37,600 |
| Restricted common stock issued in July 2005 pursuant to share purchase agreement | 691,598 | 692 | 1,382,504 | - | 1,383,196 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Comprehensive income (loss) | | | | | | |
| Loss, year ended December 31, 2005 | | | | | (2,813,602) | (2,813,602) |
| Balance, December 31, 2005 | 70,064,430 | $ 70,065 | $ 5,241,651 | | (6,561,373) | $ (1,249,657) |

(The accompanying notes are an integral part of these financial statements)

**HEPALIFE TECHNOLOGIES, INC.**

(A Development Stage Company)

**STATEMENTS OF CASH FLOWS**

**for the years ended December 31, 2005, 2004 and 2003**

**and from Inception (October 21, 1997) to December 31, 2005**

| **(Expressed in U.S. Dollars)** | 2005 | 2004 | 2003 | From Inception (October 21, 1997) to December 31, 2005 |
|---|---|---|---|---|
| **Cash flows from (used in) operating activities** | | | | |
| Net Loss | $ (2,813,602) | $ (1,435,613) | $ (1,102,723) | $ (6,561,373) |
| Adjustments for items not involving cash: | | | | |
| Depreciation | 1,074 | 261 | 583 | 4,806 |
| Common Stock Issued for Services | - | - | - | 861,100 |
| Common stock issued as stock offering costs | 1,420,796 | - | - | 1,420,796 |
| Change in assets and liabilities | | | | |
| Increase (decrease) in accounts payable | 5,994 | 18,084 | 79,639 | 106,237 |
| Increase (decrease) in accounts payable - related party | 53,298 | 53,059 | - | 106,357 |
| | (1,332,440) | (1,364,209) | (1,022,501) | (4,062,077) |
| **Cash flows used in investing activities** | | | | |
| Purchase of property and equipment | (5,920) | (1,089) | - | (10,480) |
| | (5,920) | (1,089) | - | (10,480) |
| **Cash flows from financing activities** | | | | |
| | 682,100 | 1,391,620 | 581,100 | 3,029,820 |

| | | | | |
|---|---|---|---|---|
| Proceed from issuance of common stock | | | | |
| Net proceed from promissory notes | 150,000 | 275,000 | 725,000 | 1,150,000 |
| | 832,100 | 1,666,620 | 1,306,100 | 4,179,820 |
| **Increase (decrease) in cash and cash equivalents** | (506,260) | 301,322 | 283,599 | 107,263 |
| **Cash and cash equivalents**, beginning of year | 613,523 | 312,201 | 28,602 | - |
| **Cash and cash equivalents**, end of year | $ 107,263 | $ 613,523 | $ 312,201 | $ 107,263 |
| **Supplemental disclosure of cash flow information:** | | | | |
| Interest paid in cash | $ - | $ 51,909 | $ | $ 51,909 |
| Income tax paid in cash | $ - | $ - | $ | $ - |
| **Non-cash Investing and Financing Activities:** | | | | |
| Common stock issued for services | - | - | - | 861,100 |
| Issuance of common stock as stock offering costs | 1,420,796 | - | - | 1,420,796 |

(The accompanying notes are an integral part of these financial statements)

**HEPALIFE TECHNOLOGIES, INC.**

(A development stage company)

Notes to Financial Statements

Years Ended December 31, 2005 and 2004

**(Expressed in U.S. Dollars)**

**1.**

**Organization and Basis of Presentation**

HepaLife Technologies, Inc. (formerly Zeta Corporation) (the Company ) was incorporated under the laws of the State of Florida on October 21, 1997, with an authorized capital of 100,000,000 shares of common stock, par value of $0.001 per share, and 1,000,000 shares of $0.10 par value preferred stock, which may be divided into series with the rights and preferences of the preferred stock to be determined by the Board of Directors. On August 10, 2001, Articles of Amendment to the Articles of Incorporation were filed in the State of Florida to increase the authorized capital stock of the Company to 300,000,000 shares of $0.001 par value common stock.

The Company s current business includes a Cooperative Research and Development Agreement entered into with the United States Department of Agriculture s Agricultural Research Service to fund the research and development involving optimizing the function of a patented cell line and applying this technology to the development of extra corporeal liver assist device and in-vitro toxicology and pre-clinical drug testing preforms.

The Company has incurred net operating losses since inception. The Company faces all the risks common to companies in their early stages of development, including under capitalization and uncertainty of funding sources, high initial expenditure levels, uncertain revenue streams, and difficulties in managing growth. The Company s recurring losses raise substantial doubt about its ability to continue as a going concern. The Company s financial statements do not reflect any adjustments that might result from the outcome of this uncertainty. The Company expects to incur losses from its business operations and will require additional funding during 2006. The adequacy of our cash flows hereafter will depend in large part on the Company s ability to successfully raise capital from external sources to pay for planned expenditures and to fund operations.

To meet these objectives, the Company has arranged a Common Stock Purchase Agreement with Fusion Capital Fund II, LLC to purchase from the Company up to $15,000,000 of the Company s common stock over a thirty month period (Note 9). Management believes that its current and future plans enable it to continue as a going concern. The Company's ability to achieve these objectives cannot be determined at this time. These financial statements do not give effect to any adjustments which would be necessary should the Company be unable to continue as a going concern and therefore be required to realize its assets and discharge its liabilities in other than the normal course of business and at amounts different from those reflected in the accompanying financial statements.

**2.**

**Summary of Significant Accounting Policies**

(a)

Principles of Accounting

These financial statements are stated in U.S. Dollars and have been prepared in accordance with accounting principles generally accepted in the United States of America.

(b)

Use of Estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of

the financial statements and the reported amounts of revenues and expenses during the reporting period. Management makes its best estimate of the ultimate outcome for these items based on historical trends and other information available when the financial statements are prepared. Changes in estimates are recognized in accordance with the accounting rules for the estimate, which is typically in the period when new information becomes available to management. Actual results could differ from those estimates.

(c)

Cash and Cash Equivalents

The Company considers all highly liquid instruments purchased with an original maturity of three months or less to be cash equivalents. The Company did not have any cash equivalents for the year ended December 31, 2005 and 2004. The Company occasionally has cash deposits in excess of insured limits.

(d)

Equipment and Depreciation

Equipment is initially recorded at cost and is depreciated under the straight-line method over their estimated useful life as follows:

Computer equipment

2 to 8 years

Furniture and fixture

8 years

Repairs and maintenance expenses are charged to operations as incurred.

(e)

Research and Development Costs

Research and development costs are expensed as incurred.

(f)

Start-up Costs

The Company accounts for start-up costs in accordance with Statement of Position (SOP) 98-5, *Reporting on the Costs of Start-up Activities* , where they are expensed as incurred. For income tax purposes, the Company has elected to treat its organizational costs as deferred expenses and amortize them over a period of sixty months, beginning in the first month the Company is actively in business.

(g)

Income Taxes

The Company accounts for income taxes under the provisions of Statement of Financial Accounting Standard (or "SFAS") No. 109, *Accounting for Income Taxes.* Under SFAS No. 109, deferred income tax assets and liabilities are computed for differences between the financial statements and tax bases of assets and liabilities that will result in taxable or deductible amounts in the future, based on enacted tax laws and rates applicable to the periods in which the differences are expected to affect taxable income. Valuation allowances are established when necessary, to reduce deferred income tax assets to the amount expected to be realized.

(h)

Earnings (Loss) Per Share

Basic earnings (loss) per share is based on the weighted average number of common shares outstanding. Diluted earnings (loss) per share is based on the weighted average number of common shares outstanding and dilutive common stock equivalents. Basic earnings (loss) per share is computed by dividing income/loss (numerator) applicable to common stockholders by the weighted average number of common shares outstanding (denominator) for the period. All earnings (loss) per share amounts in the financial statements are basic earnings or loss per share, as defined by SFAS No. 128, *Earnings Per Share.* Diluted earnings (loss) per share does not

differ materially from basic earnings (loss) per share for all periods presented. Convertible securities that could potentially dilute basic earnings per share in the future, such as options and warrants, are not included in the computation of diluted earnings or loss per share because to do so would be antidilutive. All per share information is adjusted retroactively to reflect stock splits and changes in par value.

(i)

Advertising Expenses

The Company expenses advertising costs as incurred. The Company did not incur any advertising costs during the years ended December 31, 2005, 2004 and 2003.

(j)

Stock-Based Compensation

The Company accounts for stock-based compensation using the intrinsic value method prescribed in Accounting Principles Board Opinion No. 25, *Accounting for Stock Issued to Employees.* Compensation cost for stock options, if any, is measured as the excess of the quoted market price of the Company s stock at the date of grant over the amount an employee must pay to acquire the stock. SFAS No. 123, *Accounting for Stock-Based Compensation,* established accounting and disclosure requirements using a fair-value-based method of accounting for stock-based employee compensation plans. The Company has elected to remain on its current method of accounting as described above, and has adopted the disclosure requirements of SFAS No. 123.

Had compensation expense for the Company s stock-based compensation plans been determined under SFAS No. 123, based on the fair market value at the grant dates, the Company s pro-forma net loss and pro-forma net loss per share would have been reflected as follows:

| | 2005 | 2004 | 2003 |
|---|---|---|---|
| | $ | $ | $ |
| Net loss as reported: | (2,813,602) | (1,435,613) | (1,102,723) |
| Stock-based employee compensation expense as determined under the fair value based method | (10,531,993) | (901,242) | (5,591,425) |
| | $ | $ | $ |
| Pro-forma net loss | (13,345,595) | (2,336,855) | (6,694,148) |
| Net loss per share - basic and diluted: | | | |
| | $ | $ | $ |
| As reported | (0.04) | (0.02) | (0.02) |
| | $ | $ | $ |
| Pro-forma | (0.19) | (0.04) | (0.12) |

The weighted average fair value of options granted in 2005 was estimated at $1.72 by using the Black-Scholes Option Pricing Model with the following weighted average assumptions: dividend yield of 0%, expected volatility of 95.6%, risk-free interest rate of 3.5%, and expected lives of three years.

The weighted average fair value of the options granted in 2003 was estimated at $0.50 by using the Black-Scholes Option Pricing Model with the following weighted average assumptions: dividend yield of 0%, expected volatility of 81.29%, risk-free interest rate of 3.5%, and expected lives of five years.

The Black-Scholes option valuation model was developed for use in estimating the fair value of traded options which have no vesting restrictions and are fully transferable. In addition, option valuation models require the input of highly subjective assumptions, including the expected stock price volatility. Because the Company's employee stock options have characteristics significantly different from those of traded options, and because changes in the subjective input assumptions can materially affect the fair value estimate, the existing model may not necessarily

provide a reliable measure of the fair value of its stock options.

(k)

Comprehensive Income

The Company adopted SFAS No. 130, *"Reporting Comprehensive Income*", which establishes standards for reporting and display of comprehensive income, its components and accumulated balances. The Company is disclosing this information on its Statements of Stockholders' Equity (Deficiency). Comprehensive income comprises equity changes except those resulting from investments by owners and distributions to owners.

(l)

Foreign Currency Translation

The Company maintains both U.S. Dollar and Canadian Dollar bank accounts at a financial institution in Canada. Foreign currency transactions are translated into their functional currency, which is U.S. Dollar, in the following manner:

At the transaction date, each asset, liability, revenue and expense is translated into the functional currency by the use of the exchange rate in effect at that date. At the period end, monetary assets and liabilities are translated into U.S. Dollars by using the exchange rate in effect at that date. Transaction gains and losses that arise from exchange rate fluctuations are included in the results of operations.

(m)

Intangible Assets

The Company adopted SFAS No. 142, *Goodwill and Other Intangible Assets* as of January 1, 2002, which presumes that goodwill and certain intangible assets have indefinite useful lives. Accordingly, goodwill and certain intangibles will not be amortized but rather will be tested at least annually for impairment. SFAS No. 142 also addresses accounting and reporting for goodwill and other intangible assets subsequent to their acquisition.

The Company has not had any goodwill or intangible assets with indefinite or definite lives since its inception.

(n)

Impairment of Long-Lived Assets

Long-lived assets of the Company are reviewed for impairment when changes in circumstances indicate their carrying value has become impaired, pursuant to guidance established in the SFAS No 144, *Accounting for the Impairment or Disposal of Long-Lived Assets*. Management considers assets to be impaired if the carrying amount of an asset exceeds the future projected cash flows from related operations (undiscounted and without interest charges). If impairment is deemed to exist, the asset will be written down to fair value, and a loss is recorded as the difference between the carrying value and the fair value. Fair values are determined based on quoted market values, discounted cash flows or internal and external appraisals, as applicable. Assets to be disposed of are carried at the lower of carrying value or estimated net realizable value.

(o)

Fair Value of Financial Instruments

The determination of fair value of financial instruments is made at a specific point in time, based on relevant information about financial markets and specific financial instruments. As these estimates are subjective in nature, involving uncertainties and matters of significant judgement, they cannot be determined with precision. Changes in assumptions can significantly affect estimated fair values. The carrying value of cash and accounts payable and accrued liabilities approximates their fair value because of the short-term nature of these instruments. The Company places its cash with high credit quality financial institutions.

(p)

Accounting for Derivative Instruments and Hedging Activities

The Company adopted SFAS No. 133, *Accounting for Derivative Instruments and Hedging Activities,* which requires companies to recognize all derivatives contracts as either assets or liabilities in the balance sheet and to measure them at fair value. If certain conditions are met, a derivative may be specifically designated as a hedge, the objective of which is to match the timing of gain or loss recognition on the hedging derivative with the recognition of (i) the changes in the fair value of the hedged asset or liability that are attributable to the hedged risk or (ii) the earnings effect of the hedged forecasted transaction. For a derivative not designated as a hedging instrument, the gain or loss is recognized in income in the period of change.

The Company has not entered into derivative contracts either to hedge existing risks or for speculative purposes. The adoption of this pronouncement does not have an impact on the Company s financial statements.

(q)

Related Party Transactions

A related party is generally defined as (i) any person that holds 10% or more of the Company s securities and their immediate families, (ii) the Company s management, (iii) someone that directly or indirectly controls, is controlled by or is under common control with the Company, or (iv) anyone who can significantly influence the financial and operating decisions of the Company. A transaction is considered to be a related party transaction when there is a transfer of resources or obligations between related parties. (See Note 4).

(r)

Stock Offering Costs

As discussed in Note 9, the fair value of stock issued to Fusion Capital under the stock purchase agreement has been expensed in the year the stock was issued because the agreement can be terminated without requiring the stock to be returned.

(s)

New Accounting Pronouncements

In December 2004, the FASB issued SFAS No. 123(R), *"Share-Based Payment"*. SFAS 123(R) establishes standards for the accounting for transactions in which an entity exchanges its equity instruments for goods or services. This Statement focuses primarily on accounting for transactions in which an entity obtains employee services in share-based payment transactions. SFAS 123(R) requires that the fair value of such equity instruments be recognized as expense in the historical financial statements as services are performed. Prior to SFAS 123(R), only certain pro-forma disclosures of fair value were required. SFAS 123(R) shall be effective for the Company as of the beginning of the first interim or annual reporting period that begins after December 15, 2005. The adoption of SFAS No. 123(R), will not have significant impact on the Company s consolidated financial statements.

In December 2004, the FASB issued SFAS No. 153, Exchanges of Nonmonetary Assets an amendment of APB Opinion No. 29. The guidance in APB Opinion No. 29, Accounting for Nonmonetary Transactions, is based on the principle that exchanges of nonmonetary assets should be measured based on the fair value of the assets exchanged and provided an exception to the basic measurement principle (fair value) for exchanges of similar productive assets. That exception required that some nonmonetary exchanges, although commercially substantive, be recorded on a carryover basis. This Statement eliminates the exception to fair value for exchanges of similar productive assets and replaces it with a general exception for exchange transactions that do not have commercial substance - that is, transactions that are not expected to result in significant changes in the cash flows of the reporting entity. The provisions of this Statement are effective for nonmonetary asset exchanges occurring in fiscal periods beginning after June 15, 2005, applied prospectively. The adoption of SFAS No. 153 will not have any impact on the Company s consolidated financial statements.

In May 2005, the FASB issued SFAS No. 154, Accounting Changes and Error Corrections . SFAS No. 154 replaces APB Opinion No. 20 Accounting Changes and SFAS No. 3, Reporting Accounting Changes in Interim Financial Statements . SFAS No. 154 requires retrospective application to prior periods financial statements of changes in accounting principle, unless it is impracticable to determine either the period-specific effects or the cumulative effect of the change. The adoption of SFAS No. 154 will not have any impact on the Company s consolidated financial statements.

**3.**

**Equipment**

| | 2005 | 2004 | 2003 |
|---|---|---|---|
| Computer equipment | $ 9,392 | $ 3,471 | $ 583 |
| furniture and fixtures | 1,089 | 1,089 | - |
| | 10,481 | 4,560 | 583 |
| Less: accumulated depreciation | (4,807) | (3,732) | (583) |
| | $ 5,674 | $ 828 | $ - |

Depreciation expense charged to operations during 2005 was $1,074 (2004 - $261, 2003 - $583).

**4.**

**Related Party Transactions**

(a)

Management fees

During 2005, the Company incurred $11,300 (2004 - $9,500, 2003 - $28,500) in management fees to directors of the Company. Included in accounts payable - related parties at December 31, 2005 is management fees of $27,000 (2004: $28,600, 2003 - $27,000) incurred in previous years.

(b)

Notes Payable

At a Board of Directors meeting held on May 28, 2003, the Company s Board of Directors agreed to accept a loan of up to $750,000 from a Company director and major stockholder. Proceeds from the loan, which will be drawn down on a as needed basis , will be used to fund the Company s research and development commitments, legal and audit fees, investor and public relations costs and other ongoing working capital requirements.

On May 29, 2003, the Company drew down $300,000 from the loan commitment and issued an unsecured promissory note bearing interest at a rate of 7.25% per annum, due on May 29, 2004.

On August 27, 2003, the Company drew down an additional $350,000 from the loan commitment and issued an unsecured promissory note bearing interest at a rate of 7.00% per annum, due on August 28, 2004.

On November 19, 2003, the Company drew down $75,000 from the loan commitment and issued an unsecured promissory note bearing an interest rate of 7.00%, due on November 19, 2004.

The Company accrued $19,666 interest expense in 2003 in respect to the above promissory notes, which is included in accounts payable at December 31, 2003.

Total unsecured promissory notes issued in 2003 of $725,000 bearing interest at rates ranging from 7.00% to 7.25% were repaid in 2004 including accrued interest of $51,500.

On August 27, 2004, the Company drew down $300,000 from the loan commitment and issued an unsecured promissory note bearing an interest rate of 7.50%, due on August 27, 2005.

In December 2004, a director and majority shareholder of the Company paid $700,000 in investor relations fees on behalf of the Company. The Company issued an unsecured promissory note bearing interest at a rate of 8.50% per annum, which is due on September 1, 2006.

As of December 31, 2004, the notes payable of $1,000,000 was made up from unsecured loans of $300,000 and $700,000, bearing interest at the rate of 7.50% and prime plus 3% respectively, due to a director and major shareholder of the Company. The entire amounts of principal and interest accrued are due and payable on demand. As of December 31, 2004, accrued and unpaid interest on these notes was $7,184.

On January 26, 2005, the Company repaid $300,000 with interest of $9,432.

On March 8, 2005, the Company issued an unsecured promissory note to the same director and major shareholder of the Company for $250,000 bearing interest at the rate of 8.5% per annum and due on March 8, 2006.

On December 5, 2005, the Company issued an unsecured promissory note to the same director and major shareholder of the Company for $200,000 bearing interest at the rate of 8.5% per annum and due on December 5, 2006.

As of December 31, 2005, the notes payable of $1,150,000 was made up from unsecured loans of $250,000, $700,000 and $200,000, all bearing interest at the rate of 8.50%, due to a director and major shareholder of the Company. Accrued and unpaid interest on these notes was $78,301.

On January 18, 2006, the Company has agreed, in consideration of Mr. Rayat s undertaking to increase his loan commitment to the Company by an additional $100,000, to $1,600,000, to convert all of the loans to demand loans.

The notes are due and payable upon the receipt of written demand from Mr. Rayat.

(c)

Amounts payable to related parties

Included in accounts payable - related parties is $28,056 (2004 - $17,272, 2003 - $nil) payable to a majority stockholder for expenses incurred on behalf of the Company, of which $28,056 (2004: $12,595, 2003 - $nil) is payable to the same director and majority shareholder in note 4(b).

(d)

Rent Expenses

The Company's office is located at Suite 216, 1628 West 1st Avenue, Vancouver, British Columbia, Canada. These premises are owned by a privately held corporation controlled by the director and officer of the Company in note 4(b). At present, the Company pays no rent. The fair value of the rent has not been included in the financial statements because the amount is immaterial.

**5.**

**Cooperative Agreement**

On November 1, 2002, the Company entered into a Cooperative Research and Development Agreement (the Agreement ) with the United States Department of Agriculture s ( USDA ) Agricultural Research Service ( ARS ), a committed a total payment of $292,727 to ARS over the two year period, ending February 19, 2005.

On May 24, 2004, the Agreement was extended to September 30, 2007, and the required total payments to ARS were amended to $807,828. The revised schedule of payments is as follows:

- $65,422.80 on or before 8/1/04 (paid in 2004);
- $65,422.80 on or before 11/1/04 (paid in June 2005);
- $65,422.80 on or before 2/1/05 (paid in October 2005);
- $65,422.80 on or before 5/1/05 (paid in October 2005);
- $65,422.80 on or before 8/1/05 (paid in December 2005);
- $65,422.80 on or before 11/1/05 (included in accounts payable);
- $65,422.80 on or before 2/1/06;
- $65,422.80 on or before 5/1/06;
- $65,422.80 on or before 8/1/06; and
- $65,422.80 on or before 11/1/06.

As of December 31, 2005, total payments of $546,137 have been paid/accrued.

As amended, the Company, instead of the ARS as in the original agreement, has the first option to prepare and prosecute patent or Plant Variety Protection Certificate applications, foreign and domestic, on subject invention owned or co-owned by the U.S Government, subject to certain conditions.

The agreement is for the purpose of funding salaries, equipment, travel and other indirect costs of one post-doctoral researcher, one support scientist, and one technician. The terms of the agreement require the interaction of the

Company with ARS personnel on the technical details involved with pig liver cell culture development, providing the necessary funds for the purpose above, preparing and filing any patent applications, and reviewing reports and implementing procedures for the development of an artificial liver device utilizing the pig liver cell line. ARS s responsibilities include hiring the post-doctoral research associate for a two-year period, providing laboratory and office space for the research associate, providing experimental animals (pigs) and slaughter facilities, conducting the research, preparing progress reports on project objectives, and preparing and submitting technical reports for publication.

All rights, title, and interest in any subject invention made solely by ARS employees are owned by ARS, solely by the Company are owned by the Company, and owned jointly between the Company and ARS if made jointly by ARS and the Company. The Company is granted an option to negotiate an exclusive license in each subject invention owned or co-owned by ARS for one or more field (s) of use encompassed by the Agreement. The option terminates when the Company fails to (1) submit a complete application for an exclusive license within sixty days of being notified by ARS of an inventions availability for licensing or (2) submit a good faith written response to a written proposal of licensing terms within forty five days of such proposal.

The Agreement, or parts thereof, is subject to termination at any time by mutual consent. Either party may unilaterally terminate the entire Agreement at any time by giving the other party written notice not less than sixty calendar days prior to the desired termination date.

**6.**

**Warrants**

The movement of share purchase warrants can be summarized as follows:

| | Number of warrants | Weighted average exercise price |
|---|---|---|
| Balance, December 31, 2003 | 4,700,000 | $ 0.025 |
| Exercised | (2,000,000) | 0.025 |
| Balance, December 31, 2004 | 2,700,000 | 0.025 |
| Exercised | (1,250,000) | 0.025 |
| Expired | (1,450,000) | 0.025 |
| Balance, December 31, 2005 | - | |

As of December 31, 2005, there are no outstanding share purchase warrants.

**7.**

**Stock Option**

On July 12, 2001, the shareholders of the Company approved the Company s 2001 Stock Option Plan which has 40,000,000 shares reserved for issuance thereunder, all of which are registered under Form S-8 on May 8, 2003. The objective of this plan is to attract and retain the best personnel, providing for additional performance incentives, and promoting the success of the Company by providing individuals the opportunity to acquire common stock.

On December 18, 2002, the Company s Board of Directors agreed to grant 10,000,000 Non-Statutory Stock Options out of the 40,000,000 common shares available for issuance under the Company s 2001 Stock Option Plan at $0.07 per share being the market price at the time of the grant. The terms and conditions, such as expiration dates and vesting periods are defined in the individual stock option agreements finalized on February 10, 2003. The options are exercisable in three (3) equal installments of thirty-three and one-third percent (33 1/3%), the first installment being exercisable immediately, with an additional of thirty-three and one-third percent (33 1/3%) of the shares becoming exercisable on each of the two (2) successive anniversary dates. The options expire on February 10, 2013.

On February 12, 2003, the Board of Directors authorized the Company to grant 75,000 options to purchase common stock to a director at $0.38 per share, being the approximate fair value at the date of grant and expiring ten (10) years from the grant date. The options become exercisable in two equal installments of fifty percent (50%), with the first installment becoming exercisable immediately and the balance becoming exercisable in 180 days from issuance. On September 22, 2003, 37,500 of these options were cancelled due to the resignation of the director from the Board of Directors.

In August 2003, the Company granted 3,000,000 stock options to directors and employees with an exercise price of $2.11 per share. The options vest and become exercisable in two equal installments of 50% (immediately) and the balance in 180 days from issuance.

In 2005, the Company granted an aggregate of 6,000,000 stock options to employees, with exercise prices from $2.38 to $3.10 per share, expiring 10 years from the date of grant, being vested immediately.

The movement of stock options can be summarized as follows:

| | Number of options | Weighted average exercise price |
|---|---|---|
| Balance, December 31, 2003 | 12,755,000 | $ 0.520 |

| | | |
|---|---|---|
| Exercised | (1,622,000) | 0.830 |
| Balance, December 31, 2004 | 11,133,000 | 0.476 |

| | | |
|---|---|---|
| Granted | 6,000,000 | 2.860 |
| Exercised | (285,000) | 2.284 |
| Balance, December 31, 2005 | 16,848,000 | 1.295 |

The options outstanding and exercisable as of December 31, 2005 can be summarized as follows:

| Exercise price | Number outstanding | Number exercisable | Weighted average remaining contractual life (yr.) |
|---|---|---|---|
| $ 0.07 | 8,915,000 | 8,915,000 | 7.11 |
| 2.11 | 1,983,000 | 1,983,000 | 7.66 |
| 2.38 | 2,000,000 | 2,000,000 | 9.22 |
| 3.10 | 3,950,000 | 3,950,000 | 9.19 |
| | 16,848,000 | 16,848,000 | 7.91 |

**8.**

**Income Taxes**

There is no current or deferred tax expense for the years ended December 31, 2005, 2004 and 2003 due to the Company s loss position. The benefits of temporary differences have not been previously recorded. The deferred tax consequences of temporary differences in reporting items for financial statement and income tax purposes are recognized, as appropriate. Realization of the future tax benefits related to the deferred tax assets is dependent on many factors, including the Company s ability to generate taxable income. Management has considered these factors in reaching its conclusion as to the valuation allowance for financial reporting purposes and has recorded a full valuation allowance against the deferred tax asset.

The income tax effect of temporary differences comprising the deferred tax assets on the accompanying balance sheets is primarily a result of start-up expenses, which are capitalized for income tax purposes. Net operating tax loss carryforwards are summarized as follows:

| | 2005 | 2004 | 2003 |
|---|---|---|---|
| Net operating loss carryforwards | $ 782,000 | $ 194,000 | $ 57,000 |
| Start-up costs | 1,024,000 | 1,138,000 | 788,000 |
| Organization costs | | 1,020 | 1,020 |
| | 1,806,000 | 1,333,020 | 846,020 |
| Valuation allowance | (1,806,000) | (1,333,020) | (846,020) |
| Net deferred tax assets | $ - | $ - | $ - |

The 2005 increase in the valuation allowance was $473,000 (2004: $487,000, 2003 - $434,219).

The Company has available net operating loss carryforwards of approximately $2,300,000 (2004 $570,000, 2003 - $169,000) for tax purposes to offset future taxable income which expire commencing 2008 to 2025. Additionally, start-up costs of approximately $1,024,000 are available to reduce taxable income (2004 $3,347,000, 2003 - $788,000), assuming normal operations have commenced.

A reconciliation between the statutory federal income tax rate (34%) and the effective rate of income tax

expense for 2005, 2004 and 2003 is as follows:

| | 2005 | 2004 | 2003 |
|---|---|---|---|
| Statutory federal income tax | -34.00% | -34.00% | -34.00% |
| Valuation allowance | 17.00% | 34.00% | 34.00% |
| Stock offering costs | 17.00% | - | - |
| Effective income tax rate | 0.00% | 0.00% | 0.00% |

**9.**

**Subsequent Events and Commitments**

On July 8, 2005, the Company entered into a Common Stock Purchase Agreement ( Purchase Agreement ) and a Registration Rights Agreement ( Registration Agreement ) with Fusion Capital Fund II, LLC ( Fusion Capital ). Fusion Capital has agreed to purchase from the Company up to $15,000,000 of the Company s shares of common stock over a thirty month period. Pursuant to the terms of the Registration Agreement, the Company has filed a registration statement (the Registration Statement ) with the Securities and Exchange Commission covering shares which may be purchased by Fusion Capital under the Purchase Agreement. Pursuant to the terms of the Purchase Agreement, the Company issued to Fusion 711,598 shares of its common stock, which Fusion Capital has agreed to hold for thirty months. The agreement was mutually cancelled on January 18, 2006, and replaced by a new Common Stock Purchase Agreement ( New Purchase Agreement ). The Company has issued an additional 374,753 shares in January 2006 for an aggregate number of 1,066,351 shares to Fusion Capital as the commitment fee and another 20,000 shares were issued to Fusion Capital upon signing of a term sheet on June 28, 2005. The fair value of the stock issued has been expensed in 2005.

Under the New Purchase Agreement with Fusion Capital dated January 20, 2006, Fusion Capital has agreed to purchase from the Company up to $15,000,000 of the Company s share of common stock over a thirty month period after the related registration statement is declared effective by the U.S. Securities and Exchange Commission, subject to earlier termination at the discretion of the Company.

Once the registration statement has been declared effective, on each trading day during the term of the New Purchase Agreement the Company has the right to sell to Fusion Capital $25,000 of the Company s common stock at a purchase price equal to the lower of (a) the lowest sale price of the common stock on such trading day and (b) the arithmetic

average of the three lowest closing sale prices for the common stock during the twelve consecutive trading days immediately preceding the date of purchase, provided that the purchase price will not be less than $0.50 per share. At the Company s option, Fusion Capital can be required to purchase fewer or greater amounts of common stock each month. The Company has the right to control the timing and the number of shares sold to Fusion Capital. Fusion Capital does not have the right or the obligation to purchase shares of our common stock in the event that the price of our common stock is less than $0.50. As of March 30, 2006, Fusion Capital had purchased 358,423 shares of common stock.

**ITEM 9: CHANGE IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE.**

We have had no disagreements with our certified public accountants with respect to accounting practices, procedures or financial disclosure.

**ITEM 9A: CONTROLS AND PROCEDURES.**

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934, as amended. A company s internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company s internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and disposition of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company s assets that could have a material effect on the financial statements.

An evaluation was performed under the supervision of our management, including our Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of the Company s disclosure controls and procedures (as defined in Securities Exchange Act of 1934 (the Exchange Act ) Rules 13a-15(e) and 15d-15(e)) as of the end of the period covered by this report. Based on that evaluation, our management, including our Chief Executive Officer and Chief Financial Officer, concluded that our disclosure controls and procedures were effective to provide reasonable assurance that information we are required to disclose in reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in SEC rules and forms.

Notwithstanding the foregoing, there can be no assurance that our disclosure controls and procedures will detect or uncover all failures of persons associated with us to disclose material information otherwise required to be set forth in our periodic reports. There are inherent limitations to the effectiveness of any system of disclosure controls and procedures, including the possibility of human error and the circumvention or overriding of the controls and procedures. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate. Accordingly, even effective disclosure controls and procedures can only provide reasonable, not absolute, assurance of achieving their control objectives.

There have been no significant changes in internal controls, or in factors that could significantly affect internal controls, subsequent to the date that management, including the Chief Executive Officer and the Chief Financial Officer, completed their evaluation.

**ITEM 9B. OTHER INFORMATION.**

None.

## PART III

### ITEM 10: DIRECTORS AND EXECUTIVE OFFICERS, PROMOTERS AND CONTROL PERSONS; COMPLIANCE WITH SECTION 16(a) OF THE EXCHANGE ACT

Set forth below is certain information regarding each of our directors and officers, and the positions held by each, as at December 31, 2005. On August 12, 2005, Mr. Harmel S. Rayat was appointed our president, chief executive officer, chief financial officer, and principal accounting officer; and Mr. Soheili resigned as our president and chief executive officer and assumed positions as our secretary and treasurer on the same day.

ARIAN SOHEILI, (Age 39). Secretary, Treasurer, Director. Mr. Soheili earned a Bachelor s degree in Business Administration from Simon Fraser University in 1993 and brings over 20 years of industry and public practice experience with Grant Thornton, Deloitte and Touche, and others. Since 1999, Mr. Soheili has been the Managing Director at Cantatus Systems Group, Inc., a firm that specializes in enterprise solutions, technology infrastructure and systems integration services. Mr. Soheili joined us as a director and our President and Chief Executive Officer on September 22, 2003, positions from which he resigned on August 11, 2005. On that date, in addition to his services as a director, he assumed the positions of our secretary and treasurer.

JASVIR S. KHELEH, (Age 32). Director. Mr. Kheleh received his Diploma in Financial Management majoring in Finance, from the British Columbia Institute of Technology (BCIT) in June 1995. From September 1995 to May 1996, Canada Trust, a subsidiary of the Toronto-Dominion Bank's, TD Bank Financial Group, employed Mr. Kheleh. Since June 1996, Mr. Kheleh has been with the nation s largest credit union institution, VanCity (Vancouver City Savings Credit Union) and is serving as Manager, Branch Services. Mr. Kheleh became manager on July 4, 2005. As Manager, Mr. Kheleh is responsible for establishing sound business objectives and providing sales and service leadership to the entire branch team; specifically, ensuring the promotion and delivery of financial products and services as mandated within VanCity s stated scope of business objectives. Mr. Kheleh is also responsible for actively promoting the institution s public presence and corporate image through community sponsorship of social, charitable and civic events. Mr. Kheleh joined us as a director on November 19, 2003.

HARMEL S. RAYAT, (Age 44). President, Chief Executive Officer, Chief Financial Officer, Principal Accounting Officer, Director. Mr. Rayat has served as one of our directors since December 4, 2000. In 2002 he was appointed secretary and treasurer. On August 12, 2005, he was appointed our president and chief executive and financial officer, as well as our principal accounting officer. Since January 2002, Mr. Rayat has been president of Montgomery Asset Management Corporation, a privately held firm providing financial consulting services to emerging growth corporations, From April 2001 through January 2002, Mr. Rayat acted as an independent consultant advising small corporations. Prior thereto, Mr. Rayat served as the president of Hartford Capital Corporation, a company that provided financial consulting services to a wide range of emerging growth corporations. During the past five years,

Mr. Rayat has served, at various times, as a director, executive officer and majority shareholder of a number of publicly traded and privately held corporations, including, Phytomedical Technologies, Inc. (currently chief financial officer, director, and majority stockholder), Entheos Technologies, Inc. (currently president, secretary, treasurer, director, and majority stockholder), and International Energy, Inc. (currently secretary, treasurer and director and majority stockholder).

Except as set forth below, none of the corporations or organizations with whom our directors are affiliated with is a parent, subsidiary or other affiliate of ours. Mr. Rayat is an officer, director and majority stockholder of each of Phytomedical Technologies, Inc., Entheos Technologies, Inc. and International Energy, Inc.

There are no family relationships among or between any of our officers and directors.

There are no arrangements or understandings between him and any other person(s) (naming such person(s)) pursuant to which he was or is to be selected as a director or nominee.

Except as set forth below, during the past five years none of our directors, executive officers, promoters or control persons have been:

(a)

the subject of any bankruptcy petition filed by or against any business of which such person was a general partner or executive officer either at the time of the bankruptcy or within two years prior to that time;

(b)

convicted in a criminal proceeding or is subject to a pending criminal proceeding (excluding traffic violations and other minor offenses);

(c)

subject to any order, judgment, or decree, not subsequently reversed, suspended or vacated, of any court of competent jurisdiction, permanently or temporarily enjoining, barring, suspending or otherwise limiting his involvement in any type of business, securities or banking activities; or

(d)

found by a court of competent jurisdiction (in a civil action), the Commission or the Commodity Futures Trading Commission to have violated a federal or state securities or commodities law.

Mr. Harmel S. Rayat, EquityAlert.com, Inc., Innotech Corporation and Mr. Bhupinder S. Mann, a former part-time employee of ours (collectively the respondents ), consented to a cease-and-desist order pursuant to Section 8A of the Securities Act of 1933. The matter related to the public resale by EquityAlert of securities received as compensation from or on behalf of issuers for whom EquityAlert and Innotech provided public relation and stock advertising services; Mr. Rayat was the president of Innotech and Equity Alert was the wholly-owned subsidiary of Innotech at the time.

The U.S. Securities & Exchange Commission contended and alleged that Equity Alert had received the securities from persons controlling or controlled by the issuer of the securities, or under direct or indirect common control with such issuer with a view toward further distribution to the public; as a result, the U.S. Securities & Exchange Commission further alleged that the securities that Equity Alert had received were restricted securities, not exempt from registration, and hence could not be resold to the public within a year of their receipt absent registration; and, accordingly, the U.S. Securities & Exchange Commission further alleged, since Equity Alert effected the resale within a year of its acquisition of the securities, without registration, such resale violated Sections 5(a) and 5(c) of the

Securities Act.

Without admitting or denying any of the findings and/or allegations of the U.S. Securities & Exchange Commission the respondents agreed, on October 23, 2003 to cease and desist, among other things, from committing or causing any violations and any future violations of Section 5(a) and 5(c) of the Securities Act of 1933. EquityAlert.com, Inc. and Innotech Corporation agreed to pay disgorgement and prejudgment interest of $31,555.14.

On August 8, 2000, Mr. Harmel S. Rayat and EquityAlert.com, Inc., without admitting or denying the allegations of the U.S. Securities & Exchange Commission that EquityAlert did not disclose certain compensation received by it in connection with stock advertisements and promotions, consented to the entry of a permanent injunction enjoining them from, among other things, violating Section 17(b) of the Securities Act of 1933; in addition, each of Mr. Rayat and EquityAlert agreed to pay a civil penalty of $20,000.

Compliance With Section 16(a) of the Exchange Act

Section 16(a) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), requires our directors, officers and persons who own more than 10 percent of a registered class of the Company's equity securities, to file reports of ownership and changes in ownership with the Securities and Exchange Commission ("the Commission"). Directors, officers and greater than 10 percent beneficial owners are required by applicable regulations to furnish us with copies of all forms they file with the Commission pursuant to Section 16(a). Based solely upon a review of the copies of the forms furnished to us, we believe that during fiscal 2005 the Section 16(a) filing requirements applicable to its directors and executive officers were satisfied.

**ITEM 11: EXECUTIVE COMPENSATION.**

Remuneration and Executive Compensation

The following table shows, for the three-year period ended December 31, 2005, the cash compensation paid by the Company, as well as certain other compensation paid for such year, to the Company's Chief Executive Officer and the Company's other most highly compensated executive officers. Except as set forth on the following table, no executive officer of the Company had a total annual salary and bonus for 2005 that exceeded $100,000.

Summary Compensation Table

| Principal Position | Year | Salary | Bonus | Other(1) | Securities Underlying Options Granted | All Other Compensation |
|---|---|---|---|---|---|---|
| Harmel S. Rayat (2) | 2005 | | | | | |

$0

$0

$2,300

0

$0

President, CEO, CFO

2004

$0

$0

$3,500

0

$0

Principal Accounting

2003

$27,000

$0

$0

1,500,000

$0

Officer and Director

Arian Soheili (2)

2005

$0

$0

$4,900

0

$0

Secretary, Treasurer

2004

$0

$0

$2,500

0

$0

Director

2003

$0

$0

$1,150

0

$0

Jasvir Kheleh,

2005

$0

$0

$4,100

0

$0

Director

2004

$0

$0

$3,500

0

$0

2003

$0

$0

$350

0

$0

(1) Includes standard Board of Directors fees and meeting attendance fees.

(2) On August 12, 2005 (i) Mr. Harmel S. Rayat was appointed our president, chief executive and financial officer, and principal accounting officer and agreed to serve in such capacities without compensation effective August 12, 2005 through December 31, 2006; and (ii) Mr.Soheili resigned as our president and chief executive officer and assumed positions as our secretary and treasurer. Prior to August 12, 2005, Mr. Soheili served as our president and chief financial officer since September 22, 2003.

Stock Option Grants in Last Fiscal Year

Shown below is further information regarding employee stock options awarded during 2005 to the named officers and directors:

Number of

| Name | Options in 2005 | Price ($/sh) | Date | Securities Underlying Options Granted to Employees | % of Total Exercise Expiration |
|---|---|---|---|---|---|
| Arian Soheili | 0 | 0 | n/a | n/a | |
| Harmel Rayat | 0 | 0 | n/a | n/a | |
| Jasvir Kheleh | 0 | 0 | | | |

n/a

n/a

Aggregated Option Exercises During Last Fiscal Year and Year End Option Values

The following table shows certain information about unexercised options at year-end with respect to the named officers and directors:

Common Shares Underlying Unexercised

Value of Unexercised In-the-money

Options on December 31, 2005

Options on December 31, 2005

Name

Exercisable

Unexercisable

Exercisable

Unexercisable

Arian Soheili

0

0

0

0

Harmel Rayat

7,000,000

0

9,450,000

0

Jasvir Kheleh

0

0

0

0

Changes in Control

There are no understandings or agreements, aside from the transaction completed and described under Certain Relationships and Related Transactions, known by management at this time which would result in a change in control of the Company. If such transactions are consummated, of which there can be no assurance, the Company may issue a significant number of shares of capital stock which could result in a change in control and/or a change in the Company s current management.

**ITEM 12: SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED TRANSACTIONS.**

The following table sets forth, as of April 6, 2006, the beneficial ownership of the Company's Common Stock by each director and executive officer of the Company and each person known by the Company to beneficially own more than 5% of the Company's Common Stock outstanding as of such date and the executive officers and directors of the Company as a group.

Number of Shares

Person or Group

of Common Stock

Percent

Harmel S. Rayat (1)

53,463,056

69%

216-1628 West First Avenue

Vancouver, B.C. V6J 1G1 Canada

Arian Soheili

0

0%

216-1628 West First Avenue

Vancouver, B.C.  V6J 1G1 Canada

Jasvir Kheleh

0

0%

216-1628 West First Avenue

Vancouver, B.C.  V6J 1G1 Canada

Directors and Executive Officers

53,463,056

69%

as a group (3 persons)

(1)  Includes 5,500,000 stock options granted on February 10, 2003, and 1,500,000 stock options granted on August 27, 2003, which may be acquired pursuant to options granted and exercisable under the Company's stock option plans. Also includes 3,203,194 shares held by Tajinder Chohan, Mr. Harmel S. Rayat's wife. Additionally, other members of Mr. Rayat's family hold shares. Mr. Rayat disclaims beneficial ownership of the shares beneficially owned by his other family members.

**ITEM 13:  CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS.**

*Management fees*

During 2005, the Company incurred $11,300 (2004 - $9,500, 2003 - $28,500) in management fees to directors of the Company.  Included in accounts payable - related parties at December 31, 2005 is management fees of $27,000 (2004: $28,600, 2003 - $27,000) incurred in previous years.

*Notes Payable*

At a Board of Directors meeting held on May 28, 2003, the Company s Board of Directors agreed to accept a loan of up to $750,000 from a Company director and major stockholder. Proceeds from the loan, which will be drawn down on a as needed basis , will be used to fund the Company s research and development commitments, legal and audit fees, investor and public relations costs and other ongoing working capital requirements.

On May 29, 2003, the Company drew down $300,000 from the loan commitment and issued an unsecured promissory note bearing interest at a rate of 7.25% per annum, due on May 29, 2004.

On August 27, 2003, the Company drew down an additional $350,000 from the loan commitment and issued an unsecured promissory note bearing interest at a rate of 7.00% per annum, due on August 28, 2004.

On November 19, 2003, the Company drew down $75,000 from the loan commitment and issued an unsecured promissory note bearing an interest rate of 7.00%, due on November 19, 2004.

The Company accrued $19,666 interest expense in 2003 in respect to the above promissory notes, which is included in accounts payable at December 31, 2003.

Total unsecured promissory notes issued in 2003 of $725,000 bearing interest at rates ranging from 7.00% to 7.25% were repaid in 2004 including accrued interest of $51,500.

On August 27, 2004, the Company drew down $300,000 from the loan commitment and issued an unsecured promissory note bearing an interest rate of 7.50%, due on August 27, 2005.

In December 2004, a director and majority shareholder of the Company paid $700,000 in investor relations fees on behalf of the Company. The Company issued an unsecured promissory note bearing interest at a rate of 8.50% per annum, which is due on September 1, 2006.

As of December 31, 2004, the notes payable of $1,000,000 was made up from unsecured loans of $300,000 and $700,000, bearing interest at the rate of 7.50% and prime plus 3% respectively, due to a director and major shareholder of the Company. The entire amounts of principal and interest accrued are due and payable on demand. As of December 31, 2004, accrued and unpaid interest on these notes was $7,184.

On January 26, 2005, the Company repaid $300,000 with interest of $9,432.

On March 8, 2005, the Company issued an unsecured promissory note to the same director and major shareholder of the Company for $250,000 bearing interest at the rate of 8.5% per annum and due on March 8, 2006.

On December 5, 2005, the Company issued an unsecured promissory note to the same director and major shareholder of the Company for $200,000 bearing interest at the rate of 8.5% per annum and due on December 5, 2006.

As of December 31, 2005, the notes payable of $1,150,000 was made up from unsecured loans of $250,000, $700,000 and $200,000, all bearing interest at the rate of 8.50%, due to a director and major shareholder of the Company. Accrued and unpaid interest on these notes was $78,301.

On January 18, 2006, the Company has agreed, in consideration of Mr. Rayat s undertaking to increase his loan commitment to the Company by an additional $100,000, to $1,600,000, to convert all of the loans to demand loans. The notes are due and payable upon the receipt of written demand from Mr. Rayat.

*Amounts payable to related parties*

Included in accounts payable - related parties is $28,056 (2004 - $17,272, 2003 - $nil) payable to a majority

stockholder for expenses incurred on behalf of the Company, of which $28,056 (2004: $12,595, 2003 - $nil) is payable to the same director and majority shareholder.

*Rent Expenses*

The Company's office is located at Suite 216, 1628 West 1st Avenue, Vancouver, British Columbia, Canada. These premises are owned by a privately held corporation controlled by a director and officer of the Company. At present, the Company pays no rent. The fair value of the rent has not been included in the financial statements because the amount is immaterial.

**ITEM 14: PRINCIPAL ACCOUNTANT FEES AND SERVICES.**

The firm of Ernst & Young, LLP served as the Company's independent accountants from May 5, 2005 until their dismissal in March 2006. The firm of Peterson Sullivan, PLLC currently serves as the Company s independent accountants. The Board of Directors of the Company, in its discretion, may direct the appointment of different public accountants at any time during the year, if the Board believes that a change would be in the best interests of the stockholders. The Board of Directors has considered the audit fees, audit-related fees, tax fees and other fees paid to the Company's accountants, as disclosed below, and had determined that the payment of such fees is compatible with maintaining the independence of the accountants.

Audit Fees: The aggregate fees, including expenses, billed by our principal accountant in connection with the audit of our consolidated financial statements for the most recent fiscal year and for the review of our financial information included in our Annual Report on Form 10-K; and our quarterly reports on Form 10-Q during the fiscal years ending December 31, 2005 and December 31, 2004 were $32,057 and $7,686 respectively.

Tax fees: The aggregate fees billed to us for tax compliance, tax advice and tax planning by our principal accountant for fiscal 2005 and 2004 were $0.

All Other Fees: The aggregate fees, including expenses, billed for all other services rendered to us by our principal accountant during year 2005 and 2004 were $0.

We do not currently have an audit committee.

**ITEM 15: EXHIBITS, FINANCIAL STATEMENT SCHEDULE**

(a) The following exhibits are filed as part of this Annual Report:

31.1

Certification of the Chief Executive Officer pursuant to Rule 13a-14(a)

31.2

Certification of the Chief Financial Officer pursuant to Rule 13a-14(a)

32.1

Certification by the Chief Executive Officer pursuant to 18 U.S.C. 1350 as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

32.2

Certification by the Chief Financial Officer pursuant to 18 U.S.C. 1350 as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

(b) During the Company s fourth quarter, the following reports were filed on Form 8-K

October 12, 2005: On October 5, 2005, HepaLife Technologies, Inc. issued a news release to announce that positive data from recent experiments on the Company s PICM-19H liver cell line was released at last week s national Biomedical Engineering Society Meeting (BMES) in Baltimore, Maryland.

December 7, 2005: On December 5, 2005, the Company drew down $200,000 from the loan commitment provided by Harmel S. Rayat and issued an unsecured promissory note, which is due on December 5, 2006 and bears an interest rate of 8.50%.

**SIGNATURES**

Pursuant to the requirements of Sections 13 or 15 (d) of the Securities and Exchange Act of 1934, the Registrant has duly caused this amendment to its report on Form 10-K for the fiscal year ended December 31, 2004, to be signed on its behalf by the undersigned, thereunto duly authorized on this 6th day of April, 2006.

HepaLife Technologies, Inc.

/s/ Harmel S. Rayat

Harmel S. Rayat

President and CEO

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in capacities and on the dates indicated.

Signature

Title

Date

/s/ Harmel S. Rayat

Director , President,

April 6, 2006

Harmel S. Rayat

Chief Executive Officer

Chief Financial Officer,

Principal Accounting Officer

/s/ Arian Soheili

Director, Secretary/Treasurer

April 6, 2006

Arian Soheili

/s/ Jasvir Kheleh

Director

April 6, 2006

Jasvir Kheleh

**Exhibit 31.1**

**CERTIFICATION OF CHIEF EXECUTIVE OFFICER**

**Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002**

I, Harmel S. Rayat, certify that:

(1) I have reviewed this annual report on Form 10-K of HepaLife Technologies, Inc. (the registrant );

(2) Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

(3) Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

(4) The registrant s other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant s internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant s fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially

affect, the registrant s internal control over financial reporting; and

(5) The registrant s other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant s auditors and the audit committee of the registrant s board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant s ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant s internal control over financial reporting.

Date: April 6, 2006

By: /s/ Harmel S. Rayat
Harmel S. Rayat
President and Chief Executive Officer

**Exhibit 31.2**

**CERTIFICATION OF CHIEF FINANCIAL OFFICER**

**Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002**

I, Harmel S. Rayat, certify that:

(1) I have reviewed this annual report on Form 10-K of HepaLife Technologies, Inc. (the registrant );

(2) Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

(3) Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

(4) The registrant s other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant s internal control over financial reporting that occurred during the registrant s most recent fiscal quarter (the registrant s fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially

affect, the registrant s internal control over financial reporting; and

(5) The registrant s other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant s auditors and the audit committee of the registrant s board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant s ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant s internal control over financial reporting.

Date: April 6, 2006

By: /s/ Harmel S. Rayat
Harmel S. Rayat
Chief Financial Officer

**Exhibit 32.1**

**Certification by the Chief Executive Officer pursuant to 18 U.S.C. 1350**
**as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002**

In connection with the Annual Report of HepaLife Technologies, Inc. (the Company ) on the Form 10-K for the period ending December 31, 2005 as filed with the Securities and Exchange Commission on the date hereof (the Report ), I, Harmel S. Rayat, President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. ss. 1350, as adopted pursuant to ss.906 of the Sarbanes-Oxley Act of 2002, that:

(i)

the Report filed by the Company fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(ii)

The information contained in that Report fairly presents, in all material respects, the financial condition and results of operations of the Company on the dates and for the periods presented therein.

**HEPALIFE TECHNOLOGIES, INC.**

Date: April 6, 2006

By: /s/ Harmel S. Rayat
Harmel S. Rayat
President and Chief Executive Officer

This certification accompanies this Report pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 and shall not be deemed filed by the Company for purposes of Section 18 of the Securities Exchange Act of 1934, as amended. A signed original of this written statement required by Section 906, or other document authenticating, acknowledging, or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906, has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

**Exhibit 32.2**

**Certification by the Chief Financial Officer pursuant to 18 U.S.C. 1350**
**as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002**

In connection with the Annual Report of HepaLife Technologies, Inc. (the Company ) on the Form 10-K for the period ending December 31, 2005 as filed with the Securities and Exchange Commission on the date hereof (the Report ), I, Harmel Rayat, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. ss. 1350, as adopted pursuant to ss.906 of the Sarbanes-Oxley Act of 2002, that:

(i)

the Report filed by the Company fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(ii)

The information contained in that Report fairly presents, in all material respects, the financial condition and results of operations of the Company on the dates and for the periods presented therein.

**HEPALIFE TECHNOLOGIES, INC.**

Date: April 6, 2006

By: /s/ Harmel S. Rayat
Harmel S. Rayat

Chief Financial Officer

This certification accompanies this Report pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 and shall not be deemed filed by the Company for purposes of Section 18 of the Securities Exchange Act of 1934, as amended. A signed original of this written statement required by Section 906, or other document authenticating, acknowledging, or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906, has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

**SECURITIES AND EXCHANGE COMMISSION**

**Washington, D.C. 20549**

**FORM 8-K**

**CURRENT REPORT**

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

**June 15, 2006**

Date of Report (Date of earliest event reported)

**HEPALIFE TECHNOLOGIES, INC.**

(Exact name of registrant as specified in its charter)

**Florida**

(State or other jurisdiction of incorporation)

**000-29819**

(Commission File Number)

**58-2349413**

(I.R.S. Employer Identification No.)

**1628 West 1st Avenue, Suite 216, Vancouver, British Columbia, V6J 1G1**

(Address of principal executive offices)

**(800) 518-4879**

(Registrant s telephone number, including area code)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

[ ] Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

[ ] Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

[ ] Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

[ ] Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

**SECTION 1. Registrant's Business and Operations**

Item 1.01 Entry into a Material Definitive Agreement

On June 15, 2006, HepaLife Technologies, Inc., through its wholly owned subsidiary, Phoenix BioSystems, Inc. entered into an exclusive worldwide license agreement with Michigan State University (MSU) for the development of new cell-culture based flu vaccines to protect against the spread of influenza viruses. This license agreement between Phoenix BioSystems, Inc. and Michigan State University is attached as Exhibit 10.1.

**SECTION 2. Financial Information**

None.

**SECTION 3. Securities and Trading Markets**

None.

**SECTION 4. Matters Related to Accountants and Financial Statements**

None.

**SECTION 5. Corporate Governance and Management**

None.

**SECTION 6. [Reserved]**

N/A.

**SECTION 7. Regulation FD**

None.

**SECTION 8. Other Events**

None.

**SECTION 9. Financial Statements and Exhibits**

Item 9.01 Financial Statements and Exhibits

The following exhibit is furnished as part of this report:

Exhibit 10.1 License Agreement between Phoenix Biosystems, Inc. and Michigan State University

**SIGNATURES**

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

**HEPALIFE TECHNOLOGIES, INC.**

/s/ Harmel S. Rayat

Harmel S. Rayat

President and CEO

Date: June 21, 2006

**EXHIBIT 10.1**

**LICENSE AGREEMENT**

THIS AGREEMENT made and effective as of the date of last signing (herein the Effective Date ) by and between Phoenix Biosystems, Inc. (herein Company ), having a principal place of business at 216 - 1628 West 1st Avenue, Vancouver, BC, Canada, V6J 1G1, and Michigan State University (herein MSU ), having a principal place of business in East Lansing, Michigan 48824, USA. Company and MSU are each a party , and may collectively be referred to as the parties.

**INTRODUCTION**

1.

WHEREAS, MSU has developed and is continuing research in the area of the Technology, as defined in Paragraph 1.1 of this Agreement; and

2.

WHEREAS, Company desires to obtain certain rights in and to the Technology; and

3.

WHEREAS, Company and MSU mutually desire to formalize an agreement which delineates their respective rights and obligations with respect to the Technology.

NOW THEREFORE, in consideration of the mutual covenants and promises contained in this Agreement and other good and valuable consideration, MSU and Company agree as follows:

**ARTICLE 1 - DEFINITIONS**

In the terms defined and used herein, the singular shall include the plural and vice versa. Terms in this Agreement (other than names of parties and Article headings) which are set forth in upper case letters have the meanings established for such terms in this Article 1.

1.1

Technology means MSU Invention Disclosure No. 95041 titled Development of a Sustainable Chick Cell Line Infected with Marek's Disease Virus and MSU Invention Disclosure 97071 titled Immortal Avian Cell Line to Grow Avian and Animal Viruses to Produce Vaccines .

1.2

Know-how means the data and information embodied in or required to enable the Technology.

1.3

Patents means any and all patent applications filed in any country of the world by or on behalf of MSU claiming the Technology and/or any patents maturing from such patent applications. As of the Effective Date of this Agreement, patents and patent applications include US patent 5,827,738 titled Sustainable chick cell line infected with Marek's Disease Virus filed 10/27/1995 and issued 10/27/1998, US patent 5,833,980 titled Sustainable Cell Line for the Production of Marek's Disease Vaccines filed 06/21/1996 and issued11/10/1998, US patent 5,866,117 titled Sustainable Chick Cell Line Infected with Marek's Disease Virus filed 08/19/1997 and issued 02/02/1999, US patent 5,874,303 titled Sustainable Cell Line for the Production of Marek's Disease Vaccines filed 06/30/1997 and issued 02/23/1999, and United States patent 5,989,805 titled Immortal Avian Cell Line To Grow Avian and Animal Viruses To Produce Vaccines filed 11/10/1997 and issued11/23/1999.

1.5

Adjusted Gross Sales means the aggregate gross revenues derived by Company and its Affiliates from the sale of Products and Services to and practice of Processes for an unaffiliated third party in an arms length transaction, less credits granted on account of price adjustments, recalls, rejection or return of items previously sold.

1.6

Product means any and all products embodying or practicing the Technology, Know-how and/or the Patents.

1.7

Process means any and all processes embodying or practicing the Technology, Know-how and/or the Patents.

1.8

Service means any and all services embodying or practicing the Technology, , Know-how and/or the Patents.

1.9

Term means the period beginning on the Effective Date and extending to the expiration of the last to expire of the Patents, or until Fifteen (15) years after the Effective Date, whichever is longer.

1.10

Field means use of the technology for human and animal vaccine and virus testing.

1.11

Territory means definition **worldwide**.

1.12

Improvement means (a) divisionals of the Patents, and (b) any continuations of the Patents deriving from inventions made within the Term (i) in the course of research at MSU supported by Company hereunder; or (ii) conceived or first reduced to practice by MSU employees while conducting work for the Company under a private agreement that is disclosed to and approved by MSU consistent with the then current MSU policy on outside work for pay.

1.13

Affiliate means any company, corporation or business which is at least fifty percent owned or controlled by Company, or which owns or controls at least fifty percent of Company, or which together with Company is commonly owned or controlled by a third party who owns or controls at least fifty percent of each.

1.14

Government means the United States Government.

1.17

Sublicensing Revenues means any and all payments, royalties and other consideration collected by Company from its sublicensees.

**ARTICLE 2 - LICENSE**

2.1

MSU hereby grants to Company during the Term of this Agreement an exclusive license within the Territory, limited to the Field, with the right to sublicense, to make, modify, reproduce, have made, lease, use, distribute, market and otherwise dispose of Products, practice the Processes, and offer the Services under the Technology, the Know-how and/or the Patents.

2.2

The exclusive license specified in Paragraphs 2.1 is subject to a reserved right of MSU to utilize the Technology, Know-how, and/or the Patents for the non-commercial research and educational purposes of MSU.

2.3

The exclusive license specified in Paragraphs 2.1 may be subject to certain rights of the Government if the Technology, Know-how, and/or the Patents were created or invented in the course of Government-funded research. Such rights may include for example a royalty-free license to the Government and the requirement that any Product produced for sale in the United States will be manufactured substantially in the United States.

**ARTICLE 3 - R&D PERFORMANCE & MARKETING**

3.1

Company shall use reasonable efforts to introduce Products and Processes into the commercial market as soon as practicable, consistent with sound and reasonable business practices and judgment. Thereafter,

Company shall endeavor to keep Products and Processes reasonably available to the public during the remainder of the Term.

3.2

MSU shall have the right to terminate or render this license nonexclusive at any time after three (3) years from the Effective Date if Company: (a) has not put the Technology into commercial use in the Territory, directly or through a sublicense or (b) is not demonstrably engaged in a research, development, manufacturing, marketing or sublicensing program, as appropriate, directed toward this end.

3.3

The following developmental steps shall be performed within one year of the Effective Date of this Agreement: 1) MSU shall thaw and deliver to Company viable cultures from three cryogenically stored vials of cells; 2) Company shall determine that the cell lines are free of the following select agents: retroviruses (RT activity), reovirus, herpesviruses (MDV), newcastle disease virus and avian leukosis virus; 3) Company shall test cells for growth of human vaccine strain influenza viruses and determine titres achieved; and 4) Company shall test cells for growth of H5N1 avian influenza virus strains.

**ARTICLE 4 - PATENTS AND PATENT COSTS**

4.1

MSU shall retain title to the Technology, Know-how, and the Patents.

4.2

MSU shall file, prosecute, and maintain Patents in the United States and in any other countries designated by Company at Company s expense.

4.3

Company agrees promptly to reimburse MSU for its outside legal costs incurred under Paragraph 4.2 within thirty (30) days after the receipt of invoices from MSU. Late payment shall be subject to interest charges of one and one-half percent (1½ %) per month. Such reimbursement payments by Company of costs incurred by MSU under

Paragraph 4.2 shall be creditable against up to 50% of the royalties that are due from Company to MSU under Article 6 during the same calendar year in which such reimbursements are due.

4.4

Failure of Company to pay the amounts required under Paragraph 4.3 within ninety (90) days after the receipt of invoices from MSU shall constitute a default by Company under this Agreement, and entitle MSU to exercise its rights to terminate this Agreement under Article 13.

4.5

Nothing in this Agreement shall prevent MSU from seeking patents on the Technology in countries other than those designated by Company. Such patent applications shall be filed, prosecuted and maintained at MSU s expense, and shall be free of any obligations to Company under this Agreement.

**ARTICLE 5 - PUBLICATION RIGHTS**

5.1

MSU reserves the right to publish or present the results of its research on the Technology.

**ARTICLE 6 - PAYMENTS AND ROYALTIES**

6.1

Company agrees to pay to MSU a non-refundable initial fee of One Thousand United States Dollars ($1,000.00) upon the execution of this License Agreement.

6.2

(a)

Company shall pay to MSU a running royalty of Two and One Half percent (2.5%) of Adjusted Gross Sales. Where a Product or Process is not sold, but is otherwise disposed of, Adjusted Gross Sales for the purpose of computing royalties shall be the Adjusted Gross Sales price at which products or processes of similar kind and quality, sold in similar quantities, are currently being offered for sale by Company. Where such products and processes are not currently being separately offered for sale by Company, Adjusted Gross Sales shall be Company's cost of manufacture, determined by Company's customary accounting procedures, increased by 100 %.

(b)

Company shall pay to MSU a running royalty of Two and One Half percent (2.5%) of sublicensee s Adjusted Gross Sales.

6.3

Beginning in calendar year 2010, Company agrees to pay MSU an annual minimum payment as shown in the table below. Should the actual running royalties paid under Paragraph 6.2 fall short of this minimum amount, Company shall pay MSU the difference when the royalty payment for the last calendar quarter of such calendar year is due in accordance with Paragraph 6.4.

| Year | Minimum Payment |
|---|---|
| 2010-2014 | $10,000.00 |
| 2015-termination | $20,000.00 |

6.4

Company shall deliver to MSU within thirty (30) days after achieving developmental steps one through four of Article 3.3 the milestone payments as shown in the table below.

| Development Step | Milestone Payment |
|---|---|
| 1 | $1,000.00 |
| 2 | $2,000.00 |
| 3 | $2,000.00 |
| 4 | $10,000.00 |

6.5

Company shall deliver to MSU within thirty (30) days after the end of each calendar quarter:

(a)

A written report showing all figures necessary to compute Adjusted Gross Sales and Company s computation of all remuneration to MSU due under this Agreement for such calendar quarter, accompanied by a check in full payment of the remuneration due. Adjusted Gross Sales shall be segmented in each such report on a country-by-country basis, including the rates of exchange used for conversion to USA Dollars from the currency in which such sales were made.

(b)

For any Adjusted Gross Sales which are made in a currency other than U.S. dollars, the amount of such sales shall be converted to U.S. Dollars using the currency exchange rates set forth in The Wall Street Journal on the last day of the calendar quarter.

(c)

All payments due shall be made in U.S. dollars without deduction for taxes, assessments, or other charges of any kind which may be imposed on Company by the government of the country where the transactions occur or any political subdivision thereof with respect to any amounts payable to MSU pursuant to this Agreement, and such taxes, assessments, or other charges shall be assumed by Company.

(d)

Late payments shall be subject to an interest charge of one and one-half percent (1½%) per month.

6.6

Company shall keep for a period of three (3) years following the year to which such records relate, full, true and accurate books of accounts and other records containing all information and data which may be necessary to ascertain and verify the remuneration payable to MSU hereunder. During the Term and for a period of three (3) years following its termination, MSU shall have the right to audit, or have an agent, accountant or other representative, audit such books, records and supporting data upon fifteen (15) days notice. Any audit shall be at MSU s expense, except that Company shall reimburse MSU for the cost of the audit in the event that the audit establishes an underpayment of ten percent (10%) or more of the amount due.

## ARTICLE 7 RESERVED

7.1

RESERVED

**ARTICLE 8 DILIGENCE**

8.1

Company shall deliver to MSU within thirty (30) days after the end of each calendar year during the Term for calendar years 2006 and 2007, a report describing Company s progress toward meeting its objectives together with an updated version of its business plan.

8.2

Company shall provide to MSU, within thirty (30) days after any meeting of its Board of Directors, copies of all reports and financial statements, including reports of sales and technology progress, which were distributed to the Board at or prior to each meeting

**ARTICLE 9 - INFRINGEMENT**

9.1

Each party shall promptly report in writing to the other party during the Term any infringement or suspected infringement of any Patent, or unauthorized use or misappropriation of the Technology or Know-how by a third party of which it becomes aware, and shall provide the other party with all available evidence supporting said infringement, suspected infringement or unauthorized use or misappropriation.

9.2

Company shall have the right to initiate an infringement suit or other appropriate action against any third party who at any time has infringed or is suspected of infringing any of the Patents or of using without proper authorization all or any portion of the Technology or Know-how. Company shall give MSU sufficient advance written notice of its intent to initiate such action and the reasons therefor, and shall provide MSU with an opportunity to make suggestions and comments regarding such action. Company shall keep MSU promptly informed of the status of any such action. Company shall pay all expenses of such action. MSU shall offer reasonable assistance to Company in connection therewith at no charge to Company except for reimbursement of reasonable out-of-pocket expenses. Recoveries, reimbursements, damages, profits or awards from such action shall first be applied to reimburse Company and MSU for litigation costs. Any remaining recoveries, reimbursements, damages, profits or awards of whatever nature shall be treated as Adjusted Gross Sales under this Agreement.

9.3

In the event that MSU is a legally indispensable party to an infringement suit or other action as described in Paragraph 9.2, MSU may join the action as a co-plaintiff. Company shall reimburse MSU for any costs it incurs as a party to any action brought by Company or its sublicensee, irrespective of whether MSU shall become a co-plaintiff.

9.4

In the event that Company does not within six (6) months (a) secure cessation of the infringement, or (b) initiate suit against the infringer, MSU shall thereafter have the right but not the obligation to convert Company's exclusive license hereunder to a non-exclusive license and/or to take action against the infringer at MSU's own expense. Company shall offer reasonable assistance to MSU in connection with such action at no charge to MSU except for the reimbursement of reasonable out-of-pocket expenses. Any damages, profits or awards of whatever nature recovered from such action shall belong solely to MSU.

**ARTICLE 10 - CONFIDENTIALITY**

10.1

In connection with this Agreement, it is acknowledged that each party may disclose its confidential and proprietary information to the other party. Any such information that is first disclosed in writing, or if first disclosed orally is later transmitted in written form, and is labeled as Confidential is referred to herein as Confidential Information.

10.2

Each party hereto shall maintain the Confidential Information of the other party in confidence, and shall not disclose or otherwise communicate such Confidential Information to others, or use it for any purpose except pursuant to, and in order to carry out, the terms and objectives of this Agreement, and hereby agrees to exercise every reasonable precaution to prevent and restrain the unauthorized disclosure of such Confidential Information by any of its directors, officers, employees, consultants or agents.

10.3

The provisions of Paragraph 10.2 shall not apply to any Confidential Information disclosed hereunder which:

(a)

Either was or will be lawfully disclosed to the recipient by an independent third party rightfully in possession of the Confidential Information; or

(b)

Either has been or will be published or generally known to the public in accordance with Article 5 or otherwise through no fault or omission by any of the parties; or

(c)

Was independently known to the recipient prior to receipt from the disclosing party, or independently developed by the recipient thereafter, as demonstrably documented in written records of the recipient; or

(d)

Is required to be disclosed by any of the parties to comply with court orders or applicable laws, to defend or prosecute litigation or to comply with governmental regulations, provided that such party takes reasonable and lawful actions to avoid and/or minimize the degree of such disclosure.

**ARTICLE 11 - WARRANTY DISCLAIMER**

11.1

Nothing in this Agreement shall be construed as:

(a)

A warranty or representation by MSU as to the validity or scope of any Patent;

(b)

A warranty or representation that anything made, used, sold or otherwise disposed of under any license granted in this Agreement is or will be free from infringement of patents, copyrights and/or trademarks of third parties;

(c)

An obligation of MSU to bring or prosecute actions or suits against third parties for infringement;

(d)

Conferring rights to use in advertising, publicity or otherwise any trademark or the name of MSU; or

(e)

Granting by implication, estoppel or otherwise any licenses under patents of MSU other than the Patents, regardless of whether such other patents are dominant of or subordinate to any Patent.

11.2

Except as expressly set forth in this Agreement, MSU MAKES NO REPRESENTATIONS, EXTENDS NO WARRANTIES OF ANY KIND, EITHER EXPRESS OR IMPLIED, AND ASSUMES NO RESPONSIBILITIES WHATEVER WITH RESPECT TO THE USE, SALE OR OTHER DISPOSITION BY COMPANY OR ITS VENDEES OR OTHER TRANSFEREES OF PRODUCTS, PROCESSES, OR SERVICES INCORPORATING OR MADE BY USE OF THE TECHNOLOGY, KNOW-HOW, OR PATENTS LICENSED UNDER THIS AGREEMENT OR INFORMATION, IF ANY, FURNISHED UNDER THIS AGREEMENT. SUCH TECHNOLOGY, KNOW-HOW, PATENTS AND INFORMATION ARE PROVIDED AS IS, WITHOUT WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED.

11.3

MSU ASSUMES NO LIABILITY UNDER THIS AGREEMENT. IN NO EVENT WILL MSU BE LIABLE FOR ANY LOSS OF DATA, LOST PROFITS, COST OF PROCUREMENT OF SUBSTITUTE TECHNOLOGY OR SERVICES OR FOR ANY SPECIAL, INCIDENTAL, CONSEQUENTIAL OR INDIRECT DAMAGES ARISING FROM THE USE OF THE PATENTS OR KNOW HOW OR OTHERWISE ARISING OUT OF THIS AGREEMENT, HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER FOR BREACH OF CONTRACT, TORT

(INCLUDING NEGLIGENCE) OR OTHERWISE. THIS LIMITATION WILL APPLY EVEN IF MSU HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. THESE LIMITATIONS SHALL APPLY NOTWITHSTANDING THE FAILURE OF ESSENTIAL PURPOSE OF ANY LIMITED REMEDY.

**ARTICLE 12 - NOTICES**

12.1

Communications to Company concerning this Agreement should be addressed to:

Mr. Harmel S. Rayat

President and CEO

Phoenix Biosystems, Inc.

Suite 216 1628 West 1st Avenue

Vancouver, BC, V6J 1G1

Fax: 604-659-5029

Email: hsrayat@montgomerycorp.com

12.2

Communications to MSU concerning this Agreement should be addressed to:

Ms. Loraine J. Hudson, Director

Office of Intellectual Property

Michigan State University

246 Administration Building

East Lansing, MI 48824-1046

Fax:

517-432-3880

**ARTICLE 13 - TERMINATION**

13.1

Company may terminate this Agreement at any time by providing 90 days written notice to MSU. Upon termination a final report shall be submitted to MSU, and any royalty payments and unreimbursed patent expenses due to MSU shall become immediately payable.

13.2

In the event that Company shall be in default of any of its obligations hereunder, MSU may at its sole option: (a) terminate this Agreement or (b) convert the exclusive license hereunder to a non-exclusive license. MSU shall exercise either of these options by providing written notice to Company specifying the nature of the default including the amount of royalties then due, if any. Termination under these circumstances shall be effective thirty (30) days following receipt of said notice by Company, unless Company cures said default and makes payment of all monies due plus interest prior to the expiration of said thirty (30) day period.

13.3

13.4

Upon termination, Company shall provide MSU with:

(a)

All data, know-how, and improvements developed by Company in the course of Company s efforts to develop Products, Processes, and Services which MSU shall have the right to use and transfer to future licensees;

(b)

The right to access any regulatory information filed with any US or foreign government agency with respect to Products, Processes, and Services; and

(c)

If Company has filed patent applications or obtained patents which represent a modification or improvement within the scope of the claims contained in the Patents, Company agrees upon

request to enter into good faith negotiations with MSU or its future licensee(s) for the purpose of granting licensing rights to said modifications or improvements in timely fashion and under commercially reasonable terms.

13.6

Upon termination of this Agreement under Paragraphs 13.1 or 13.2, or conversion to a non-exclusive license under Paragraph 13.2, neither party shall be relieved of any obligations incurred prior to such termination or conversion, and the obligations of the parties under any provisions which by their nature are intended to survive any such termination or conversion shall survive and continue to be enforceable.

13.7

In the event that Company shall become insolvent, shall make an assignment for the benefit of creditors, or shall have a petition in bankruptcy filed for or against it, MSU shall have the right to terminate this entire Agreement immediately upon giving Company written notice of such termination.

13.8

Any sublicenses granted by Company under this Agreement shall provide for assignment to MSU of Company s interest therein upon termination of this Agreement.

**ARTICLE 14 - MISCELLANEOUS**

14.1

Company agrees to defend MSU at Company's cost and expense, and will indemnify and hold harmless MSU and its trustees, officers, faculty, professional staff, employees, students and agents and their respective successors, heirs and assigns (the Indemnitees) from and against any and all claims, losses, costs, damages, fees (including attorneys fees) or expenses arising out of or in connection with (i) the manufacture, use, commercialization, marketing or sale by Company of any Product, Process, or Service hereunder, (ii) any breach by Company of a material term of this Agreement, and (iii) the use or misuse by Company or a third party (including end consumers) of any Technology, Know-How, Patent, Product, Process, or Service (including but not limited to any product liability claims, whether brought as a tort, breach of warranty or strict liability cause of action).

(a)

Company agrees, at its own expense, to provide attorneys acceptable to MSU to defend against any actions brought or filed against any party indemnified hereunder with respect to the subject of the indemnity contained herein, whether or not such actions are rightfully brought.

(b)

Beginning at such time as Company begins to exercise the rights it has been granted pursuant to Article 2, Company shall at its sole cost and expense procure and maintain commercial general liability insurance in amounts not less than two million U.S. Dollars ($2,000,000) per incident and $2,000,000 annual aggregate, and naming the Indemnitees as additional insureds. Such general liability insurance shall provide (i) product liability coverage and (ii) broad form contractual liability coverage for Company s indemnification obligations under this Agreement. The Company shall also maintain worker s compensation coverage consistent with statutory requirements. Such insurance shall be carried with companies rated A or better by A. M. Best or a self-insurance program acceptable to MSU. The minimum amounts of insurance coverage required shall not be construed to create a limit of Company s liability with respect to its indemnification obligations under this Agreement.

(c)

Company shall provide MSU with written evidence of such insurance upon request of MSU. Company shall provide MSU with written notice at least 30 days prior to the cancellation, non-renewal or material change in such insurance; if Company or its sublicensee, Affiliate or agent does not obtain replacement insurance providing comparable coverage within such 30 day period, MSU shall have the right to terminate this Agreement effective at the end of such 30 day period without notice or any additional waiting periods, notwithstanding Paragraph 14.2 of this Agreement.

(d)

Company shall maintain such commercial general liability insurance beyond the expiration or termination of this Agreement during (i) the period that any Product, Process or Service relating to or developed pursuant to this Agreement is being commercially distributed or sold by

Company or by a sublicensee, or an Affiliate or agent of Company and (ii) for a reasonable period thereafter which in no event shall be less than fifteen (15) years.

14.2

Company shall not use or refer to MSU, any MSU trademarks, or any MSU employees or departments in any advertisement, sales material, website, or any other form of publicity without the prior written consent of MSU. MSU acknowledges that Company is a wholly-owned subsidiary of a corporation having a reporting obligation under the Securities Exchange Act of 1934, as amended, which has or may have certain disclosure and filing obligations under applicable law, including but not limited to the public announcement and disclosure of this Agreement and the filing of the same with the United States Securities and Exchange Commission; it is acknowledged and agreed that such disclosure and filing shall not be deemed a violation of this Agreement.

14.3

This exclusive license Agreement is personal as to Company, and neither this Agreement nor any of the rights or obligations hereunder may be assigned or transferred by either party without the prior written consent of the other party.

14.4

It is understood that MSU is subject to United States laws and regulations controlling the export of technical data, computer software, laboratory prototypes and other commodities (including *inter alia* the Arms Export Control Act, as amended and the Export Administration Act of 1979 as amended), and that its obligations hereunder are contingent on compliance with all applicable United States export laws and regulations. The transfer of certain technical data and/or commodities may require a license from the cognizant agency of the United States Government and/or written assurances by Company that Company shall not export data or commodities to certain foreign countries without prior approval of such agency. MSU neither represents nor warrants that a license shall not be required nor that, if required, it shall be issued. In any event, Company specifically agrees not to export or re-export any information and/or technical data and/or products in violation of any applicable USA laws and/or regulations.

14.5

This Agreement shall be construed under and interpreted under the laws of the State of Michigan, USA, except that questions affecting the construction and effect of any Patent or copyrights shall be determined by the national law of the country in which the Patent or copyrights have been granted.

14.6

All written communications under this Agreement shall be in the English language.

14.7

In the event that either party is prevented from performing or is unable to perform any of its obligations under this Agreement due to any act of God, fire, casualty, flood, war, strike, lockout, failure of public utilities, government regulation or the like, such party shall give notice to the other party in writing promptly, and thereupon the affected party's performance shall be excused and the time for performance shall be extended for the period of delay or inability to perform due to such occurrence.

14.8

The waiver by either party of a breach or default of any provisions of this Agreement by the other party must be in written form and signed by both parties, and shall not be construed as a waiver of any succeeding breach of the same or any other provision.

14.9

This Agreement contains the full understanding of the parties with respect to the subject matter hereof and supersedes all prior understandings and writings relating thereto.

14.10

This Agreement may only be amended in a writing executed by an authorized signatory for each party. The parties agree that any photocopied or electronically produced copy of this fully executed original Agreement shall have the same legal force and effect as a copy of the Agreement that has the original signatures. The parties also agree that this Agreement may be executed in two counterparts, which together shall constitute one original version of this Agreement.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their properly and duly authorized officers or representatives as of the Effective Date.

**Michigan State University**

**Phoenix BioSystems, Inc.**

/s/ Loraine J. Hudson

/s/ Harmel S. Rayat

*Signature*

*Signature*

Loraine J. Hudson

Harmel S. Rayat

*Printed Name*

*Printed Name*

Director of Intellectual Property

President

*Title*

*Title*

June 15, 2006

June 14, 2006

*Date*

*Date*