HEPALIFE TECHNOLOGIES INC
Form S-1/A
February 09, 2006

As Filed With The U.S. Securities & Exchange Commission On February 8 , 2006

Registration No. 333- 131256

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM S-1 /A

Pre-Effective Amendment #1

REGISTRATION STATEMENT

UNDER THE SECURITIES ACT OF 1933

HEPALIFE TECHNOLOGIES, INC.

(Exact name of registrant as specified in its charter)

Florida

(State or other jurisdiction of

incorporation or organization)

3841

(Primary Standard Industrial

Classification Code Number)

58-2349413

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

1628 West 1st Avenue, Suite 216,

Vancouver, British Columbia, V6J 1G1

Telephone: (800) 518-4879

Facsimile: (604) 659-5029

(Address and telephone of registrant's executive office)

Mr. Harmel Rayat

1628 West 1st Avenue, Suite 216,

Vancouver, British Columbia, V6J 1G1

Telephone: (800) 518-4879

Facsimile: (604) 659-5029

(Name, address and telephone number of agent for service)

Copies To:

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New York, New York 10019

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Approximate date of commencement of proposed sale to the public: As soon as practicable after this registration statement becomes effective.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, please check the following box. **[X]**

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration number of the earlier effective registration statement for the same offering. [ ]

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration number of the earlier effective registration statement for the same offering. [ ]

If this Form is a post effective amendment filed pursuant to Rule 462 (d) under the Securities Act, check the following box and list the Securities Act registration number of the earlier effective registration statement for the same offering. [ ]

If delivery of the prospectus is expected to be made pursuant to Rule 434, please check the following box.

CALCULATION OF REGISTRATION FEE

Title Of Each Class Of Securities To Be Registered	Amount To Be Registered	Proposed Maximum Offering Price Per Share(1)	Proposed Maximum Aggregate Offering Price (1)	Amount Of Registration Fee (2)
Common stock, par value $0.001per share (1)	11,086,351	$1.37	$15,188,301	$1,625.15
TOTAL (3)	**11,086,351**	**$1.37**	**$**15,188,301	**$1,625.15**

1.

Estimated solely for the purpose of computing the registration fee pursuant to Rule 457(c) under the Securities Act of 1933; the closing sale price of the registrant s stock on January 19, 2006, as quoted on the National Association of Securities Dealers, Inc. s Over the Counter Bulletin Board was $1.37. It is not known how many shares will be purchased under this registration statement or at what price shares will be purchased.

2.

These shares consist of the following: (i) 1,086,351 issued and outstanding shares issued to Fusion Capital Fund II, LLC; and (ii) 10,000,000 shares issuable to Fusion Capital Fund II, LLC in connection with the common stock purchase agreement. The Registrant previously paid $1,822.36 in connection with its filing of a registration statement on Form S-1 filed on December 16, 2005 (File No. 333-130422) which registration statement was subsequently withdrawn on January 13, 2006, and pursuant to which no shares were sold.

3. The selling stockholder is offering all of the 11,086,351 shares registered pursuant to this registration statement. Accordingly, this registration statement includes an indeterminate number of additional shares of common stock issuable by reason of any stock dividend, stock split, or other similar transaction effected without the receipt of consideration, which results in an increase in the number of outstanding shares of our common stock. In the event of a stock split, stock dividend or similar transaction involving our common stock, in order to prevent dilution, the number of shares registered shall be automatically increased to cover the additional shares in accordance with Rule 416(a) under the Securities Act of 1933.

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further

amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until this Registration Statement shall become effective on such date as the Commission, acting pursuant to said Section 8(a), may determine.

PROSPECTUS

Hepalife Technologies, Inc.

11,086,351 Shares of Common Stock

This prospectus relates to the sale of up to 11,086,351 shares of our common stock 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 NASD s Over-The-Counter Bulletin Board under the symbol HPLF. The closing sale price for our common stock as reported on the Over-the-Counter Bulletin Board on January 19, 2006, was $1.37.

Investing in the common stock involves certain risks. See "Risk Factors" beginning on page 6 for a discussion of these risks.

Fusion Capital is an underwriter within the meaning of the Securities Act of 1933, as amended.

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Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

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The date of this prospectus _____, 2006

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You should rely only on the information contained in this prospectus or any supplement hereto. We have not, and the selling stockholder has not, authorized anyone to provide you with different information. If anyone provides you with different information you should not rely on it. We are not, and the selling stockholder is not, making an offer to sell the common stock in any jurisdiction where the offer is not permitted. You should not assume that the information contained in this prospectus is accurate as of any date other than the date on the front cover of this prospectus or any supplement hereto, regardless of the date of delivery of this prospectus or any supplement hereto, or the sale of common stock. Our business, financial condition, results of operations and prospects may have changed since that date.

We obtained statistical data and certain other industry information and forecasts fused throughout this prospectus from market research, publicly available information and industry publications. Industry publications generally state that they obtain their information from sources that they believe to be reliable, but they do not guarantee the accuracy and completeness of the information. Similarly, while we believe that the statistical and industry data and forecasts and market research used herein are reliable, we have not independently verified such data. We have not sought the consent of the sources to refer to their reports or articles in this prospectus.

PROSPECTUS SUMMARY

This summary contains material information, about us and the offering, which is described in detail elsewhere in the prospectus. Since it may not include all of the information you may consider important or relevant to your investment decision, you should read the entire prospectus carefully, including the more detailed information regarding our company, the risks of purchasing our common stock discussed under "Risk Factors" on page 6, and our financial statements and the accompanying notes.

Unless the context otherwise requires, the terms we, our, us, the Company, and Hepalife refer to Hepalife Technologies, Inc., a Florida corporation and not to the selling stockholder.

Business

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 70,439,183 were issued and outstanding on January 20, 2006) and 1,000,000 shares of preferred stock (none of which has been issued).

Our principal executive offices are located at 1628 W. 1st Avenue, Suite 216, Vancouver, British Columbia V6J 1G1. Our telephone number is 800-518-4879. The address of our website is www.hepalife.com. Information on our website is not part of this prospectus.

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.

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.

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. On September 30, 2005, we had a cumulative deficit of $4,990,538.

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. See Business.

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.

The Offering

On January 18, 2006, we terminated our common stock purchase agreement and related registration rights agreement, each dated December 16, 2005, with Fusion Capital Fund II, LLC. We subsequently entered into a new common stock purchase agreement with Fusion Capital dated January 20, 2006, pursuant to which Fusion Capital has agreed, once the registration statement, of which this prospectus is part, is declared effective and 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.

We shall not commence any sales of our common stock to Fusion Capital until the registration statement of which this prospectus is part, has been declared effective by the U.S. Securities and Exchange Commission. The purchase price per share which Fusion Capital will pay for the common stock varies depending on the market price of our common

stock and is determined pursuant to a formula set forth in the common stock purchase agreement, provided that the purchase price will not be less than $0.50 per share. We have the right to control the timing and amount of shares sold to Fusion Capital, if any. We also have the right to terminate the common stock purchase agreement at any time without further cost or liability to us. In our

sole discretion, we may elect to sell more of our common stock to Fusion Capital than the minimum daily amount. 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.

Fusion Capital is offering for sale up to 11,086,351 shares of our common stock.

In connection with our entering into the stock purchase agreement, we authorized the sale to Fusion Capital of up to 10,000,000 shares of our common stock for up to maximum proceeds of $15.0 million. Assuming Fusion Capital purchases all $15.0 million of our common stock, we estimate that the maximum number of shares we will sell to Fusion Capital under the common stock purchase agreement will be 10,000,000 shares (exclusive of the aggregate 1,066,351 shares issued to Fusion Capital as the commitment fee and the 20,000 shares issued to Fusion Capital upon signing of a term sheet dated as of June 28, 2005). Subject to approval by our board of directors, we have the right but not the obligation to sell more than 10,000,000 shares to Fusion Capital. In the event we elect to sell more than the 10,000,000 shares, we will be required to file a new registration statement and have it declared effective by the U.S. Securities & Exchange Commission. The number of shares ultimately offered for sale by Fusion Capital is dependent upon the number of shares purchased by Fusion Capital under the common stock purchase agreement.

As of January 20, 2006, there were 70,439,183 shares outstanding. Included in our issued and outstanding shares are the 1,066,351 shares that we have issued to Fusion Capital as compensation for its purchase commitment and the 20,000 shares issued to Fusion Capital upon signing of the term sheet relating to the Fusion Capital transaction. Excluded from our issued and outstanding are the 10,000,000 shares offered by Fusion Capital pursuant to this prospectus, which it has not yet purchased from us. If all of shares offered by this prospectus were issued and outstanding as of the date hereof, the number of shares offered by this prospectus would represent approximately 13.8% of the total common stock then outstanding

RISK FACTORS

You should carefully consider the risks described below before purchasing shares of our common stock. Our most significant risks and uncertainties are described below; however, they are not the only risks we face. If any of the following risks actually occur, our business, financial condition, or results or operations could be materially adversely affected, the trading of our common stock could decline, and you may lose all or part of your investment therein. You should acquire shares of our common stock only if you can afford to lose your entire investment.

RISKS ASSOCIATED WITH OUR BUSINESS

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 $1,435,613, $1,102,723 and $375,472, respectively, during the past three fiscal years of operation. As a result, at December 31, 2004, we had an accumulated deficit of $3,747,771. We had an accumulated deficit of $4,990,538 at September 30, 2005. 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.

From inception through September 30, 2005 expenditures for our advertising and investor relations expenditures aggregated $2,801,749 or approximately 56% of total expenditures as compared to total research and development expenses during the same period of $480,715 or approximately 10% of total expenditures. We expect to use a portion of the proceeds, if any, that we receive from Fusion Capital, for our advertising and investor relations program. **Please refer to Use of Proceeds and Business-Competition.** 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:

- we may not be able to obtain regulatory approvals or the approved indication may be narrower than we seek;
- our technologies or products, if any, derived from our research and development efforts may not prove to be safe and effective in clinical trials;
- 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;
- any products that may be approved may not be accepted in the marketplace by physicians or patients;
- we may not have adequate financial or other resources to complete the development and commercialization of products derived from our research and development efforts;
- we may not be able to manufacture our products in commercial quantities or at an acceptable cost; and
- 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, 2004 and 2003, 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 September 30, 2005, we had a working capital deficit of $1,184,454. We have an operating cash flow deficit of $1,111,020 for the nine months ended September 30, 2005, and have sustained operating cash flow deficits of $1,364,209 in 2004, $1,022,501 in 2003 and $108,129 in 2002. Although we believe that we have sufficient financial resources and commitments to sustain our current level of research and development activities through the end of February 28, 2006, any expansion, acceleration or continuation (beyond February 28, 2006) 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.

We only have the right to receive $25,000 per trading day under the common stock purchase agreement with Fusion Capital, unless our stock price equals or exceeds $1.00, in which case the daily amount may be increased as the price of our common stock increases so long as no event of default exists. Fusion Capital shall not have the right or the obligation to purchase any shares of our common stock on any trading days that the market price of our common stock is less than $0.50. Since we initially registered 10,000,000 shares for sale by Fusion Capital pursuant to this prospectus, the selling price of our common stock to Fusion Capital will have to average at least $1.50 per share for us to receive the maximum proceeds of $15.0 million without registering additional shares of common stock. Assuming a purchase price of $1.37 per share (the closing sale price of the common stock on January 19, 2006) and the purchase by Fusion Capital of 10,000,000 shares under the common stock purchase agreement, proceeds to us would be $13,700,000. Subject to approval by our board of directors, we have the right but not the obligation to issue more than 10,000,000 shares to Fusion Capital. In the event we elect to issue more than 10,000,000 shares offered hereby, we will be required to file a new registration statement and have it declared effective by the U.S. Securities & Exchange Commission.

Specifically, Fusion Capital does not have the right or the obligation to purchase any shares of our common stock on any trading days that the market price of our common stock is less than $0.50. If obtaining sufficient financing from Fusion Capital were to prove unavailable or prohibitively dilutive and if we are unable to develop and commercialize any products on the basis of our research and development program, we will need to secure another source of funding in order to satisfy our working capital needs. Even if we are able to access the full $15.0 million under the common stock purchase agreement with Fusion Capital, we may still need additional capital to fully implement our business, operating and development plans. Should the financing we require to sustain our working capital needs be unavailable or prohibitively expensive when we require it, the consequences would be a material adverse effect on our business, operating results, financial condition and prospects.

The extent we rely on Fusion Capital as a source of funding will depend on a number of factors including, the prevailing market price of our common stock and the extent to which we are able to secure working capital from other sources, including other debt and equity financings.

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 $1,500,000 loan commitment to us. On January 18, 2006, we agreed, in consideration of Mr. Rayat s oral undertaking to increase his loan commitment to us from $1,500,000 to $1,600,000, to convert the loans to demand loans. 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, if any, we receive under the common stock purchase agreement with

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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.

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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

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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

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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.

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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 January 20, 2006, Mr. Rayat beneficially owned approximately 69% of our outstanding common stock. Even if all of these shares offered hereby are sold, Mr. Rayat would still own approximately 61% of our then issued and outstanding shares. 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.

RISKS ASSOCIATED WITH THE OFFERING

The Sale Of Our Common Stock To Fusion Capital May Cause Dilution And The Sale Of The Shares Of Common Stock Acquired By Fusion Capital Could Cause The Price Of Our

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Common Stock To Decline.

The sale of shares pursuant to our common stock purchase agreement with Fusion Capital or any other future equity financing transaction will have a dilutive impact on our stockholders. As a result, our net income or loss per share could decrease in future periods, and the market price of our common stock could decline. In addition, the lower our stock price is, the more shares of common stock we will have to issue under the common stock purchase agreement with Fusion Capital in order to draw down the full amount. If our stock price were lower, then our existing stockholders would experience greater dilution. We cannot predict the actual number of shares of common stock that will be issued pursuant to the agreement with Fusion Capital or any other future equity financing transaction, in part, because the purchase price of the shares will fluctuate based on prevailing market conditions and we do not know the exact amount of funds we will need. See Dilution.

The purchase price for the common stock to be sold to Fusion Capital pursuant to the common stock purchase agreement will fluctuate based on the price of our common stock. All shares in this offering are freely tradable. Fusion Capital may sell none, some or all of the shares of common stock purchased from us at any time. We expect that the shares offered by this prospectus will be sold over a period of up to 30 months from the date of this prospectus. Depending upon market liquidity at the time, a sale of shares under this offering at any given time could cause the trading price of our common stock to decline. The sale of a substantial number of shares of our common stock under this offering, or anticipation of such sales, could make it more difficult for us to sell equity or equity-related securities in the future at a time and at a price that we might otherwise wish to effect sales.

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

We have previously issued a total of 70,439,183, 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 or if the selling stockholders whose shares are being registered pursuant to this prospectus sell or attempt to publicly sell such shares 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 January 19, 2006, our average trading volume per day for the past three months was approximately 47,504 shares a day with a high of 246,300 shares traded and a low of 13,491 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

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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.

Fusion Capital's purchase and sale into the market of $25,000 of our common stock each trading day could cause our common stock price to decline due to the additional shares available in the market, particularly in light of the relatively thin trading volume of our common stock. Using the closing price on January 19, 2006, of $1.37 as an example, Fusion Capital would be issued approximately 18,248 shares each trading day if we elected to have them purchase the daily purchase amount, whereas our average trading volume for the prior three months is 47,504 per day. The market price of our common stock could decline given our minimal average trading volume compared to the number of shares potentially issuable to Fusion Capital and the voting power and value of your investment would be subject to continual dilution if Fusion Capital purchases the shares and resells those shares into the market, although there is no obligation for Fusion Capital to sell such shares. Any adverse affect on the market price of our common stock would increase the number of shares issuable to Fusion Capital each trading day which would increase the dilution of your investment. Although we have the right to reduce or suspend Fusion Capital purchases at any time, our financial condition at the time may require us to waive our right to suspend purchases even if there is a decline in the market price.

Contractual 9.9% beneficial ownership limitations prohibit Fusion Capital, together with its affiliates, from beneficially owning more than 9.9% of our outstanding common stock. This 9.9% limitation does not prevent Fusion Capital from purchasing shares of our common stock and then reselling those shares in stages over time where Fusion Capital and its affiliates do not, at any given time, beneficially own shares in excess of the 9.9% limitation. Consequently, these limitations will not necessarily prevent substantial dilution of the voting power and value of your investment.

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.

FORWARD-LOOKING STATEMENTS

This prospectus 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, intend, or proj 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 and Business, as well as in this prospectus 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 prospectus 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. In addition to the information expressly required to be included in this filing, we will provide such further material information, if any, as may be necessary to make the required statements, in light of the circumstances under which they are made, not misleading.

MARKET FOR OUR COMMON STOCK

Our common stock trades on the Over-the-Counter Bulletin Board under the trading symbol HPLF. The quotations shown reflect inter-dealer prices, without retail mark-up, markdown or commission and may not necessarily represent actual transactions. Our high and low bid prices by quarter during fiscal years 2005, 2004, and 2003, are as follows:

High

Low

2005

Fourth Quarter 2005

$2.20

$1.35

Third Quarter

2005

$2.10

$1.40

Second Quarter 2005

$3.12

$1.80

First Quarter 2005

$4.97

$2.38

2004

Fourth Quarter 2004

$5.80

$2.06

Third Quarter 2004

$2.91

$1.95

Second Quarter 2004

$2.99

$1.47

First Quarter 2004

$3.62

$2.55

2003

Fourth Quarter 2003

$3.59

$1.74

Third Quarter 2003

$2.18

$1.51

Second Quarter 2003

$1.77

$0.44

First Quarter 2003

$0.70

$0.20

On January 19, 2006, the closing price of our common stock as reported on the Over-the-Counter Bulletin Board was $1.37 per share. On January 13, 2006, we had 63 stockholders of record holding our common stock. Our stockholders have direct electronic access to all of our U.S. Securities & Exchange Commission filings via our website at www.hepalife.com, or via the U.S. Securities & Exchange Commission website at www.sec.gov. We send proxy filings to our stockholders as matters are voted on by all of our stockholders. When we do send information to our stockholders that relate to our annual meeting, our annual financial information contains audited information on which an opinion has been issued.

Securities Authorized for Issuance Under Equity Compensation Plans

We have reserved an aggregate of 40,000,000 shares of our common stock for issuance pursuant to our 2001 Stock Option Plan. The following table represents the number of shares issuable upon exercise and reserved for future issuance under this plan as of January 20, 2006.

Securities Authorized for Issuance Under Equity Compensation Plans

Number of securities

remaining available for

Number of Securities to be

Weighted-average exercise

future issuance under

issued upon exercise of

Plan Category	(a)	(b)	(c)
	price of outstanding		
	equity compensation plans		
	outstanding options,		
	options, warrants and		
	(excluding securities		
	warrants and rights		
	rights		
	reflected in column (a))		
Equity compensation plans approved by security holders	16,848,000	$1.29	20,925,000
Equity compensation plans not approved by security holders			
Total	16,848,000	$1.29	

20,925,000

DIVIDEND POLICY

We have never declared or paid dividends on our common stock. Our dividend practices are determined by our board of directors and may be changed from time to time. We will base any issuance of dividends upon our earnings (if any), financial condition, capital requirements, acquisition strategies, and other factors considered important by our board of directors. Florida law and our articles of incorporation do not require our board of directors to declare dividends on our common stock. We expect to retain any earnings generated by our operations for the development and expansion of our business and do not anticipate paying any dividends to our common stockholders for the foreseeable future.

SELECTED FINANCIAL INFORMATION

The following summary statement of operations and summary balance sheet data are derived from our financial statements for the years ended December 31, 2004, 2003, 2002, 2001 and 2000 that were filed with the U.S. Securities & Exchange Commission on our Annual Reports on Form 10-K or Form 10-KSB, as applicable. This information should be read in conjunction with the audited consolidated financial statements and the related notes.

FIVE-YEAR STATEMENT OF OPERATIONS

	Years Ended December 31					Nine Months Ended September 30
	2000	2001	2002	2003	2004	2005
Revenues	0	$0	$0	$0	$0	$0
General and administrative						
Management fees and consulting fees Related party	62,000	144,000	144,600	28,500	9,500	26,765
Investor Relations	-	-	119,500	960,003	1,016,916	705,330
Other operating expense	28,877	21,936	21,823	73,767	259,572	318,053
Research and Development	-	-	91,500	41,400	151,546	196,269
Total General and Administrative Expenses	90,877	165,936	377,423	1,103,670	1,437,534	1,246,417
Other Income						
Interest Income	(10,269)	(5,572)	(1,951)	(947)	(1,921)	(3,650)
Provision for Income Taxes	-	-	-	-	-	-
Net Loss Available to Common Stockholders	($80,608)	($160,364)	($375,472)	($1,102,723)	($1,435,613)	($1,242,767)
Basic and Diluted Loss Per Common Share	($0.00)	($0.00)	($0.01)	($0.02)	($0.02)	($0.02)
Weighted Average Common Shares Outstanding	41,200,000	45,409,680	52,723,277	57,817,305	64,610,777	69,063,819

SUPPLEMENTARY FINANCIAL INFORMATION

Certain quarterly financial information is set forth below.

	March 31, 2003	June 30, 2003	September 30, 2003	December 31, 2003
Revenues	$0	$0	$0	$0
Gross Profit	$0	$0	$0	$0
Net Income (Loss)	($13,385)	($268,425)	($365,248)	$(455,665)
Net Income (Loss) Per Share (Basic)	($0.00)	($0.01)	($0.01)	($0.01)

	March 31, 2004	June 30, 2004	September 30, 2004	December 31, 2004
Revenues	$0	$0	$0	$0
Gross Profit	$0	$0	$0	$0
Net Income (Loss)	($96,164)	$(142,767)	($195,246)	($1,001,436)
Net Income (Loss) Per Share (Basic)	($0.00)	($0.00)	($0.00)	($0.02)

	March 31, 2005	June 30, 2005	September 30, 2005
Revenues	$0	$0	$0
Gross Profit	$0	$0	$0
Net Income (Loss)	($677,015)	($292,098)	($273,655)
Net Income (Loss) Per Share (Basic)	($0.01)	($0.00)	($0.00)

USE OF PROCEEDS

This prospectus relates to shares of our common stock that may be offered and sold from time to time by the selling stockholder. We will receive no proceeds from the sale of shares of common stock in this offering. However, we may receive up to $15.0 million in proceeds from the sale of our common stock to Fusion Capital under the common stock purchase agreement. However, no assurance can be given that we will receive all or a significant portion of the maximum $15.0 million. ***Please refer to The Fusion Transaction.***

The following table sets forth the amount of proceeds we anticipate receiving from Fusion Capital from the sale of shares of our common stock offered by this prospectus at varying purchase prices over the 30 month term of the commons stock purchase agreement:

Assumed Average Purchase Price	**Number of Shares to be Issued if Full Purchase**	**Proceeds from the Sale of 10,000,000 Shares to Fusion Capital Under the Common Stock Purchase Agreement**
$0.50	10,000,000	$5,000,000
$1.37(1)	10,000,000	$13,700,000
$2.50	6,000,000	$15,000,000
$4.00	3,750,000	$15,000,000
$4.50	3,333,333	$15,000,000
$5.00	3,000,000	$15,000,000

(1) The closing price of our common stock on January 19, 2006.

Any proceeds that we receive from Fusion Capital under the common stock purchase agreement will be used for working capital, loan repayments and general corporate purposes as estimated in the following table:

Aggregate Amount		$7,500,000		
Received (1)				
Time Period	Months 1 - 12	Months 13 - 24	Months 26 - 30	Totals

Amount Received During Period	$3,000,000	$3,000,000	$1,500,000	$7,500,000
Working Capital	$215,000	$1,150,000	$575,000	$1,940,000
Loan Repayment (2)	$1,150,000	$0	$0	$1,150,000
Public/Industry/Investor Relations (3)	$0	$350,000	$175,000	$525,000
Research & Development	$1,500,000	$1,500,000	$750,000	$3,750,000
Estimated Offering Expenses	$135,000	$0	$0	$135,000
				$7,500,000

Aggregate Amount		$10,000,000		
Received (1)				
Time Period	Months 1 - 12	Months 13 - 24	Months 26 - 30	Totals
Amount Received During Period	$4,000,000	$4,000,000	$2,000,000	$10,000.000
Working Capital	$865,000	$2,150,000	$1,075,000	$4,090,000
Loan Repayment (2)	$1,150,000	$0	$0	$1,150,000
Public/Industry/Investor Relations (3)	$350,000	$350,000	$175,000	$875,000
Research & Development (4)	$1,500,000	$1,500,000	$750,000	$3,750,000
Estimated Offering Expenses	$135,000			$135,000
				$10,000,000

Aggregate Amount		$15,000,000		
Received (1)				
Time Period	Months 1 - 12	Months 13 - 24	Months 26 - 30	Totals
Amount Received During Period	$6,000,000	$6,000,000	$3,000,000	$15,000,000
Working Capital	$2,865,000	$4,150,000	$2,100,000	$9,115,,000
Loan Repayment (2)	$1,150,000	$0	$0	$1,150,000
Public/Industry/Investor Relations (3)	$350,000	$350,000	$150,000	$850,000
Research & Development (4)	$1,500,000	$1,500,000	$750,000	$3,750,000
Estimated Offering Expenses	$135,000			$135,000
				$15,000,000

(1)

Assumes that these funds will be received over a 30 month period. Also assumes the sale to and purchase by Fusion Capital of all 10,000,000 shares at prices of $0.75, $1.00 and $1.50 per share.

(2)

The loans are from Harmel S. Rayat, our president and chief executive and financial officer, and majority stockholder. This amount does not include interest on loans at the rate of 8.5% per annum. The loans are due upon written demand of Mr. Rayat.

(3)

May include expenses of, without limitation, shareholder mailings, corporate materials, and advertisements in industry, investment and financial periodicals, newsletters and magazines.

(4)

If we receive the estimated proceeds we anticipate that we will amend our CRADA, from time to time, so as to expand and accelerate the scope of our current research and development efforts.

It is expected that the estimated expenditures will occur at varying times and amounts over a period of approximately three years. While we currently intend to use the proceeds substantially in the manner listed above, we reserve the right to reassess and reassign the use of the proceeds depending upon the results of our ongoing sponsored research and development efforts, the actual timing and amounts of funds received by us, our financial condition, availability of additional financing if needed, or if for any reason in the judgment of our board of directors, changes are necessary or advisable.

DILUTION

Our net tangible book value as of September 30, 2005 was ($1,184,018) or approximately ($0.02) per share of common stock. Net tangible book value per share is determined by dividing our tangible book value (total tangible assets less total liabilities) by the number of outstanding shares of our common stock. Since this offering is being made solely by the selling stockholder and none of the proceeds will be paid to us our net tangible book value will be unaffected by this offering. Our net tangible book value, however, will be impacted by the common stock to be issued under the common stock purchase agreement. The amount of dilution will depend on the offering price and number of shares to be issued under the common stock purchase agreement. The following example shows the dilution to new investors at an offering price of $1.37 per share, the closing price of our stock on January 19, 2006.

If we assume that we had issued 10,000,000 shares of common stock under the common stock purchase agreement (*i.e.,* the number of shares being registered in the accompanying registration statement and to be acquired by Fusion Capital) at an assumed offering price of $1.37 per share, less the estimated offering expenses of $135,000, our net tangible book value as of September 30, 2005, would have been $12,380,982 or approximately $ 0.15 per share. Such an offering would represent an immediate increase in net tangible book value to existing stockholders of approximately $0.17 per share and an immediate dilution to new stockholders of approximately $1.22 per share. The following table illustrates the per share dilution:

Assumed public offering price per share		$1.37
Net tangible book value per share before this offering	$(0.02)	
Increase attributable to new investors	$0.17	
Net tangible book value per share after this offering		$0.15
Dilution per share to new stockholders		$1.22

The offering price of our common stock is based on the then-existing market price. In order to give prospective investors an idea of the dilution per share they may experience, we have prepared the following table showing the dilution per share at various assumed offering prices:

ASSUMED OFFERING PRICE	NO. OF SHARES TO BE ISSUED[1]	DILUTION PER SHARE TO NEW INVESTORS
$0.50	10,000,000	$0.44
$1.29	10,000,000	$1.22
$2.50	6,000,000	$2.32
$4.00	3,750,000	$3.81

(1)

We have registered an aggregate of 11,086,351 shares of our common stock which will be offered for sale by the selling stockholder. Of the amount registered, 10,000,000 shares of common stock will be purchased by the selling stockholder under the common stock purchase agreement.

MANAGEMENT S DISCUSSION AND ANALYSIS OF

FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion and analysis is based upon our consolidated 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 Cost*s*

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 $1,435,613, $1,102,723 and $375,472, respectively, during the past three fiscal years of operation. As a result, at December 31, 2004, we had an accumulated deficit of $3,747,771. 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, 2004 and 2003, 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.

Nine Months Ended 2005, 2004 and 2003 and From Inception (October 21, 1997) to September 30, 2005

	Nine Months Ended September 30			From Inception (October 21, 1997) to September 30,
	2005	2004	2003	2005
Revenues	$0	$0	$0	$0
General and administrative				
Management fees and consulting fees Related party	$26,765	$5,080	27,000	936,079
Investor Relations	705,330	248,131	-	2,801,749
Other operating expense	318,053	161,447	599,982	807,980
Research and Development	196,269	20,700	20,700	480,715
Total General and Administrative Expenses	1,246,417	435,358	647,682	5,026,523
Other Income				
Interest Income	(3,650)	(1,181)	(624)	(35,985)
Provision for Income Taxes	-	-	-	-
Net Loss Available to Common Stockholders	($1,242,767)	($434,177)	($647,058)	($4,990,538)
Basic and Diluted Loss Per Common Share	($0.02)	($0.01)	($0.01)	($0.11)

Weighted Average Common Shares Outstanding	69,063,819	64,415,011	56,615,392	46,387,894

Nine Months Ended September 30, 2005 and 2004

We had no revenues in the nine months ended September 30, 2005 and 2004. Our general and administrative expenses increased 186% to $1,246,417 in the nine months ended September 30, 2005, from $435,358 in the same period in 2004. This increase was primarily attributable to an increase of $457,199 in investor relations costs 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 $705,330 as follows: aggregate monthly service fees of $75,719 to National InfoSystems; direct mail advertising costs of $624,275; and email advertising costs of $5,336. In addition to the increase in investor relations costs of $457,199, we also had a 97% increase in other operating expenses, from a total of $161,447 in the nine months ended September 30, 2004, to $318,053 in the nine months ended September 30, 2005. This increase of $156,606 was primarily due to increased legal costs of $97,721; increased loan interest charges of $24,543; increased cost of office supplies of $7,539; and increased postage costs related

to our annual general meeting of $22,526.

We also had an increase of $175,569 in our research and development costs to $196,269, representing an 848% over the comparable expenses of $20,700 in 2004. The increase in research and development costs was the result of our making three payments of $65,423 ($196,269 in the aggregate) under our CRADA.

Interest income increased 209% to $3,650 in the nine months ended September 30, 2005, from $1,181 during the same period in 2004, reflecting higher average cash balances maintained during most of the quarterly period in 2005.

We incurred net losses of $1,242,767 and $434,177 during the nine months ended September 30, 2005, and 2004, respectively. The increase in our net loss amounting to $808,590 was principally caused by the increase in our investor relations costs and research and development costs during the period.

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.

Years Ended December 31, 2003 and 2002

We had no revenues in 2003 and 2002. Our general and administrative expenses increased 272% to $1,062,270 in 2003, from $285,923 in the same period in 2002. This increase was primarily attributable to an increase of $840,503 in investor relations costs to $960,003, as compared to $ 119,500 in 2002 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 $960,003, as follows: aggregate monthly fees of $18,716 to National InfoSystems; direct mail advertising costs of $895,187; and email advertising costs of $46,100.

During the years ended December 31, 2003 and 2002, our investor relations costs represented approximately 87% and 32%, respectively, of our total expenses.

Interest income decreased 52% to $947 in the year ended December 31, 2003, from $1,951 during the same period in 2002. This was a result of lower average cash balances maintained during 2003.

Our net loss in 2003 increased 194% to $1,102,723, from $375,472 in 2002. The increase in our net loss was principally caused by increased investor relations costs as noted above.

Our operations in 2003 were funded from a loan in the amount of $725,000 from Mr. Harmel Rayat, and $581,100 from the proceeds from the sale of our common stock upon exercise of outstanding options.

Liquidity and Capital Resources

Our operating activities use of cash for the twelve months ended December 31, 2004, 2003 and 2002, was $1,364,209, $1,022,501 and $108,129, respectively. Our operating activities use of cash for the nine months ended September 30, 2005 and 2004 was $1,111,020 and $462,194, respectively.

Our working capital deficit was $539,779 as of December 31, 2004 and $1,184,454 as of September 30, 2005. Cash used by operations in the twelve months ended December 31, 2004, resulted primarily from increased research and development expenses and investor relations costs. Cash used by operations in the nine months ended September 30, 2005, resulted primarily from our net loss from operations of $1,242,767, as well an increase in accounts payable of

$131,355.

We have experienced losses during the last three fiscal years and expect to continue to incur losses for the foreseeable future. Since inception these losses have amounted to $4,990,538 on a cumulative basis through September 30, 2005. Since we have yet to develop or commercialize any products and, accordingly, have generated no revenues, these losses have been funded primarily from proceeds from the sale of our common stock upon exercise of outstanding options and warrants and loans from our majority stockholder and director, as set forth in the following table.

Financing Source	Year Ending December 31,			
	2005	2004	2003	2002
Loans Incurred	$450,000	$1,000,000	$725,000	$0
Loans Repaid	$300,000	$725,000	$0	$0
Exercise of Options	$650,850	$1,341,620	$398,600	$0
Exercise of Warrants	$31,250	$50,000	$182,500	$0
Total	$832,100	$1,666,620	$1,306,100	$0

Contractual Obligations

As of December 31, 2004, we had the following contractual commitments (aggregating $523,382), to fund researchers and associated laboratory supplies, pursuant to our CRADA with the USDA's Agricultural Research Service, entered into on November 1, 2002, and amended on May 24, 2004:

Amount

Due Date

$65,422.80

on or before February 1, 2005(paid);

$65,422.80

on or before May 1, 2005(paid);

$65,422.80

on or before August 1, 2005 (paid);

$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

As a result of delays incurred in the employment of personnel, we reached an agreement in February of 2004 with the USDA s Agricultural Research Service to modify the foregoing schedule so as to delay the payment of the installments due in August and November of 2004 and thereafter until and unless funds are actually required. Consequently, in 2004 we made three payments consisting of two payments of $65,423 ($130,846 in the aggregate) and one payment of $20,700, under our CRADA. In 2005 we made three payments of $65,423.We are in compliance with the modified payment schedule.

Additionally, as of the date of this prospectus, we have the following loan repayment commitments to Mr. Harmel S. Rayat:

Date of Loan

Amount

Interest Rate

Amount to be Repaid

March 2, 2005

$700,000

8.5%

$759,500

March 8, 2005

$250,000

8.5%

$271,250

December 5, 2005

$200,000

8.5%

$217,000

The notes are due and payable upon the receipt of written demand from Mr. Rayat. See Certain Relationships and Related Transactions. We do not currently have sufficient capital on hand to repay the loan. We have no understanding or agreements with Mr. Rayat regarding the repayment of these loans. We have the right to prepay these amounts without penalty. We expect to repay these amounts, from the proceeds, if any, we receive under the common stock purchase agreement with Fusion Capital.

Except for our CRADA commitments and our loan repayment obligations, we have no other material capital expenditures planned during fiscal 2005.

We had cash and cash equivalents of $613,523, $312,201 and $28,602 as of December 31, 2004, 2003 and 2002, respectively. The cash and cash equivalents as of September 30, 2005 and 2004 were $50,203 and $94,567, respectively.

In addition, pursuant to our common stock purchase agreement with Fusion Capital, we have the right to receive $25,000 per trading day under the agreement with Fusion Capital unless our stock price

equals or exceeds $1.00, in which case the daily amount may be increased under certain conditions as the price of our common stock increases. Fusion Capital shall not have the right or the obligation to purchase any shares of our common stock on any trading days that the market price of our common stock is less than $0.50. Since we initially registered 10,000,000 shares for sale by Fusion Capital pursuant to this prospectus, the selling price of our common stock to Fusion Capital will have to average at least $1.50 per share for us to receive the maximum proceeds of $15.0 million without registering additional shares of common stock. Assuming a purchase price of $1.37 per share (the closing sale price of the common stock on January 19, 2006) and the purchase by Fusion Capital of 10,000,000 shares under the common stock purchase agreement, proceeds to us would be $13,700,000. Subject to approval by our board of directors, we have the right but not the obligation to issue more than 10,000,000 shares to Fusion Capital. In the event we elect to issue more than 10,000,000 shares offered hereby, we will be required to file a new registration statement and have it declared effective by the U.S. Securities & Exchange Commission.

Although we believe that we have sufficient cash on hand to satisfy our contractual commitments through February 28, 2006, we do not currently have sufficient cash on hand to sustain planned operating activities through the end of 2006. Our ability to continue as a going concern is substantially dependent upon future levels of funding from our funding sources, including Fusion Capital, which are currently uncertain as to amount and timing. Specifically, Fusion Capital shall not have the right or the obligation to purchase any shares of our common stock on any trading days that the market price of our common stock is less than $0.50. If obtaining sufficient financing from Fusion Capital were to prove unavailable or prohibitively dilutive and if we are unable to commercialize and sell products, if any, derived from our research and development efforts, we will need to secure another source of funding in order to satisfy our working capital needs. Even if we are able to access the full $15.0 million under the common stock purchase agreement with Fusion Capital, we may still need additional capital to fully implement our business, operating and development plans. Should the financing we require to sustain our working capital needs be unavailable or prohibitively expensive when we require it, the consequences would be a material adverse effect on our business, operating results, financial condition and prospects. We have no agreements or understandings with any other person regarding any potential financing. On January 17, 2006, we terminated and rescinded certain agreements with Pacific Capsource, Inc. (collectively, the Pacific Capsource Agreements) relating to, among other things, Pacific Capsource s efforts to introduce us to potential financing sources. The agreements were terminated and rescinded *ab initio* (e.g. from the beginning) as of the date of the respective agreements. Accordingly, neither we nor Pacific Capsource have any liability, obligation or responsibility to the other under the Pacific Capsource Agreements. Accordingly, except for our agreement with Fusion Capital, we have no agreements or understandings regarding any financings.

The extent to which we will rely on Fusion Capital as a source of funding will depend on a number of factors including, the prevailing market price of our common stock and the number of shares outstanding, progress we have made in our business, other opportunities we may wish to pursue, general economic conditions, our capital requirements at the time, and the extent to which we are able to secure working capital from other sources on terms that are more beneficial to us.

Related Party Transactions

For a description of our related party transactions, see the **Certain Relationships and Related Transactions** section of this prospectus and the related notes to our financial statements appearing at the end of this prospectus.

Off Balance Sheet Arrangements

We do not currently have, nor have we had, any relationships with unconsolidated entities or financial partnerships, such as entities often referred to as structured finance or special purpose entities, which would have been established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes. In addition, we do not engage in trading activities involving non-exchange traded contracts. As such, we are not materially exposed to any financing, liquidity, market or credit risk that could arise if we had engaged in these relationships.

Qualitative and Quantitative 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.

New Accounting Pronouncements

In December 2004, the Financial Accounting Standards Board (FASB) issued FASB Statement No. 123 (revised 2004), *Share-Based Payment (* Statement 123(R) *),* a revision of FASB Statement No. 123, *Accounting for Stock-Based Compensation*. Statement 123(R) supersedes APB Opinion No. 25, *Accounting for Stock Issued to Employees,* and amends FASB Statement No. 95, *Statement of Cash Flows.* Statement 123(R), which we expect to adopt in the first quarter of 2006, is generally similar to Statement 123; however, it will require all share-based payments to employees, including grants of employee stock options, to be recognized in the financial statements based on their fair values. Thus, pro forma disclosure will no longer be an alternative to financial statement recognition. We do not believe the adoption of Statement 123(R) will have a material impact on our results of operations or financial position.

On April 14, 2005, the U.S. Securities & Exchange Commission announced it would permit most registrants, subject to its oversight, additional time to implement the requirements in FASB Statement No. 123 (Revised 2004), *Share-Based Payment.* As originally issued by the FASB, public companies subject to U.S. Securities & Exchange Commission oversight were required to implement Statement 123R as of the beginning of the first interim or annual reporting period that begins after June 15, 2005, or after December 16 2005 for small business issuers.

As announced, the U.S. Securities & Exchange Commission will permit companies to implement Statement 123R at the beginning of their next fiscal year, instead of the next reporting period as required by Statement 123R. That means a calendar year registrant, which is not a small business issuer, may continue to follow the guidance in FASB Statement No. 123, *Accounting for Stock-Based Compensation,* throughout 2005 and implement the new rules reflected in Statement 123R beginning January 1, 2006. The U.S. Securities & Exchange Commission notes that if a company has a fiscal year that ends on June 30, 2005 and is not a small business issuer, it must still comply with Statement 123R beginning with its quarter beginning on July 1, 2005. In other words, such companies must comply with Statement 123R as originally issued by the FASB.

The U.S. Securities & Exchange Commission announcement notes that it is not changing any of the

accounting requirements in Statement 123R, rather only the required compliance date for certain registrants.

We understand the FASB has no current plans to amend or alter the guidance in Statement 123R to reflect the view of the U.S. Securities & Exchange Commission.

BUSINESS

This description contains certain forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from the results discussed in the forward-looking statements as a result of certain of the risks set forth herein. We assume no obligation to update any forward-looking statements contained herein.

Overview

We were organized in 1997 under the name Zeta Corporation. From inception through September 2002, we focused our efforts on the development of newcompanycapital.com, a website that served as an online community for entrepreneurs and start up companies seeking capital and accredited investors seeking to invest. Due to the poor performance of the online business and continued weakness in the internet business sector in general, we decided to discontinue our web related operations and to seek out alternative business opportunities. On November 1, 2002, we entered into the CRADA with the USDA s Agriculture Research Service, which was amended on May 24, 2004.

Through our CRADA with the USDA s Agricultural Research Service, and incorporating the PICM-19 Cell Line developed and patented by USDA s Agricultural Research Service scientists, we are currently concentrating our efforts on developing an artificial liver device and in-vitro toxicology and pre-clinical drug testing platforms through the application of the PICM-19 Cell Line. We currently do not have, and may never develop, any commercialized products. Our goal is to obtain the rights to market:

- a commercially viable artificial liver device; and
- in-vitro toxicological testing platforms

Our sponsored research and development program is in the preliminary development stage. Our program is targeting specifically the development of an artificial liver device and in-vitro toxicology and drug testing platforms. We are still in the early stages of our efforts. We will require significant further research, development, testing and regulatory approvals and additional (beyond the $807,828 to which we have committed under the terms of our CRADA) investment before we will be in a position to attempt to commercialize products derived from our sponsored 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 approvals and other factors.

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.

In order to receive revenues from our proposed artificial liver device, we must first accomplish all of the following:

- Optimize high density 3-D PICM-19 cell growth and function;

- Develop and test model bioreactors;

- Prepare larger bioreactors for efficacy testing in animal models (pig or dog);

- Prepare Good Manufacturing Practices (GMP) and Good Laboratory Practices (GLP) test system suitable for human trials to meet FDA approval, and

- Following FDA approval, and acceptance in the medical community, development of a permanent GMP and GLP facility for bioreactor production and device allocation.

We anticipate completing the first three activities under our present CRADA. We do not contemplate completion of the last two activities until such time as we have extended the scope of our CRADA and acquired a license to the underlying technology.

In order to receive revenues from our proposed in-vitro toxicology and drug testing platforms, we must first accomplish all of the following:

-

Establish and publish (in peer-reviewed scientific journals) that PICM-19 cells will maintain liver cell function under high through-put in-vitro formats;

-

Demonstrate predicted responses from known toxins;

-

Establish rapid, highly sensitive and reproducible assays that would be desirable for drug/chemical development companies, and

-

Develop GMP and GLP facility for growth and packaging PICM-19 cells in multi-well, high through-put, testing formats and for fee-for- service screening of test compounds.

We anticipate that the first three of the objectives will be completed under the terms of our CRADA. Attainment of the final objective involves business activities contemplated to be completed towards the end of, and/or after, the CRADA, at such time, if ever, that we have acquired a license to the underlying technology.

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

At present, we have not submitted for, or received regulatory approval or commercialized any product. Since we have not yet submitted any product for regulatory approval, the statements contained in this prospectus regarding our ongoing sponsored research and development efforts and the results attained by us to-date have not been evaluated by the FDA or any other governmental or regulatory agency.

Material Agreements

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. 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. See Management s Discussion and Analysis of Financial Condition and Results of Operations. 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.

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.

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

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

We, in turn, our responsible for:

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

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

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

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

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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, of which the following remain to be made:

Amount

Date Due

$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

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

Please refer to **Management s Discussion And Analysis Of Financial Condition And Results Of Operations.**

Research Objectives of the CRADA.

The initial research objectives of the CRADA included:

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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 prospectus, 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.

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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 prospectus, 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.

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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 prospectus, these studies are not anticipated to be necessary for completion of the CRADA objectives and accordingly, are not longer deemed a priority.

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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 prospectus, 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.

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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.

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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.

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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 prospectus, 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.

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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 prospectus, 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 prospectus, 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:

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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

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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. See also The Fusion Capital Transaction.

Potential Application of the PICM-19 Cell Line

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;

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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);

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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;

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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;

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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;

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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,

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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;

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Genetic and metabolic stability of the cells over time;

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

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

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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.

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. Please refer to Business-Competition.

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:

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

- 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).

Competition

Industry

The biotechnology industry is characterized by intense competition, rapid product development and technological change. A number of companies, research institutions and universities are working on technologies and products that may be similar and/or potentially competitive with our own. In contrast to our PICM-19 Cell Line, the cellular components of other artificial liver devices being developed to-date have been based on freshly isolated porcine hepatocytes, cell lines established from human liver tumors, stem-cell-like cells prepared from fresh human adult liver tissue and human or pig liver cells transformed or immortalized by the addition of oncogenes (i.e., genes associated with cancer) through genetic engineering. While immortalized liver cells retain a high capacity for growth, they often have reduced or altered hepatocyte functions. In addition, PICM-19 Cell Line s ability to synthesize liver specific proteins and display enhanced liver-specific functions are also important attributes to the development of in-vitro toxicological and pre-clinical drug testing platforms.

The PICM-19 cells replicate indefinitely, like tumor-derived cell lines, but unlike tumor cell lines the PICM-19 cells can stop growing and become the specialized cell types that make the liver what it is. This is in contrast to the liver cell lines derived from tumor tissue or by transforming the liver cells by the addition of cancer causing genes. In these cell lines, the cells do not retain the ability to stop growing and do not become normal liver cells. In addition, PICM-19 cells do not form tumors when injected (one million cells per injection site) under the skin of severe combined immunodeficient (SCID) mice.

Also, of concern in using tumor derived cell lines is the possibility that they could escape into the patient and cause cancer. This is particularly true if the cell line was derived from a human tumor (e.g. the HepG2 cell line derivatives) since human cells would be more likely to successfully evade the immune system of the patient than if they were animal tumor-derived. Because PICM-19 cells are pig cells with non-human sugar groups attached to their cell surfaces, they would cause an immediate hyperacute rejection response in the patient and would be eliminated within minutes. Because this response is mediated by preformed antibodies continuously present in the patients blood, even patients with compromised immune systems would in most cases mount this immediate tissue rejection response. Also, again, as stated above, the PICM-19 cell line was not tumor-derived, shows normal growth cessation, and did not form tumors when injected into SCID mice.

Human stem-cell-like cells prepared from fresh human liver tissue have two disadvantages. First, as with liver transplantation, human adult liver stem cell cultures may be contaminated with human pathogens, e.g., hepatitis viruses or HIV. PICM-19 cells are not contaminated with human pathogens and this can be readily verified at any time because the cell culture is a proven cell line, i.e., can be grown indefinitely. This relates to the second problem of the human adult liver derived stem cells-namely, that the growth potential of these cell cultures is not known. The PICM-19 Cell Lines growth potential is defined in that the cell line has been continuously cultured for several years and single cell cloned to make subclonal cell lines. This and other characteristics of the human stem-cell-like cell cultures have not been published in the peer-reviewed literature and so are not proven in this respect to our knowledge.

The related possibility that human embryonic stem (ES) cells could be a source of hepatocytes for an artificial liver device is also unproven in a similar way. While hepatocytes can presumably be derived from human ES cells lines, a reliable, efficient system for creating this differentiation process on a large scale has not been demonstrated in the peer-viewed literature, and, therefore, does not presently exist as anything but a possibility.

Fresh pig hepatocytes are currently the most commonly considered cell substrate for an artificial liver device. The PICM-19 Cell Line has several advantages over fresh pig hepatocytes. Since fresh pig hepatocytes are harvested from pigs, each time they are acquired the health status of the pig is a concern, e.g., zoonotic diseases, bacterial contamination during processing and freezing, variation in retrovirus load, and variation in the quality of the harvested cells in terms of hepatic function. The PICM-19 Cell Line in contrast can be defined in all these parameters and then rechecked as often as necessary because, unlike the fresh or fresh-frozen pig hepatocytes, the PICM-19 Cell Line grows in culture. Thus, quality assurance in terms of hepatic function and biological safety will always be a problem for freshly harvest liver cells.

We face competition from a number of companies, many of which are substantially larger than we are and have access to resources far greater than ours. 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.

The brief description of the products and technologies being developed or marketed by our competitors listed below have been taken from publicly available documents or reports filed by these companies with the United States Securities and Exchange Commission.

Competitors With Respect To Liver Device Technologies

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Braun, Inc. have developed an artificial liver device;

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Arbios Systems, Inc. developing artificial liver device incorporating liver cells obtained from pigs;

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Vital Theraperies, Inc. artificial liver device technology originally developed by VitaGen (formerly Hepatix) that uses a line of human liver cells cultivated from a hepatoblastoma, a type of liver tumor;

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MultiCell Technologies, Inc. supplies immortalized human hepatocytes for drug discovery and therapeutic applications, as well as for inclusion in their artificial liver device, and

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TeraKlin AG developed a liver filtration system based on a dialysis principle to remove water-soluble and albumin bound toxins from the blood (acquired by Gambro).

Competitors With Respect To In Vitro Toxicology Testing

-

Amphioxus Cell Technologies is marketing toxicology testing kits incorporating an immortalized human liver cell line developed from a hepatoma (cancerous liver tumor);

-

BD Biosciences - is marketing fully characterized, replatable, inducible cryopreserved human hepatocytes for P450 toxicity related studies;

-

Biotrin International is marketing its Biotrin Rat Alpha GST EIA for hepatotoxicity investigations;

-

CellzDirect, Inc. is marketing early cryopreserved human hepatocytes for in-vitro screening, metabolism, hepatotoxicity, interaction studies, etc.;

-

Charles River Laboratories Discovery and Development Services is marketing early toxicity information to pharmaceutical companies engaged in discovery/lead optimization, utilizing numerous cryopreserved hepatocytes in its processes;

-

Geron Corporation is developing a source of normal human liver cells for toxicity testing by applying its telomerase technology to immortalize primary human hepatocytes, and developing related procedures; and

-

In Vitro Technologies, Inc. is marketing plated hepatocytes from non-transplantable human livers for toxicology, enzyme induction, efficacy, and virology; also offers rat, monkey, and dog hepatocytes.

We believe that in order for us to compete with such companies, both for the acquisition of rights to viable biotechnologies and the financial resources required to ultimately attempt to commercialize such technologies, it is important for us to establish and maintain brand name recognition. Accordingly, since our signing of the CRADA on November 1, 2002, in addition to our sponsored research and development efforts, we have undertaken a program designed to establish brand name recognition within the investment and scientific communities; we intend to continue to develop and market our brand name pending commercialization, if ever, of the results of our research and development program or any products derived from our sponsored research development efforts.

We believe our strategy has been a key factor in our having been able to successfully obtain an extension of the term of the CRADA in 2004 and access to the potential financing, described in this prospectus, to fulfill, expand and potentially accelerate our sponsored research and development activities under the CRADA. We also believe that our strategy will ultimately facilitate the commercialization of our targeted technologies and the marketing, distribution and public acceptance of products, if any, derived from our sponsored research and development efforts, if and when, regulatory approval is received.

On March 2, 2005, we entered into a Market Access Services Agreement with National InfoSystems Inc. d/b/a Thornhill Advisors (National), pursuant to which National agreed, on a non-exclusive basis to assist us in, among other things, establishing a financial and public relations methodology designed to increase awareness within the biotechnology sector and the investment community; assist us in the implementation of our business plan and in disseminating information about or concerning us and our business to the biotechnology sector and the financial marketplace. Prior to the execution of the Market Access Service Agreement, we retained National on a month to month basis.

In consideration for such services we paid National $10,500 (Canadian) per month. We also reimbursed National certain expenses, including, but not limited to, travel, print media advertising costs, subcontract fees and costs incurred in the preparation and mailing of research reports; printing, publication and marketing costs of brochures, newsletters reports and marketing materials; and printing and publication costs of our annual reports, quarterly reports, and/or other shareholder communication material.

The Market Access Service Agreement was terminated by mutual consent on August 31, 2005.

Personnel

Competition among biotechnology companies for qualified employees is intense, and there can be no assurance we will be able to attract and retain qualified individuals. If we fail to do so, this would have a material, adverse effect on the results of our operations.

We do not maintain any life insurance on the lives of any of our officers and directors. We are highly dependent on the services of our directors and officers, particularly on those of Harmel S. Rayat. If one or all of our officers or directors die or otherwise become incapacitated, our operations could be interrupted or terminated.

Scientific Advisory Board

Our scientific advisory board provides advice regarding specific facets of our ongoing sponsored scientific research and development. We believe that each member of the advisory board brings distinct scientific, clinical, and business development experience which we can call-upon during various phases of its active research and commercial development, as needed.

We use scientists, physicians and other professionals with expertise related to our technologies to advise us on scientific and medical matters related to our research and development activities and technology assessment. Each member serves for a period of one year.

Currently, our scientific advisory board members are:

Name

Age

Position

Held Position Since

Michael Ott, MD, Ph.D

44

Advisory Board Member

July 8, 2004

Dr. Darryl J. Fleishman, MD

40

Advisory Board Member

May 1, 2005

Mr. John Bergman

53

Advisory Board Member

June 7, 2004

Mr. Frank Menzler

37

Advisory Board Member

June 4, 2004

Prof. Michael Ott, MD, Ph.D

Dr. Michael Ott is Associate Professor for Experimental Hepatology at the Hannover Medical School (Germany); he earned his medical and doctoral degrees from Germany s largest medical training school, Westfälische-Wilhelms-University (Munster), receiving his medical license from the Ärztekammer des Landes Nordrhein-Westfalen (Germany) in 1987. From 1987 through 1989, Dr. Ott undertook his post-doctoral (equivalent) research at the University of Muenster (Germany) in the Molecular Biology and Pathophysiology Laboratory for Hemostasis and Microcirculation, and subsequently completed a three-year

training program from 1990 through 1993 in Internal Medicine at the Johann-Wolfgang-Goethe University Medical Center in Frankfurt, Germany. From 1993 to 1997, Dr. Michael Ott undertook further post-doctoral research at Marion Bessin Liver Research Center at the Albert Einstein College of Medicine, New York.

Since 2003, Dr. Michael Ott has been a tenured Associate Professor for Experimental Hepatology at the Hannover Medical School. From 1997 to 2003, he was a member of the Department of Gastroenterology, Hepatology and Endocrinology at the Hannover Medical School.

Dr. Ott has not conducted any specific Advisory Board activities on our behalf. However, we expect Dr. Ott s expertise in adult and embryonic stem cell research and his experience in cell transplantation to become of valuable assistance as the PICM-19 cell line is further optimized and incorporated into a bioreactor unit, we expect to avail ourselves of Dr. Ott s expertise.

Pursuant to the scientific advisory board agreement, Dr. Ott receives compensation at the rate of $105 per hour for services rendered, subject to a minimum monthly compensation of $315 (a minimum of 3 hours at $105 per hour) and subject further to a maximum daily compensation of $840; he has received aggregate payments of $1,575 for 2004 (seven months at $315 per month) and $3,780 for 2005.

Dr. Darryl J. Fleishman, MD

Dr. Darryl Fleishman is a Board Certified Emergency Medicine Specialist. Dr. Fleishman earned his MD degree in 1991 from Boston University Medical School in Boston, MA, and in 1994 completed his Emergency Residency Program at Wayne State University in Detroit, MI.

From August 1994, through July 1997, Dr. Fleishman served at Holy Cross Hospital in Chicago, IL, while concurrently posted at the Level I Trauma Center at Mt. Sinai Hospital, Chicago, IL. From October 1995 through March 1998, Dr. Darryl Fleishman tenured at Chicago s Little Company of Mary and subsequently worked at St. Therese Hospital, Waukegan, IL from July 1997 through January 1998. From January 1998 through May 1999, Dr. Fleishman served at the Level I Trauma Center in St. John s Hospital in Springfield, IL and tenured at Ingalls Memorial Hospital, Harvey, IL from September 1999 through July 2002. From December 2002 through September 2004, Dr. Darryl Fleishman served at the Level I Trauma Center at Christ Hospital in Harvey, IL and since July 2004 has been in active emergency-medicine practice at St. Francis Hospital & Health Center s Level I Trauma Center, Blue Island, IL.

Through his direct medical experience with emergency room patients suffering with liver disease, acute liver failure, adverse drug reactions and drug-induced liver damage is able to bring a unique insight to our research and development activities. As an active medical practitioner, Dr. Fleishman also assists us through peer-recruitment to our Advisory Board. Dr. Fleishman has authored and assisted with preparation of a formal presentation on our PICM-19 Development Cycle to be presented to clinical medical practitioners. In connection with the preparation of the report, Dr. Fleishman has visited our facilities in Maryland, and met with the USDA s Agricultural Research Service collaborating scientists. He has assisted in the interpretation and analysis of numerous scientific research papers, reviewed industry reports, and participated in teleconferences with research staff.

Pursuant to the scientific advisory board agreement, Dr. Fleishman receives compensation at the rate of $105 per hour for services rendered, subject to a minimum monthly compensation of $315 (a minimum of 3 hours at $105 per hour), and subject further to a maximum daily compensation of $840; he has received

aggregate payments of $5,390 for 2005, representing compensation for an aggregate of approximately 51 hours of service.

Mr. John Bergman

Mr. John Bergmann is Senior Research Associate and Laboratory Manager with the Department of Human Biological Chemistry and Genetics at the University of Texas Medical Branch. From May 1976, through August 1978, Mr. Bergmann served as Research Associate and Director of Scientific Equipment, New Jersey Sea Grant, New Jersey Marine Science Consortium, Fort Hancock, NJ. From September 1978 through August 1979, Mr. John Bergmann accepted a Research Associate position at National Oceanic Atmospheric Administration (NOAA), Northeast Fisheries Center, National Marine Fisheries Service, in Fort Hancock, NJ. Subsequently, from September 1979 through December 1980, Mr. Bergmann worked at the University of Houston, Central Campus, Department of Biological Sciences, in Houston, TX.

Since December 1980, Mr. John Bergmann has undertaken research efforts at the University of Texas Medical Branch, Galveston, TX in numerous capacities: Research Associate I, Department of Human Biological Chemistry and Genetics, Division of Biochemistry (December 1980 through February 1989); Research Associate II, Department of Human Biological Chemistry and Genetics, Division of Biochemistry (February 1989 through January 1991); Faculty Associate, graduate School of Biomedical Sciences and School of Medicine, Department of Pharmacology and Toxicology (January 1991 through April 1994); Research Associate II, Department of Pathology, Division of Clinical Microbiology and Immunology (April 1994 through May 1999); Research Associate II, Department of Human Biological Chemistry and Genetics (May 1999 through 2002); and Senior Research Associate and Laboratory Manager, Department of Human Biological Chemistry and Genetics. Mr. John Bergmann attended Montclair State University, NJ where he earned a Bachelor of Arts degree in Biology in 1974 and his Master of Arts degree in Biology in 1977.

Mr. Bergmann provided early input regarding the application of polymer scaffolding in our cell engineering efforts. As we further optimizes the PICM-19 cell line, we expect to take advantage of Mr. Bergmann s 30-plus years of research experience and his specific expertise in cell biology, tissue engineering, and cell biochemistry.

Pursuant to the scientific advisory board agreement, Mr. Bergmann receives compensation at the rate of $105 per hour for services rendered, subject to a minimum monthly compensation of $315 (a minimum of 3 hours at $105 per hour), and subject further to a maximum daily compensation of $840; he has received aggregate payments of $1,890 for 2004 (eight months at $315 per month) and $3,780 for 2005.

Mr. Frank Menzler

Mr. Menzler earned a Diplom-Ingenieur (Master s of Science equivalent) in Mechanical and Biomedical Engineering from RWTH Aachen, Germany s largest university of technology in 1996, and his Master s degree in Business Administration (MBA) from Northwestern University s, Kellogg School of Business in 2001.

In February 1998, Mr. Frank Menzler co-founded Impella Cardiotechnik AG, a medtech start up venture; designing, developing, and ultimately commercializing minimally-invasive cardiac assist systems for use in cardiology and cardiac surgery. Mr. Menzler served in executive positions at Impella until April 2002, and from May 2002 through July 2004 was in charge of marketing for Europe, Middle East, Africa

and Canada at Guidant Corporation s (NYSE: GDT) Cardiac Surgery Business Unit in Brussels, Belgium. Since September 2004, Mr. Frank Menzler has been the General Manager for ABIOMED, Inc. s European division, ABIOMED, B.V.

Mr. Frank Menzler is a founding member of our scientific advisory board and provides insight into possible strategic alliances with respect to our continued sponsored research efforts.

Pursuant to the scientific advisory board agreement, Mr. Menzler receives compensation at the rate of $105 per hour for services rendered, subject to a minimum monthly compensation of $315 (a minimum of 3 hours at $105 per hour), and subject further to a maximum daily compensation of $840; he has received aggregate payments of $1,890 for 2004 (eight months at $315 per month) and $3,780 for 2005.

The USDA Research Service Collaborating Scientists

The following scientists, all of whom are employees of the USDA, spend all or a portion of their time on our sponsored research and development activities and related matters. We do not compensate these scientists directly. However, a portion of the payments which we make under our CRADA is used for the payment of salaries.

Dr. Neil C. Talbot

Under the terms of our CRADA, Dr. Talbot spends approximately 10% of his time supervising and participating in our sponsored research and development activities.

With a Bachelor s degree in biology, a Master of Science degree (viral immunology major) and a Doctorate in cellular and molecular oncology, Dr. Talbot has over 24 years of scientific research experience with the University of Maryland, Squibb Institute for Medical Research (E.R. Squibb and Sons, Inc.), National Institutes of Health and is currently employed by the U.S. Department of Agriculture, where Dr. Talbot received a Merit Award for superior performance on in-vitro culture of embryonic cells in 1993 and a Scientist of the Year Award in 1996.

Dr. Talbot has extensive knowledge and experience in the following areas:

-

Research on nuclear cloning of cattle and embryonic stem cells of the pig, sheep and cow;

-

Oncogene and transformation suppression research with the isolation and characterization of oncogene resistant NIH/3T3 cell lines and v-Ki-ras suppressor genes;

-

Tyrosine Kinase oncogene suppression research with the analysis of the C127 mouse cell line's resistance to transformation by various oncogenes by transfection or infection;

-

Oncogene suppression research with the development of human HOS cell lines resistant to transformation by the v-Ki-ras oncogene.

-

Viral DNA analysis and production of monoclonal antibodies to equine herpesvirus type 1.

-

Immunoassays (ELISA, SN, CF, and cytotoxicity) for the evaluation of the antibody response in experimental infections of equine herpesvirus type1.

Dr. Talbot is widely published, with numerous research papers in such publications as: In Vitro Cellular and Developmental Biology; Cells Tissues Organs; Veterinary Immunology and Immunopathology; and Experimental Cell Research. Dr. Talbot is the co-inventor of the Hepatocyte Cell Line Derived from the Epiblast of Pig Blastocysts, U.S. Patent 5,532,156, issued July 2, 1996, and the Artificial Liver Device, U.S. Patent 5,866,420, issued February 2, 1999.

Dr. Thomas J. Caperna

Under the terms of our CRADA, Dr. Caperna spends approximately 10% of his time supervising and participating in our sponsored research and development activities.

With a Bachelor s degree in Wildlife Biology and Zoology, a Master of Science degree in Biology (immunochemistry), and a PhD in Nutritional Biochemistry, Dr. Caperna has over 23 years of animal and cell research experience. Dr. Caperna has held research positions at Syracuse University and Virginia Polytechnic Institute and has been an associate and a research scientist at the U.S. Department of Agriculture since 1986.

Dr. Caperna s expertise and research are in the following areas:

-

Isolation and culture of rat and pig hepatic parenchymal and sinusoidal cells;

-

Hepatocellular trace metal metabolism and metalloprotein biochemistry;

-

Pig, chicken and bovine endocrinology;

-

Nutrient-hormone interactions;

-

Growth, development and energy metabolism in the pig with emphasis on the somatotropin axis;

-

Stable isotope methodology in metabolic studies; and

-

Proteomics and Mass Spectrometry.

Dr. Ayesha Mahmood

Dr. Mahmood spends her full time on conducting our sponsored research and development activities relating to the artificial liver device.

Dr. Mahmood holds a Bachelor's degree in Biochemistry, a Master of Science in Chemical Engineering and a PhD in Biomedical Engineering from Wayne State University, a biomedical engineering pioneer since 1939 and a recognized research innovator in small diameter blood vessel grafts, tissue engineering and biomaterials for tissue and organ replacement. Dr. Mahmood has published studies and delivered research presentations on biomaterials engineering, tissue engineering, chemical engineering and more, and has presented her findings to leading scientific peer review groups, including the Transactions of the Society for Biomaterials, American Institute of Chemical Engineers, Society of Biomaterials, and others.

Dr. Mahmood works at the U.S. Department of Agriculture s Agricultural Research Service Growth Biology Laboratory located in Beltsville, MD.

Mr. Ryan Willard

Mr. Willard spends his full time conducting our sponsored research and development activities relating to the in-vitro toxicology testing platforms.

Having completed his B.S. degree (cum laude) in Integrated Science and Technology/Biotechnology with a minor in Business at James Madison University in Harrison, VA, Mr. Willard subsequently undertook studies at the Department of Biology, University of Virginia (Charlottesville, VA). Among his broad scope of research experience, Mr. Willard has worked on genetic cloning and sequencing, protein purification, and the development of non-isotopic assays.

Most recently, Mr. Willard s efforts as Senior Laboratory and Research Specialist at University of Virginia have focused on the development of a high-throughput assay for screening HIV anti-Rev compounds, testing positive compounds from the screen for efficacy and toxicity, and ultimately working towards elucidating a mechanism for each.

Mr. Willard works at the U.S. Department of Agriculture s Agricultural Research Service Growth Biology Laboratory located in Beltsville, MD.

Government Regulation

General

We are involved in a heavily regulated sector, and our ability to remain viable will depend on favorable government decisions at various points by various agencies. From time to time, legislation is introduced in the US Congress that could significantly change the statutory provisions governing our sponsored research and development processes as well as the approval, manufacture and marketing of any products derived from such sponsored research and development activities. Additionally, healthcare is heavily regulated by the federal government and by state and local governments. The federal laws and regulations affecting healthcare change constantly, thereby increasing the uncertainty and risk associated with any healthcare related venture, including our business. In addition, FDA regulations and guidance are often revised or reinterpreted by the agency in ways that may significantly affect our

business and our products, if any. It is impossible to predict whether legislative changes will be enacted or FDA regulations, guidance, or interpretations changed, and what the impact of such changes, if any, may be.

The federal government regulates healthcare through various agencies, including but not limited to the following: (i) the FDA, which administers the Food, Drug, and Cosmetic Act (FD&C Act), as well as other relevant laws; (ii) CMS, which administers the Medicare and Medicaid programs; (iii) the Office of Inspector General (OIG) which enforces various laws aimed at curtailing fraudulent or abusive practices, including by way of example, the Anti-Kickback Law, the Anti-Physician Referral Law, commonly referred to as Stark, the Anti-Inducement Law, the Civil Money Penalty Law, and the laws that authorize the OIG to exclude healthcare providers and others from participating in federal healthcare programs; and (iv) the Office of Civil Rights, which administers the privacy aspects of the Health Insurance Portability and Accountability Act of 1996 (HIPAA). All of the aforementioned are agencies within United States Department of Health and Human Services (HHS).

Healthcare is also provided or regulated, as the case may be, by the Department of Defense through

its TriCare program, the Public Health Service within HHS under the Public Health Service Act, the Department of Justice through the Federal False Claims Act and various criminal statutes, and state governments under Medicaid and other state sponsored or funded programs and their internal laws regulating all healthcare activities.

In addition to regulation by the FDA, in the future, we may be subject to general healthcare industry regulations. The healthcare industry is subject to extensive federal, state and local laws and regulations relating to:

- billing for services;
- quality of medical equipment and services;
- confidentiality, maintenance and security issues associated with medical records and individually identifiable health information;
- false claims; and
- the labeling of products.

These laws and regulations are extremely complex and, in some cases, still evolving. In many instances, the industry does not have the benefit of significant regulatory or judicial interpretation of these laws and regulations. If our operations are found to be in violation of any of the federal, state or local laws and regulations that govern our activities, we may be subject to the applicable penalty associated with the violation, including civil and criminal penalties, damages, fines or curtailment of our operations. The risk of being found in violation of these laws and regulations is increased by the fact that many of them have not been fully interpreted by the regulatory authorities or the courts, and their provisions are open to a variety of interpretations. Any action against us for violation of these laws or regulations, even if we successfully defend against it, could cause us to incur significant legal expenses and divert our management s time and attention from the operation of our business.

Federal Food and Drug Administration (FDA) Regulation

We have yet to develop any products for submission for regulatory approval. The production and marketing of any product that may be developed by us and our ongoing sponsored research and development, preclinical testing and clinical trial activities will be subject to extensive regulation and review by numerous governmental authorities.

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. A number of products for which FDA approval has been sought 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 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 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 derived from such research. It is possible that the FDA will issue additional regulations further restricting the sale of our proposed products 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 efforts, even if approved.

Environmental Regulation

Our sponsored research and development processes may involve the handling of potentially harmful biological materials as well as hazardous materials. The USDA's Agriculture 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 and we incur expenses relating to compliance with these laws and regulations. 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 financial condition. 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 are 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.

Employees

In addition to the management services provided to us by Mr. Harmel S. Rayat, we have an

administrative, clerical and office staff consisting of one full time and three part time employees. All of our sponsored research and development activities are provided on our behalf by scientists and others employed by governmental agencies with which we have agreements or by third party providers.

Legal Proceedings

We are not a party to any material legal proceedings and there are no material legal proceedings pending with respect to our property. We are not aware of any legal proceedings contemplated by any governmental authorities involving either our property or us. None of our directors, officers or affiliates is an adverse party in any legal proceedings involving us, or has an interest in any proceeding, which is adverse to us.

Property

Our principal office is 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.

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MANAGEMENT

The following table and text set forth the names and ages of all directors and executive officers of our company as of January 20, 2006. The board of directors is comprised of only one class. All of the directors will serve until the next annual meeting of stockholders and until their successors are elected and qualified, or until their earlier death, retirement, resignation or removal.

There are no family relationships between or among the directors, executive officers or persons nominated or charged by our company to become directors or executive officers.

Executive officers area appointed by, and serve at the discretion of, the Board of Directors.

Name	Age	Position	Held Position Since
Harmel S. Rayat (1)	44	President, Chief Executive Officer, Chief Financial Officer, Principal Accounting Officer and Director	Director and President from December 16, 1998, to September 22, 2003; resigned as president on September 22, 2003 and appointed Secretary and Treasurer; and continued to serve as a director, Secretary and Treasurer, until August 12, 2005, when he resigned as Secretary and Treasurer and was appointed President and Chief Executive Officer, Chief Financial Officer, and Principal Accounting Officer.
Arian Soheili (1)	39	Secretary, Treasurer and Director	Secretary, Treasurer and Director since August 11, 2005 and a director since September 22, 2003.
Jasvir S. Kheleh	32	Director	November 19, 2003.

(1) On August 12, 2005, (i) Mr. Harmel S. Rayat was appointed our president, chief executive officer, chief financial officer, and principal accounting officer; and (ii) Mr.Soheili resigned as our president and chief executive officer and assumed positions as our secretary and treasurer on the same day. Prior to August 12, 2005, Mr. Soheili served as our president and chief financial officer since September 22, 2003.

The following is a brief description of the business experience of each director and executive officer during the past five years and an indication of directorships held by each director in other companies subject to the reporting requirements under the Federal securities laws.

Harmel S. Rayat, *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 president, chief financial officer, chief executive 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).

Arian Soheili, *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, *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.

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

Based solely upon our review of Forms 3 and 4 and amendments thereto furnished to us by each of Messrs. Rayat, Kheleh and Soheili pursuant to Rule 16a-3(e) of during our current fiscal year and Form 5 and the amendments thereto furnished to us with respect to our most recent fiscal year, we believe that all of our directors, executive officers and persons who own more than 10% of our common stock were in compliance with Section 16(a) of the Exchange Act of 1934 during the fiscal year. During the years ended December 31, 2005 and 2004, all of our directors, executive officers and persons who own more than 10% of our common stock were in compliance with section 16(a) of the Exchange Act of 1934.

Directors

Our board of directors consists of three members. Directors serve for a term of one year and stand for election at our annual meeting of stockholders. Pursuant to our Bylaws, any vacancy occurring in the board of directors, including a vacancy created by an increase in the number of directors, may be filled by the stockholders or by the affirmative vote of a majority of the remaining directors though less than a quorum of the board of directors. A director elected to fill a vacancy shall hold office only until the next election of directors by the stockholders. If there are no remaining directors, the vacancy shall be filled by the stockholders.

We do not have any committees, nor do we have a member of the board of directors who would qualify as a financial expert.

At a meeting of stockholders, any director or the entire board of directors may be removed, with or without cause, provided the notice of the meeting states that one of the purposes of the meeting is the removal of the director. A director may be removed only if the number of votes cast to remove him exceeds the number of votes cast against removal.

Compensation of Directors

In 2005, 2004, and 2003, we incurred $12,900, $9,500 and $1,500, respectively, in fees to directors. Additionally, in 2003 we paid $27,000 to Harmel S. Rayat in management fees.

Standard Arrangements

Currently, we pay our directors for their services as directors a monthly stipend of $250 per month, with the exception of Mr. Rayat, who since becoming our president on August 12, 2005, has not received any compensation for services rendered as a director. In addition, each director receives $100 per board or committee meeting attended. We have no other arrangements pursuant to which any our directors was compensated during the year ended December 31, 2005, 2004, and 2003, for services as a director.

Executive Compensation

Remuneration and Executive Compensation

Mr. Rayat has agreed to serve as our president, chief executive officer, chief financial officer, principal accounting officer and as a director without compensation, effective August 12, 2005, through December 31, 2006.

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

Name and 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

Officer and Director

2003

$27,000

$0

$0

1,500,000

$0

Arian Soheili(2)

2005

$0

$0

$6,800

0

$0

Secretary, Treasurer

2004

$0

$0

$2,500

0

$0

and Director

2003

$0

$0

$1,150

0

$0

Jasvir Kheleh,

2005

$0

$0

$3,800

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 2004 to the named officers and directors:

Number of

% of Total

Securities

Options Granted

Name	Options in 2004	Price ($/sh)	Date	Underlying to Employees	Exercise	Expiration
Harmel Rayat	0	0	n/a	n/a		
Arian Soheili	0	0	n/a	n/a		
Jasvir Kheleh	0	0	n/a	n/a		

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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

Harmel Rayat

7,000,000

0

9,450,000

0

Arian Soheili

0

0

0

0

Jasvir Kheleh

0

0

0

0

Employment Contracts and Change in Control Arrangements

We do not have any employment agreements with any of our officers and directors. There are no understandings or agreements known by management at this time, which would result in a change in control. If such transactions are consummated, of which there can be no assurance, we may issue a significant number of shares of capital stock, which could result in a change in control and/or a change in our current management.

Stock Option Plans And Other Issuances

On July 12, 2001, our stockholders approved the 2001 Stock Option Plan, which has 40,000,000 shares reserved for issuance thereunder, all of which were 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 our success by providing individuals the opportunity to acquire common stock.

On December 18, 2002, our board of directors agreed to reserve 10,000,000 Non-Statutory Stock Options out of the 40,000,000 common shares available for issuance under our 2001 Stock Option Plan However, the options were actually granted and the terms and conditions, such as expiration dates and vesting periods are defined in the individual stock option agreements were finalized on February 10, 2003. The options are exercisable at a price of $0.07 per share and in three (3) equal instalments of thirty-three and one-third percent (33 1/3%), the first instalment 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. Harmel S. Rayat, an officer and director, was the recipient of 5,500,000 options; Ranjit Bhogal, an employee, was the recipient of 2,250,000 options; Bhupinder Mann, an employee, was the recipient of 1,500,000 options; and Jeet Sidhu, an employee, was the recipient of 750,000 options.

On February 12, 2003, our board of directors granted 75,000 options to purchase common stock to Harvinder Dhaliwal, 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 instalments of fifty percent (50%), with the first instalment 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 our board of directors.

On August 27, 2003, our board of directors granted 3,000,000 options to purchase common stock to certain of our directors, officers and our employees at $2.11 per share. The option price was based on the

closing price of our common shares on August 27, 2003. The options become exercisable in two equal instalments of fifty percent (50%), with the first instalment becoming exercisable immediately and the balance becoming exercisable in 180 days from issuance. Harmel S. Rayat, an officer and director, was the recipient of 1,500,000 options; Ranjit Bhogal, an employee, was the recipient of 750,000 options; Bhupinder Mann, an employee, was the recipient of 500,000 options; and Jeet Sidhu, an employee, was the recipient of 250,000 options.

We did not grant any stock options in 2004. As of December 31, 2004, options to purchase 11,133,000 of our common stock at a weighted average exercise price of $0.48 per share were outstanding under the 2001 Stock Option Plan, of which 7,799,666 options to purchase shares were exercisable at December 31, 2004.

On March 7, 2005, our board of directors authorized the granted 4,000,000 options to purchase common stock to certain employees at $3.10 per share. The option price was based on the closing price of our common shares on March 7, 2005. The options become exercisable immediately. Ranjit Bhogal, an employee, was the recipient of 2,500,000 options; and Jeet Sidhu, an employee, was the recipient of 1,500,000 options.

On March 17, 2005, our board of directors granted 2,000,000 options to purchase common stock to certain employees at $2.38 per share. The option price was based on the closing price of our common shares on March 17, 2005. The options become exercisable immediately. Ranjit Bhogal, an employee, was the recipient of 1,400,000 options; and Jeet Sidhu, an employee, was the recipient of 600,000 options.

THE FUSION CAPITAL TRANSACTION

General

On July 8, 2005, we entered into a common stock purchase agreement with Fusion Capital Fund II, LLC, which we terminated on December 14, 2005. We subsequently entered into a new common stock purchase agreement with Fusion Capital dated December 16, 2005, which was terminated on January 18, 2006. On January 20, 2006, we entered into a new common stock purchase agreement with Fusion Capital pursuant to which Fusion Capital has agreed, so long as no event of default (as described below) 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. We shall not commence any sale of our common stock to Fusion Capital until the registration statement of which this prospectus is part, has been declared effective by the U.S. Securities and Exchange commission. 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.

Fusion Capital, a selling stockholder under this prospectus, is offering for sale up to 11,086,351 shares of our common stock. In connection with entering into the agreement, we authorized the sale to Fusion Capital of up to 10,000,000 shares of our common stock for maximum proceeds of $15.0 million. Assuming Fusion Capital purchases all $15.0 million of common stock, we estimate that the maximum number of shares we will sell to Fusion Capital under the common stock purchase agreement will be 10,000,000 shares (exclusive of the of the 374,753 shares issued to Fusion Capital as the commitment fee

pursuant to the January 20, 2006 common stock purchase agreement, the 691,598 shares issued to Fusion Capital as the commitment fee pursuant to the July 8, 2005 common stock purchase agreement, and the 20,000 shares issued to Fusion Capital upon signing of the June 28, 2005 term sheet). Subject to approval by our board of directors, we have the right but not the obligation to issue more than 10,000,000 shares to Fusion Capital. In the event we elect to issue more than 10,000,000 shares offered hereby, we will be required to file a new registration statement and have it declared effective by the U.S. Securities and Exchange Commission. The number of shares ultimately offered for sale by Fusion Capital is dependent upon the number of shares purchased by Fusion Capital under the common stock purchase agreement.

Purchase of Shares Under The Common Stock Purchase Agreement

Under the common stock purchase agreement, on each trading day Fusion Capital is obligated to purchase a specified dollar amount of our common stock. Subject to our right to suspend such purchases at any time, and our right to terminate the agreement with Fusion Capital at any time, each as described below, Fusion Capital shall purchase on each trading day during the term of the agreement $25,000 of our common stock. We may decrease this daily purchase amount at any time. We also have the right to increase or decrease the daily purchase amount at any time, provided however, we may not increase the daily purchase amount above $25,000 unless our stock price is above $1.00 per share for five consecutive trading days. The purchase price per share is equal to the lesser of:

-

the lowest sale price of our common stock on the purchase date; or

-

the average of the three (3) lowest closing sale prices of our common stock during the twelve (12) consecutive trading days prior to the date of a purchase by Fusion Capital.

The purchase price will be adjusted for any reorganization, recapitalization, non-cash dividend, stock split, or other similar transaction occurring during the trading days in which the closing bid price is used to compute the purchase price. Fusion Capital may not purchase shares of our common stock under the common stock purchase agreement if Fusion Capital, together with its affiliates, would beneficially own more than 9.9% of our common stock outstanding at the time of the purchase by Fusion Capital. Fusion Capital has the right at any time to sell any shares purchased under the common stock purchase agreement, which would allow it to avoid the 9.9% limitation. Therefore, we do not believe that Fusion Capital will ever reach the 9.9% limitation.

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The following table sets forth the amount of proceeds we would receive from Fusion Capital from the sale of shares of our common stock offered by this prospectus at varying purchase prices:

Assumed Average Purchase Price	Number of Shares to be Issued if Full Purchase	Percentage of Outstanding After Giving Effect to the Issuance to Fusion Capital(1)	Proceeds from the Sale of 10,000,000 Shares to Fusion Capital Under the Common Stock Purchase Agreement
$0.50	10,000,000	12.4%	$5,000,000
$1.37(2)	10,000,000	12.4%	$13,700,000
$2.50	6,000,000	7.8%	$15,000,000
$4.00	3,750,000	5.0%	$15,000,000
$4.50	3,333,333	4.5%	$15,000,000
$5.00	3,000,000	4.1%	$15,000,000

(1)

Based on 70,439,183 shares outstanding as of January 20, 2006 and includes the issuance of 1,086,351 shares of common stock issued to Fusion Capital as a commitment fee, and the number of shares issuable at the corresponding assumed purchase price set forth in the adjacent column.

(2)

Closing sale price of our common stock on January 19, 2006.

In connection with entering into the agreement, we authorized the sale to Fusion Capital of up to 10,000,000 shares of our common stock**.** We estimate that we will sell no more than 10,000,000 shares to Fusion Capital under the common stock purchase agreement (exclusive of the of the 374,753 shares issued to Fusion Capital as the commitment fee pursuant to the January 20, 2006, common stock purchase agreement, the 691,598 shares issued to Fusion Capital as the commitment fee pursuant to the July 8, 2005 common stock purchase agreement, and 20,000 shares issued to Fusion Capital upon the signing of the June 28, 2005 term sheet), all of which are included in this offering. We have the right to terminate the agreement without any payment or liability to Fusion Capital at any time, including in the event that all 10,000,000 shares are sold to Fusion Capital under the common stock purchase agreement. Subject to approval by our board of directors, we have the right but not the obligation to sell more than 10,000,000 shares to Fusion Capital. In the event we elect to sell more than the 10,000,000 shares offered hereby, we will be required to file a new registration statement and have it declared effective by the U.S. Securities & Exchange Commission.

Minimum Purchase Price

Fusion Capital shall not have the right or the obligation to purchase any shares of our common stock in the event that the purchase price would be less the floor price. Specifically, Fusion Capital shall not have the right or the obligation to purchase shares of our common stock on any trading day that the market price of our common stock is below $0.50.

Our Right to Suspend Purchases

We have the unconditional right to suspend purchases at any time for any reason effective upon one trading day s notice. Any suspension would remain in effect until our revocation of the suspension. To the extent we need to use the cash proceeds of the sales of common stock under the common stock purchase agreement for working capital or other business purposes, we do not intend to restrict purchases under the common stock purchase agreement.

Our Right to Increase and Decrease the Amount to be Purchased

Under the common stock purchase agreement Fusion Capital has agreed to purchase on each trading day during the 30 month term of the agreement, $25,000 of our common stock or an aggregate of $15.0 million. We have the unconditional right to decrease the daily amount to be purchased by Fusion Capital at any time for any reason effective upon one trading day s notice.

In our discretion, we may elect to sell more of our common stock to Fusion Capital than the minimum daily amount. First, in respect of the daily purchase amount, we have the right to increase the daily purchase amount as the market price of our common stock increases. Specifically, for every $0.10 increase in Threshold Price above $1.00, the Company shall have the right to increase the daily purchase amount by up to an additional $2,500. For example, if the Threshold Price were $1.50 we would have the right to increase the daily purchase amount to up to an aggregate of $37,500. If the Threshold Price is $2.50, we would have the right to increase the daily purchase amount to up to $62,500 in the aggregate. The "Threshold Price" is the lowest sale price of our common stock during the five trading days immediately preceding our notice to Fusion Capital to increase the daily purchase amount. If at any time during any trading day the sale price of our common stock is below the Threshold Price, the applicable increase in the daily purchase amount will be void. The increase in the daily amount that Fusion Capital shall buy from us as the market price of our shares increases is not subject to any limitations in the amount until we receive the full $15 million aggregate amount.

In addition to the daily purchase amount, we may elect to require Fusion Capital to purchase on any single trading day our shares in an amount up to $250,000, provided that our share price is above $1.50 during the ten trading days prior thereto. The price at which such shares would be purchased will be the lowest Purchase Price (as defined above) during the previous fifteen (15) trading days prior to the date that such purchase notice was received by Fusion Capital. We may increase this amount to $500,000 if our share price is above $3.00 during the ten trading days prior to our delivery of the purchase notice to Fusion Capital. We may deliver multiple purchase notices; however at least ten (10) trading days must have passed since the most recent non-daily purchase was completed. The daily purchases shall be suspended for ten (10) trading days each time any such notice is delivered.

In deciding whether or not to increase or decrease the amount of our stock we elect to sell to Fusion Capital, we will consider many factors, including the sale price and the number of shares outstanding of our common stock at such time. We will also consider our need for funding. We will evaluate alternative funding opportunities and general economic conditions. We will also take into account the progress we have made in our business as well as any new opportunities we may wish to pursue.

Events of Default

Generally, Fusion Capital may terminate the common stock purchase agreement without any

liability or payment to the Company upon the occurrence of any of the following events of default:

the effectiveness of the registration statement of which this prospectus is a part of lapses for any reason (including, without limitation, the issuance of a stop order) or is unavailable to Fusion Capital for sale of our common stock offered hereby and such lapse or unavailability continues for a period of five (5) consecutive trading days or for more than an aggregate of twenty (20) trading days in any 365-day period;

suspension by our principal market of our common stock from trading for a period of three consecutive trading days;

the de-listing of our common stock from our principal market provided our common stock is not immediately thereafter trading on the Nasdaq National Market**,** the Nasdaq National SmallCap Market, the New York Stock Exchange or the American Stock Exchange;

the transfer agent s failure for five trading days to issue to Fusion Capital shares of our common stock which Fusion Capital is entitled to under the common stock purchase agreement;

any material breach of the representations or warranties or covenants contained in the common stock purchase agreement or any related agreements which has or which could have a material adverse affect on us subject to a cure period of ten trading days;

any participation or threatened participation in insolvency or bankruptcy proceedings by or against us; or

a material adverse change in our business.

Our Termination Rights

We have the unconditional right at any time for any reason to give notice to Fusion Capital terminating the common stock purchase agreement. Such notice shall be effective one trading day after Fusion Capital receives such notice.

No Short-Selling or Hedging by Fusion Capital

Fusion Capital has agreed that neither it nor any of its affiliates shall engage in any direct or indirect short-selling or hedging of our common stock during any time prior to the termination of the common stock purchase agreement.

Effect of Performance of the Common Stock Purchase Agreement on Our Stockholders

All shares registered in this offering will be freely tradable by Fusion Capital at any time. It is anticipated that shares registered in this offering will be sold over a period of up to 30 months from the date of this prospectus. The sale of a significant amount of shares registered in this offering at any given time could cause the trading price of our common stock to decline and to be highly volatile. Fusion Capital may ultimately purchase all of the shares of common stock registered in this offering, and it may sell some, none or all of the shares of common stock it acquires upon purchase. Therefore, the purchases under the common stock purchase agreement may result in substantial dilution to the interests of other holders of our common stock. However, we have the right at any time for any reason to: (1) reduce the daily purchase amount, (2) suspend purchases of the common stock by Fusion Capital and (3) terminate the common stock purchase agreement. **Please refer to Risk Factors.**

Commitment Shares and Signing Shares Issued to Fusion Capital

Under the terms of the July 8, 2005 common stock purchase agreement Fusion Capital received 691,598 shares of our common stock as a commitment fee. Under the terms of the January 20, 2006 common stock purchase agreement Fusion Capital received 374,753 shares of our common stock as a commitment fee. We also issued 20,000 shares of our common stock to Fusion Capital upon its signing of the term sheet on June 28, 2005. Except for the common stock purchase agreement with Fusion Capital we have no other relationship with Fusion Capital. However, Fusion Capital entered into a similar common stock purchase agreement with Phytomedical Technologies, Inc., a company whose majority stockholder, president, chief executive officer and chief financial officer is Harmel S. Rayat.

No Variable Priced Financings

Until the termination of the common stock purchase agreement, we have agreed not to issue, or enter into any agreement with respect to the issuance of, any variable priced equity or variable priced equity-like securities unless we have obtained Fusion Capital s prior written consent.

PRINCIPAL STOCKHOLDERS

The following table sets forth, as of January 13, 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. The percentage ownership shown in such table is based upon the 70,064,430 common shares outstanding at January 13, 2006, and ownership by these persons of options or warrants exercisable within 60 days of such date.

Person or Group	Number of Shares of Common Stock	Percent
Harmel S. Rayat (1) 216-1628 West First Avenue Vancouver, B.C. V6J 1G1 Canada	53,463,056	69%
Arian Soheili 216-1628 West First Avenue	0	0%

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.

On December 16 1998, Mr. Rayat was appointed our president and acquired 4,000,000 shares of our common stock directly from us and an additional 3,000,000 shares directly from our then president and majority stockholder. On July 12, 2001 our shareholder s approved a four for one forward split of our issued and outstanding common stock. This resulted in Mr. Rayat owning 28,000,000 shares of our common stock.

Mr. Rayat s subsequent purchases are summarized below:

- 8,933,332 shares purchased on July 13, 2001 in consideration of $134,000 for debt owed for management fees;

- 2,160,000 shares purchased on April 26, 2002 in consideration of $108,000 for debt owed for management fees;

- 1,920,000 shares purchased from us on July 18, 2002 in consideration of $84,000 for debt owed for management fees;

- 2,390,000 shares purchased on October 1, 2002 from EquityAlert.com Inc. in satisfaction of a debt for accrued and unpaid management fees in the amount of $120,000;*

* These shares were originally issued by us to Equity Alert on July 25, 2002 in consideration of certain

investor relations services, valued at $119,500, performed by Equity Alert form our benefit and account.

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

Management fees

During 2005, 2004 and 2003, we incurred $12,900, $9,500 and $28,500, respectively, in management fees to our directors. Management and consulting fees of $1,600 incurred in 2004 and $27,000 incurred in previous years are included in our accounts payable as at December 31, 2004.

Notes Payable

At a meeting held on May 28, 2003, our board of directors agreed to accept a loan commitment from Mr. Harmel S. Rayat, a director and our major stockholder agreed to loan us up to $750,000 on an as needed basis. The commitment has subsequently increased to $1,600,000. Proceeds from the loan are to fund our research and development commitments, legal and audit fees, ongoing investor and public relations costs and other working capital requirements.

In 2003, we drew down $725,000; the loan was reflected by unsecured promissory notes bearing interest at rates ranging from 7.00% to 7.25%. These notes and accrued and unpaid interest in the amount of $51,500 were paid in 2004.

On August 27, 2004, we again 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. On December 31, 2004 there was accrued and unpaid interest on the note of $7,187 is included in accounts payable. This note was repaid in January of 2005.

In December 2004, Mr. Rayat advanced, on our behalf, $700,000. We issued an unsecured promissory note bearing interest at a rate of prime plus 3% per annum and due on September 1, 2006.

In March 2005, Mr. Rayat advanced, on our behalf, $250,000. We issued an unsecured promissory note bearing interest at a rate of 8.50 % due on March 8, 2006.

In December 2005, Mr. Rayat advanced, on our behalf, $200,000. We issued an unsecured promissory note bearing interest at a rate of 8.50 % due on December 5, 2006.

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

Amounts payable to related parties

In 2004 we accrued $12,595 in payables to Mr. Harmel S. Rayat for miscellaneous of expenses (including travel expenses) paid or incurred on our behalf.

Rent Expenses

The Company's office is located at Suite 216, 1628 West 1st Avenue, Vancouver, British Columbia, Canada. A private corporation controlled by Mr. Rayat, our president and chief executive officer, chief financial officer, principal accounting officer and also one of our directors, owns these premises. We do not pay any rent for the premises. The fair value of the rent has not been included in our financial statements because the amount is immaterial.

Warrants

Of the 4,700,000 and 2,700,000 stock purchase warrants outstanding as at December 31, 2003 and 2004, respectively, unaffiliated members of Mr. Rayat s family held 2,700,000 and 2,700,000 stock purchase warrants, respectively, at a price of $0.025. In 2004, we received $50,000 from the exercise of 2,000,000 warrants by the holders of these warrants. The warrants were issued as part of an offering completed by us on March 19, 1999, in which we sold 3,000,000 units, each consisting of one share of common stock and one warrant to purchase one share of common stock at $0.10. Following the July 12, 2001, four for one forward stock split, the amounts were adjusted to 12,000,000 shares at a price of $0.025 per share, in order to reflect the stock split. The offering was completed pursuant to the exemption from the registration requirements of the Securities Act afforded by Regulation S as promulgated thereunder.

SELLING STOCKHOLDER

The following table presents information regarding the selling stockholder. Neither the selling stockholder nor any affiliate thereof has held a position or office, or had any other material relationship, with us. Fusion Capital may acquire additional shares under the common stock purchase agreement.

Selling Stockholders	Shares Beneficially Owned Before Offering	Percentage of Outstanding Shares Beneficially Owned Before Offering(A)	Shares to be Sold in the Offering	Percentage of Outstanding Shares Beneficially Owned After Offering(B)
Fusion Capital Fund II, LLC (C) 222 Merchandise Mart Plaza Suite 9-112 Chicago, IL 60654	1,086,351	1.5%	11,086,351	0%
TOTAL	1,086,351	1.5%	11,086,351	0%

A.

Percentage of outstanding shares is based on 70,439,183 shares of common stock outstanding as of January 20, 2006, which includes all shares of common stock beneficially owned by the selling stockholders before this offering.

B.

Percentage of outstanding shares is based on shares of common stock outstanding as of January 20, 2006, together with the 10,000,000 shares of common stock that may be purchased by Fusion Capital from us under the common

stock purchase agreement. The shares to be issued to Fusion Capital under the common stock purchase agreement are treated as outstanding for the purpose of computing Fusion Capital's percentage ownership. Fusion Capital may not purchase shares of our common stock under the common stock purchase agreement if Fusion Capital, together with its affiliates, would beneficially own more than 9.9% of our common stock outstanding at the time of the purchase by Fusion Capital. Fusion Capital has the right at any time to sell any shares purchased under the common stock purchase agreement, which would allow it to avoid the 9.9% limitation. Therefore, we do not believe that Fusion Capital will ever reach the 9.9% limitation.

C.

Steven G. Martin and Joshua B. Scheinfeld, the principals of Fusion Capital, are deemed to be beneficial owners of all of the shares of common stock owned by Fusion Capital. Messrs. Martin and Scheinfeld have shared voting and disposition power over the shares being offered under this prospectus.

PLAN OF DISTRIBUTION

The selling stockholder is offering the common stock offered by this prospectus. The common stock may be sold or distributed from time to time by the selling stockholders only for cash directly to one or more purchasers or through brokers, dealers, or underwriters who may act solely as agents at market prices prevailing at the time of sale, at prices related to the prevailing market prices, at negotiated prices, or at fixed prices, which may be changed. The sale of the common stock offered by this Prospectus may be effected in one or more of the following methods:

-

Ordinary brokers transactions;

-

Transactions involving cross or block trades;

-

Transactions through brokers, dealers, or underwriters who may act solely as agents;

-

Transactions at the market into an existing market for the common stock;

-

Transactions not involving market makers or established trading markets, including direct sales to purchasers or sales effected through agents;

-

In privately negotiated transactions; or

-

Any combination of the foregoing.

In order to comply with the securities laws of certain states, if applicable, the shares may be sold only through registered or licensed brokers or dealers. In addition, in certain states, the shares may not be sold unless they have been registered or qualified for sale in the state or an exemption from the registration or qualification requirement is available and complied with.

Brokers, dealers, underwriters, or agents participating in the distribution of the shares as agents may receive compensation in the form of commissions, discounts, or concessions from the selling stockholders and/or purchasers of the common stock for whom the broker-dealers may act as agent. The compensation paid to a particular broker-dealer may be less than or in excess of customary commissions.

Fusion Capital, the selling stockholder, is an "underwriter" within the meaning of the Securities Act of 1933, as amended.

Neither the selling stockholder nor we can presently estimate the amount of compensation that any agent will receive. We know of no existing arrangements between the selling stockholder, any other stockholders, broker, dealer, underwriter, or agent relating to the sale or distribution of the shares. At the time a particular offer of shares is made, a prospectus supplement, if required, will be distributed that will set forth the names of any agents, underwriters, or dealers and any compensation from the selling stockholder and any other required information.

We will pay the expenses incident to the registration, offering, and sale of the shares to the public other than commissions or discounts of underwriters, broker-dealers, or agents. We have also agreed to indemnify Fusion Capital against specified liabilities, including liabilities under the Securities Act of 1933, as amended.

Insofar as indemnification for liabilities arising under the Securities Act of 1933, as amended, may be permitted to our directors, officers, and controlling persons, we have been advised that in the opinion of the Securities and Exchange Commission this indemnification is against public policy as expressed in the Securities Act of 1933, as amended, and is therefore, unenforceable.

Fusion Capital and its affiliates have agreed not to engage in any direct or indirect short selling or hedging of our common stock during the term of the common stock purchase agreement.

We have advised the selling stockholder that while they are engaged in a distribution of the shares included in this prospectus they are required to comply with Regulation M promulgated under the Securities Exchange Act of 1934, as amended. With certain exceptions, Regulation M precludes the selling stockholder, any affiliated purchasers, and any broker-dealer or other person who participates in the distribution from bidding for or purchasing, or attempting to induce any person to bid for or purchase any security which is the subject of the distribution until the entire distribution is complete. Regulation M also prohibits any bids or purchases made in order to stabilize the price of a security in connection with the distribution of that security. All of the foregoing may affect the marketability of the shares offered hereby

this prospectus.

This offering will terminate on the date that all shares offered by this prospectus by Fusion Capital have been sold.

DISCLOSURE OF COMMISSION POSITION ON INDEMNIFICATION FOR SECURITIES ACT LIABILITIES

Our directors and officers are indemnified by our bylaws against amounts actually and necessarily incurred by them in connection with the defense of any action, suit or proceeding in which they are a party by reason of being or having been our directors or officers or of our subsidiaries. Our articles of incorporation provide that none of our directors or officers shall be personally liable for damages for breach of any fiduciary duty as a director or officer involving any act or omission of any such director or officer. Insofar as indemnification for liabilities arising under the Securities Act of 1933, as amended, may be permitted to such directors, officers and controlling persons pursuant to the foregoing provisions, or otherwise, we have been advised that in the opinion of the U.S. Securities & Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable.

In the event that a claim for indemnification against such liabilities, other than the payment by us of expenses incurred or paid by such director, officer or controlling person in the successful defense of any action, suit or proceeding, is asserted by such director, officer or controlling person in connection with the securities being registered, we will, unless in the opinion of counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

SHARES ELIGIBLE FOR RESALE

Sales of substantial amounts of our common stock in the public market following this offering could negatively affect the market price of our common stock. Such sales could also impair our future ability to raise capital through the sale of our equity securities.

At January 20, 2006, we had outstanding 70,439,183 shares of our common stock. Of these shares, approximately 15,399,500 shares are freely tradable by persons, other than "affiliates", without restriction under the Securities Act of 1933, as amended; and 54,664,930 shares are "restricted" securities, within the meaning of Rule 144 under the Securities Act of 1933, as amended, and may not be sold in the absence of registration under the Securities Act of 1933, as amended, unless an exemption from registration is available, including the exemption provided by Rule 144. On, January 20, 2006 our affiliate, Mr. Harmel S. Rayat, held 46,463,056 shares. Absent a registration statement covering the resale of such shares, the shares may only be sold pursuant to Rule 144. Mr. Rayat may purchase an additional 7,000,000 shares pursuant to outstanding stock options. Absent a registration statement covering the resale of such shares, when issued, these shares may be resold in a public transaction only pursuant to Rule 144.

In general, under Rule 144, a person or persons whose shares are aggregated, including any affiliate of ours who has beneficially owned restricted securities for at least one year, would be entitled to sell within any three-month period, a number of shares that does not exceed 1% of the number of common stock then outstanding.

Sales under Rule 144 are also subject to manner of sale and notice requirements and to the availability of current public information about us. Under Rule 144(k), a person who is not considered to have been an affiliate of ours at any time during the 90 days preceding a sale, and who has beneficially owned restricted securities for at least two years, including the holding period of any prior owner except an affiliate of ours, may sell these shares without following the terms of Rule 144.

DESCRIPTION OF CAPITAL STOCK

General

We are authorized to issue 300,000,000 shares of common stock, $0.001 par value per share, and 1,000,000 shares of undesignated preferred stock, $0.10 par value per share.

Common Stock

As of January 20, 2006, there were 70,439,183 shares of common stock outstanding we had 63 stockholders of record as of January 13, 2006. All of the issued and outstanding shares of common stock on January 20, 2006, were fully paid and non-assessable.

The holders of our common stock are entitled to one vote per share on all matters to be voted on by the stockholders. Subject to preferences that may be applicable to any shares of preferred stock that may be outstanding from time to time, holders of common stock are entitled to receive ratably such dividends as may be declared by the board of directors out of funds legally available therefore. In the event we liquidate, dissolve or wind up, holders of common stock are entitled to share ratably in all assets remaining after payment of liabilities and the liquidation preferences of any outstanding shares of preferred stock. Holders of common stock have no preemptive, conversion, or subscription rights. There are no redemption or sinking fund provisions applicable to the common stock. All then outstanding shares of common stock are, and all shares of common stock to be outstanding upon completion of this offering will be, fully paid and non-assessable.

Preferred Stock

Under our articles of incorporation, our board of directors has the authority, without further action by our stockholders, to issue up to 1,000,000 shares of preferred stock in one or more series and to fix the rights, preferences, privileges, qualifications and restrictions granted to or imposed upon such preferred stock, including dividend rights, conversion rights, voting rights, rights and terms of redemption, liquidation preference and sinking fund terms, any or all of which may be greater than the rights of the common stock. The issuance of preferred stock could adversely affect the voting power of holders of common stock and reduce the likelihood that such holders will receive dividend payments and payments upon liquidation. Such issuance could have the effect of decreasing the market price of the common stock. The issuance of preferred stock or even the ability to issue preferred stock could also have the effect of delaying, deterring or preventing a change in control. We have no present plans to issue any shares of preferred stock.

Options

As of January 20, 2006, 16,848,000 options for shares were outstanding under our approved stock option plan and 20,925,000 shares were available for future grants under our stock option plan. Holders of

options do not have any of the rights or privileges of our stockholders, including voting rights, prior to exercise of the options. The number of shares of common stock for which these options are exercisable and the exercise price of these options are subject to proportional adjustment for stock splits and similar changes affecting our common stock. We have reserved sufficient shares of authorized common stock to cover the issuance of common stock subject to the options.

Registrar and Transfer Agent

The registrar and transfer agent for our securities Holladay Stock Transfer, Inc., located at 2939 North 67th Place, Suite C, Scottsdale, AZ 85251.

Registration Rights

In connection with the January 20, 2006, Fusion Capital transaction (See Fusion Capital Transaction), we entered into a registration rights agreement with Fusion Capital. Pursuant to the terms of the registration rights agreement, we are obligated to file a registration statement with the Securities and Exchange Commission covering shares which may be purchased by or which have been issued to Fusion Capital under the purchase agreement.

Limitation of Liability; Indemnification

A Florida corporation may indemnify any person who may be a party to any third party proceeding by reason of the fact that such person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee, or agent of another entity, against liability incurred in connection with such proceeding (including any appeal thereof) if he or she acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, the best interests of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful.

A Florida corporation is permitted to indemnify any person who may be a party to a derivative action if such person acted in any of the capacities set forth in the preceding paragraph, against expenses and amounts paid in settlement not exceeding, in the judgment of the board of directors, the estimated expenses of litigating the proceeding to conclusion, actually and reasonably incurred in connection with the defense or settlement of such proceeding (including appeals), provided that the person acted under the standards set forth in the preceding paragraph. However, no indemnification

shall be made for any claim, issue, or matter for which such person is found to be liable unless, and only to the extent that, the court determines that, despite the adjudication of liability, but in view of all the circumstances of the case, such person is fairly and reasonably entitled to indemnification for such expenses which the court deems proper.

Any indemnification made under the above provisions, unless pursuant to a court s determination, may be made only after a determination that the person to be indemnified has met the standard of conduct described above. This determination is to be made by a majority vote of a quorum consisting of the disinterested directors of the board of directors, by duly selected independent legal counsel, or by a majority vote of the disinterested stockholders. The board of directors also may designate a special committee of disinterested directors to make this determination. Notwithstanding the foregoing, a Florida corporation must indemnify any director, officer, employee or agent of a corporation who has been successful in the defense of any proceeding referred to above.

Generally, a director of a Florida corporation is not personally liable for monetary damages to our company or any other person for any statement, vote, decision, or failure to act, regarding corporate management or policy, unless: (a) the director breached or failed to perform his duties as a director; and (b) the director s breach of, or failure to perform, those duties constitutes (i) a violation of criminal law, unless the director had reasonable cause to believe his conduct was lawful or had no reasonable cause to believe his conduct was unlawful, (ii) a transaction from which the director derived an improper personal benefit, either directly or indirectly, (iii) an approval of an unlawful distribution, (iv) with respect to a proceeding by or in the right of the company to procure a judgment in its favor or by or in the right of a stockholder, conscious disregard for the best interest of the company, or willful misconduct, or (v) with respect to a proceeding by or in the right of someone other than the company or a stockholder, recklessness or an act or omission which was committed in bad faith or with malicious purpose or in a manner exhibiting wanton and willful disregard of human rights, safety, or property. The term recklessness, as used above, means the action, or omission to act, in conscious disregard of a risk: (a) known, or so obvious that it should have been known, to the directors; and (b) known to the director, or so obvious that it should have been known, to be so great as to make it highly probable that harm would follow from such action or omission.

Furthermore, a Florida corporation is authorized to make any other further indemnification or advancement of expenses of any of its directors, officers, employees or agents under any bylaw, agreement, vote of stockholders or disinterested directors, or otherwise, both for actions taken in an official capacity and for actions taken in other capacities while holding such office. However, a corporation cannot indemnify or advance expenses if a judgment or other final adjudication establishes that the actions of the director, officer, employee, or agent were material to the adjudicated cause of action and the director, officer, employee, or agent (a) violated criminal law, unless the director, officer, employee, or agent had reasonable cause to believe his or her conduct was unlawful, (b) derived an improper personal benefit from a transaction, (c) was or is a director in a circumstance where the liability for unlawful distributions applies, or (d) engaged in willful misconduct or conscious disregard for the best interests of the corporation in a proceeding by or in right of the corporation to procure a judgment in its favor or in a proceeding by or in right of a stockholder.

We have adopted provisions in our articles of incorporation and bylaws providing that our directors, officers, employees, and agents shall be indemnified to the fullest extent permitted by Florida law. Additionally, our bylaws permit us to secure insurance on behalf of any officer, director, employee, or other agent for any liability arising out of his or her actions in connection with their services to us, regardless of whether our articles or incorporation or bylaws permit such indemnification. We have not yet obtained any such insurance.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to our directors or officers pursuant to the foregoing provisions, or otherwise, we have been advised that in the opinion of the Securities Exchange Commission, this indemnification is against public policy as expressed in the Securities Act, and is therefore unenforceable.

There is no pending litigation or proceeding involving any of our directors, officers, employees, or other agents as to which indemnification is being sought, nor are we aware of any pending or threatened litigation that may result in claims for indemnification by any director, officer, employee, or other agent.

Potential Anti-Takeover Effect of Provisions of Florida Law

We are subject to several anti-takeover provisions under Florida law that apply to public corporations organized under Florida law, unless the corporation has elected to opt out of those provisions in its articles of incorporation or bylaws. We have not elected to opt out of those provisions. The FBCA prohibits the voting of shares in a publicly-held Florida corporation that are acquired in a control share acquisition unless the holders of a majority of the corporation s voting shares (exclusive of shares held by officers of the corporation, inside directors, or the acquiring party) approve the granting of voting rights as to the shares acquired in the control share acquisition. A control share acquisition is defined in the FBCA as an acquisition that immediately thereafter entitles the acquiring party to vote in the election of directors within each of the following ranges of voting power: one-fifth or more but less than one-third of such voting power, one-third or more but less than a majority of such voting power, and more than a majority of such voting power. However, an acquisition of a publicly held Florida corporation s shares is not deemed to be a control-share acquisition if it is either (i) approved by such corporation s board of directors, or (ii) made pursuant to a merger agreement to which such Florida corporation is a party. Given that Mr. Harmel Rayat beneficially owns approximately 69% of our issued and outstanding shares (61% of all of the offered shares are sold), it is not likely that a third party will be able to effect a control share acquisition.

The FBCA also contains an affiliated transaction provision that prohibits a publicly-held Florida corporation from engaging in a broad range of business combinations or other extraordinary corporate transactions with any person who, together with affiliates and associates, beneficially owns more than 10% of the corporation s outstanding voting shares, otherwise referred to as an interested stockholder, unless:

-

the transaction is approved by a majority of disinterested directors before the person becomes an interested stockholder,

-

the interested stockholder has owned at least 80% of the corporation s outstanding voting shares for at least five years, or

-

the transaction is approved by the holders of two-thirds of the corporation s voting shares other than those owned by the interested stockholder.

Potential Anti-Takeover Effect of our Articles of Incorporation and Bylaws

Our articles of incorporation permits our board of directors to issue up to 1,000,000 shares of preferred stock, with such rights, preferences, privileges, and restrictions as are fixed by the board of directors. This gives our board of directors the ability to issue shares of preferred stock which could include the right to approve or not approve an acquisition or other transaction that could result in a change in control.

EXPERTS

Moore Stephens Ellis Foster Ltd., an independent registered public accounting firm, audited our balance sheets as of December 31, 2004 and 2003, and the statements of operations, stockholders' deficits and cash flows for the years ended December 31, 2004 and 2003. These financial statements are included in this prospectus in reliance on their report, given their authority as experts in accounting and auditing.

Clancy and Co., P.L.L.C., an independent registered public accounting firm, audited our statements of operations, stockholders' equity, and cash flows for the year ended December 31, 2002. These financial

statements are included in this prospectus in reliance on their report, given their authority as experts in accounting and auditing.

LEGAL MATTERS

Sierchio Greco & Greco, LLP will pass upon the validity of the issuance of the common stock offered hereby for us.

AVAILABLE INFORMATION

We currently file, quarterly and annual reports with the U.S. Securities & Exchange Commission on forms 8-K, 10-Q and 10-K (commencing with the fiscal year ended December 31, 2005). We have filed with the U.S. Securities & Exchange Commission under the Securities Act of 1933 a registration statement on Form S-1 with respect to the shares being offered in this offering. This prospectus does not contain all of the information set forth in the registration statement, certain items of which are omitted in accordance with the rules and regulations of the U.S. Securities & Exchange Commission. The omitted information may be inspected and copied at the Public Reference Room maintained by the U.S. Securities & Exchange Commission at 100 F Street, N.E., Washington, D.C. 20549. You can obtain information about operation of the Public Reference Room by calling the U.S. Securities & Exchange Commission at 1-800-SEC-0330. The U.S. Securities & Exchange Commission also maintains an Internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the U.S. Securities & Exchange Commission at http://www.sec.gov. Copies of such material can be obtained from the public reference section of the U.S. Securities & Exchange Commission at prescribed rates. Statements contained in this prospectus as to the contents of any contract or other document filed as an exhibit to the registration statement are not necessarily complete and in each instance reference is made to the copy of the document filed as an exhibit to the registration statement, each statement made in this prospectus relating to such documents being qualified in all respects by such reference.

For further information with respect to us and the securities being offered hereby, reference is hereby made to the registration statement, including the exhibits thereto and the financial statements, notes, and schedules filed as a part thereof.

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FINANCIAL STATEMENTS

Index To Financial Statements

AUDITED FINANCIAL STATEMENTS

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HEPALIFE TECHNOLOGIES, INC.
(A Development Stage Company)

INTERIM BALANCE SHEETS
September 30, 2005 and December 31, 2004
(Unaudited)
(Basis of Presentation - Note 1)

(Expressed in U.S. Dollars)	**September 30, 2005**	**December 31, 2004**
ASSETS		
Current assets		
Cash	$50,203	$613,523
Total current assets	50,203	613,523
Equipment, net (Note 6)	436	828
Total assets	$50,639	614,351
LIABILITIES		
Current		
Accounts payable and accrued liabilities	$202,054	$100,243
Accounts payable - related parties (Note 4)	82,603	53,059
Notes payable - related party (Note 4)	950,000	1,000,000
Total liabilities	1,234,657	1,153,302
STOCKHOLDERS' DEFICIENCY		
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: 70,024,430 (2004: 67,817,832)	70,025	67,818
Additional paid-in capital	3,736,495	3,141,002
Loss accumulated during the development stage	(4,990,538)	(3,747,771)
Total stockholders' deficiency	(1,184,018)	(538,951)
Total liabilities and stockholders' deficiency	$50,639	$614,351

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

HEPALIFE TECHNOLOGIES, INC.

(A Development Stage Company)

INTERIM STATEMENTS OF OPERATIONS

for the three and nine months ended September 30, 2005 and 2004

and from Inception (October 21, 1997) to September 30, 2005

(Unaudited)

	Three months ended September 30,		Nine months ended September 30,		From Inception (October 21, 1997) to September 30,
(Expressed in U.S. Dollars)	2005	2004	2005	2004	2005
Revenue	$-	$-	$-	$-	-
Expenses					
Management and consulting fees (Note 4)	$15,714	$5,080	$26,765	$5,080	936,079
Investors relations	26,115	107,531	705,330	248,131	2,801,749
Other operating expenses	167,830	82,936	318,053	161,447	807,980
Research and development expenses	65,423	-	196,269	20,700	480,715
	275,082	195,547	1,246,417	435,358	5,026,523
Operating Loss	(275,082)	(195,547)	(1,246,417)	(435,358)	(5,026,523)
Other income and expenses					
Interest income	1,427	301	3,650	1,181	35,985
	1,427	301	3,650	1,181	35,985
Net loss available to common shareholders	(273,655)	(195,246)	(1,242,767)	(434,177)	(4,990,538)
	$(0.004)	$(0.003)	$(0.018)	$(0.007)	$(0.108)

Loss per share - basic and diluted (Note 3)					
Weighted average number of common shares outstanding - basic and diluted	69,941,739	64,612,517	69,063,819	64,415,011	46,387,894

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

HEPALIFE TECHNOLOGIES, INC.

(A Development Stage Company)

INTERIM STATEMENT OF STOCKHOLDERS' DEFICIENCY

from Inception (October 21, 1997) to September 30, 2005

(Unaudited)

(Expressed in U.S. Dollars)	Common Stock Shares	Common Stock 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 16 1998	16,000,000	16,000	384,000	-	400,000

Comprehensive income (loss)					
Net loss	-	-	-	(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)					
Net loss	-	-	-	(121,045)	(121,045)
Balance, December 31, 1999	41,200,000	41,200	736,800	(592,991)	185,009

Comprehensive income (loss)					
Net loss	-	-	-	(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)					
Net loss	-	-	-	(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)					
Net loss	-	-	-	(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)					
Net loss	-	-	-	(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)					
Net loss	-	-	-	(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 at $3.10 per share	50,000	50	154,950	-	155,000
Common stock issued pursuant to exercise of stock options at $2.11 per share	195,000	195	411,255	-	411,450

Common stock issued pursuant to exercise of share purchase warrants at $0.025 per share	1,250,000	1,250	30,000	-	31,250
Restricted common stock issued pursuant to share purchase agreement	711,598	712	(712)	-	(0)
Comprehensive income (loss)					
Net loss	-	-	-	(1,242,767)	(1,242,767)
Balance, September 30, 2005	70,024,430	$70,025	$ 3,736,495	$ (4,990,538)	$ (1,184,018)

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

HEPALIFE TECHNOLOGIES, INC.

(A Development Stage Company)

INTERIM STATEMENTS OF CASH FLOWS

for the nine months ended September 30, 2005 and 2004

and from Inception (October 21, 1997) to September 30, 2005

(Unaudited)

	Nine months ended September 30,		From Inception (October 21, 1997) to September 30,
(Expressed in U.S. Dollars)	2005	2004	2005
Cash flows from (used in) operating activities			
Net loss for the period	$(1,242,767)	$(434,177)	$(4,990,538)
Adjustments for items not involving cash:			
Depreciation	392	131	4,124
Common stock issued for services	-	-	523,100
Conversion of debt to equity	-	-	338,000
Change in non cash working capital items:			
Increase (decrease) in accounts payable	131,355	(28,148)	
Net cash flows used in operating activities	(1,111,020)	(462,194)	(3,840,657)
Cash flows used in investing activities			
Purchase of property and equipment	-	(1,090)	(4,560)
Net cash flows used in investing activities	-	(1,090)	(4,560)
Cash flows from financing activities			

Proceed from issuance of common stock	597,700	595,650	2,945,420
Proceed from promissory notes - related party	-	300,000	-
Proceed (repayment) from promissory notes	(50,000)	(650,000)	950,000
Net cash flows provided by financing activities	547,700	245,650	3,895,420
Increase (decrease) in cash	(563,320)	(217,634)	50,203
Cash, beginning of period	613,523	312,201	-
Cash, end of period	$50,203	$ 94,567	$50,203
Supplemental disclosure of cash flow information:			
Interest paid in cash	$-	$-	$51,909
Income tax paid in cash	$-	$-	$ -
Non-cash Investing and Financing Activities:			
Conversion of debt to equity	$-	$-	$338,000
Common stock issued for services	$-	$-	$523,100

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

HEPALIFE TECHNOLOGIES, INC.

(A Development Stage Company)

NOTES TO INTERIM FINANCIAL STATEMENTS

SEPTEMBER 30, 2005

(Unaudited)

(Expressed in US Dollars)

NOTE 1 BASIS OF PRESENTATION GOING CONCERN UNCERTAINITIES

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 2005. The satisfaction of our cash 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 10). 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.

NOTE 2 STATEMENT OF INFORMATION FURNISHED

The accompanying unaudited interim financial statements have been prepared in accordance with Form 10-Q instructions and in the opinion of management contains all adjustments necessary to present fairly the financial

position as of September 30, 2005 and December 31, 2004, and the results of operations for three and nine months ended September 30, 2005 and 2004 and cash flows for the nine months ended September 30, 2005 and 2004. These results have been determined on the basis of generally accepted accounting principles and practices in the United States and applied consistently with those used in the preparation of the Company's 2004 Annual Report on Form 10-KSB.

Certain information and footnote disclosure normally included in the financial statements presented in accordance with generally accepted accounting principles in the United States have been condensed or omitted. It is suggested that the accompanying financial statements be read in conjunction with the accompanying financial statements and notes thereto incorporated by reference in the Company's 2004 Annual Report on Form 10-KSB.

NOTE 3 - LOSS PER SHARE

Basic earnings or loss per share is based on the weighted average number of common shares outstanding. Diluted earnings or loss per share is based on the weighted average number of common shares outstanding and dilutive common stock equivalents. The computation of earnings (loss) per share is net loss available to common stockholders (numerator) divided by the weighted average number of common shares outstanding (denominator) during the periods presented. All earnings or 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 loss per share does not differ materially from basic loss per share for all periods presented. Convertible securities that could potentially dilute basic loss per share in the future are not included in the computation of diluted loss per share because to do so would be

antidilutive. All per share and per share information are adjusted retroactively to reflect stock splits and changes in par value, when applicable.

The computation of basic and diluted loss per share is as follows:

	Three months ended September 30,		Nine months ended September 30,		Cumulative from inception (October 21, 1997) to September 30,
	2005	2004	2005	2004	2005
Numerator - net loss available to common stockholders	$(273,655)	$(195,246)	$(1,242,767)	$(434,177)	$(4,990,538)
Denominator - weighted average number of common shares outstanding	69,941,739	64,612,517	69,063,819	64,415,011	46,387,894
Basic and diluted loss per common shares	$(0.004)	$(0.003)	$(0.018)	$(0.007)	$(0.108)

NOTE 4 RELATED PARTY TRANSACTIONS

Management Fees: During the three months ended September 30, 2005 and 2004, the Company paid management fees of $7,500 and $3,800 to the directors respectively. During the nine months ended September 30, 2005 and 2004, the Company paid management fees of $11,300 and $3,800 to the directors respectively. As of September 30, 2005, the Company included $27,000 in the accounts payable as management fees payable to a director for his services. There is no management or consulting agreement in effect nor is there an agreement in place to convert debt to equity.

Notes Payable and Accrued Interest: As of September 30, 2005, notes payable of $950,000 was made up from unsecured loans of $250,000 and $700,000, both bearing interest at the rate of 8.50%, due to a director and major shareholder of the Company. The entire amounts of principal and interest accrued are due and payable on demand. Accrued and unpaid interest on these notes during the three and nine month period ended September 30, 2005, amounted to $20,353 and $57,847 respectively.

Properties: The Company's office is located at Suite 216, 1628 West 1st Avenue, Vancouver, BC, V6J 1G1. These premises are owned by a private corporation controlled by a director and majority shareholder 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 involved is immaterial.

NOTE 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 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 August 2005);
- $65,422.80 on or before 5/1/05 (included in accounts payable);
- $65,422.80 on or before 8/1/05 (included in accounts payable);

- $65,422.80 on or before 11/1/05;
- $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 September 30, 2005, total payments of $480,715 have been paid/accrued.

As amended, the Company, instead of 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 licence 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 licence 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.

NOTE 6 EQUIPMENT

	September 30, 2005	December 31, 2004
Computer equipment	$3,471	$3,471
furniture and fixtures	1,089	1,089
	4,560	4,560
Less: accumulated depreciation	(4,124)	(3,732)
	$436	$828

Depreciation expenses charged to operations for the three-month and nine-month periods ended September 30, 2005 were $131 (2004: $131) and $392 (2004: $131) respectively.

NOTE 7 COMMON STOCK

During the quarter ended September 30, 2005, the Company issued 691,598 shares of its common stock to Fusion Capital Fund II, LLC according to the Common Stock Purchase Agreement. The Company had issued 20,000 shares of its common stock to Fusion Capital in June 2005. See Note 10 for further details.

NOTE 8 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, June 30, 2005 and December 31, 2004	2,700,000	0.025
Exercised	(1,250,000)	0.025
Expired	(1,450,000)	0.025
Balance, September 30, 2005	-	

As of September 30, 2005, there are no outstanding share purchase warrants.

NOTE 9 - STOCK OPTIONS

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.

In the nine-month period ended September 30, 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.

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:-

	Three months ended September 30,		Nine months ended September 30,	
	2005	2004	2005	2004
Net loss as reported:	$(273,655)	$(195,246)	$(1,242,767)	$(434,177)
Stock-based employee compensation expense as determined under the fair value based method	-	-	(10,320,000)	(901,242)
Pro-forma net loss	$(273,655)	$(195,246)	$(11,562,767)	$(1,335,419)
Net loss per share - basic and diluted:				
As reported	$(0.004)	$ (0.003)	$(0.018)	$ (0.007)
Pro-forma	$(0.004)	$ (0.003)	$(0.167)	$(0.021)

The weighted average fair value of options granted in the nine-month period ended September 30, 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 93%, risk-free interest rate of 3.5% and expected lives of three years.

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
Balance, September 30, 2005	17,133,000	1.311

No options were granted, cancelled or exercised during the three-month period ended September 30, 2005.

The weighted average remaining contractual life of the outstanding stock options at September 30, 2005 is 8.16 years.

NOTE 10 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). Pursuant to the terms of the Purchase Agreement, the Company issued to Fusion Capital 711,598 shares of its common stock, which Fusion Capital has agreed to hold for thirty months. 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.

Once the Registration Statement has been declared effective, each trading day during the term of the 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. 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.

This offering was made pursuant to an exemption from registration provided by Section 4(2) of the Securities Act, 1933, as amended.

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

MOORE STEPHENS ELLIS FOSTER LTD.

CHARTERED ACCOUNTANTS

1650 West 1st Avenue

Vancouver, BC Canada V6J 1G1

Telephone: (604) 734-1112 Facsimile: (604) 714-5916

Website: www.ellisfoster.com

REPORT OF INDEPENDENT AUDITORS

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, 2003 and the related statements of stockholders equity (deficiency), operations and deficit and cash flows for the year ended December 31, 2003. 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. We did not audit the cumulative data from October 21, 1997 (inception) to December 31, 2002 in the statements of stockholders equity, operations and cash flows, which were audited by other auditors whose report, dated March 3, 2003, which 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, 2003 and the results of its operations and its cash flows for the year then ended 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 the matters that raise substantial doubt about the Company s ability to continue as a going concern 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, 2004

Chartered Accountants

2002 AUDITOR LETTER

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of

Hepalife Technologies, Inc. (formerly Zeta Corporation)

We have audited the accompanying statements of operations, changes in stockholders equity, and cash flows for the year ended December 31, 2002 and the cumulative data from October 21, 1997 (inception) to December 31, 2002, of Hepalife Technologies, Inc. (formerly Zeta Corporation) (a development stage company, the Company), a Florida Corporation. These financial statements are the responsibility of the Company s management. Our responsibility is to express an opinion on these statements based on our audit.

We conducted our audit, 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. 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 provides a reasonable basis for our opinion.

In our opinion the financial statements referred to above present fairly, in all material respects, the Company s results of operations and its cash flows for the year ended December 31, 2002, and the cumulative data from October 21, 1997 (inception) to December 31, 2002, in conformity with generally accepted accounting principles in the United States.

The accompanying financial statements have been prepared assuming the Company will continue as a going concern. As discussed in Note 2 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 inception resulting in a substantial accumulated deficit. The Company is devoting substantially all of its present efforts in establishing its business. Management s plans regarding the matters that raise substantial doubt about the Company s ability to continue as a going concern are also disclosed in Note 2 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 factors raise substantial

doubt about its ability to continue as a going concern. These financial statements do not include any adjustments that might result from the outcome of this uncertainty.

Clancy and Co., P.L.L.C.

Phoenix, Arizona

March 3, 2003

HEPALIFE TECHNOLOGIES, INC.

BALANCE SHEET

DECEMBER 31, 2004 and 2003

	Years Ended December 31	
	2003	2004
ASSETS		
Current Assets		
Cash	$312,201	$613,523
Total Current Assets	312,201	613,523
Equipment , net	-	828
Total Assets	$312,201	$614,351
LIABILITIES AND STOCKHOLDERS' (DEFICIENCY)		
Current Liabilities		
Accounts Payable and Accrued Liabilities	$82,159	$100,243
Accounts Payable and Accrued Liabilities Related Party	-	53,059
Notes Payable Related Party	725,000	1,000,000
Total Current Liabilities	807,159	1,153,302
Stockholders' Equity (Deficiency)		
Preferred Stock: $0.10 Par Value; Authorized Shares, 1,000,000 shares; Issued and Outstanding, None	-	-
Common Stock: $0.001 Par Value; Authorized Shares, 300,000,000; Issued and Outstanding, 69,167,832 Shares	64,196	67,818
Additional Paid In Capital	1,753,004	3,141,002
Loss Accumulated During the Development Stage	(2,312,158)	(3,747,771)
Total Stockholders' Equity (Deficiency)	(494,958)	(538,951)

Total Liabilities and Stockholders	Equity (Deficiency)	$312,201	$614,351

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

HEPALIFE TECHNOLOGIES, INC.

STATEMENTS OF OPERATIONS

FOR THE YEARS ENDED DECEMBER 31, 2004, 2003 AND 2002
AND FROM INCEPTION (OCTOBER 21, 1997) TO DECEMBER 31, 2004

	Years Ended December 31			Cumulative Amount Since Inception to
	2002	2003	2004	December 31, 2004
Revenues	$0	$0	$0	$0
General and administrative				
Management fees and consulting fees Related party	144,600	28,500	9,500	909,314
Investor Relations	119,500	960,003	1,016,916	2,096,419
Other operating expense	21,823	73,767	259,572	489,927
Research and Development	91,500	41,400	151,546	284,446
Total General and Administrative Expenses	377,423	1,103,670	1,437,534	3,780,106
Other Income				
Interest Income	(1,951)	(947)	(1,921)	(32,335)
Provision for Income Taxes	-	-	-	-
Net Loss Available to Common Stockholders	($375,472)	($1,102,723)	($1,435,613)	($3,747,771)
Basic and Diluted Loss Per Common Share	($0.01)	($0.02)	($0.02)	
Weighted Average Common Shares Outstanding	52,723,277	57,817,305	64,610,777	

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

HEPALIFE TECHNOLOGIES, INC.

STATEMENT OF STOCKHOLDERS EQUITY (DEFICIENCY)

	Common shares		Additional paid-in capital	Loss accumulated during development stage	Total stock-holders' equity (deficiency)
	Shares	Amount			
Common stock issued for services 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 services rendered at $0. 025 per share, December 16 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 13, 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 at 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)

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, 2004, 2003 AND 2002

	Years Ended December 31		
	2002	2003	2004
Cash Flows From (Used In) Operating Activities			
Net Loss for the Period	($375,472)	($1,102,723)	($1,435,613)
Adjustments to Reconcile Net Loss to Net Cash Used In Operating Activities			
Common Stock Issued For Services	120,100	-	-
Depreciation	1,153	583	261
Conversion of Debt to Equity	204,000	-	-
Changes in Assets and Liabilities			
Increase (Decrease) in Accounts Payable	(57,910)	79,639	18,084
Increase (Decrease) in Accounts Payable Related Parties	-	-	53,059
Net Cash Flows Used In Operating Activities	(108,129)	(1,022,501)	(1,364,209)
Cash Flows From Investing Activities			
Purchase of Property and Equipment	-	-	(1,089)
Net Cash Flows Used In Investing Activities	-	-	(1,089)
Cash Flows From (Used In) Financing Activities			
Net Proceed From Notes Payable	-	725,000	275,000
Proceed From Issuance of Common Stock	-	581,100	1,391,620
Net Cash Flows Provided By Financing Activities	-	1,306,100	1,666,620
Increase (Decrease) in Cash and Cash Equivalents	(108,129)	283,599	301,322
Cash and Cash Equivalents, Beginning of Period	136,731	28,602	312,201
Cash and Cash Equivalents, End of Period	$28,602	$312,201	$613,523

Supplemental Information			
Cash paid for:			
Interest	$-	$-	$51,909
Income Taxes	$-	$-	$-
Noncash investing and financing activities:			
Conversion of debt to equity	$204,000	$-	$-
Common Stock Issued For Services	$120,100	$-	$-

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

HEPALIFE TECHNOLOGIES, INC.

NOTES TO FINANCIAL STATEMENTS

DECEMBER 31, 2004

1. Organization and Nature of Operations

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 12, 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.

The accompanying financial statements have been prepared in conformity with generally accepted accounting principles, which contemplates continuation of the Company as a going concern. However, the Company has sustained substantial operating losses since inception resulting in a substantial accumulated deficit and has used substantial amounts of working capital in its operations. In view of these matters, the continued operations of the Company is dependent upon the Company s ability to meet its financing requirements, and the success of its future operations. The Company expects to incur losses as it expands its business and will require additional funding during 2005.

To meet these objectives, the Company plans to seek additional equity and expects to raise funds through a private or public equity investment in order to support existing operations and expand the range and scope of its business. There is no assurance that such additional funds will be available for the Company on acceptable terms, if at all. The Company anticipates that its major stockholder will contribute sufficient funds to satisfy the cash needs of the Company through calendar year ending December 31, 2005, however, there can be no assurances to that effect. If adequate funds are not available or not available on acceptable terms, the Company may be (i) unable to fund further research and operating plans, (ii) required to scale back or abandon our research and product development activities, (iii) reduce our workforce, and (iv) license to others products or technologies we would otherwise seek to commercialize ourselves, all of which could have a material adverse effect on our business, results of operations and financial condition. Management believes that actions presently taken to revise the Company s operating and financial requirements provide the opportunity for the Company to continue as a going concern. The Company s ability to achieve these objectives cannot be determined at this time.

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, 2004.

(d) Equipment and Depreciation

Property and equipment, stated at cost and are depreciated under the straight-line method over their estimated useful lives. Repairs and maintenance 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 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 and per share information are adjusted retroactively to reflect stock splits and changes in par value.

(i) Advertising Expenses

The Company expensed advertising costs as incurred. The Company did not incur any advertising costs during the years ended December 31, 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.

(k) Comprehensive Income

The Company adopted Statement of Financial Accounting Standards No. 130 (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 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 did not have any goodwill or intangible assets with indefinite or definite life since its inception.

(n) Impairment of Long-Lived Assets

Long-lived assets of the Company are reviewed for impairment when changes circumstances require as to whether their carrying value has become impaired, pursuant to guidance established in the Statement of Fianncial Accounting Standards No 144 (SFAS 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

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 cash equivalents and accounts payable and accrued liabilities approximate their fair value because of the short-term nature of these instruments. The Company places its cash and cash equivalents with high credit quality financial institutions.

The Company operates outside of the United States of America and is exposed to foreign currency risk due to the fluctuation between the currency in which the Company operates in and the U.S. dollar.

(p) Accounting for Derivative Instruments and Hedging Activities

The Company adopted Statement of Financial Accounting Standards Board No. 133 (SFAS 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) New Accounting Pronouncements

In November 2004, the FASB issued SFAS No. 151, *Inventory Costs-an amendment of ARB No. 43, Chapter 4* , which is the result of the FASB s project to reduce differences between U.S. and international accounting standards. SFAS No. 151 requires idle facility costs, abnormal freight, handling costs, and amounts of wasted materials (spoilage) be treated as current-period costs. Under this concept, if the costs associated with the actual level of spoilage or production defects are greater than the costs associated with the range of normal spoilage or defects, the difference would be charged to current-period expense, not included in inventory costs. SFAS No. 151 will be effective for inventory costs incurred during fiscal years beginning after June 15, 2005. The adoption of SFAS No. 151 will not have a material impact on the Company s financial statements.

In December 2004, the FASB issued SFAS No. 153, *Exchanges of Nonmonetary Assets*, *an amendment of APB* No. 29*, Accounting for Nonmonetary Transactions*. SFAS No. 153 requires exchanges of productive assets to be accounted for at fair value, rather than at carryover basis, unless (1) neither the asset received nor the asset surrendered has a fair value that is determinable within reasonable limits or (2) the transactions lack commercial substance. SFAS 153 is effective for nonmonetary asset exchanges occurring in fiscal periods beginning after June 15, 2005. The adoption of FASB No. 153 will not have a material impact on the Company s financial statements.

In December 2004, the FASB issued SFAS No. 123(R), *"Accounting for Stock-Based Compensation".* 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 16 2005. The adoption of FASB No. 123(R), will not have a material impact on the Company s financial statements.

3. Equipment

	2004
Computer equipment	$3,471
Furniture and fixtures	1,089
	4,560
Less: Accumulated depreciation	(3,732)
	$828

Depreciation expense charged to operations during 2004 was $261 (2003 $583; 2002-$1,153).

4. Related Party Transactions

(a) Management fees

During 2004, the Company incurred $9,500 (2003 $28,500; 2002-$144,600) in management fees to directors of the Company. Included in accounts payable related parties at December 31, 2004 is management and consulting fees of $1,600 incurred in 2004 and $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 director and major stockholder of the Company. 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.

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.

Accrued interest as at December 31, 2004 of $7,187 is included in accounts payable related parties.

In December 2004, the same director and major stockholder of the Company paid $700,000 in investor relation fees on behalf of the Company. For reimbursement, the Company issued an unsecured promissory note bearing interest at a rate of prime plus 3% per annum and due on September 1, 2006.

(c) Amounts payable to related parties

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

(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 private corporation of the same director and officer of the Company in note 4b. 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.

(e) Warrants

All 2,700,000 warrants outstanding as at December 31, 2004 (2003 4,700,000) (see Note 7), are held by family members of the same director and majority stockholder in note 4b.

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 Agricultural Research Service (ARS), and committed a total payment of $292,727 to ARS over two year period ending February 19, 2005.

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

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

As at December 31, 2004, total payments of $284,446 have been paid/accrued.

As amended, the Company, instead of 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 a post-doctoral research associate. 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

In November 2003, 7,300,000 of these warrants were exercised into common share for total proceeds of $182,500.

In December 2004, 2,000,000 warrants were exercised into common share for total proceeds of $50,000.

Share purchase warrants outstanding as at December 31, 2004:

Number of Warrants

Exercise Price

Expiry Date

2,700,000

$0.025

March 22, 2005

Each warrant entitles the holder to acquire one common share of the Company.

7. Stock Option Plan

On July 12, 2001, the stockholders of Hepalife Technologies, Inc. approved the Company s 2001 Stock Option Plan which has 40,000,000 shares reserved for issuance thereunder, all of which were registered under Form S8 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.

The Company did not grant any stock options in 2004.

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.

On August 27, 2003, the Board of Directors authorized the Company to grant 3,000,000 options to purchase common stock to directors and employees of the Company at $2.11 per share. The option price was based on the closing price of the Company s common shares on August 27, 2003. 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.

Summary of employee stock options information for the years ended on December 31, 2004 and 2003 is as follows:

	Shares	Weighted Average Exercise Price
Options outstanding at December 31, 2002	-	$-
Granted	13,075,000	$ 0.54
Exercised	(282,500)	$(1.41)
Cancelled	(37,500)	$(0.38)
Options outstanding at December 31, 2003	12,755,000	$ 0.52
Exercised	(1,622,000)	$(0.83)

Options outstanding at December 31, 2004		
11,133,000		
	$ 0.48	

Options Outstanding and Exercisable

Range of Exercise Prices	Number Outstanding	Weighted Average Remaining Contractual Life (yr.)	Weighted Average Exercise Price	Number exercisable	Weighted Average Exercise Price
$0.01 - $1.00	8,915,000	8.10	$0.07	5,581,666	$0.07
$2.00 - $3.00	2,218,000				

2,218,000

8.70

$2.11

11,133,000

7,799,666

8.63

$0.48

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:

	2004	2003	2002
Net income (loss) as reported:	$(1,435,613)	$(1,102,723)	$(375,472)
Stock-based employee compensation expense as determined under the fair value based method	(901,242)	(5,591,425)	-

Pro-forma, net (loss)	$(2,336,855)	$(6,694,148)	$(375,472)
Net (loss) per share basic and diluted:			
As reported	$(0.02)	$(0.02)	$(0.01)
Pro-forma	$(0.04)	$(0.12)	$(0.01)

The weighted average fair value of the options granted in2003 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 rates of 3.5%, and expected lives of five years.

8. Income Taxes

There is no current or deferred tax expense for the years ended December 31, 2004 and 2003 due to the Company s loss position. The benefits of timing 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 sheet is primarily a result of start-up expenses, which are capitalized for income tax purposes. Applying a federal statutory rate of 34% to the pretax loss results in a deferred tax benefit with a full valuation allowance recorded against the benefit as follows at December 31:

	2004	2003	2002
NOL carryforwards	$194,000	$57,000	$171
Start-up costs	1,138,000	788,000	410,610
Organizational costs	1,020	1,020	1,020
	1,333,020	846,020	411,801
Valuation allowance	(1,333,020)	(846,020)	(411,801)

Net deferred tax assets

$-

$-

$-

The Company has available net operating loss carryforwards of approximately $570,000 (2003 $169,000) for tax purposes to offset future taxable income which expire commencing 2008 to 2024. Additionally, the estimated effect of the charge-off of start-up expenses in 2004 is a reduction in estimated income taxes of approximately $1,035,000 (2003 $1,026,000), assuming normal operations have commenced.

9. Subsequent Events

On January 10, 2005, the Company extended an Investor and media relations agreement with Thornhill Advisors for another 12 months ending December 31, 2005, with monthly payments of CDN$7,000 (US$5,385).

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

ITEM 13. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION

The following table sets forth estimated expenses expected to be incurred in connection with the issuance and distribution of the securities being registered.

Securities and Exchange Commission Registration Fee	$1,479
Accounting Fees and Expenses	$25,000
Legal Fees and Expenses	$100,000
Other	$8,521
TOTAL	**$135,000**

All amounts except the Securities and Exchange Commission registration fee are estimated. No portion of the expenses associated with this offering will be borne by the selling stockholders.

ITEM 14. INDEMNIFICATION OF OFFICERS AND DIRECTORS

The Florida Business Corporation Act, or FBCA, permits a Florida corporation to indemnify any person who may be a party to any third party proceeding by reason of the fact that such person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee, or agent of another entity, against liability incurred in connection with such proceeding (including any appeal thereof) if he or she acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, the best interests of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful.

The FBCA permits a Florida corporation to indemnify any person who may be a party to a derivative action if such person acted in any of the capacities set forth in the preceding paragraph, against expenses and amounts paid in settlement not exceeding, in the judgment of the board of directors, the estimated expenses of litigating the proceeding to conclusion, actually and reasonably incurred in connection with the defense or settlement of such proceeding (including appeals), provided that the person acted under the standards set forth in the preceding paragraph. However, no indemnification shall be made for any claim, issue, or matter for which such person is found to be liable unless, and only to the extent that, the court determines that, despite the adjudication of liability, but in view of all the circumstances of the case, such person is fairly and reasonably entitled to indemnification for such expenses which the court deems proper.

The FBCA provides that any indemnification made under the above provisions, unless pursuant to a court determination, may be made only after a determination that the person to be indemnified has met the standard of conduct described above. This determination is to be made by a majority vote of a quorum consisting of the disinterested directors of the board of directors, by duly selected independent legal counsel, or by a majority vote of the disinterested stockholders. The board of directors also may designate a special committee of disinterested directors to make this determination. Notwithstanding the foregoing, the FBCA provides that a Florida corporation must indemnify any director, officer, employee or agent of a corporation who has been successful in the defense of any proceeding referred to above.

Notwithstanding the foregoing, the FBCA provides, in general, that no director shall be personally liable for monetary damages to our company or any other person for any statement, vote, decision, or failure to act, regarding corporate management or policy, unless: (a) the director breached or failed to perform his duties as a director; and (b) the director s breach of, or failure to perform, those duties constitutes (i) a violation of criminal law, unless the director had reasonable cause to believe his conduct was lawful or had no reasonable cause to believe his conduct was unlawful, (ii) a transaction from which the director derived an improper personal benefit, either directly or indirectly, (iii) an approval of an unlawful distribution, (iv) with respect to a proceeding by or in the right of the company to procure a judgment in its favor or by or in the right of a stockholder, conscious disregard for the best interest of the company, or willful misconduct, or (v) with respect to a proceeding by or in the right of someone other than the company or a stockholder, recklessness or an act or omission which was committed in bad faith or with malicious purpose or in a manner exhibiting wanton and willful disregard of human rights, safety, or property. The term recklessness, as used above, means the action, or omission to act, in conscious disregard of a risk: (a) known, or so obvious that it should have been known, to the directors; and (b) known to the director, or so obvious that it should have been known, to be so great as to make it highly probable that harm would follow from such action or omission.

The FBCA further provides that the indemnification and advancement of payment provisions contained therein are not exclusive and it specifically empowers a corporation to make any other further indemnification or advancement of expenses of any of its directors, officers, employees or agents under any bylaw, agreement, vote of stockholders or disinterested directors, or otherwise, both for actions taken in an official capacity and for actions taken in other capacities while holding such office. However, a corporation cannot indemnify or advance expenses if a judgment or other final adjudication establishes that the actions of the director, officer, employee, or agent were material to the adjudicated cause of action and the director, officer, employee, or agent (a) violated criminal law, unless the director, officer, employee, or agent had reasonable cause to believe his or her conduct was unlawful, (b) derived an improper personal benefit from a transaction, (c) was or is a director in a circumstance where the liability for unlawful distributions applies, or (d) engaged in willful misconduct or conscious disregard for the best interests of the corporation in a proceeding by or in right of the corporation to procure a judgment in its favor or in a proceeding by or in right of a stockholder.

We have adopted provisions in our articles of incorporation and bylaws providing that our directors, officers, employees, and agents shall be indemnified to the fullest extent permitted by Florida law. Additionally, our bylaws permit us to secure insurance on behalf of any officer, director, employee, or other agent for any liability arising out of his or her actions in connection

with their services to us, regardless of whether our articles or incorporation or bylaws permit such indemnification. We intend to obtain such insurance.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to our directors or officers pursuant to the foregoing provisions, or otherwise, we have been advised that in the opinion of the Securities Exchange Commission, this indemnification is against public policy as expressed in the Securities Act of 1933, and is therefore unenforceable.

There is no pending litigation or proceeding involving any of our directors, officers, employees, or other agents as to which indemnification is being sought, nor are we aware of any pending or threatened litigation that may result in claims for indemnification by any director, officer, employee, or other agent.

ITEM 15. RECENT SALES OF UNREGISTERED SECURITIES

Except as otherwise noted, all of the following shares were issued and options and warrants granted pursuant to the exemption provided for under Section 4(2) of the Securities Act of 1933, as amended, as a transaction not involving a public offering, and/or Regulations D and S as promulgated under said act. Except as noted, no commissions or finders fees were paid, and no underwriter participated, in connection with any of these transactions. Each such issuance was made pursuant to individual contracts which are discrete from one another and are made only with persons who were sophisticated in such transactions and who had knowledge of and access to sufficient information about us to make an informed investment decision. Among this information was the fact that the securities were restricted securities.

On April 26, 2002, our board of directors authorized the issuance of 2,160,000 restricted common shares at a price of $0.05 per share in exchange for the satisfaction of $108,000 due for management fees owed to Mr. Harmel S. Rayat, a director and majority stockholder. The registrant believes that the offer and sale of these shares were exempt from the registration requirements of the Securities Act by virtue of Section 4(2) thereof and Regulation S as promulgated under the Securities Act.

On July 25, 2002, our board of directors agreed to issue 2,390,000 restricted shares of our common stock at a price of $0.05 per share in exchange for investor relations services valued at $119,500 to EquityAlert.com, Inc., a wholly owned subsidiary of Innotech Corporation. Mr. Rayat was at the time, also a director and majority stockholder of Innotech Corporation. The registrant believes that the offer and sale of these shares were exempt from the registration requirements of the Securities Act by virtue of Section 4(2) thereof.

On December 18, 2002, the board of directors authorized the issuance of 1,920,000 restricted common shares at a price of $0.05 per share in exchange for the satisfaction of $84,000 due for management fees due to Mr. Rayat. The registrant believes that the offer and sale of these shares were exempt from the registration requirements of the Securities Act by virtue of Section 4(2) thereof and Regulation S as promulgated under the Securities Act.

On November 3, 2003, we issued an aggregate of 7,300,000 shares to three individuals for $0.025 per share or an aggregate consideration of $182,500 pursuant to an exercise of

outstanding warrants. The warrants were issued as part of an offering completed by us on March 19, 1999 in which we sold 3,000,000 units, each consisting of one share of common stock and one warrant to purchase one share of common stock at $0.10. Following the July 12, 2001 four for one forward stock split, the amounts were adjusted to 12,000,000 shares at a price of $0.025 per share, in order to reflect the stock split. The registrant believes that the offer and sale of these shares were exempt from the registration requirements of the Securities Act by virtue of Section 4(2) thereof and Regulation S as promulgated under the Securities Act.

On December 20, 2004, we issued an aggregate of 2,000,000 shares at a price of $0.025 per share or $50,000 in the aggregate to one person pursuant to the exercise of outstanding warrants. The warrants were issued as part of an offering completed by us on March 19, 1999 in which we sold 3,000,000 units, each consisting of one share of common stock and one warrant to purchase one share of common stock at $0.10. Following the July 12, 2001 four for one forward stock split, the amounts were adjusted to 12,000,000 shares at a price of $0.025 per share, in order to reflect the stock split. The registrant believes that the offer and sale of these shares were exempt from the registration requirements of the Securities Act

On June 28, 2005, we issued 20,000 restricted shares of common stock to Fusion Capital Fund II, LLC pursuant to a confidential term sheet; on July 8, 2005, we issued 691,598 restricted shares of common stock to Fusion Capital Fund II, LLC to satisfy the commitment share obligation under the July 8, 2005 common stock purchase agreement; and on January 20, 2006, we issued an additional 374,753 restricted shares of common stock to Fusion Capital Fund II, LLC to satisfy the commitment share obligation under the January 20, 2006, common stock purchase agreement. No further commitment fees are due Fusion Capital under our new common stock purchase agreement dated January 20, 2006. The registrant believes that the offer and sale of these securities (and the delivery of the common stock purchase agreement) were exempt from the registration requirements of the Securities Act by virtue of Section 4(2) thereof and Regulation D as promulgated under the Securities Act.

ITEM 16. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES.

The following exhibits are filed as part of this registration statement:

Exhibit No.

Description

3.1

Amended and Restated Articles of Incorporation, filed March 7, 2000 (1)

3.2	By-laws, filed March 7, 2000 (1)
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10.1

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Advisory Board Agreement dated June 4, 2004 between the Company and Mr. Frank Menzler. *

23.1

Consent of Sierchio Greco & Greco, LLP (Included in Exhibit 5 hereto). *

23.2

Consent of Moore Stephens Ellis Foster Ltd. Dated February 8 , 2006.

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Consent of Clancy and Co. PLLC Dated February 8 , 2006.

NOTES

* Previously Filed

(1)

The documents identified are incorporated by reference from the Company's Registration Statement on Form 10-SB12G (No. 000-29819).

(2)

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ITEM 17. UNDERTAKINGS

The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) to include any prospectus required by Section 10(a)(3) of the Securities Act of 1933,

as amended;

(ii) to reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Securities and Exchange Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the Calculation of Registration Fee table in the effective registration statement; and

(iii) to include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

(2) That, for the purpose of determining any liability under the Securities Act of 1933, as amended, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(4) For purposes of determining liability under the Securities Act of 1933 to any purchaser:

(i) if the registrant is relying Rule 430B,

(A)

Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and

(B)

Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer, and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a

purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date; or

(ii) If the Registrant is subject to Rule 430C, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other that prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.

(5)

That for the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities:

The undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

(i)

Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;

(ii)

Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;

(iii)

The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and

(iv)

Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the provisions described under Item 24 above, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act of 1933 and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public

policy as expressed in the Securities Act of 1933 and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant has duly caused this Registration Statement to be signed on our behalf by the undersigned, thereunto duly authorized, in Vancouver, British Columbia, Canada, on this 8th day of February , 2006.

Hepalife Technologies, Inc.

By: /s/ Harmel S. Rayat

Harmel S. Rayat

President, Chief Executive Officer,

Chief Financial Officer and Principal Accounting Officer

Pursuant to the requirements of the Securities Act of 1933, the following persons in the capacities and on the dates indicated have signed this Form S-1 Registration Statement:

Signature

Title

Date

/s/ Harmel S. Rayat

Director, President,

February 8 , 2006

Harmel S. Rayat

Chief Executive Officer,

Chief Financial Officer and

Principal Accounting Officer

/s/ Arian Soheili

Director , Secretary and

February 8 , 2006

Arian Soheili

Treasurer

/s/ Jasvir Kheleh

Director

February 8 , 2006

Jasvir Kheleh

Hepalife Technologies, Inc.

Registration Statement on Form S-1

Index to Exhibits Filed as Part of This Registration Statement

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