**As filed with the Securities and Exchange Commission on _____.**

**Registration No. 333-100568**

**SECURITIES AND EXCHANGE COMMISSION**
**Washington, DC 20549**
**- ----------**

**FORM SB-2/A-5**
**REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933**
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**ORAGENICS, INC.**
(Name of small business issuer in its charter)

| **Florida** | **2836** | **59-3410522** |
|---|---|---|
| (State or Other Jurisdiction of Organization) | (Primary Standard Industrial Classification Code) | (IRS Employer Identification #) |

**ORAGENICS, INC.**
**12085 Research Drive**
**Alachua, Florida 32615**
**(386) 418-4018**

(Address and telephone of registrant's executive office)

**Mento A. Soponis**
**4730 SW 103d Way**
**Gainesville, FL 32608**
**Tel: (386) 418-4018**

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

Copies of all communications and notices to:

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**APPROXIMATE DATE OF COMMENCEMENT OF PROPOSED SALE TO THE PUBLIC:**

The effective date of this registration statement.

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* , as amended (the "Securities Act") check the following box. **[ X ]**

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

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

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

If delivery of the prospectus is expected to be made under Rule 434, please check the following box. **[ ]**

**CALCULATION OF REGISTRATION FEE**

| Securities to be Registered | Amount to be Registered | Offering Price Per Share[1] | Aggregate Offering Price[1] | Registration Fee |
|---|---|---|---|---|
| Units consisting of: | 2,400,000 | $ 1.25 | $ $3,000,000 | $ 276.00 |
| One share of common stock [2] | 2,400,000 | | | |
| One half of one Series A warrant [3] | 1,200,000 | | | |
| One half of one Series B warrant [3] | 1,200,000 | | | |
| Shares of common stock issuable upon exercise of Series A warrants | 1,200,000 | 2.00 | 2,400,000 | $ 220.80 |
| Shares of common stock issuable upon exercise of Series B warrants | 1,200,000 | 3.00 | 3,600,000 | $ 331.20 |
| Redeemable warrants we will issue to our underwriter [4] | 500,000 | | | |
| Shares of common stock issuable upon exercise of redeemable warrants | 500,000 | 1.25 | 625,000 | $ 57.50 |
| Shares of common stock to be issued to our underwriter [4] | 100,000 | | | |
| **Totals:** | 10,700,000 | | 9,625,000 | $ 885.50 |

[1] Estimated solely for purposes of calculating the registration fee under Rule 457(a)

[2] Upon completion of our offering, the shares of common stock will be separable from the units and represented by certificates different from those representing the Series A and B warrants. The shares of common stock will trade on the TSX Venture Exchange.

[3] Upon completion of our offering, the Series A and B warrants will be separable from the units, and represented by certificates different from those representing the shares of common stock. The Series A and B warrants will be non-transferable and will not trade on any stock exchange or quotation service.

[4] In connection with the sale of the units, the registrant will issue to its underwriter, Haywood Securities Inc., 100,000 shares of common stock and warrants to purchase 500,000 shares of common stock.

**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 THE REGISTRATION STATEMENT SHALL BECOME EFFECTIVE ON SUCH DATE AS THE COMMISSION, ACTING UNDER SAID SECTION 8(A), MAY DETERMINE.**



**SUBJECT TO COMPLETION DATED MAY 1, 2003**

**The information in this prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities in any state where the offer or sale is not permitted.**

**Prospectus**

**ORAGENICS, INC.**
**2,400,000 Units**
**Consisting of One Share of Common Stock,**
**One Half of One Series A Warrant and**
**One Half of One Series B Warrant**
**500,000 Redeemable Warrants**
**100,000 Shares of Common Stock**

Before this offering, there has been no public market for the common stock.

Each unit consists of one share of common stock, one half of one non-transferable Series A warrant and one half of one non-transferable Series B warrant. Each whole Series A warrant entitles the holder to purchase one share of common stock at a price of $2.00 for 6 months from the date of closing of the offering of the units. Each whole Series B warrant entitles the holder to purchase one share of common stock at a price of $3.00 for 9 months from the closing date. If the warrants are not exercised by such times, they will expire and cannot be exercised thereafter. The shares of common stock and Series A and B Warrants are separable from the units. Each will be represented by different certificates. We are offering 2,400,000 units in the Canadian provinces of British Columbia and Alberta only through our underwriter, Haywood Securities Inc. The offering price is $1.25 per unit. Our offering is a "best efforts" offering on an "all or none" basis, completion of our offering is subject to the sale of all the units. There are no minimum purchase requirements. The offering will commence on the effective date of this registration statement, which will occur concurrently with or after the date of issue of a MRRS Decision Document evidencing the issue of receipts for the Canadian prospectus in Alberta and British Columbia by the British Columbia Securities Commission, and will continue for a period of 90 days from the date of issue of an MRRS Decision Document. There are no arrangements to place the funds in an escrow, trust or similar account.

**Investing in our common stock involves risks. See "Risk Factors" on page 8.**

| | **Price to Public**[1] | **Underwriter's Commission**[2] | **Proceeds to Us**[3] |
|---|---|---|---|
| **Per unit** | $ 1.25 | $ 0.09375 | $ 1.15625 |
| **Total** | $ 3,000,000 | $ 225,000 | $ 2,775,000 |

[1] The price per unit was established by negotiation between us and our underwriter, Haywood Securities Inc.

[2] We will pay Haywood a commission of 7.5% of the gross proceeds of the offering. We will also issue 500,000 warrants each exercisable for two years from the closing date to purchase one share of our common stock, at a price of $1.25 per share, and 100,000 shares of our common stock, to Haywood. This prospectus is registering the issuance of the shares and warrants to Haywood.

[3] Before expenses of the offering, estimated at $350,000.

**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. It is illegal to tell you otherwise.**

The information in this prospectus is not complete and may be changed. We will not sell these securities until the

registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell securities, and is not soliciting an offer to buy these securities, in any jurisdiction where the offer or sale is not permitted.

There is no public trading market for our units, shares of common stock, or warrants. These securities will not be listed on any national securities exchange in the United States. The Series A and B warrants are non-transferable and will not be listed on any stock exchange.

The date of this prospectus is _____.



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## SUMMARY OF OUR OFFERING

The following is a summary of the principal features of this offering and should be read together with the more detailed information and financial data and statements contained elsewhere in this prospectus. You should read the entire prospectus carefully, especially the discussion of the risks of purchasing our securities in "Risk Factors" on page 9.

### Our Business

We were incorporated in Florida in 1996. Our executive office is located at 12085 Research Drive, Alachua, Florida 32615. This is also our mailing address. Our telephone number is (386) 418-4018. Our corporate website is at www.oragenics.com. We do not intend the reference to our web address to incorporate by reference in this prospectus the information on our website. The information on our website is not intended to be part of this prospectus and you

should not rely on it when making a decision to invest in our securities.

We are a biotechnology research and development company seeking to commercialize two technologies developed by our founder and Chief Scientific Officer, Dr. Jeffrey Hillman. Dr. Hillman is a Harvard-trained Professor at the University of Florida College of Dentistry. He is presently on indefinite leave from his post at the University of Florida. He did the early development work on our technologies at the Forsyth Dental Center and the University of Florida. The technologies are the property of the University, and the University has obtained patents relating to the technologies. We have obtained exclusive licenses of the technologies from the University.

The first technology is a genetically altered strain of a species of bacteria called S. *mutans* which occurs naturally on teeth in human beings. We refer to this technology as replacement therapy. The strains of this species of bacteria which occur naturally produce lactic acid from sugar in our diets. Lactic acid is the principal cause of tooth decay. Our preliminary animal studies indicate that our licensed, patented strain of this bacteria produces harmless chemicals instead of lactic acid[1], and therefore does not cause tooth decay. [2] We hope further testing will confirm these results.

The second technology is an antibiotic known as *mutacin* 1140 which is produced by our licensed, patented strain of bacteria. Our preliminary *in vitro* [3] laboratory tests of mutacin 1140 have demonstrated its effectiveness against all tested Gram-positive bacteria [4]. Gram-positive bacteria cause many human ailments, such as pneumonia, pharyngitis and others. We hope further testing will confirm these

We have made an investigational new drug application to the Federal Food and Drug Administration, which we refer to as the FDA in this prospectus, in respect of our replacement therapy technology. The FDA has placed our application on clinical hold. This means that we may not begin human clinical trials under our application until the FDA gives us permission to do so. On March 19, 2003, we submitted to the FDA a new investigational drug application. Our new investigational drug application relates to a modified strain of our licensed, patented strain of s. mutans which we developed in order to respond to the FDA's concerns with our previous investigational new drug application, and incorporates our previous investigational new drug application by reference. The FDA has put our new investigational drug application on clinical hold. We have not yet made an investigational new drug application in respect of our *mutacin* 1140 technology. In order to sell products based on our licensed, patented technologies, we must obtain approval from the FDA for investigational new drug applications, complete Phase I, II and III clinical trials, and obtain FDA approval for new drug applications. If we are successful in obtaining regulatory approval for one or both of our licensed, patented technologies, we will attempt to license other technologies, from the University of Florida or elsewhere, to which we believe members of our team such as Dr. Hillman can add value.

[1] Hillman et al, Construction and Characterization of an Effector Strain of *Streptococcus mutans* for Replacement Therapy of Dental Caries, *Infection and Immunity* (2000) Vol. 68, No. 2, pp. 543-549

[2] Hillman et al, Construction and Characterization of an Effector Strain of *Streptococcus mutans* for Replacement Therapy of Dental Caries, *Infection and Immunity* (2000) Vol. 68, No. 2, pp. 543-549

[3] Studies carried out in isolation from a living organism.

[4] Wojciehowski, Byers and Hillman, Regulation of Expression of the Structural Gene for Mutacin 1140 and Characterization of its Antibacterial Properties (2002), submitted for publication and Hillman et al, Isolation of a *Streptococcus mutans* strain producing a Novel Bacterium, *Infection and Immunity* (1984) Vol. 44, No. 1, pp. 141-144.



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**The Offering**

Following is a brief summary of this offering:

| | |
|---|---|
| Securities being offered by us | 2,400,000 units. Each unit consists of one share of common stock, one half of one Series A warrant, and one half of one Series B warrant. Each whole Series A warrant may be exercised to purchase a further share of common stock at a price of $2.00 per share for 6 months from the closing of the |

| | |
|---|---|
| | offering. Each whole Series B warrant may be exercised to purchase a further share of common stock at a price of $3.00 per share for 9 months from the closing of the offering. |
| Offering price per unit | $1.25 |
| Net proceeds to us | $2,775,000, before expenses of the offering, estimated at $350,000. |
| Number of shares outstanding before the offering | 9,425,704 |
| Number of shares outstanding after the offering | 11,925,704[1] |

[1] Excludes shares which may be issued on exercise of outstanding options, the Series A and B warrants, and the warrants we will issue to Haywood.

**Selected Financial Data**

The following selected financial data for the three years ended December 31, 2002 are derived from our audited financial statements, which have been audited by Ernst & Young LLP, independent certified public accountants. Ernst & Young LLP's report on the financial statements for the three years ended December 31, 2002, which appears elsewhere herein, includes an explanatory paragraph which describes an uncertainty about our ability to continue as a going concern.

| | December 31, 2002 [1] | December 31, 2001 [1] | December 31, 2000 [1] |
|---|---|---|---|
| **Balance Sheet** | | | |
| Total Assets | $ 310,916 | $ 201,265 | $ 14,423 |
| Total Liabilities | 394,398 | 215,292 | 42,039 |
| Total Long Term Liabilities | nil | nil | nil |
| Cash Dividends Per Share | nil | nil | nil |
| Stockholders' (Deficit) | (83,482) | (14,027) | (27,616) |

**Income Statement**

| | Year Ended December 31 | | |
|---|---|---|---|
| | **2002** | **2001** | **2000** |
| Total Revenue | - 0 - | 303,912 | 53,875 |
| Total Expenses | 709,700 | 270,465 | 69,318 |
| Income (Loss) from Operations | (709,700) | 33,747 | (15,443) |
| Net Income (Loss) | (699,603) | 13,473 | (16,912) |
| Net Income (Loss) per Share-basic and diluted | (0.08) | 0.00 | 0.00 |

[1] Our financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States, conform in all material respects with accounting principles generally accepted in Canada.



## RISK FACTORS

**An investment in our securities involves significant risks. Please consider the following risk factors before deciding to invest in our securities.**

**Risks Associated with Our Company**

***1. Our auditors have issued a going concern opinion. This means we may not be able to achieve our objectives and may have to suspend or cease operations.***

Our auditors have issued a going concern opinion. This means that there is doubt that we can continue as an ongoing business. At April 30, 2003 we had an estimated working capital deficit of $(284,000).

***2. We have experienced a history of losses and expect to incur future losses. Therefore, we must continue to raise money from investors to fund our operations. If we are unable to fund our operations, we will cease doing business.***

We have recorded minimal revenue to date and we have incurred a cumulative operating loss of $714,000 through December 31, 2002. Our losses have resulted principally from costs incurred in research and development activities related to our efforts to develop our technologies and from the associated administrative costs. We expect to incur significant operating losses and negative cash flows over the next several years due to the costs of expanded research and development efforts and pre-clinical and clinical trials and hiring additional personnel. We will need to generate significant revenues in order to achieve and maintain profitability. We may not be able to generate these revenues or achieve profitability in the future. Even if we do achieve profitability, we may not be able to sustain or increase profitability.

We are a development stage company focused on product development and we have not generated any revenues from sales to date. Until we receive FDA approval for sales of products incorporating our licensed, patented technologies, we cannot sell our products and will not have revenues from sales. That is because we are spending money on research and development of our technologies, but cannot sell products to the public at the present time. Consequently, we must raise money from investors to fund our operations. If we can't fund our operations through investments by third parties, we will have to cease operations. We expect that when we receive the net proceeds from this offering, we will have the cash we need for operations during the next twelve months.

***3. We have a limited operating history. We have generated extremely limited revenue from our operations, and no revenue from sales. If we do not generate revenues from our operations, we may have to cease operations.***

We have a limited operating history. We commenced operations in 1999. Since commencing operations, we have generated very limited revenue from our operations. We have not generated any revenue from sales. If we cannot generate revenues from our operations in the future, and are unable to obtain further financing to cover our expenses, we will have to cease operations.

***4. The FDA has put our investigational new drug application for our replacement therapy technology on clinical hold. If we are unable to obtain or maintain regulatory clearance or approval for our technologies, we will be unable to generate revenues and will have to cease operations.***

Our technologies have not been cleared for marketing by the FDA or foreign regulatory authorities and cannot be commercially distributed in the United States or any international markets until such clearance is obtained. Before regulatory approvals can be obtained, our technologies will be subject to extensive pre-clinical and clinical testing. These processes are lengthy and expensive. We can offer you no assurance that such trials will demonstrate the safety or effectiveness of our technologies. There is a risk that our replacement therapy and mutacin 1140 technologies may be found to be unsafe or ineffective or otherwise fail to satisfy regulatory requirements. The FDA has put our investigational new drug application for our replacement therapy technology on clinical hold. This means that we may not begin human clinical trials under our application until the FDA gives us permission to do so. We have amended our investigational new drug application three times to respond to the FDA's concerns. If we are unable to resolve the FDA's concerns, we will not be able to proceed further to obtain regulatory approval for that technology. If we fail to obtain or maintain FDA clearance for one or both of our technologies we may have to cease operations.



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***5. Our product candidates are in the preliminary development stage, and may not be effective at a level sufficient to support a profitable business venture. If they are not, we will be unable to create marketable products, and we will have to cease operations.***

Our only two product candidates are in the preliminary development state. Although we have current data which

indicates the promise of the concept of our replacement therapy and *mutacin* 1140 technologies, we can offer you no assurance that the technologies will be effective at a level sufficient to support a profitable business venture. If they are not, we will be unable to create marketable products, we will not generate revenues from our operations, and we will have to cease operations. The science on which our replacement therapy and *mutacin* 1140 technologies are based may also fail due to flaws or inaccuracies on which the data are based, or because the data is totally or partially incorrect, or not predictive of future results. The science upon which our business is based may prove to be totally or partially incorrect. Because our science may be flawed or incorrect, we may never be able to create a marketable product. If our science fails, we will not be able to create a marketable product. If we are unable to do so, we will not generate revenues, we will have to cease operations and you will lose your entire investment.

***6. The success of our research and development activities is uncertain. If they do not succeed, we will be unable to generate revenues from our operations and we will have to cease doing business.***

We intend to continue with research and development of our technologies for the purpose of obtaining regulatory approval to produce and market them. 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 we have budgeted and actual time may exceed our expectations. If research and development requires more funding than we anticipate, then we may have to reduce technological development efforts or seek additional financing from loans or the sale of our stock. There can be no assurance that we will be able to secure any necessary additional financing or that such financing would be available on favorable terms. If we are unable to receive additional financing, you may lose all or a portion of your investment. Equity financing could result in substantial dilution to existing shareholders. We anticipate we will remain engaged in research and development for a considerable period of time.

***7. It is possible that our replacement therapy technology will be less effective in humans than it has been shown to be in animals. It is possible our mutacin 1140 technology will be shown to be ineffective or harmful in humans. If either of our technologies are shown to be ineffective or harmful in humans, we will be unable to generate revenues from them, and we will have to cease operations.***

Testing of our replacement therapy technology has to date been undertaken solely in animals. Those studies have proven our genetically altered strain of S. *mutans* to be effective in preventing tooth decay. It is possible that our strain of S. *mutans* will be shown to be less effective in preventing tooth decay in humans in clinical trials. If our replacement therapy technology is shown to be ineffective in preventing tooth decay in humans, we will be unable to commercialize and generate revenues from this technology. Testing of our antibiotic substance, *mutacin* 1140, has to date been undertaken solely in the laboratory. We have not yet conducted animal or human studies of *mutacin* 1140. It is possible that when we conduct these studies, they will show that *mutacin* 1140 is ineffective or harmful. If *mutacin* 1140 is shown to be ineffective or harmful, we will be unable to commercialize it and generate revenues from sales of *mutacin* 1140. If we are unable to generate revenues from either technology, we may have to cease operations.

***8. It is possible we will be unable to find a method to produce mutacin 1140 in commercial quantities. If we cannot, we will be unable to undertake the pre-clinical and clinical trials which are required in order to obtain FDA permission to sell it, and we will be unable to generate revenues from it, and we may have to cease operations.***

Our antibiotic technology, *mutacin* 1140, is a substance produced by our genetically altered strain of S. *mutans*. To date, it has been produced only in laboratory cultures. In order for us to conduct the pre-clinical and Phase I clinical studies which we must complete in order to find a partner who will sub-license this technology from us and finance the Phase II and III clinical studies we must complete in order to obtain FDA approvals necessary to sell products based on this technology, we must demonstrate a method of producing commercial quantities of this substance at economical rates. We have not yet been able to find such a method and it is possible we will be unable to find one. If we are not able to find such a method, we will be unable to generate revenues from this technology and we may have to cease operations.



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***9. We must spend at least $600,000 in 2003 and $1 million annually following 2003 on development of our technologies under our license agreements with the University of Florida Research Foundation, Inc. We may be unable to raise the financing necessary to do so. We must also comply with certain other conditions of our licenses. If we do not, our licenses to our technologies may be terminated, and we may have to cease operations.***

We hold our replacement therapy and *mutacin* 1140 technologies under licenses from the University of Florida Research Foundation, Inc. Under the licenses, we must spend at least $600,000 in 2003 and $1 million in each calendar year following 2003 on development of those technologies before the first commercial sale of products derived from those technologies. If we do not, our licenses may be terminated. Until commercial sales of such products take place, we will not be earning revenues from the sale of products. We will therefore have to raise the money we must spend on development of our technologies by other means, such as the sale of our common stock. We can offer you no assurance we will be able to raise the financing necessary to meet our obligations under our licenses. If we are not, we will lose our licenses to our technologies, and may have to cease operations.

The University of Florida Research Foundation, Inc. may terminate our licenses in respect of our replacement therapy technology and our *mutacin* 1140 technology if we breach our obligations to timely pay monies to it, submit development reports to it, or commit any other breach of the covenants contained in the license agreement. We can offer you no assurance that we will be able to comply with these conditions. If we are not, and if our license is terminated, our investment in development of our replacement therapy technology will become valueless, and you will lose all or a portion of your investment.

***10. We can offer you no assurance the government and the public will accept our licensed patented technologies. If they do not, we will be unable to generate sufficient revenues from our technologies, which may cause us to have to cease operations.***

The commercial success of our replacement therapy and *mutacin* 1140 licensed technologies, which have been developed through biotechnology, will depend in part on government and public acceptance of their production, distribution and use. Biotechnology has enjoyed and continues to enjoy substantial support from the scientific community, regulatory agencies and many governmental officials around the world (including in the United States). Future scientific developments, media coverage and political events may diminish such support. Public attitudes may be influenced by claims that health products produced with biotechnology are unsafe for consumption or pose unknown risks to the environment or to traditional social or economic practices. Securing governmental approvals for, and consumer confidence in, such products poses numerous challenges, particularly outside the United States. The market success of technologies developed through biotechnology, such as ours, could be delayed or impaired in certain geographical areas because of such factors. Products based on our technologies may compete with a number of traditional dental therapies and drugs manufactured and marketed by major pharmaceutical companies and other biotechnology companies. Market acceptance of products based on our technologies will depend on a number of factors, including potential advantage over alternative treatment methods. We can offer you no assurance that dentists, physicians, patients or the medical and dental communities in general will accept and utilize products developed from our technologies. If they do not, we will be unable to generate sufficient revenues from our technologies, which may cause us to have to cease operations.

***11. We may be exposed to product liability claims if products based on our technologies are marketed and sold. Because we have limited liability insurance coverage, if a judgment is rendered against us in excess of the amount of our coverage, we may have to cease operations.***

Because we are testing new technologies, and will be involved either directly or indirectly in the manufacturing and distribution of the technologies, we are exposed to the financial risk of liability claims in the event that the use of the technologies results in personal injury or death. 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, and upon the performance of your investment. Although we carry $1,000,000 in general liability insurance, such insurance may not be sufficient to cover any potential liability. We could be sued for a large sum of money and held liable in excess of our liability coverage. If we cannot pay the judgment we may have to cease operations.



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***12. We intend to rely on third parties to pay the majority of the costs of regulatory approvals necessary to manufacture and sell products using our technologies. If we are unable to obtain agreements with third parties to fund such costs, we will have to fund them ourselves. We may be unable to do so, and if we are not, we may have to cease operations.***

We intend to sublicense our licensed, patented technologies to pharmaceutical companies after completion of Phase I clinical studies. If we are successful in doing so, our sublicensees will pay the costs of Phase II and III clinical trials, and manufacture and market our technologies. If we are unable to sublicense our technologies, we will have to pay for the costs of Phase II and III trials and new drug applications to the FDA ourselves. We would also have to set up our own manufacturing facilities, and find our own distribution channels. This would greatly increase our future capital requirements, and we can offer no assurance we would be able to obtain the necessary financing. If we are not, we may have to cease operations.

***13. There is uncertainty relating to favorable third-party reimbursement in the United States. If we can't obtain third party reimbursement for products based on our technologies, we may have to cease operations.***

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 fail to present such clinical data, that will adversely affect our ability to obtain favorable third party reimbursement, we will earn less revenue and we may have to cease operations.

***14. Although Dr. Jeffrey Hillman is our Chief Scientific Officer, he will devote only approximately 75% of his working time to the affairs of our company and he has agreed to assign to our company only those inventions that he may conceive or discover which relate to our existing proprietary intellectual rights. If he should conceive of or discover further inventions which do not relate to our existing intellectual property rights, we will not get the economic benefit of those inventions. If Dr. Hillman conceives of or discovers inventions which do not relate to our intellectual property rights which compete with our technologies, we may earn less revenue from our technologies.***

Dr. Jeffrey Hillman is responsible for having discovered our only two technologies and is, therefore, considered to be a key participant in our future research and development program relating to those technologies. Dr. Hillman will, however, be devoting only 75% of his working time to the affairs of our company. Dr. Hillman has agreed that only those new inventions that he discovers or conceives and which relate to our existing intellectual property rights will become our property. This means that Dr. Hillman is not required to transfer any new inventions that he discovers or conceives which do not relate to our existing intellectual property rights. If he should conceive of or discover further inventions which do not relate to our existing intellectual property rights, we will not get the economic benefit of those inventions. If Dr. Hillman conceives of or discovers inventions which do not relate to our intellectual property rights which compete with our technologies, we may earn less revenue from our technologies. As Dr. Hillman may be conducting research and development activities for the benefit of others, his personal interests and obligations to others may conflict with his obligations to act in the best interests of our company. If such a conflict arises, we may be exposed to liability to others and our ability to achieve our business objectives may be impaired.

***15. Because there is no public trading market for our common stock, you may not be able to resell your stock.***

There is currently no public trading market for our common stock. Therefore there is no central place, such as stock exchange or electronic trading system, to resell the shares comprised in the units and which may be obtained upon exercise of the Series A and B warrants. If you do want to resell your shares, you will have to locate a buyer and negotiate your own sale. The TSX Venture Exchange has conditionally approved the listing of our common stock. Listing will be subject to us fulfilling all of the requirements of the TSX Venture Exchange, including distribution of these securities to a minimum number of public securityholders. The Series A and B warrants are not transferable and will not be listed on any stock exchange.



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***16. Sales of shares of our common stock which are presently owned by our directors and officers and subject to escrow and other resale restrictions could reduce the market price of our common stock when the resale restrictions expire.***

On completion of this offering, the majority of our common stock will be owned by our directors and officers. The stock they own will be subject to escrow and other restrictions on resale. These restrictions will fall away as time passes. Once the restrictions fall away, our directors and officers may resell their shares in the market. If our controlling shareholders sell substantial amounts of shares upon release from escrow, this may reduce the market price of our common stock. The interests of our current management may conflict with your interests.

***17. Special Note Regarding Forward-Looking Statements*** . This prospectus contains forward-looking statements that reflect our current views with respect to future events and financial performance. In some cases, you can identify forward-looking statements by words like "believe," "expect," "estimate," "anticipate," "intend," "project," "plan," "may," "should," "potential" and "continue." These statements are only predictions, and apply only as of the date of this prospectus. You should not consider that they are made with certainty. These statements are subject to risks and uncertainties, including those set out above and others, that could cause actual results to differ materially from historical results or our predictions. Although we believe that the expectations referred to in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, performance or achievements. We are under no duty to update forward-looking statements to conform them to actual results after the date of this prospectus.

**You should rely only on the information contained in this prosectus. We have not authorized anyone to provide you with information different from that contained in this prospectus. This prospectus may only be used where it is legal to sell these securities. The information contained in this prospectus may only be accurate on the date of this prospectus.**

## USE OF FUNDS AVAILABLE

Our offering is being made in the Canadian provinces of British Columbia and Alberta through our underwriter, Haywood Securities Inc. We have agreed to pay Haywood a commission of 7.5% of the gross proceeds of the sale of the units, and to reimburse Haywood for its reasonable expenses in connection with the offering. We have also agreed to issue shares and warrants to Haywood, as described under "Plan of Distribution." In addition to Haywood's commission, we anticipate incurring further expenses in connection with the offering of $350,000. Our estimated working capital deficit at April 30, 2003 is $(284,000). Our estimated working capital deficit together with the net proceeds of our offering yields the funds available to us.

The table below sets forth the calculation of the amount of our available funds.

| | | |
|---|---|---|
| Gross Proceeds | $ | 3,000,000 |
| Commission | | 225,000 |
| Offering Expenses | | 350,000 |
| Net Proceeds | | 2,425,000 |
| +Working Capital Deficit at April 30, 2003 | | (284,000) |
| =Funds Available to us | $ | 2,141,000 |

We will use our available funds as follows:

Our available funds will be used to pay the commission and offering expenses, to fund the costs of certain of the pre-clinical and clinical trials of our technologies we must undertake before we can obtain FDA approval to sell products based on our technologies, and for working capital.

The amounts we will pay from our available funds for expenses of the offering are: $885.50 for SEC filing fees; $1,500 (estimated) for Alberta and British Columbia Securities Commission filing fees; $8,500 (estimated) for TSX Venture Exchange listing fees; $50,000 for Haywood's expenses, $225,000 (estimated) for United States and Canadian legal fees; $4,000 for printing our prospectus; $50,000 for accounting fees; $2,000 for our transfer agent and warrant agent fees; and $8,114.50 for miscellaneous unforeseen expenses relating to the offering.



We will use our available funds as follows:

100,000 to the University of Florida for patent expenses; $50,000 for regulatory consulting firm fees and $126,000 for 14 months salary (including payroll taxes and benefits) of the director of regulatory affairs we intend to hire; $50,000 for peptide production research and $126,000 for 14 months salary (including payroll taxes and benefits) of a scientist we intend to hire to help us develop a method of producing *mutacin* 1140 in commercial quantities; $40,000 for pre-clinical studies relating to our replacement therapy technology ( this sum includes an additional pre-clinical animal

toxicity study estimated to cost approximately $20,000 which the FDA may require us to perform in order to lift the clinical hold on our new investigational drug application) and $250,000 for pre-clinical studies relating to our *mutacin* 1140 technology; $300,000 for the costs of Phase I clinical trials for our replacement therapy technology and $70,000 for 14 months salary (including payroll taxes and benefits) for the clinical trials manager we intend to hire; and $20,000 for the costs of the investigational new drug application we intend to make for our *mutacin* 1140 technology.

The table below sets forth the use of our available funds:

| | | | | |
|---|---|---|---|---|
| Patent expenses paid to University of Florida | | | $ 100,000 | |
| Regulatory: | | | | |
| Consulting Fees | $ 50,000 | | | |
| Salary (including related taxes and benefits): director reg. Affairs (14 Months) | 126,000 | | | |
| | | | 176,000 | |
| *Mutacin* 1140 production research: | | | | |
| peptide production research | 50,000 | | | |
| Salary (including related taxes and benefits): production scientist (14 months) | 126,000 | | | |
| | | | 176,000 | |
| Pre clinical research: | | | | |
| replacement therapy | 40,000 | | | |
| *mutacin* 1140 | 250,000 | | | |
| | | | 320,000 | [1] |
| Clinical trials for replacement therapy: | | | | |
| Phase I trials | 300,000 | | | |
| salary (including related taxes and benefits): clinical trials manager (14 months) | 70,000 | | | |
| | | | 470,000 | [1] |
| *Mutacin* 1140 investigational new drug application | | | 20,000 | |
| General and administration costs for one and one-half years: | | | | |
| Salaries | 573,000 | [2] | | |
| Legal and accounting fees | 210,000 | | | |
| Rent and utilities | 54,000 | | | |
| Insurance | 42,000 | | | |
| Other costs | 55,000 | | | |
| | | | 934,000 | |
| Working capital reserve | | | 75,000 | |
| | | | 2,141,000 | |
| Payment of costs incurred causing working capital deficit[3] | | | 284,000 | |
| Net Proceeds | | | $ 2,425,000 | |



[1] These sums together include salary of $120,000 payable to Dr. Jeffrey Hillman

[2] Includes salary of $180,000 payable to Mento A. Soponis and $100,000 payable to Paul A. Hassie

[3]

| | | |
|---|---|---|
| Principal and interest on $100,000 principal amount note dated Feb. 14, 2003 payable to Cornet Capital Corp. payable on the earlier of demand and one year from date of note with interest at 10% per year, and $75,000 principal amount note dated April 29, 2003 payable to Cornet Capital Corp. one year from the date of note with interest of 10% per year, (see Liquidity and Capital Resources on page 40). | $ | 192,500 |
| Deferred compensation to officers as follows: | | 91,500 (of $143,000) |
| Mento A. Soponis | $ 68,500 | |
| Jeffrey Hillman | 20,000 | |
| Paul Hassie | 3,000 | |
| | 91,500 | |
| | $ | |
| (see Limited Operating History: Need for Additional Capital on page 36. | $ | 284,000 |

On March 19, 2003, we submitted a new investigational new drug application in respect of a strain of our licensed, patented strain of S. *mutans* we have modified to address FDA concerns with our previous investigational new drug application in respect of our replacement therapy technology. The FDA has put our new investigational drug application on clinical hold, pending redesign of certain experimental protocols, completion of the final animal toxicity study, and possibly completion of new pre-clinical animal toxicity studies and studies demonstrating complete eradication of our new strain of *S. mutans* from clinical subjects we will have to amend our new investigational drug application to describe the new protocols and the results of these studies. If upon review of the amendment to our new investigational drug application, the FDA has further objections to the commencement of human clinical trials, we will undertake additional animal studies in order to meet their objections. We will postpone the hiring of a clinical trials manager, and utilize some or all of the funds presently earmarked for paying his or her 14 months salary ($70,000, including salary and related taxes and benefits), and for clinical trials of our replacement therapy technology ($300,000), to pay for the additional animal studies. We will also continue with the present development program for *mutacin* 1140.

If the FDA ultimately denies us permission to conduct human clinical trials for our replacement therapy technology, we will aggressively pursue the in-licensing of one or more new technologies from the University of Florida and other Universities. We will re-direct any remainder of the funds presently devoted to the salary of the clinical trials manager, and to clinical trials for replacement therapy, toward expenses in connection with pursuing such in-licensing.

## DETERMINATION OF OFFERING PRICE

Before this offering, there has been no public market for our common stock. The price of the units we are offering was determined by negotiation between ourselves and Haywood in order for us to raise $3,000,000 in this offering. The offering price bears no relationship whatsoever to our assets, earnings, book value or other criteria of value, and we cannot assure you will be able to resell the shares of common stock comprised in the units, or any shares of common stock you may obtain upon exercise of the Series A or B warrants, above the offering price of the units or at all. Among the factors considered were:

* our lack of operating history
* the proceeds to be raised by the offering
* the amount of capital to be contributed by purchasers in this offering in proportion to the amount of stock to be retained by our existing shareholders, and
* our relative cash requirements.



## RESALE OF OUTSTANDING COMMON STOCK, DIVIDEND POLICY AND NUMBER OF SHAREHOLDERS

No issued and outstanding shares of our common stock are subject to options to purchase or warrants and none of our outstanding securities are convertible into shares of common stock with the exception of 315,000 options to acquire 315,000 shares of common stock at an exercise price of $1.25 per share. The options expire on September 19, 2007

9,425,704 of our outstanding shares of common stock could be sold pursuant to Rule 144 of the Securities Act of 1933. We have agreed to register 625,000 shares of our common stock under the Securities Act of 1933 upon the occurrence of certain events which have yet to take place. These events are referred to under "Recent Sales of Unregistered Securities." We have also agreed to register the 599,940 shares we issued to the University of Florida Research Foundation, Inc. upon its request, if we determine to register any other of our shares under the United States Securities Act of 1933. The University of Florida Research Foundation, Inc. has waived those rights with respect to this offering. See "Description of Securities: Registration Rights."

We are not offering or proposing to offer publicly any shares of our common stock other than those comprised in the units and which may be obtained upon exercise of the warrants which are being sold under this registration statement.

We have not declared any cash dividends, nor do we intend to at this time. We are not subject to any legal restrictions respecting the payment of dividends, except that we may not pay dividends if the payment would render us insolvent. Our future dividend policy will be based on our cash resources and needs. We do not anticipate declaring dividends for the foreseeable future, as we anticipate that all our available cash will be needed for our operations.

There are presently 15 holders of record of our common stock.

## CAPITALIZATION

Our authorized capital is 100,000,000 shares of common stock with par value of $.001 per share, and 20,000,000 shares of preferred stock without par value, of which 9,425,704 shares of common stock and no shares of preferred stock are outstanding at April 30, 2003.

The following table sets forth our capitalization at December 31, 2002 on a historical basis and as adjusted to reflect the sale of the shares comprised in the units and the issuance of 100,000 shares of common stock to Haywood.

This table should be read in conjunction with the section entitled, Management's Discussion and Analysis of Financial Condition and Plan of Operations, our Financial Statements and Notes, and other financial and operating data included elsewhere in this prospectus.

| | 12/31/2002 | As Adjusted After Offering |
|---|---|---|
| **Stockholder's Equity (Deficit):** | | |
| Common Stock: 100,000,000 shares authorized par value $0.001 | | |
| 9,425,704 issued and outstanding | $ 9,426 | |
| 11,925,704 issued and outstanding | | $ 11,926 |
| Additional Paid-in Capital | 628,234 | 3,050,734 |
| Accumulated Deficit | (721,142) | (721,142) |
| TOTAL STOCKHOLDERS' EQUITY (DEFICIT) | $ (83,482) | $ 2,341,518 |



## DILUTION OF THE PRICE YOU PAY FOR YOUR SHARES

Dilution represents the difference between the offering price and the net tangible book value per share immediately after completion of this offering. Net tangible book value is the amount that results from subtracting total liabilities and intangible assets from total assets. Dilution arises mainly as a result of our arbitrary determination of the offering price of the units. Dilution of the value of the shares comprised in the units you purchase is also a result of the lower book value of the shares held by our existing stockholders.

As of December 31, 2002, the net tangible book value of our shares of common stock was $(83,482) or approximately $(0.01) per share based upon 9,425,704 shares outstanding.

Upon completion of this offering, the net tangible book value of the 11,925,704 shares which will be outstanding will be $2,341,518, or approximately $0.20 per share. The amount of dilution you will incur will be $1.05 per share. The net

tangible book value of the shares held by our existing stockholders will be increased by $0.21 per share without any additional investment on their part. You will incur an immediate dilution from $1.25 per share to $0.20 per share.

After completion of this offering, you will own approximately 20.1% of the total number of shares then outstanding, shares for which you will have made a cash investment of $3,000,000, or $1.25 per share. This will represent 78.5% of the total investment in our company. Our existing stockholders will own approximately 79.0% of the total number of shares then outstanding, for which they have made contributions of cash, services and other assets totaling $822,860 or approximately $0.09 per share. This will represent 21.5% of the total investment in our company.

The foregoing figures assume that none of the Series A and B warrants comprised in the units, or any of Haywood's warrants, will be exercised, and that none of our existing stock options will be exercised.

The following table compares the differences of your investment in our shares with the investment of our existing stockholders.

**Existing Stockholders:**

| | | |
|---|---|---|
| Price per unit | $ | 1.25 |
| Net tangible book value per share before offering | $ | (0.01) |
| Gain to existing shareholders | $ | 0.21 |
| Net tangible book value per share after offering | $ | 0.2 |
| Increase to present stockholders in net tangible book value per share after offering | $ | 0.21 |
| Capital contributions | $ | -0- |
| Number of shares outstanding before the offering | | 9,425,704 |
| Number of shares after offering held by existing stockholders | | 9,425,704 |
| Percentage of ownership after offering | | 79.0% [1] |

[1] Does not include 100,000 shares of common stock we will issue to Haywood as part of its compensation.

**Purchasers of Units in this Offering:**

| | | |
|---|---|---|
| Price per unit | $ | 1.25 |
| Dilution per share | $ | 1.05 |
| Capital contributions | $ | 3,000,000 |
| Number of shares after offering held by public investors | | 2,400,000 |
| Percentage of ownership after offering | | 20.1% |



## PLAN OF DISTRIBUTION: TERMS OF THE OFFERING

We are offering through our underwriter, Haywood Securities Inc., 2.4 million units, at a price of $1.25 per unit. Our offering will be made only in the Canadian provinces of British Columbia and Alberta. Each unit consists of one share of common stock of our company, one half of one non-transferable Series A warrant and one half of one non-transferable Series B warrant. One whole Series A warrant may be exercised for 6 months from the date of closing of the offering to acquire a further share of common stock at a price of $2.00 per share. One whole Series B warrant may be exercised for 9 months from the closing date to acquire a further share of common stock at $3.00 per share. Whole warrants only may be exercised. We will not allow the issuance of fractional shares of common stock. For so long as our United States registration statement remains effective, this prospectus qualifies the issue of shares of our common stock upon exercise of the Series A and B Warrants in the United States.

We have entered into an agency agreement dated March 28, 2003 with Haywood. Haywood has agreed to offer our units for sale to the public in British Columbia and Alberta. Our offering is a "best efforts" offering, on an "all or none" basis. Although Haywood has agreed to use its reasonable commercial efforts to sell the units, it is not obliged to purchase any units which are not sold. We will pay Haywood a sales commission equal to 7.5% of the selling price for each unit sold to an investor under our offering. We will issue to Haywood 500,000 warrants, each exercisable for two years from the closing date to purchase one share of our common stock, at a price of $1.25 per share. We will also issue

100,000 shares of our common stock to Haywood under the agency agreement. We have agreed to reimburse Haywood for its reasonable expenses in connection with our offering, regardless of whether it is completed. If the offering is not completed, we will not pay Haywood any compensation. In that event, we do not know how we will reimburse Haywood's expenses. For so long as our United States registration statement remains effective, this prospectus qualifies the resale of the shares we will issue to Haywood, and the shares which may be acquired on exercise of the warrants we will issue to Haywood, by Haywood in the United States.

Haywood's warrants, the underlying shares of common stock and the 100,000 shares of common stock we will issue to Haywood are included in this registration statement, and we have promised to cause this or another registration statement to remain effective until the earlier of the time all of such securities are sold and 18 months from the date of closing of our offering. Haywood will only sell its 100,000 shares of common stock and the shares of common stock underlying its warrants pursuant to its prospectus delivery requirements.

Haywood may form a selling group of Canadian registered investment dealers to assist with sales of the units as subagents. No selling group members will be members of the National Association of Securities Dealers in the United States. Haywood will pay selling group members 6% of the 7.5% cash commission payable in respect of sales by selling group members, and 72% of the warrants issuable to Haywood in connection with such sales. All compensation paid to members of the selling group will be paid from Haywood's compensation. No additional compensation will be payable by us to members of the selling group. The offering will commence on the effective date of this registration statement, which will occur concurrently with or after the date of issue of a Mutual Reliance Review System Decision Document evidencing the issue of receipts for the Canadian prospectus in Alberta and British Columbia by the British Columbia Securities Commission, and will continue for a period of 90 days from the date of issue of an MRRS Decision Document. We expect those dates to occur at approximately the same time. We expect that the offering will be closed on or about _____, 2003. The offering must be completed within 90 days from date of issuance of an Mutual Reliance Review System decision document for the Canadian prospectus, unless such time period is extended by the British Columbia Securities Commission. Completion of our offering is subject to obtaining subscriptions for all of the units. Those who wish to participate in our offering must open accounts with Haywood or members of its selling group, and deposit the purchase price of the units they wish to purchase into their accounts. Subscription funds will not be held in escrow: rather, they will be withdrawn from client accounts on the day of closing. If subscriptions are not obtained for all the units, no funds will be withdrawn from client accounts and amounts deposited will continue to show as credits to the account until otherwise utilized or withdrawn.

Haywood may terminate its obligations under the agency agreement, and Haywood may withdraw all subscriptions on behalf of investors, at its discretion, on the basis of Haywood's assessment of the state of the financial markets or upon the occurrence of the following: if any order to cease or suspend trading in our securities, or prohibiting or materially restricting the distribution of any of the securities which are the subject of this offering, is issued or announced or commenced by any competent regulatory authority not based solely on activities or alleged activities of Haywood which is not rescinded, revoked or withdrawn; if any inquiry, investigation (formal or informal) or other proceeding in relation to us or any of our directors or senior officers is



announced or commenced by any securities regulatory authority or stock exchange which, in Haywood's discretion, materially adversely effects the trading or distribution of the securities which are the subject of our offering; if there is any adverse material change, financial or otherwise, in our assets, liabilities, business, condition, capital or prospects (financial or otherwise), as determined by Haywood in its discretion; if, in Haywood's opinion, it would be impracticable or unprofitable to continue to offer the securities which are the subject of our offering for sale; if any financial occurrence or event of national or international consequence or governmental action, law, or regulation or other occurrence of any nature whatsoever which, in Haywood's opinion, would seriously or adversely affect the market for the securities which are the subject of this offering or our business should develop or occur; or if we are in breach or non-compliance in any material respect with any representation, warranty, term or condition of our agency agreement with Haywood.

Pursuant to the agency agreement, we have agreed to indemnify Haywood in respect of all losses, claims, damages or liabilities which Haywood may become subject under the United States *Securities Act* of 1933, the United States *Securities Exchange Act* of 1934, or the British Columbia and Alberta *Securities Acts*, if they arise out of or are based upon our breach of any representation or warranty of ours contained in the agency agreement or the Series A and B warrant indenture, or our failure to comply with any of our obligations under those agreements, or any untrue statement

or alleged untrue statement of a material fact contained in this registration statement or the Canadian prospectus, or in any amendment or supplement to those documents, or our omission or alleged omission to state in those documents a material fact required to be stated in them, or which is necessary to make the statements contained in them not misleading.

Haywood has informed us that it does not expect to confirm sales of units offered under this prospectus to any accounts over which it exercises discretionary authority.

Applicable United States securities laws require that we register the shares which you may acquire upon exercise of your Series A and B warrants and the shares which Haywood may acquire on exercise of the warrants we will issue to it, or use an available exemption in order to legally issue them. We have promised in our agency agreement with Haywood to keep this registration statement effective for the term of such warrants; however, we can offer you no assurance that we will be able to do so. If we are not able to do so, you may be unable to exercise your warrants. If you are not able to exercise your warrants, you will lose a portion of your investment.

The TSX Venture Exchange has conditionally approved the listing of our common stock. Listing will be subject to us fulfilling all of the requirements of the TSX Venture Exchange, including distribution of these securities to a minimum number of public securityholders. We do not intend to list our common stock on any exchange or quotation system in the United States. **Our Series A and B warrants are non-transferable and will not be listed on any stock exchange or quotation service.**

Haywood Securities (USA) Inc. is a wholly-owned subsidiary of Haywood, and is a member of the National Association of Securities Dealers. Neither Haywood Securities (USA) Inc. nor any other member of the National Association of Securities Dealers is participating in this offering.

**Section 15(g) of the Exchange Act**

Our shares of common stock are covered by the "penny stock" rules under Section 15(g) of the Securities Exchange Act of 1934, as amended, and the related rules of the SEC. They impose additional sales practice requirements on United States broker/dealers who sell our securities. These rules require, among other things, that a broker engaging in a transaction in our securities provide its customers with:

* a standardized risk disclosure document;
* current quotations or similar price information;
* disclosure of the amount of compensation or other remuneration received by the broker and its sales persons as a result of the penny stock transactions; and
* monthly account statements.

The broker must provide the bid and offer quotations and compensation information before effecting the transaction. This information must be contained in the customer's confirmation.



Our shares are subject to the foregoing rules in the United States. The foregoing rules apply to broker/dealers. The application of the penny stock rules may affect your ability to resell your shares in the United States because some broker/dealers may not be willing to make a market in our securities because of the burdens imposed upon them by the penny stock rules. Also, the broker prepares the information provided to the broker's customers. Because we do not prepare the information, we cannot assure you such information is current or complete.

Our common stock is defined as a "penny stock" under the Securities and Exchange Act of 1934, and its rules. Because our common stock is a penny stock, you may not be able to resell your shares in the United States. This is because the Exchange Act and the penny stock rules impose additional sales practice and disclosure requirements on broker/dealers who sell our securities to persons other than accredited investors. As a result, fewer broker/dealers are willing to make a market in our stock.

## BUSINESS

### Corporate

Oragenics, Inc. was incorporated under the laws of Florida on November 6, 1996. We commenced operations in 1999. Our registered office is located at 4730 S.W. 103rd Way, Gainesville, Florida 36208, and our head office is located at 12085 Research Drive, Alachua, Florida 32615.

We amended our articles of incorporation on May 8, 2002, in order to change our name from Oragen, Inc. to Oragenics, Inc. and to increase our authorized capital from 100,000 shares of common stock to 100,000,000 shares of common stock and 20,000,000 shares of preferred stock.

### General

We are a biotechnology research and development company created and operating to attempt to commercialize two new technologies. Our licensed, patented replacement therapy technology may prove to be a new treatment for human tooth decay. Before products incorporating our licensed, patented technologies may be produced or sold in the United States, we must obtain FDA approval. If we are successful in obtaining regulatory approval, for one or both of our licensed, patented technologies, we will attempt to license other technologies, from the University of Florida or elsewhere, to which we believe members of our team such as Dr. Hillman can add value.

### Federal Food and Drug Administration Regulation

The FDA and comparable regulatory agencies in state and local jurisdictions and in foreign countries impose substantial requirements upon the clinical development, manufacture and marketing of drugs. These agencies and other federal, state and local entities regulate research and development activities and the testing, manufacture, quality control, safety, effectiveness, labeling, storage, record-keeping, approval, advertising and protection of any products we may develop.

### General

The steps required before a new drug may be produced and marketed in the United States are:

1. pre-clinical laboratory and animal tests
2. investigational new drug application
3. clinical trials (Phases I, II and III)
4. pharmaceutical development
5. new drug application (review and approval)
6. post-marketing surveys

The testing and approval procedures require substantial time, effort and financial resources and we cannot assure you that any approval will be timely granted, or at all.

**Pre-Clinical Trials and Investigational New Drug Application**

Pre-clinical tests are conducted in the laboratory, and usually involve animals. They are done to evaluate the safety and efficacy of the potential product. The results of the pre-clinical tests are submitted as part of the investigational new drug application and are fully reviewed by the FDA prior to granting the applicant permission to commence clinical trials in humans. Submissions of an investigational new drug application may not result in FDA approval to commence clinical trials. See "Regulatory Status" below.

**Clinical Trials**

Clinical trials are conducted in three phases, normally involving progressively larger numbers of patients.



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**Phase I**

Phase I clinical trials consist of administering the drug and testing for safety and tolerated dosages as well as preliminary evidence of efficacy in humans. They are concerned primarily with learning more about the safety of the drug, though they may also provide some information about effectiveness. Phase I testing is normally performed on healthy volunteers. The test subjects are paid to submit to a variety of tests to learn what happens to a drug in the human body; how it is absorbed, metabolized and excreted, what effect it has on various organs and tissues; and what side effects occur as the dosages are increased. The principal objective is to determine the drug's toxicity. Phase I trials generally involve 20-40 people at an estimated cost of $10,000 per patient, taking six months to one year to complete.

**Phase II**

Assuming the results of Phase I testing present no toxicity or unacceptable safety problems, Phase II trials may begin. In many cases Phase II trials may commence before all the Phase I trials are completely evaluated if the disease is life threatening and preliminary toxicity data in Phase I shows no toxic side effects. In life threatening disease, Phase I and Phase II trials are sometimes combined to show initial toxicity and efficacy in a shorter period of time. Phase II trials involve a study to evaluate the effectiveness of the drug for a particular indication and to determine optimal dosages and dose interval and to identify possible adverse side effects and risks in a larger patient group. The primary objective of this stage of clinical testing is to show whether the drug is effective in treating the disease or condition for which it is intended. Phase II studies may take several months or longer and involve a few hundred patients in randomized controlled trials that also attempt to disclose short-term side effects and risks in people whose health is impaired. A number of patients with the disease or illness will receive the treatment while a control group will receive a placebo. At the conclusion of Phase II trials, we and the FDA will have a clear understanding of the short-term safety and effectiveness of our technologies and their optimal dosage levels.

**Phase III**

Phase III clinical trials will generally begin after the results of Phase II are evaluated. If a product is found to be effective in Phase II, it is then evaluated in Phase III clinical trials. The objective of Phase III is to develop information that will allow the drug to be marketed and used safely. Phase III trials consist of expanded multi-location testing for efficacy and safety to evaluate the overall benefit or risk index of the investigational drug in relation to the disease treated. Phase III trials will involve thousands of people with the objective of expanding on the clinical evidence.

Some objectives of Phase III trials are to discover optimum dose rates and schedules, less common or even rare side effects, adverse reactions, and to generate information that will be incorporated into the drug's professional labeling and the FDA-approved guidelines to physicians and others about how to properly use the drug.

**Pharmaceutical Development**

The method of formulation and manufacture may affect the efficacy and safety of a drug. Therefore, information on manufacturing methods and standards and the stability of the drug substance and dosage form must be presented to the FDA and other regulatory authorities. This is to ensure that a product that may eventually be sold to the public has the same composition as that determined to be effective and safe in the clinical studies. Production methods and quality control procedures must be in place to ensure a relatively pure compound, essentially free of contamination and uniform with respect to all quality aspects.

**New Drug Application**

The fourth step that is necessary prior to marketing a new drug is the new drug application submission and approval. In this step, all the information generated by the pre-clinical and human clinical trials will be submitted to the FDA and if successful, the drug will be approved for marketing.

**Post Marketing Surveys**

The final step is the random surveillance or surveys of patients being treated with the drug to determine its long-term effects. This has no effect on the marketing of the drug unless highly toxic conditions are found.



The required testing, data collection, analysis and compilation of an investigational new drug application and a new drug application are labor intensive and costly and may take a great deal of time. Tests may have to be redone or new tests performed in order to comply with FDA requirements. Therefore, we cannot estimate with any certainty the length or the costs of the approval process. We can offer no assurance that we will ever receive FDA approval of products derived from our licensed, patented technologies.

**Our Business Strategy**

For our business to become profitable and competitive, our technologies must be approved for production and sale by the FDA. Our present strategy for financing the clinical trials which will be necessary as part of the FDA approval process involves conducting the research and development work in respect of our technologies through Phase I clinical trials. Assuming we complete Phase I clinical trials successfully, we intend to sub-license our licensed, patented technologies to pharmaceutical companies, which would be responsible for completing Phase II and III clinical trials and for undertaking the new drug applications. We anticipate that such sub-licenses would provide for payment of fees to us, a portion of which would be payable upon execution and the balance of which would be payable upon achievement of product development milestones, and for payment to us of royalties from sales. This strategy would serve to avoid the high costs of Phase II and III trials we would otherwise have to pay, and generate revenues from our technologies sooner than if we conducted those trials ourselves. There can be no assurance that we will be able to enter into such sub-licenses on terms favorable to us, or at all.

If we are successful in sublicensing one or both of our technologies, we intend to seek to license promising new technologies in our fields of expertise. We hope to be able to obtain licenses of other technologies firstly from the University of Florida, with which a number of our directors and officers have a strong relationship, and secondly from other universities.

**Our Technologies**

**Replacement Therapy**

***Background***

Our licensed, patented replacement therapy technology is the fruit of 25 years of research by our founder and chief scientific officer, Dr. Jeffrey Hillman. In the course of his research at Forsyth Dental Center and the University of Florida, Dr. Hillman isolated a strain of a species of bacteria naturally resident on teeth with the ability to out compete and displace other strains of that species. The strains of that species typically found on teeth produce lactic acid, which causes tooth decay. Dr. Hillman, through recombinant DNA technology, succeeded in replacing a gene in the strain of bacteria with the ability to out-compete. That gene is responsible for producing lactic acid. Dr. Hillman replaced it with a gene that causes that strain to produce other harmless, non-decay-causing substances. The University of Florida has obtained a patent in respect of that genetically altered strain, and we have obtained an exclusive license of that patent from the University of Florida. Our replacement therapy technology may prove to be a new treatment for human tooth decay.

In 2000, we entered into a sponsored research agreement with respect to our replacement therapy technology. Under that agreement, we were paid $357,750 in respect of research and development costs. The agreement allowed our sponsor the exclusive option to negotiate a sublicense of our replacement therapy technology. Our sponsor did not exercise the option, and it has expired. We have had no further discussions or negotiations with the sponsor since the

agreement expired.

**Market Opportunity**

The dental care market in the United States is $58 billion annually. Of this sum, a considerable portion is related to tooth decay. Since the introduction of fluoride, no significant technology has been introduced to prevent tooth decay. Our licenced, patented replacement therapy technology may prove to be the first new treatment for human tooth decay in many years.



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**Technical Background**

Many different types of bacteria reside in everyone's mouth. *Streptococcus mutans* (S. *mutans*) is a bacteria that resides on nearly everyone's teeth. This bacteria converts sugar that we eat into lactic acid. Lactic acid erodes the tooth's enamel and causes the great majority of tooth decay. Our replacement therapy technology consists of a genetically modified strain of *S. mutans* that does not produce lactic acid. Our strain of S. *mutans* produces tiny quantities of a substance known as *mutacin* 1140, which allows our strain to out-compete the strain of S. *mutans* which is naturally resident on a person's teeth. Our strain eliminates the resident strain of S. *mutans* and replaces it in the mouth. It will be administered as a pharmaceutical composition by dentists in office visits. Because our strain out-competes resident strains on teeth, one treatment may last for a long time. Preliminary studies conducted by our Chief Scientific Officer, Dr. Jeffrey Hillman have shown our Replacement Therapy technology to be effective and non toxic in animals.[5] We hope that further testing will confirm these results. We have not yet conducted human clinical trials.

**Animal Studies**

Dr. Jeffrey Hillman, Our Chief Scientific Officer, and others have conducted animal studies of the effectiveness of our replacement therapy technology in rats at the Forsyth Institute, the University of Florida and our company from 1976 to 2002.[6] In the most recent of these studies, our strain of S. *mutans* and wild-type strains of *S. mutans* were grown in culture in the presence of sugar. After careful analysis of the culture, it was found that the wild strain made lactic acid almost exclusively from the metabolism of sugar. It also made very small amounts of other acids and the non-acidic compounds, ethanol and acetoin. By contrast, our strain made mostly the non-acidic compounds, ethanol and acetoin, from metabolism of the sugar. Our strain produced absolutely no detectable lactic acid. We then infected 2 identical groups of conventional rats with either the wild strain or our strain. A third identical group of rats was not infected and served as a control group. After feeding the rats a diet containing sugar for 8 weeks, the teeth of the rats were carefully inspected to determine their incidence and severity of tooth decay. It was found that animals infected with our strain had no more tooth decay than did the control group animals. Both the group infected with our strain and the control group had only half the tooth decay experienced by the wild strain.

Dr. Hillman and others also conducted a 6 month toxicity study in rats. They infected a group of rats with our licensed, patented strain of S. *mutans*. No gross or histological side effects were found during colonization of the rats over this prolonged period.

These studies provide scientific evidence of the effectiveness of our licensed, patented strain of S. *mutans* in preventing tooth decay, and of its non-toxicity, in animals.

**Manufacturing**

The manufacturing methods for producing our strain of S. *mutans* to be used in our replacement therapy technology will be standard fermentation methods. These involve culturing bacteria in large vessels, and harvesting them when mature by centrifuge or filtration. The cells will then be suspended in a pharmaceutical medium appropriate for application in the human mouth. These methods are commonplace and readily available within the pharmaceutical industry. We intend to sub-license our replacement therapy technology to a pharmaceutical company after completion of Phase I clinical studies. If we are successful in doing so, the sub-licensee company will manufacture and market our replacement therapy technology.

**Method of Administration**

We expect, if we are successful in obtaining the necessary regulatory approvals, that the product based on our

replacement therapy technology will be a liquid rinse which will be applied to a patient's teeth by a dentist. We expect that it will be available by prescription only.

[5] Hillman et al, Construction and Characterization of an Effector Strain of *Streptococcus mutans* for Replacement Therapy of Dental Caries, *Infection and Immunity (2000)* Vol.68, No. 2.
[6] Hillman et al, Construction and Characterization of an Effector Strain of *Streptococcus mutans* for Replacement Therapy of Dental Caries, *Infection and Immunity (2000)* Vol.68, No. 2



**Competition**

We do not know of any direct competitors with our licensed, patented replacement therapy technology. We understand that certain companies have been researching vaccines to inhibit the growth of S. *mutans*. However, every vaccine has drawbacks, including induced-heart-reactive antibodies in animals. Major studies would be required to establish that elimination of naturally occurring bacteria such as S. *mutans* from the mouth will not create serious, unintended consequences. Academic institutions, government agencies and other public and private research organizations may also conduct research, seek patent protection and establish collaborative arrangements for discovery, research and clinical development of technologies and products similar to ours. Many of our potential competitors in these areas have research and development capabilities that may allow them to develop new or improved products that may compete with products based on our technologies.

Any product based on our replacement therapy technology will compete against traditional oral care products used to combat tooth decay. These products include tooth sealants and fluoride treatments administered by dentists, and fluoride based toothpastes. Some of our competitors will include Colgate, Procter & Gamble, Unilever, GlaxoSmithKline and Dentsply. All of these companies are much larger and have far greater technical and financial resources than us. It is our intention to compete in the market for dental care products by obtaining a strategic partner with a dedicated sales force in the dental office market. There can be no assurance we will be able to obtain any such partner. If we are unable to secure such a strategic partner, we will seek to enter into a contract manufacturing arrangement with a pharmaceutical manufacturing company, and to enter into distribution agreements with dental product distributing companies. There can be no assurance we will be able to enter into any such arrangement.

**License**

We hold our patented replacement therapy technology under license from the University of Florida Research Foundation Inc. The license is dated August 4, 1998. It was amended on September 15, 2000, July 10, 2002, September 25, 2002 and March 2003. It provides us with an exclusive world wide license to make, use and sell products and processes covered by patent no. 5,607,672. This patent covers the genetically altered strain of S. *mutans* which does not produce lactic acid, a pharmaceutical composition for administering the genetically altered strain, and the method of preventing tooth decay by administering the strain. The University of Florida Research Foundation, Inc. has reserved for itself and the University of Florida the right to use and sell such products and services for research purposes only. Our license also provides the University of Florida Research Foundation, Inc. with a license, for research purposes only, to any improvements we make to the products and processes covered by the patent. Our license is for the period of the patent, subject to the performance of terms and conditions contained therein. The patent is dated March 4, 1997, and will expire on March 3, 2014.

Under the license, we have entered into an Equity Agreement with the University of Florida Research Foundation, Inc. under which we have issued as partial consideration for our license 599,940 shares of our common stock which is 6.4% of our total outstanding shares as of December 31, 2002. We are obligated to pay 5% of the selling price of our products to the University of Florida Research Foundation, Inc. If we sublicense the license, we are obligated to pay 20% of all amounts we receive from the sublicensee to the University of Florida Research Foundation, Inc. On December 31, 2005 and each year thereafter we are obligated to make a minimum royalty payment of $50,000. We are obligated to spend or cause to be spent at least an aggregate of $600,000 in 2003 and an aggregate of $1,000,000 in each calendar year following 2003 on the research, development and regulatory prosecution of our replacement therapy and *mutacin* 1140 technologies together, until a product which is covered wholly or partially by the claims of the patent, or is manufactured using a process which is covered wholly or partially by the claims of the patent, is sold commercially.

If we fail to make these minimum expenditures, the University of Florida Research Foundation, Inc. may terminate our

license.

We must pay all patent costs and expenses incurred by the University of Florida Research Foundation, Inc. for the preparation, filing, prosecution, issuance and maintenance of the patents beyond $105,000. We must pay $100,000 for the patent expenses when we have received at least $1,000,000 in external funding. We will make this payment from the proceeds of this offering.



We have agreed to indemnify and hold the University of Florida Research Foundation, Inc. harmless from any damages caused as a result of the production, manufacture, sale, use, lease, consumption or advertisement of the product. Further, we are required to maintain liability insurance coverage appropriate to the risk involved in marketing the products. We have obtained liability insurance in the amount of $1,000,000.

**Intellectual Property Matters**

We do not hold any patents on our replacement therapy technology. Our rights to this technology flow from our license with the University of Florida Research Foundation, Inc.

We received notification from B.C. International Corporation on July 29, 2002 that a gene utilized in our licensed, patented strain of S. *mutans* infringes a patent which it holds under a license. Their notification did not state that they intended to pursue legal remedies. Management of our company does not believe the gene in question infringes that patent. We have sent them correspondence setting out our position. We have heard nothing further from them.

**Regulatory Status**

We submitted an investigational new drug application for our replacement therapy technology in 1998. The FDA placed our application on clinical hold on December 3, 1998 pending resolution of concerns related to transmission of our genetically modified strain of S. *mutans* by those treated with it to others who have not been treated with it, possible mutation of our strain to an acid-producing strain, and the possibility of genetic transmission of the ability to produce *mutacin* 1140 from our strain to other forms of bacteria which occur naturally in human beings. The clinical hold order was issued because the FDA believed our application did not contain sufficient information to allow it to assess the risks to the subjects in our proposed human clinical studies. We may not commence Phase I human clinical studies of our replacement therapy technology until the clinical hold is lifted. We have amended our application 3 times in response to FDA concerns. As a result of the research and development work we have done to respond to the FDA's concerns, we have gained valuable knowledge about the use and administration of our replacement therapy technology.

On October 23, 2000, we met with representatives of the FDA's Center for Biological Evaluation and Research to discuss their concerns. At that meeting, we and the Center's representatives discussed design of the pre-clinical experiments which the FDA would require in response to the clinical hold. We agreed with the FDA to perform such experiments, and that the Center will review the results from the experiments in a timely manner. We agreed with the FDA that when we again amended our investigational new drug application to submit the results from those experiments to the Center, it would consider that a complete response to the clinical hold. If the results of the experiments are positive, the Center will have our proposed clinical studies reviewed by the Vaccines and Related Biological Product Committee, an advisory committee of non-government experts, for safety. If the Center and the Committee conclude our proposed clinical studies are safe, our application will be granted and we will commence Phase I trials of our replacement therapy technology.

In order to address the FDA's concerns, we developed a modification of our licensed, patented strain of S. *mutans.* The modified strain has a nutritional requirement for a substance known as D-alanine. If D-alanine is withdrawn from its diet, it will die. We believe this trait will allow us to address the FDA's concerns about transmission of our strain to people who have not been treated with it. Because of the nutritional requirement of our modified strain, if it is transmitted to those who have not been treated with it, it will die, unless D-alanine is administered regularly. D-alanine will be supplied to the trial subjects with mouth rinse. D-alanine is not normally found in the human diet, which is why it has been selected for our study as a potential recall mechanism. The maintenance system will be by regular mouth rinse, the amount and frequency of which will be determined in the clinical trials. We designed pre-clinical animal experiments with the modified strain which we believe comply with all of the Center for Biological Research and Evaluation's requirements, and reviewed them with our regulatory consultant. We commenced these studies in 2001. The results of the studies can be summarized as follows. The modifications to produce D-alanine dependence had no

effect on the modified strain's production of lactic acid or *mutacin* 1140, which suggests that the modified strain compares identically to our original strain with respect to its ability to out compete natural strains and non-production of tooth decay. No adverse side effects were observed in laboratory rats infected with the modified strain, and exposed to D-alanine in their drinking water, for five months. The potential for reversion of the modified strain to lactic acid production and for transmission of the modified strain to those not treated with it were demonstrated to be very low. In the animal model used, total eradication was not achieved. A final animal study remains to be completed. We expect the final animal study to be completed by May of 2003.



On March 19, 2003, we submitted a new investigational new drug application to the FDA in respect of our newly modified strain of our licensed, patented strain of S. *mutans*. It incorporates our previous investigational new drug application by reference. Our new investigational drug application refers to the final animal study and indicates that results from that study will be submitted as an amendment when it is complete. On April 18, 2003, the FDA notified us by telephone that it was placing our new investigational new drug application on clinical hold. We spoke again by telephone with the FDA on April 30, 2003. The FDA has indicated that, in order to lift the clinical hold, it wants certain of the experimental protocols for our human clinical trials described in our new investigational new drug application redesigned to include a full physical examination of subjects' spouses, and to include more extensive testing of subjects' spouses. The FDA will also require completion of the final animal toxicity study, and may require additional pre-clinical animal toxicity studies in which our newly modified strain of S *mutans* and D-alanine are ingested by rats together and separately, and studies demonstrating total eradication of our newly modified strain of S. *mutans* from clinical subjects. The FDA indicated to us that it expects to issue a formal letter outlining its requests within approximately 3 weeks of April 30, 2003, and that it is willing to meet with us to discuss possible animal models for the studies demonstrating total eradication of our newly modified strain that would be satisfactory. The cost of redesign of our experimental protocols will not be material. We estimate that the cost of the additional pre-clinical animal toxicity studies, if required, and the studies demonstrating total eradication of our strain will be approximately $20,000 each. We will require the proceeds of this offering to complete the final study and amend our investigational new drug application to submit the results from the final animal toxicity study, the redesign of our experimental protocols, and the additional pre-clinical animal toxicity study, if required. We expect to amend our application to disclose the results from the final study and the redesign of our experimental protocols in June of 2003. If the FDA requires additional pre-clinical animal toxicity studies, we expect to complete the design of those studies in June of 2003. We hope to complete the studies themselves, if required, in January 2004. Our new investigational drug application also contains a tentative design for Phase I clinical trials for our replacement therapy technology.

If the FDA approves our investigational new drug application, we will be permitted to commence large-scale human clinical trials of our licensed, patented replacement therapy technology. The cost per patient is estimated at $10,000.

Our patient estimate for each phase of the clinical trial process for the replacement therapy technology is:

| Phase I | Phase II/III |
|---|---|
| **24-30** | **3,000** |

**Milestones**

1 Complete the pre-clinical studies and redesign of our experimental protocols required for approval of our investigational new drug application. We expect to do this by June, 2003, and we expect completion to cost $20,000.

2 Obtain FDA approval for the design of the Phase I clinical trials for our replacement therapy technology. We hope to do this by June 2003, if the FDA does not require us to complete additional pre-clinical animal toxicity studies and studies demonstrating complete eradication of our newly modified strain of *S. mutans* from clinical subjects. If the FDA does so, we hope to complete the additional studies by January, 2004, and we expect the studies to cost $20,000 each. We expect to pay our regulatory consultants fees of $50,000 in connection with the design of Phase I clinical trials and advice concerning our discussions about the design with the FDA.

3 Hire a clinical trials manager to oversee Phase I clinical trials for our replacement therapy technology. We expect to do this within three to four months of the closing of the offering, at a cost of $70,000 for 14 months salary and related taxes and benefits.

4 Hire a Director of Regulatory Affairs. We expect to do this within two to three months of the closing of the offering, at a cost of $126,000 for 14 months salary and related taxes and benefits.

5 Complete Phase I clinical trials. We expect to do this within twelve to fourteen months of the closing of this offering, and we expect the total cost to be $300,000.



6 Enter into a sub-licensing agreement with one or more major pharmaceutical companies. Assuming favorable results from our Phase I clinical trials, we hope to do this within eighteen months of the closing of this offering.

**Mutacin 1140**

**Background**

Our second licensed, patented technology is *mutacin* 1140, an antibiotic peptide which is produced by our strain of S. *mutans*. It was discovered by Dr. Hillman in the course of his research into our replacement therapy technology. It is a broad spectrum antibiotic which has demonstrated potency, in laboratory studies against all Gram-positive bacteria against which it has been tested.[7] The testing was conducted by our Chief Scientific Officer and director, Dr. Jeffrey Hillman, who is also the majority shareholder of our company, together with others at the University of Florida and at our laboratories in 1998 and 1999.

**Introduction to Antibiotics**

Before the development of effective modern antibiotics, serious bacterial infections were as feared as AIDS is today. Since development of antibiotics, they have been less feared. However, society may soon be faced once again with the prospect of bacterial and fungal diseases becoming major causes of death. Resistance to drugs which are effective against bacterial and fungi is increasing, and at a faster pace than development of drugs which are effective against them.

**Market Opportunity**

Since the initial discovery and introduction of antibiotics some 50 years ago, doctors and researchers have found that bacteria are efficient at developing or acquiring mechanisms of defence. Until recently, antibiotic resistance appeared to be a relatively minor nuisance. Drug manufacturers were confident they could modify the structure of existing drugs such as penicillins, cephalosporins and tetracyclines faster than bacteria are able to develop drug resistance. Unfortunately, this has not proved to be the case. The numbers of drug resistant bacteria are on the rise, and the development of new treatment options has not kept pace. The single greatest problem in the use of antibiotics today is resistance by the disease causing organisms they are targeted against. The Center for Disease Control estimates that bacteria resistant to known antibiotics cause 44% of hospital infections. Drug resistant bacterial infections affect approximately 9 million people annually in the United States, resulting in some 60,000 deaths. Vancomycin, introduced in 1956, today serves as the last line of defence against certain life-threatening infections. Unfortunately, certain bacteria have developed strains which resist even vancomycin. Many experts caution we may soon see the return of the pre- antibiotic era.

**Technical Background**

Preliminary *in vitro* [8] laboratory studies conducted by Dr. Jeffrey Hillman, our Chief Scientific Officer and director have demonstrated *mutacin* 1140's effectiveness against all tested Gram-positive bacteria [9]. Gram-positive bacteria are a class of bacteria that cause a large variety of human infections. We hope further testing will confirm these results. *Mutacin* 1140 belongs to a small class of antibiotics called lantibiotics. Lantibiotics differ from other antibiotics because they contain an unusual amino acid. They are able to kill a wide variety of bacteria by punching holes in their cellular membranes.

Nisin is a lantibiotic that has been widely used for decades as a food preservative. We will study *mutacin* 1140 first for its potential application in the clinical treatment of various infectious diseases. In laboratory studies it has been effective at killing a broad spectrum of bacteria, including the streptococci that cause pharyngitis (strep throat) and pneumonia. It is also effective against Staphylococci, which cause various sorts of infection. [10] At a later time, we may study *mutacin* 1140 for use as a food preservative.

*Mutacin* 1140 has other properties that indicate its potential usefulness and acceptance as an antibiotic. The most striking of these is the observation that these pathogenic bacteria based on testing to date seem to have great difficulty in becoming resistant to it [11]. It is a small, modified peptide that is expected to be absorbed by an oral route of administration. Preliminary animal testing conducted by Dr. Hillman indicates that it does not readily provoke an immune response, indicating that it may not be very allergenic[12].



[7] Hillman et al, Construction and Characterization of an Effector Strain of *Streptococcus mutans* for Replacement Therapy of Dental Caries, *Infection and Immunity (2000)* Vol.68, No. 2.

[8] Studies carried out in isolation from a living organism.

[9] Wojciehowski, Byers and Hillman, Regulation of Expression of the Structural Gene for *Mutacin* 1140 and Characterization of its Antibacterial Properties (2002), submitted for publication..

[10] Wojciehowski, Byers and Hillman, Regulation of Expression of the Structural Gene for *Mutacin* 1140 and Characterization of its Antibacterial Properties (2002), submitted for publication..

[11] Wojciehowski, Byers and Hillman, Regulation of Expression of the Structural Gene for Mutacin 1140 and Characterization of its Antibacterial Properties (2002), submitted for publication and Hillman et al, Isolation of a *Streptococcus mutans* Strain Producing a Novel Bacterium, *Infection and Immunity* (1984) Vol. 44, No. 1, pp. 141-144.

[12] Wojciehowski, Byers and Hillman, Regulation of Expression of the Structural Gene for Mutacin 1140 and Characterization of its Antibacterial Properties (2002), submitted for publication and Hillman et al, Isolation of a *Streptococcus mutans* Strain Producing a Novel Bacterium, *Infection and Immunity* (1984) Vol. 44, No. 1, pp. 141-144.

**Laboratory Testing**

Dr. Hillman and others have conducted laboratory studies at the Forsyth Institute, the University of Florida and our company to test the efficacy of *mutacin* 1140 as an antibacterial agent from 1984 to the present[13]. To test the ability of *mutacin* 1140 to kill bacteria, standard microbiological testing methods were employed. *Mutacin* 1140 was purified and incorporated into growth medium at different concentrations. This medium was then inoculated with the bacterium under study, and its ability to grow in the presence of *mutacin* 1140 was observed. The minimal inhibitory concentration (MIC), which is defined as the lowest concentration of *mutacin* 1140 that was observed to inhibit growth of the test bacterium, was recorded.

Purified *mutacin* 1140 was found to have a very broad spectrum of activity. It was found to kill all Gram positive bacteria tested at concentrations comparable to many therapeutically effective antibiotics. The bacteria found to be sensitive included those responsible for human infections such as streptococcal pharyngitis ("strep throat"), the predominant type of human pneumonia, and bacterial endocarditis.

A particularly interesting feature of *mutacin* 1140 is that none of the sensitive species of bacteria tested were able to acquire genetically stable resistance to purified *mutacin* 1140. Acquired resistance to antimicrobial agents by strains of bacteria which cause illness in humans has become a major problem in the recent past.

**Manufacturing**

We have not yet identified the production method for *mutacin* 1140.

**Method of Administration**

We expect that, if we are successful in identifying a production method for *mutacin* 1140 and obtaining the necessary regulatory approvals, any products based on our *mutacin* 1140 technology will be antibiotic drugs, available only by prescription. We do not yet know the method by which products based on *mutacin* 1140 will be administered to patients. They may be administered orally, topically or by injection.

**Competition**

We believe that the current direct competitors with our *mutacin* 1140 technology are antibiotic drugs such as Vancomycin and others. There are strains of bacteria which have developed resistance even to vancomycin. We believe that there is ample room in the marketplace for new antibiotic drugs.

We are aware of a mutacin peptide similar to *mutacin* 1140 patented by the University of Laval. Successful development of that technology would constitute major competition for *mutacin* 1140.

Many potential competitors of ours are taking approaches quite different from ours to the development of antibiotic drugs. These include traditional natural products screening, genomics to identify new antibiotic targets and combinatorial chemistry to generate new chemical structures. Competition in the pharmaceutical industry is based on drug safety, efficacy, ease of use, patient compliance, price, marketing and distribution. The commercial success of our *mutacin* 1140 technology will depend on our ability and the ability of our sublicensees to compete effectively in all these areas. There can be no assurance our competitors will not succeed in developing products which are more effective than *mutacin* 1140, or which would render *mutacin* 1140 obsolete and non competitive.

If we are able to find a suitable method for producing *mutacin* 1140 and to obtain the necessary regulatory approvals, any products based on our *mutacin* 1140 technology will compete against a large number of prescription antibiotics currently on the market, and against new antibiotic products which will enter the market over the next several years. Producers of antibiotic products include many large, international pharmaceutical companies, all of which have much greater financial and technical resources than us. It is our intention to compete in the market for antibiotic products by obtaining a strategic partner with an established sales force calling on doctors and hospitals. There can be no assurance we will be able to obtain any such partner. If we are not, we will be obliged to develop our own channels of distribution for products based on *mutacin* 1140. There can be no assurance we will be able to do so.

[13] Wojciehowski, Byers and Hillman, Regulation of Expression of the Structural Gene for Mutacin 1140 and Characterization of its Antibacterial Properties (2002), submitted for publication and Hillman et al, Isolation of a *Streptococcus mutans* Strain Producing a Novel Bacterium, *Infection and Immunity* (1984) Vol. 44, No. 1, pp. 141-144.

**License**

We hold our patented *mutacin* 1140 technology under license from the University of Florida Research Foundation, Inc. dated June 22, 2000. It was amended on September 15, 2000, July 10, 2002, September 25, 2002 and March, 2003. It provides us with an exclusive world wide license to make, use and sell products and processes covered by patents no. 5,932,469 and 6,391,285. These patents together cover *mutacin* 1140, a pharmaceutical preparation containing *mutacin* 1140, and the method of controlling growth of bacteria by use of *mutacin* 1140. Our license is for a period of the patent, subject to the performance of terms and conditions contained therein. The University of Florida Research Foundation, Inc. has reserved for itself and the University of Florida the right to use and sell such products and services for research purposes only. Our license also provides the University of Florida Research Foundation, Inc. with a license, for research purposes only, to any improvements we make to the products and processes covered by the patent. Patent No. 5,932,469 is dated August 3, 1999 and expires August 2, 2016, and Patent No. 6,391,285 is dated May 21, 2002 and expires May 20, 2020. Under the terms of the license, we are obligated to pay 5% of the selling price of our products to the University of Florida Research Foundation, Inc. If we sublicense the license, we are obligated to pay 20% of the amounts we receive from the sublicensee to the University of Florida Research Foundation, Inc. In calendar year 2005 and each year thereafter we are obligated to make a minimum royalty payment of $50,000. We are obligated to spend or cause to be spent at least an aggregate of $600,000 in 2003 and an aggregate of $1,000,000 in each calendar year following 2003 on the research, development and regulatory prosecution of our replacement therapy and *mutacin* 1140 technologies together, until a product which is covered wholly or partially by the claims of the patent, or is manufactured using a process which is covered wholly or partially by the claims of the patent, is sold commercially.

If we fail to make these minimum expenditures, the University of Florida Research Foundation, Inc. may terminate our license.

We have agreed to indemnify and hold the University of Florida Research Foundation, Inc. harmless from any damages caused as a result of the production, manufacture, sale, use, lease, consumption or advertisement of the product. Further, we are required to maintain liability insurance coverage appropriate to the risk involved in marketing the products. We have obtained liability insurance in the amount of $1,000,000.

**Intellectual Property Matters**

We do not hold any patents on our *mutacin* 1140 technology. Our rights to this technology flow from our license with the University of Florida Research Foundation, Inc.

We are aware that the University of Laval has obtained a patent in respect of a mutacin antibiotic similar to *mutacin* 1140. It is our view that this patent and our licensed patent do not infringe on each other. The University of Florida Research Foundation, Inc. obtained its patent in respect of *mutacin* 1140 before the University of Laval obtained its patent. Nevertheless, it is possible our licensed patent may infringe the University of Laval's patent. If so, we may have to incur substantial costs related to sublicensing the University's patent, or if we are unable to negotiate a sublicense, we may be exposed to litigation from the University.

**Regulatory Status**

We have not yet submitted an investigational new drug application to the FDA for our *mutacin* 1140 technology, because we have not yet found a method to produce it in quantities necessary to undertake such studies. We intend to hire a senior scientist and to engage manufacturing companies and research institutions to assist us in developing such a method with some of the funds which will be available to us on completion of this offering. Refer to "Use of Funds Available." We hope to complete development of such a method within 9 to 12 months of closing of the offering.

Our patient estimate for each phase of the clinical trial process for our *mutacin* 1140 technology is:

| **Phase I** | **Phase II/III** |
|---|---|
| 24-30 | 500-1,000 |

**Milestones**

1. Hire a senior scientist to lead the development of a production method sufficient to produce commercial quantities of *mutacin* 1140. We expect to do this within one month of the closing of this offering, and we expect employing such a person to cost $108,000 (including related taxes and benefits) per year.
2. Retain one or more manufacturing companies or research institutions to work with us to develop a production method for *mutacin* 1140. We expect to do this within one month of the closing of this offering, and we expect costs during the first year to be $50,000.
3. Develop a suitable production method for *mutacin* 1140. We hope to develop a suitable production method within nine to twelve months of the closing of the offering. We expect that costs associated with finding such a production method will be the costs of hiring a senior scientist and retaining a manufacturing company discussed above.
4. Complete pre-clinical studies, including animal toxicity and efficacy, required for an investigational new drug application. We expect to complete this within six months after successful development of a production method. We expect completion of pre-clinical studies to cost $250,000.
5. Submit an investigational new drug application to the FDA. We expect to do this within fifteen months of the closing of this offering, and we expect the costs of preparation and submission of the application to be $20,000.
6. Complete Phase I clinical trials. We expect to do this within twenty-four months of the closing of this offering, and we expect completion to cost $300,000 - $350,000.
7. Enter into a sub-licensing agreement with one or more major pharmaceutical companies. Assuming favorable results from our Phase I clinical trials, we hope to do this within twenty-six to thirty months of the closing of this offering.



**Regulatory Consultants**

We have engaged ERA Consulting (USA) LLC to provide us with consulting services relating to our regulatory affairs, and strategic and scientific advice related to our projects, under an agreement dated July 16, 2002. The initial term of the agreement is for one year. We have agreed to pay our consultant for these services at the daily and hourly rates charged by those individuals who provide us with services on its behalf. These rates vary between $63 and $375 per

hour and $500 and $3,000 per day. We will also pay our consultant's direct costs of providing services, such as travel, board, lodging, teleconference and courier charges. Either party may terminate the agreement on 30 days written notice.

We have also engaged The Biologics Consulting Group, LLC to provide us with biologics regulatory consulting services relating to our regulatory affairs, under an agreement with a term from December 18, 2002 to December 17, 2003. We have agreed to pay our consultant for these services at the hourly rates charged by those individuals who provide us with services on its behalf. These rates vary between $165 per hour and $300 per hour. We will also compensate our consultant for all lodging, travel expenses, business meals and other project-related expenses we agree to in advance. Either party may terminate the agreement at any time by giving written notice.

**Marketing**

We presently intend to seek to sublicense our replacement therapy and *mutacin* 1140 *technologies* to pharmaceutical companies, assuming successful completion of Phase I clinical trials. The sublicensees would be responsible for the costs of Phase II and III trials, and of the new drug applications. Assuming the new drug applications are successful, the sublicensees would be responsible for marketing products derived from our licensed, patented technologies. We intend to select sublicensees on the basis of their experience and financial success. We can offer you no assurances that we will obtain FDA approval for our technologies or that we will be successful in entering into sublicenses with established multinational companies.

**Competition**
**Industry**

The pharmaceutical and biotechnology industries are characterized by intense competition, rapid product development and technological change. Competition is intense among manufacturers of dental therapeutics and prescription pharmaceuticals. Most of our potential competitors are large, well established pharmaceutical, chemical or healthcare companies with considerably greater financial, marketing, sales and technological resources than are available to us. Academic institutions, government agencies and other public and private research organizations may also conduct research, seek patent protection and establish collaborative arrangements for discovery, research and clinical development of technologies and products similar to ours. Many of our potential competitors have research and development capabilities that may allow them to develop new or improved products that may compete with products based on our technologies. Products developed from our technologies could be rendered obsolete or made uneconomical by the development of new products to treat the conditions to be treated by products developed from our technologies, technological advances affecting the cost of production, or marketing or pricing actions by our potential competitors. This could materially affect our business, financial condition and results of operations. We cannot assure you that we will be able to compete successfully.

**For Personnel**

Competition among biotechnology and biopharmaceutical 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 and the performance of your investment.

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 Jeffrey Hillman and Chuck Soponis. If one or all of our officers or directors die or otherwise become incapacitated, our operations could be interrupted or terminated.

**Research and Development Costs**

In our last two fiscal years, we have spent $457,337 on research and development of our technologies.



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**If We Do Not Complete Our Offering**

Apart from this offering, we have no plans to raise money. If we are unable to complete this offering we may have to suspend or cease operations.

**Costs of Enforcing Our Licenses**

We have licenses to sell products made using the replacement therapy and *mutacin* 1140 technologies. The licenses were granted to us by the University of Florida Research Foundation, Inc., which owns the patents to our technologies. There is no assurance, however, that third parties will not infringe on our licenses or their patents. In order to protect our license rights and their patents, we or the University of Florida Research Foundation, Inc. may have to file lawsuits and obtain injunctions. If we do that, we will have to spend large sums of money for attorney fees in order to obtain the injunctions. Even if we do obtain the injunctions, there is no assurance that those infringing on our licenses or the University of Florida Research Foundation's patents will comply with the injunctions. Further, we may not have adequate funds available to prosecute actions to protect or to defend the licenses and patents, in which case those infringing on the licenses and patents could continue to do so in the future.

**Company's Office**

Our administrative office is located at 12085 Research Drive, Alachua, Florida 32615. This is also our mailing address. Our telephone number is (386) 418-4018. The annual rental is $24,610 pursuant to the terms of a lease from March 15, 2002 to March 14, 2003. We lease our office space from the University of Florida Research Foundation, Inc. under an office lease dated August 4, 1998, as amended September 15, 2000, July 10, 2002 and September 25, 2002.

**Employees**

We are an early-stage biotechnology research and development company and currently have four employees other than our officers and directors. They all work full time. Of our officers and directors who are employed by us, one is full-time, one 75% time and one is part time, to become full time on closing of our offering.

## MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND PLAN OF OPERATIONS

**Overview**

We are a biotechnology research and development company created to commercialize two new technologies. The first technology is replacement therapy, which is designed to prevent the principal cause of tooth decay. The second technology is *mutacin* 1140, which is an antibiotic.

**Limited Operating History: Need for Additional Capital**

We are a development stage corporation and have generated limited revenues from operations during the last two years. All of our revenues have been from a sponsored research agreement which has expired; none have been from sales.

Our auditors have issued a going concern opinion. This means that our auditors believe there is substantial doubt that we can continue as an on-going business unless we obtain additional capital to pay our bills. This is because we have not generated any revenues from sales and no revenues are anticipated until we are able to enter into sub-licensing agreements with respect to our replacement therapy and *mutacin* 1140 technologies. Accordingly, we must raise cash from sources other than operations. Our only other source for cash at this time is investments by others in us. We must raise cash to finance our operations. If we complete this offering, we do not know how long the money will last, however, we do believe it will last at least twelve months. We are presently unable to finance all of our current cash requirements. We are presently addressing this problem by deferring payment of the salaries of our officers in order to conserve cash. We are presently unable to finance all of our current cash requirements. We are presently addressing this problem by deferring payment of the salaries of our officers in order to conserve cash. As of April 30, 2003, we have deferred approximately $143,000 of salary payable to Chuck Soponis ($93,500), Jeffrey Hillman ($42,000) and Paul Hassie ($7,500). $91,500 of this amount



will be paid from the proceeds of the offering. The balance will be paid from our cash on hand. On February 14, 2003 we borrowed $100,000 from Cornet Capital Corp. (see "Interest of Management and Others in Material Transactions"), and on April 29, 2003 we borrowed $75,000 from Cornet Capital Corp., in order to meet our current cash requirements. These borrowing were not made under the loan facility with Cornet Capital Corp. described under "Interest of Management and Others in Material Transactions." No shares were issued to Cornet Capital Corp. in connection with

these borrowings. In order to meet our cash requirements prior to the closing of the offering, we may have to draw on our loan facility, or raise cash from other sources, or both. We presently have no plans to raise cash from other sources, and there can be no assurance we will be able to do so if we must.

To meet our need for cash we are attempting to raise money from this offering. We recently raised $500,000 in consideration of the issuance of 625,000 restricted shares of common stock. We cannot guarantee that we will be able to raise enough money through this offering to stay in business. If we do not raise all of the money we need from this offering to maintain our operations, we will have to find alternative sources, like a second public offering, a private placement of securities, or loans from our officers or others. We have discussed this matter with our officers, however, our officers are unwilling to make any commitment to lend us any money at this time. At the present time, we have not made any arrangements to raise additional cash, other than through this offering and our loan facility with Cornet Capital Corp. see "Interest of Management and Others in Material Transactions." If we need additional cash and can't raise it we will either have to suspend operations until we do raise the cash, or cease operations entirely. If we complete this offering, we believe the cash will last into 2004. Other than as described in this paragraph, we have no other financing plans.

We will complete our public offering within 90 days of the date of issue of a Mutual Reliance Review System Decision Document in respect of our Canadian prospectus by the British Columbia Securities Commission, if subscriptions are received for all the units and the conditions of closing are met. A portion of the funds received from this offering will be used to maintain our operations until we begin generating revenues.

We do not plan to conduct any research other than continued research relating to our two licensed, patented technologies. Our plan of operation is explained in the business section of this prospectus. We do not plan to buy or sell any plant or significant equipment during the next twelve months.

Our present strategy for financing the clinical trials which will be necessary as part of the FDA approval process involves conducting the research and development work in respect of our technologies through Phase I clinical trials. Assuming we complete Phase I clinical trials successfully, we intend to sub-license our technologies to pharmaceutical companies, which would be responsible for completing Phase II and III clinical trials and for undertaking the new drug application. We will not begin to generate revenues from operations unless and until we complete Phase I clinical trials and enter into a sub-license of one of our technologies. However, we will be spending substantial sums of money on research and development of our technologies. We will not begin generating revenues from sales unless and until a sublicensee obtains approval of a new drug application and begins selling products based on our technologies.

**Business Objectives and Milestones**

The specific goal of our business is to successfully develop, clinically test and obtain FDA approval for sales of products based on our licensed, patented technologies. Our present strategy involves undertaking the animal studies necessary for approval of an investigational new drug application for each technology. If successful, we will then undertake and complete Phase I human clinical trials. We intend at that point to sub-license each of our technologies to one or more pharmaceutical companies, who will be responsible for funding the completion of the Phase II and III clinical trials for the technologies, the cost of the new drug application (see "Federal Food and Drug Administration Regulations"), and for the manufacture and distribution of products based on our technologies. In order to accomplish these objectives, we must take the following actions:

**General**

1 Retain a regulatory consulting firm with FDA expertise to assist us in the preparation and filing of FDA regulatory submissions. We have recently engaged two such firms to do so. We expect to pay these firms approximately $40,000 - $50,000 during the next twelve months.



2 Hire a Director of Regulatory Affairs to coordinate our involvement with the regulatory consulting firm and to oversee our regulatory activities. We expect to hire such a person within two to three months of the closing of this offering, and we expect employing such a person to cost $108,000 per year, including salary and related taxes and benefits.

3 Hire a Clinical Trials Manager to coordinate and oversee Phase I clinical trials. We expect to do this

within three to four months of the closing of this offering, and we expect employing such a person to cost $60,000 per year, including salary and related taxes and benefits.

**Replacement Therapy**

1 Complete the final pre-clinical animal toxicity studies and the redesign of our experimental protocols referred to in our investigational new drug application. We expect to do this by June of 2003, and we expect completion to cost $20,000. If the FDA require is to complete additional pre-clinical animal toxicity studies and studies demonstrating total eradication of our newly modified strain of *S. mutans* from clinical subjects to remove the clinical hold which is has placed on our new investigational drug application, we hope to complete the new studies by January, 2004, and we expect completion to cost $20,000 each.

2 Complete Phase I clinical trials. We expect to do this within twelve to fourteen months of the closing of this offering, and we expect the total cost to be $300,000.

3 Enter into a sub-licensing agreement with one or more major pharmaceutical companies. Assuming favorable results from our Phase I clinical trials, we hope to do this within eighteen months of the closing of this offering.

**Mutacin 1140**

1 Hire a senior scientist to lead the development of a production method sufficient to produce commercial quantities of *mutacin* 1140. We expect to do this within one month of the closing of this offering, and we expect employing such a person to cost $108,000 per year, including salary and related taxes and benefits.

2 Retain one or more manufacturing companies or research institutions to work with us to develop a production method for *mutacin* 1140. We expect to do this within one month of the closing of this offering, and we expect costs during the first year to be $50,000 to $75,000.

3 Develop a suitable production method for *mutacin* 1140. We hope to develop a suitable production method within nine to twelve months of the closing of the offering.

4 Complete pre-clinical studies, including animal toxicity and efficacy, required for an investigational new drug application submission. We expect to complete this within six months after successful development of a production method. We expect completion of pre-clinical studies to cost 250,000.

5 Submit an investigational new drug application to the FDA. We expect to do this within fifteen months of the closing of this offering, and we expect the costs of preparation and submission of the application to be $20,000.

6 Complete Phase I clinical trials. We expect to do this within twenty-four months of the closing of this offering, and we expect completion to cost $300,000 - $350,000. Funding for completion of these clinical trials is not provided in the proceeds of this offering. In order to fund these trials, we will have to obtain additional funding from other sources. We do not know what these sources will be, and there is no assurance we will be able to identify any sources of additional funding.

7. Enter into a sub-licensing agreement with one or more major pharmaceutical companies. Assuming favorable results from our Phase I clinical trials, we hope to do this within twenty-six to thirty months of the closing of this offering.



We expect to conduct much of the research and development work through Phase I clinical trials for both technologies within our company. We expect to engage outside companies to work with us on the production of *mutacin* 1140 and to perform toxicity, pharmacokinetic, and spectrum of action studies on the antibiotic.

**Results of Operations**

***Years Ended December 31, 2002 and 2001***

Our revenues decreased to zero in the year ended December 31, 2002 from $303,912 in 2001. In 2001, our revenues consisted entirely of amounts paid to us under a sponsored research agreement with a major consumer products company. This agreement terminated in late 2001.

Our operating expenses increased 162% to $709,700 in the year ended December 31, 2002 from $270,465 in 2001. Research and development expenses increased 110% to $310,007 in 2002 from $147,330 in 2001, reflecting the hiring of two full time research staff and a Chief Scientific Officer, increased consumption of laboratory supplies and costs incurred for legal patent protection in 2002. General and administration expenses increased 225% to $399,693 in 2002 from $123,135 in 2001, reflecting consulting fees for recruiting, legal and accounting work performed in 2002 and for the amendment to the employment agreement of one of our officers.

Interest income decreased 34% to $2,169 in 2002 from $3,297 in 2001, which was a result of the higher average cash balances maintained in 2001 due to the sponsored research agreement. Interest expenses increased 11% to $8,072 in 2002 from $7,271 in 2001, reflecting the larger average balance of deferred salaries upon which interest was computed in 2002 over 2001.

We incurred a net loss of $699,603 in 2002 and had net income of $13,473 in 2001, reflecting no revenues earned in 2002 and significant increases in operating expenses in 2002 associated with increased research staff, increased consumption of laboratory supplies, the amendment of the employment agreement of one of our officers and costs incurred for recruiting, legal and accounting services.

***Years Ended December 31, 2001 and 2000***

We had revenues of $303,912 and $53,875 in the years ended December 31, 2001 and 2000, respectively. These revenues consisted principally of amounts paid to us under a sponsored research agreement.

Our operating expenses were $270,465 and $69,318 in the years ended December 31, 2001 and 2000, respectively. Research and development expenses increased 443% to $147,330 in 2001 from $27,111 in 2000 reflecting research performed on our replacement therapy technology in conjunction with our sponsored research agreement. Specific contributors to the increase in our research and development expenses during 2001 were the hiring of one full time research staff, costs incurred for legal patent protection and payments to research consultants. General and administration expenses increased 192% in 2001 to $123,135 from $42,207 in 2000 reflecting the full year of compensation for the chief executive officer and fees for legal and accounting work.

Interest income was $3,297 in 2001 and zero in 2000, reflecting the higher cash balances maintained in 2001 as a result of revenues received under our sponsored research agreement. Interest expense increased 395% in 2001 to $7,271 from $1,469 in 2000 reflecting the higher balances in notes payable to shareholders and deferred salary in 2001.

We had net income of $13,473 in 2001 and incurred a net loss of $16,912 in 2000, reflecting primarily the income and expenses associated with our sponsored research agreement.

**Critical Accounting Policy**

In December 2001, the SEC requested that reporting companies discuss their most "critical accounting policies" in Management's Discussion and Analysis of Financial Condition and Plan of Operations. The SEC indicated that a "critical accounting policy" is one that is important to the portrayal of a company's financial condition and operating results and requires management's most difficult, subjective or complex judgments, often as a result of the need to make estimates about the effect of matters that are inherently uncertain. While our significant accounting policies are more fully described in Note 1 to our financial statements, we believe the following accounting policy to be critical.



Our revenue recognition policies are in accordance with the SEC's Staff Accounting Bulletin No. 101, "Revenue Recognition in Financial Statements." We have generated revenue through a sponsored research agreement. The terms of the agreement included non-refundable fees to fund additional research and development to allow the sponsor the ability to assess whether it would exercise a right to license our technology. The agreement also provided for the payment of a non-refundable up-front fee to negotiate an exclusive license for the worldwide manufacturing and marketing rights to our technology.

We recognize revenue relating to the evaluation of our technology ratably over the contracted period that the evaluation and research and development are being performed. We recognize revenue relating to the negotiation of an exclusive license at the termination of the negotiation period. We recognize such revenues only if we are reasonably assured that these amounts will be collected. This assessment involves judgment on our part. If we do not believe that collection of

amounts billed, or amounts to be billed to our sponsor, is reasonably assured, then we defer revenue recognition.

**Liquidity and Capital Resources**

From inception through December 31, 2002, we financed our operations primarily through the issuance of common stock for $508,616, the issuance of notes payable to shareholders totaling $85,454 and a sponsored research agreement totaling $357,787.

We had cash and cash equivalents of $25,580 at December 31, 2002 that are held in one financial institution and invested overnight in money market funds. During the year ended December 31, 2002, we incurred $272,000 in fees associated with this offering.

We lease our laboratory and office facilities, as well as certain equipment, under a 12-month cancelable operating lease with annual renewal options. We had no material commitments for the acquisition or lease of any property or equipment. On February 14, 2003, we obtained a loan of $100,000 from Cornet Capital Corp., and issued an uncollateralized promissory note in the principal amount of $100,000 that pays interest at 10% per annum to Cornet Capital Corp. as security. Principal and interest are payable on demand and in any event before February 14, 2004. On April 29, 2003, we obtained a further loan of $75,000 from Cornet Capital Corp., and issued an uncollateralized promissory note in the amount of $75,000 that pays interest at 10% per annum to Cornet Capital Corp. as security. Principal and interest are payable on April 29, 2003. These borrowings were not made under the loan facility with Cornet Capital Corp. described under "Interest of Management and Others in Material Transactions." No shares were issued to Cornet Capital Corp. in connection with these borrowings.

We expect to incur substantial additional research and development expenses including continued increases in personnel and costs related to research, preclinical testing and clinical trials.

We anticipate that the estimated net proceeds of this offering will be adequate to satisfy our operating expenses and capital requirements as planned into 2004. We will also have available to us, if required, up to $500,000 which we may borrow from Cornet Capital Corp. under a loan facility. See "Interest of Management and Others in Material Transactions." We will require substantial funds to conduct research and development and preclinical and Phase I clinical testing of our licensed, patented technologies and to develop sublicensing relationships for the Phase II and III clinical testing and manufacture and marketing of any products that are approved for commercial sale. Our future capital requirements will depend on many factors, including continued scientific progress in our research and development programs, the magnitude of these programs, the scope and results of preclinical testing and clinical trials, the time and costs involved in obtaining regulatory approvals, the costs involved in preparing, filing, prosecuting, maintaining and enforcing patent claims, competing technological and market developments and our ability to establish development, manufacturing and marketing arrangements. We intend to seek additional funding through sublicensing arrangements or through public or private financings, but there can be no assurance that additional financing will be available on acceptable terms or at all.



## MANAGEMENT

**Officers and Directors**

Each of our directors serves until his or her successor is elected and qualified. Each of our officers is elected by the board of directors to a term of one (1) year and serves until his or her successor is duly elected and qualified, or until he or she is removed from office. Brian McAlister and Robert Zahradnik serve as the compensation committee. Brian McAlister, Robert Zahradnik and Brian Anderson serve as the audit committee. The board of directors has no nominating committee.

The names, addresses, ages and positions of our officers and directors are set forth below:

| Name and Address | Age | Position(s) |
|---|---|---|

| | | |
|---|---|---|
| Mento A. ("Chuck") Soponis<br>4730 SW 103 Way<br>Gainesville, FL 32608 | 58 | president, chief executive officer and member of the board of directors |
| Robert Zahradnik<br>9 Fox Run Lane<br>Batesville, AR 75201 | 58 | member of the board of directors and the audit and compensation committees |
| Jeffrey D. Hillman<br>6424 SW 26th Place<br>Gainesville, FL 32608 | 53 | chief scientific officer and chairman of the board of directors |
| Brian McAlister<br>7225 Blenheim Street<br>Vancouver, British Columbia<br>Canada V6N 1S2 | 46 | member of the board of directors and the audit and compensation committees |
| Brian Anderson<br>6511 South Canyon Ranch Road<br>Salt Lake City, UT 84121 | 56 | member of the board of directors and the audit committee |
| Paul A. Hassie<br>5547 SW 37th Drive<br>Gainesville, FL 32608 | 51 | chief financial officer, treasurer and secretary |

Dr. Hillman has been a director of our company since inception. Dr. Zahradnik has been a director since 1996. Mr. Soponis has been an officer and director since August 2000. Mr. McAlister has been a director since March 2002 and Mr. Anderson has been a director since August 2002. Mr. Hassie has held his office since June of 2002. All are expected to hold their offices/positions until the next annual meeting of our stockholders.

**Background of Officers and Directors**

***Jeffrey D. Hillman - Chief Scientific Officer and Chairman of the Board of Directors***

Dr. Hillman has been our chief scientific officer and chairman of the board of directors since November 1996. From November 1991, Dr. Hillman has been Professor in the College of Dentistry at the University of Florida in Gainesville, Florida. He teaches classes, trains doctoral candidates and conducts research. However, Dr. Hillman has been on leave from the University of Florida, since February 2001, in order to develop our technologies and technologies for iviGene Corporation, Alachua, Florida. iviGene is engaged in the business of developing vaccines and therapeutics, focusing on genes and gene products that are critical factors in the infection state. iviGene does not compete with us. Dr. Hillman received undergraduate training at the University of Chicago (Phi Beta Kappa), and his D.M.D. degree (cum laude) and Ph.D. from Harvard Medical School. He has authored or co-authored more than 100 publications and textbook chapters on subjects related to the etiology and cure of tooth decay and dental disease. He has been conducting research on our licensed, patented replacement therapy technology for more than 25 years. Dr. Hillman's employment contract with us contains non-competition and non-disclosure provisions.



Dr. Hillman has also entered into an Employee and Proprietary Information and Invention Agreement with us dated January 2, 2002 under which he has assigned to us all of his interest in any inventions he may make which are based on any of our proprietary rights or any of our other intellectual property during his employment by us. Dr. Hillman will devote 75% of his time to our company.

***Mento A. Soponis - President, Chief Executive Officer and a member of the Board of Directors.***

Since August 2000, Mr. Soponis has been our president, chief executive officer and a member of the board of directors. From December 2000 to June 2002, Mr. Soponis was president and chief executive officer of iviGene Corporation, Alachua, Florida. IviGene is engaged in the business of developing vaccines and therapeutics. Mr. Soponis remains as Chairman of the Board of Directors of iviGene Corporation. From January 2000 to May 2000, Mr. Soponis was a consultant for the office of technology licensing at the University of Florida, Gainesville, Florida where he reviewed agreements and negotiated the terms of technology licenses. From December 1995 to December 1999, Mr. Soponis was president and chief executive officer of USBiomaterials Corporation, Alachua, Florida. US Biomaterials developed

healthcare products for bone regeneration and for dental care. Mr. Soponis is a graduate of Princeton University and the George Washington University law school. He has served as CEO for a number of early stage biotechnology companies. He has broad experience in strategic positioning and negotiation of corporate partnerships. Mr. Soponis works for us full time. Mr. Soponis' employment contract with us contains non-competition and non-disclosure provisions. Mr. Soponis will devote 100% of his time to our company.

***Robert T. Zahradnik - Member of the Board of Directors***

Since November 1996, Dr. Zahradnik has been a member of our board of directors. Since July 2000 Dr. Zahradnik has been vice president and a director of iviGene Corporation, Alachua, Florida. iviGene is engaged in the business of developing vaccines and therapeutics. Since September 1999, Dr. Zahradnik has been general manager of ProHealth, Inc., Batesville, Arkansas. ProHealth, Inc. is a manufacturer of nutritional supplements and household and skin care products. Since February 1993, Dr. Zahradnik has been a partner and general manager of Professional Dental Technologies and Therapeutics, Batesville, Arkansas, an oral pharmaceutical manufacturer. Since February 1986, Dr. Zahradnik has been the chief executive officer and chairman of the board of directors of Advanced Clinical Technologies, Inc., Medfield, Massachusetts, a medical diagnostic manufacturer and technical consulting firm. Dr. Zahradnik has signed a Proprietary Information Agreement with us dated September 12, 2002 under which he has agreed not to disclose confidential or secret information related to our business which we disclose to him. He has not signed a non-competition agreement with us. Dr. Zahradnik will devote such portion of his time to our company as is necessary to fulfill his responsibilities.

***Brian McAlister - Member of the Board of Directors***

Since March 2002, Mr. McAlister has been a member of our board of directors. From January 1999 to November 2001, Mr. McAlister was president and chairman of the board of directors of LCM Equity. In November 2001, LCM Equity completed a reverse acquisition with Regma Bio Technologies Ltd. of London, England. Regma Bio Technologies is engaged in the development of biotechnology products. Since March 20, 2000, Mr. McAlister has been a Director of Uscribble.com Writing Inc. Uscribble was a subsidiary corporation of LCM Equity until the completion of the reverse acquisition of with Regma Bio Technologies Ltd. Since 1988, Mr. McAlister has been president of Cornet Capital Corp., a corporation owned and controlled by Mr. McAlister which is engaged in the business of assisting start-up corporations with capital raising, funding and other consulting activities. Mr. McAlister was a director of Response Biomedical Corp. from June to November of 2001. From November 1999 to July 2000, Mr. McAlister was a director of Advanced Interactive, Inc., a Vancouver, British Columbia corporation, engaged in the business of developing interactive television. From February 1992 to October 1997, Mr. McAlister was a member of the Board of Directors of Novadigm, Inc. a corporation whose securities are traded on the NASDAQ small cap system. Mr. McAlister has been President and a member of the Board of Directors of Midway Gold Corporation, a company whose shares are listed on the TSX Venture Exchange, since January of 1997. Mr. McAlister holds a Bachelor of Science degree in Business Administration with a major in finance from the University of Denver. Mr. McAlister has signed a Proprietary Information Agreement with us dated September 6, 2002 under which he has agreed not to disclose confidential or secret information related to our business which we disclose to him. He has not signed a non-competition agreement. Mr. McAlister will devote 15-20% of his time to our company.



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***Brian Anderson - Member of the Board of Directors***

Since August 2002, Mr. Anderson has been a member of our board of directors. Mr. Anderson has been a principal and partner of Montridge, LLC, Ridgefield CT, an investor relations firm, since August 16, 2002. From 1998 to June of 2002, Mr. Anderson was the President and Chief Executive Officer of Cognetix, Inc., Salt Lake City, Utah, a research and therapeutics development company. From 1995 to 1998, Mr. Anderson was Senior Vice President, Marketing and Commercial Development of Interneuron Pharmaceuticals, Inc., Lexington, Massachusetts (now called Indeveus Pharmaceuticals Inc.), a biopharmaceutical company whose shares are listed on the NASDAQ National Market. From 1987 to 1995 Mr. Anderson held a number of executive positions at Bristol-Myers Squibb, including responsibilities in business development, strategic planning and marketing. Mr. Anderson has signed a Proprietary Information Agreement with us dated September 11, 2002 under which he has agreed not to disclose confidential or secret information related to our business which we disclose to him. He has not signed a non-competition agreement. Mr. Anderson will devote such portion of his time to our company as is necessary to fulfill his responsibilities.

***Paul A. Hassie - Chief Financial Officer, Treasurer and Secretary***

Since July 2002, Mr. Hassie has been our chief financial officer. Since February 2000, Mr. Hassie has been president of BioFlorida, a trade organization located in Gainesville, Florida that supports biosciences in Florida. Since November 1999, Mr. Hassie has been engaged in the business of financial consulting to bioscience companies in the Gainesville, Florida area. From June 1997 to November 1999, Mr. Hassie was chief financial officer of USBiomaterials Corporation located in Alachua, Florida. USBiomaterials developed healthcare products for bone regeneration and for dental care. From January 1992 to May 1997, Mr. Hassie was controller for Transkaryotic Therapies, Inc. located in Cambridge, Massachusetts. Transkaryotic Therapies is engaged in the business of research and development of gene therapy products. From January 1984, to September 1991, Mr. Hassie was senior manager in the Boston office of Ernst & Young LLP, Certified Public Accountants. Mr. Hassie received a Bachelor of Science degree in accounting from Bryant College, Smithfield, Rhode Island in 1977; an MBA from Bryant College in 1981; and, a Masters of Science in Taxation from Bryant College in 1996. Mr. Hassie is a member of the American Institute of Certified Public Accountants and is a licensed Certified Public Accountant in the Commonwealth of Massachusetts. Mr. Hassie has signed a non-disclosure agreement with us dated August 15, 2002 under which he has agreed not to disclose or make commercial use of our technical and proprietary information and products. He has not signed a non-competition agreement with us. If our offering is completed, Mr. Hassie will devote 100% of his time to our company.

**Conflicts of Interest**

All of our officers and directors, with the exception of Mr. Soponis, have other outside business activities which represent a conflict of interest in that they do not devote full-time to our business.

**Scientific Advisory Board**

We use scientists and physicians with expertise related to our technologies to advise us on scientific and medical matters. We expect to have an advisory board consisting of three or four members in the near future. Currently, our scientific advisory board members are:

***Howard K. Kuramitsu, Ph.D***

Dr. Kuramitsu is a UB Distinguished Professor at the State University of New York at Buffalo. He is a leading expert in the area of the biology of the oral cavity and studies diseases associated with the oral cavity. Dr. Kuramitsu serves on the Editorial Boards of the *International Journal of Oral Biology, Oral Microbiology and Immunology* and *Infection and Immunity*. He also serves on the NIH-NIDCR Advisory Council. Dr. Kuramitsu's work includes more than 170 publications. Dr. Kuramitsu has signed a Proprietary Information Agreement with us dated September 16, 2002 under which he has agreed not to disclose confidential or secret information related to our business which we disclose to him



***Steven J. Projan, Ph.D***

Dr. Projan is Director, Antibacterial Research of Wyeth Research. He is an expert in the regulation of virulence in pathogenic bacteria. Dr. Projan serves on the editorial boards of *Antimicrobial Agents and Chemistry*, *Microbial Drug Resistance*, *Infection and Immunity*, and the *Journal of Bacteriology*. He also serves on the ASM Colloquium Committee of the American Society for Microbiology. Dr. Projan's work includes 64 articles and 45 abstracts. Dr. Projan has signed a Proprietary Information Agreement with us dated November 12, 2002 under which he has agreed not to disclose confidential or secret information related to our business which we disclose to him

## EXECUTIVE COMPENSATION

The following table sets forth the compensation paid by us from January 1, 2000 to December 31, 2002, for each of our officers and directors. This information includes the dollar value of base salaries, bonus awards and number of stock options granted, and certain other compensation, if any.

**Summary Compensation Table**

| | | Long-Term Compensation | |
|---|---|---|---|
| **Annual Compensation** | | **Awards** | **Payouts** |

| Names Executive Officer and Principal Position | Year Ended | Salary (US$) | Bonus (US$) | Other Annual Compensation (US$) | Restricted Stock Award(s) ($) | Securities Underlying Options/ SARs (#) | LTIP Payouts (US$) | Other Annual Compensation (US$) | |
|---|---|---|---|---|---|---|---|---|---|
| Mento A. Soponis | 2002 | 109,423 | 0 | 0 | 0 | 0 | 0 | 0 | [1] |
| President | 2001 | 81,291 | 0 | 0 | 0 | 0 | 0 | 6,010 | |
| | 2000 | 30,906 | 0 | 0 | 0 | 756,000 | 0 | 0 | |
| Robert Zahradnik | 2002 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Director | 2001 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 2000 | 0 | 0 | 0 | 0 | 486,000 | 0 | 0 | |
| Jeffrey D. Hillman | 2002 | 55,385 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Chief Scientific | 2001 | 60,000 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Officer | 2000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Paul A. Hassie | 2002 | 15,000 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Chief Financial | 2001 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Officer, | 2000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Secretary/Treasurer | | | | | | | | | |
| Brian McAlister | 2002 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Director | 2001 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 2000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Brian Anderson | 2002 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| Director | 2001 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| | 2000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |

[1] Retirement plan contribution

We have employment agreements with Mento A. Soponis and Jeffrey Hillman.

Under the terms of our employment agreement with Mr. Soponis dated May 1, 2002, we are obligated to pay initial compensation of $90,000 per annum until September 1, 2002 and at the rate of $180,000 thereafter. The term of the agreement is for a period of three years commencing May 1, 2002 and terminating April 30, 2005. We will reimburse Mr. Soponis for expenses he incurs while employed by us and if he dies during the term of the agreement, we will pay his estate his salary for the month he died and for three additional months thereafter. Mr. Soponis is to devote substantially all his time to our business.



Under the terms of our employment agreement with Dr. Hillman dated May 1, 2002, as amended October 3, 2002 and December 16, 2002, we are obligated to pay compensation of $120,000 per annum. The term of the agreement is for a period of three years commencing May 1, 2002 and terminating April 30, 2005. We will reimburse Dr. Hillman for expenses he incurs while employed by us and if he dies during the term of the agreement, we will pay his estate his salary for the month he died and for three additional months thereafter. Dr. Hillman is to devote at least 75% of his time to our business. Dr. Hillman has also signed a Proprietary Information and Invention Agreement with us. Under this agreement, Dr. Hillman has agreed to hold all our proprietary information in the strictest confidence, and assigned to us all of his right, title and interest in any inventions which he makes during the term of his employment with us that incorporate, are based on or relate to any of our proprietary intellectual property rights

Effective August 1, 2002, we employed Mr. Hassie on a part-time basis. Prior to that time, he provided services to us as an independent consultant. We expect to employ Mr. Hassie full time upon completion of this offering. We have no employment agreement with Mr. Hassie. We expect to pay Mr. Hassie a salary of $100,000 per year following closing.

The compensation discussed herein addresses all compensation awarded to, earned by, or paid to our named executive officers.

There are no other stock option plans, retirement, pension, or profit sharing plans for the benefit of our officers and directors other than as described herein.

**Individual Option Grants in Last Fiscal Year**

| Name | Percentage of Securities Underlying Options | Percentage of Total Options Granted to Employees in Fiscal Year | Exercise Price | Expiration Date |
|---|---|---|---|---|
| Mento A. Soponis | 756,000 | 61% | $.00009 | Aug. 1, 2010 |
| Robert T. Zahradnik | 486,000 | 39% | $.00009 | Aug. 1, 2010 |

**Aggregated Option Exercises in Last Fiscal Year and Fiscal Year-End Option Values**

| Name | Number of Shares Acquired on Exercise | Value Realized ($) | Number of Securities Underlying Unexercised Options Exercisable/ Unexercisable | Value of Unexercised In-the-Money Options Exercisable/ Unexercisable |
|---|---|---|---|---|
| Mento A. Soponis | 756,000 | 70.00 | 0/0 | 0/0 |
| Robert T. Zahradnik | 486,000 | 45.00 | 0/0 | 0/0 |

**Long-Term Incentive Plan Awards**

We do not have any long-term incentive plans that provide compensation intended to serve as incentive for performance.

**Options to Purchase Securities**

***Details of the Stock Option Plan***

Our directors have approved the adoption of a stock option plan. The purpose of the stock option plan is to enable our company to attract, retain and motivate qualified directors and employees, to reward directors and employees and key consultants, such as members of our Scientific Advisory Board, for their contribution toward our long term goals, and to enable and encourage such individuals to acquire our shares as long term investments. A brief description of our plan follows.



1 Only those individuals who are bona fide directors, employees and key consultants of our company may participate in the plan.

2. The plan will be administered by a committee of at least two directors appointed by our board of directors. Where directors, senior officers, 10% beneficial owners of our securities or those committee members are in a position to receive stock options, the board will decide as a whole about the grant of options to them, or appoint two non-employee directors to serve as the committee members with respect to such options.

3. Subject to any antidilution adjustments permitted under the plan, the maximum number of shares that may be issued upon the exercise of stock options granted under the plan may not exceed 1,000,000 shares of common stock.

4. All options we grant under the plan will have a vesting period of at least 18 months from the date they are granted, with either (a) equal release of shares on a quarterly basis; or (b) the release of the majority of the shares later in the vesting period.

5. The exercise price of stock options will be determined by the committee. During the 90 days following closing of the offering, the exercise price may not be less than greater of the offering price of the units and the closing price of our shares on the TSX Venture Exchange on the day prior to the date of grant, less allowable discounts, in accordance with the policies of the TSX Venture

Exchange. After 90 days, the minimum exercise price will be the closing price of our shares on the day prior to the date of grant, less allowable discounts.

6. If an option expires and it has not been exercised in full, or if an option is otherwise terminated without having been exercised in full, the number of shares which were subject to the expired or terminated option will again be available for the purposes of the plan.
7. All options which we grant under the stock option plan must expire no more than five years from the date on which the committee grants and we announce the granting of the option.
8. If an option holder ceases to be a director of our company or ceases to be employed by our company (other then by reason of death), then the option granted shall expire no later than the 90th day following the date that the option holder ceases to be a director or ceases to be employed by us, subject to the terms and conditions set out in the plan.
9. For so long as we are classified as a Tier 2 company on the TSX Venture Exchange, all the options we grant under the plan will vest as determined by the committee in accordance with the requirements of the TSX Venture Exchange and the plan will be administered in accordance with the requirements of the TSX Venture Exchange.
10. No individual may receive grants of options to purchase more than 5% of our issued and outstanding shares during any one year period.
11. The aggregate number of shares reserved for issuance under options that have been granted to insiders cannot exceed 10% of our outstanding shares, and the aggregate number of shares issued to insiders under the plan cannot exceed 10% of our outstanding shares in any one year period.
12. No options we grant under the stock option plan may be assigned or transferred, other than by will or the laws of descent and distribution or pursuant to a Qualified Domestic Relations Order if it is a non-incentive stock option.

We will not require or seek shareholder approval for the grant of options under the stock option plan, or the exercise of options. We may grant options under the stock option plan to employees of our company regularly employed on a full-time or part-time basis, our directors and officers, and persons who perform services for us on an ongoing basis or who have provided, or are expected to provide, services of value to us.

**Options Granted**

We have granted the following options to purchase shares of our common stock under our stock option plan:



| Option Holder | Relationship to Us | Shares Subject to Option | Exercise Price | Expiry Date |
|---|---|---|---|---|
| Brian Anderson | Member of Board of Directors | 60,000 [1] | $1.25 | September 19, 2007 |
| Jixiang Mo | Employee | 45,000 [1][2] | $1.25 | September 19, 2007 |
| Paul Hassie | Chief Financial Officer, Secretary and Treasurer | 30,000 [1] | $1.25 | September 19, 2007 |
| Emily Schuler | Employee | 30,000 [1][2] | $1.25 | September 19, 2007 |
| Sandra Allen | Employee | 30,000 [1][2] | $1.25 | September 19, 2007 |
| Dr. Howard Kuramitsu | Member of Scientific Advisory Board | 60,000 [2][3] | $1.25 | September 19, 2007 |

[1] One third of these options will vest on the first, second and third anniversaries of the date of grant, September 20, 2002.
[2] Not an officer or director.
[3] One fourth of these options will vest on the first, second, third and fourth anniversaries of the date of grant, September 20, 2002.

**Compensation of Directors and Members of Scientific Advisory Board**

Messrs. Soponis, Zahradnik, Hillman and McAlister do not receive any compensation for serving as members of the board of directors. In consideration of his agreement to serve as a director, we have granted Mr. Anderson options to purchase 60,000 shares vesting over 3 years under our stock option plan, and to pay him $2,500 per meeting attended to a maximum of $10,000 per year. If other "outside" directors agree to serve on our board, we anticipate we will compensate them in a similar manner.

Members of our Scientific Advisory Board receive no compensation other than the grant of options to purchase shares under our stock option plan.

**Indemnification**

Under our Articles of Incorporation and Bylaws, we may indemnify any officer or director who was or is a party or threatened to be made a party to any threatened, pending or completed proceeding, including a lawsuit, because of his position, if he acted in good faith and in a manner he reasonably believed to be in our best interest. We may advance expenses incurred in defending a proceeding. To the extent that the officer or director is successful on the merits in a proceeding as to which he is to be indemnified, we must indemnify him against all expenses incurred, including attorneys' fees. With respect to a derivative action, indemnity may be made only for expenses actually and reasonably incurred in defending the proceeding, and if the officer or director is judged liable, only by a court order. The indemnification is intended to be to the fullest extent permitted by the laws of the State of Florida.

Regarding indemnification for liabilities arising under the Securities Act of 1933, which may be permitted to directors or officers under Florida law, we are informed that, in the opinion of the Securities and Exchange Commission, indemnification is against public policy, as expressed in the Act and is, therefore, unenforceable.

## PRINCIPAL SHAREHOLDERS

The following table sets forth, as of the date of this prospectus, the total number of shares owned beneficially, except as noted below, by each of our directors, officers and key employees, individually and as a group, and the present owners of 5% or more of our total outstanding shares. The table also reflects what their ownership will be upon completion of this offering. Except as noted below, the shareholders listed below have direct ownership of their shares and possess sole voting and dispositive power with respect to the shares.



| **Name and Address Beneficial Owner** | **Number of Shares Before the Offering** | **Percentage of Ownership Before the Offering** | **Number of Shares After Offering[1]** | **Percentage of Ownership After the Offering**[1] |
|---|---|---|---|---|
| Mento A. Soponis[2]<br>4730 SW 103 Way<br>Gainesville, FL 32608 | 1,244,592[3] | 13.2% | 1,244,592 | 10.4% |
| Robert Zahradnik[2]<br>161 Stone Ridge Road<br>Franklin, MA 02038 | 756,000 | 8.0% | 756,000 | 6.3% |
| Jeffrey D. Hillman[2]<br>6424 SW 26th Place<br>Gainesville, FL 32608 | 5,400,108[4] | 57.3% | 5,400,108 | 45.3% |
| Paul A. Hassie<br>5547 SW 37th Drive<br>Gainsville, FL 32608 | 0 | 0 | 0 | 0.00% |
| Brian McAlister[2][5]<br>7225 Blenheim Street<br>Vancouver, BC | 800,064 | 8.5% | 800,064 | 6.7% |

| | | | | |
|---|---|---|---|---|
| Canada V6N 1S2 | | | | |
| Brian Anderson<br>6511 S. Canyon Ranch Road<br>Salt Lake City, UT 84121 | 0 | 0 | 0 | 0.00% |
| **All officers and directors as a group (6 persons)** | **8,200,764** | **87%** | **8,200,764** | **68.8%** |
| University of Florida Research Foundation, Inc.[6] | 599,940 | 6.4% | 599,940 | 5.0% |

[1] Does not take into account any shares which may be issued upon exercise of the Series A and B warrants or the warrants we will issue to Haywood Securities Inc.

[2] Messrs. Soponis, Zahradnik, Hillman and McAlister, may be deemed to be "promoters" of our company within the meaning of the Securities Acts of British Columbia and Alberta and the Securities Act of 1933, as amended

[3] Includes shares owned by Justin Soponis and Trevor Soponis, children of Chuck Soponis.

[4] Includes shares owned by Charles Hillman and Stacia Helfand (children of Dr. Hillman) and the Jeffrey D. Hillman 2002 Trust and the Jeffrey D. Hillman Grantor Retained Annuity Trust (trusts controlled by Dr. Hillman).

[5] Held directly by Cornet Capital Corp., a corporation wholly owned by Mr. McAlister.

[6] These shares were issued to the University of Florida Research Foundation, Inc. as partial consideration for the license of our replacement therapy technology.



**Future Sales of Shares**

A total of 9,425,704 shares of common stock are issued and outstanding as of December 31, 2002, all of which are restricted securities, as defined in Rule 144 of the Rules and Regulations of the SEC promulgated under the Securities Act. Under Rule 144, the shares can be publicly sold, subject to volume restrictions and restrictions on the manner of sale, commencing one year after their acquisition.

Rule 144 is an exemption from registration for the resale of restricted securities. Restricted securities are securities acquired in a transaction which did not involve a public offering. In order to comply with the requirements of Rule 144, the following conditions must be met:

* there must be adequate current public information regarding us
* the restricted securities must have been fully paid for and held by the seller for at least one year from the date he or she acquired them
* during the second year from the date of acquisition by the seller, the number of shares which the seller may sell is limited in any three-month period to the greater of 1% of our outstanding shares, or the average weekly trading volume in those shares over the four weeks preceding the potential sale
* the securities may only be sold in unsolicited brokers transactions or in transactions directly with a market maker
* a Form 144 must be filed with the SEC concurrently with the sale and with any national securities exchange on which the security is traded

Restricted securities that have been held for more than two years by non-affiliates, and persons who are not control persons, may be sold without complying with these conditions. Affiliates, and persons who are control persons, must continue to comply with the foregoing conditions as long as they are affiliates or control persons.

The market price of our shares of common stock could drop as the result of sales of substantial numbers of shares in the public market, or the perception that such sales could occur. This could also make it more difficult for us to raise funds through future sales of shares.

## DESCRIPTION OF SECURITIES

**Common Stock**

We are authorized to issue 100,000,000 shares of common stock, par value $0.001 per share, of which 9,425,704 are presently issued and outstanding. The holders of our common stock:

* have equal ratable rights to dividends from funds legally available if and when declared by our board of directors;
* are entitled to share ratably in all of our assets available for distribution to holders of common stock upon liquidation, dissolution or winding up of our affairs;
* do not have preemptive, subscription or conversion rights and there are no redemption or sinking fund provisions or rights; and
* are entitled to one non-cumulative vote per share on all matters on which stockholders may vote.

All shares of common stock which are the subject of this offering, will be fully paid for and non-assessable when issued. We refer you to our Articles of Incorporation, Bylaws and the applicable statutes of the State of Florida for a more complete description of the rights and liabilities of holders of our securities.



**Non-cumulative Voting**

Holders of shares of our common stock do not have cumulative voting rights, which means that the holders of more than 50% of the outstanding shares, voting for the election of directors, can elect all of the directors to be elected, if they so choose, and, in that event, the holders of the remaining shares will not be able to elect any of our directors. After this offering is completed, present stockholders will own approximately 79.0% of our outstanding shares.

**Cash Dividends**

As of the date of this prospectus, we have not paid any cash dividends to stockholders. The declaration of any future cash dividend will be at the discretion of our board of directors and will depend upon our earnings, if any, our capital requirements and financial position, general economic conditions, and other pertinent conditions. It is our present intention not to pay any cash dividends in the foreseeable future, but rather to reinvest earnings, if any, in our business operations.

**Preferred Stock**

We are authorized to issue up to 20,000,000 shares of preferred stock with no par value, in one or more classes or series. The designation and preferences, limitations and relative rights, including dividend rights, dividend rates, conversion rights, conversion rates, voting rights and terms of redemption of the preferred shares will be determined by the board of directors. We have no plans presently to issue any shares of preferred stock.

**Series A Warrants**

The Series A Warrants will be issued under a warrant indenture between our company and Computershare Trust Company of Canada dated March 28, 2003. Each Series A warrant entitles the holder to purchase one share of common stock at a price of $2.00 for 6 months from the date of closing of this offering. If the Series A warrants are not exercised by then, they will expire and cannot be exercised thereafter. The warrant indenture will provide, among other things, for appropriate adjustment in the class, number and price of the shares to be issued on exercise of the warrants upon certain events, including any stock split, subdivision, consolidation or reclassification of our common stock or the payment of stock dividends.

**Series B Warrants**

The Series B warrants will be issued under the warrant indenture referred to above. Each Series B warrant entitles the holder to purchase one share of common stock at a price of $3.00 for 9 months from the date of closing of this offering. If the Series B warrants are not exercised by then, they will expire and cannot be exercised thereafter.

**Other Terms of the Series A and B Warrants**

We will pay any transfer tax incurred as a result of the issuance of common stock to the holder upon its exercise.

We will not issue fractional shares upon the exercise of a warrant and you may not exercise one-half of one warrant or any other fraction thereof. The holder of a warrant will not possess any rights as our shareholder until he or she exercises the warrant.

A warrant may be exercised upon surrender of the warrant certificate on or before the expiry date of the warrant at the office of the warrant trustee, with the exercise form found on the back of the warrant certificate, completed and executed as indicated, accompanied by payment of the exercise price (by money order, wire transfer, bank draft or certified cheque payable to the order of Oragenics, Inc.) for the number of shares of common stock with respect to which the warrant is being exercised.



For a holder to receive shares of common stock which will be "good delivery" in settlement of transactions on the TSX Venture Exchange upon exercise of the warrants, there must be a current registration statement in effect with the SEC and qualification in effect under applicable state securities laws (or applicable exemptions from state qualification requirements) with respect to the issuance of shares of common stock. We have agreed to use our best efforts to cause this or another registration statement with respect to the shares issuable upon exercise of the warrants under the *Securities Act* of 1933 to become and remain effective in anticipation of and before the exercise of the warrants and to take such other actions under the laws of various states as may be required to cause the sale of shares or other securities upon exercise of Series A and B warrants to be lawful.

The foregoing discussion of material terms and provisions of the warrants is qualified in its entirety by reference to the detailed provisions of the warrant indenture, the form of which has been filed as an exhibit to the registration statement of which this prospectus is a part.

For the life of the warrants, the holders thereof have the opportunity to profit from a rise in the market price of the common shares without assuming the risk of ownership of the common shares underlying the warrants. The warrant holders may be expected to exercise their warrants at a time when we would, in all likelihood, be able to obtain any needed capital by an offering of common shares on terms more favorable than those provided for by the warrants. Furthermore, the terms on which we could obtain additional capital during the life of the warrants may be adversely affected.

**Redeemable Warrants**

As part of its compensation in connection with the offering, we will issue to our underwriter, Haywood Securities Inc., 500,000 warrants. Each warrant will be exercisable for two years from the date of closing of the offering to purchase one share of common stock at a price of $1.25 per share. If our shares trade at a price of above $5.00 per share or more for 20 consecutive trading days on the TSX Venture Exchange or such other exchange as they may be listed on, then we may provide notice to Haywood that it must exercise such warrants within 30 days of the notice, failing which the warrants will expire and may not be exercised thereafter.

**Reports**

After we complete this offering, we will furnish shareholders with an annual report. We will be required to file reports with the SEC under section 15(d) of the Securities Act. The reports will be filed electronically. The reports we will be required to file are Forms 10-KSB, 10-QSB, and 8-K. You may read copies of any materials we file with the SEC at the SECs Public Reference Room at 450 Fifth Street, N.W., Washington, D.C. 20549. You may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC also maintains an Internet site that will contain copies of the reports we file electronically. The address for the Internet site is www.sec.gov We will be required to send annual and quarterly financial statements to shareholders resident in Alberta and British Columbia, and to file those financial statements with the Alberta and British Columbia Securities Commission.

**Registrar and Transfer Agent**

We have entered into a Transfer Agent, Registrar and Dividend Agreement between ourselves and Computershare Trust Company of Canada dated January 16, 2003. Upon completion of the offering, Computershare Trust Company of Canada will be the registrar and transfer agent for our securities. Its telephone number is (604) 661-9400.

**Registration Rights**

Pursuant to our license of our replacement therapy technology from the University of Florida Research Foundation, Inc. described under "Our Technologies," we have entered into an Equity Agreement with the University of Florida

Research Foundation, Inc. It provides that if, at any time, we determine to register any shares of our common stock under the United States *Securities Act* of 1933, we will include in such registration the 599,940 shares which we issued to the University of Florida Research Foundation, Inc. as partial consideration for the license, if the University of Florida Research Foundation, Inc. requests us to do so. Under a further agreement with the University of Florida Research Foundation, Inc., dated January 13, 2003, the University of Florida Research Foundation, Inc. has waived its registration rights under the Equity Agreement with respect to this offering.



## ESCROWED SECURITIES

**National Escrow Policy**

| Designation of class | Number of securities held in escrow | Percentage of class[1] |
|---|---|---|
| Common Shares | 8,200,764 | 68.8% |

[1] This is the percentage of our issued and outstanding shares of common stock which will be escrowed upon completion of the offering.

Under Canadian National Policy 46-201 "Escrow for Initial Public Offerings," those of our shares of common stock which are held by our Principals must be held in escrow.

A "Principal" is:

(i) a director or senior officer of our company or of a material operating subsidiary of our company;
(ii) a person or company who has acted as our promoter during the two years before this offering;
(iii) a person or company who owns or controls more than 10% of our voting securities immediately before and immediately after completion of this offering if that person has elected or appointed or has the right to elect or appoint one of our directors or senior officers or a director or officer of a material operating subsidiary of our company;
(iv) a person or company who owns or controls more than 20% of our voting securities immediately before and immediately after completion of this offering; and
(v) associates and affiliates of any of the foregoing persons.

All of our directors and senior officers are Principals.

Under the National Escrow Policy, we have entered into an escrow agreement with Computershare Trust Company of Canada as escrow agent, and our Principals dated March 28, 2003. Under the escrow agreement, our Principals have deposited their common shares in escrow with the escrow agent. The escrow agent will release 10% of our Principals' common shares from escrow on the date our common shares are listed on the TSX Venture Exchange. After that, 15% of our Principals' common shares will be released from escrow every 6 months. The schedule of releases is set out in the following table.

| Date | % of escrowed shares to be released |
|---|---|
| Listing date | 10% |
| 6 months from listing date | 15% |
| 12 months from listing date | 15% |
| 18 months from listing date | 15% |
| 24 months from listing date | 15% |
| 30 months from listing date | 15% |
| 36 months from listing date | 15% |

We are an "emerging issuer" as defined in the National Escrow Policy. A faster, 18 month release schedule applies to

"established issuers" under the policy. If we become an "established issuer" while our Principals' common shares are in escrow, we will "graduate." If we graduate, there will be a catch-up release and an accelerated release of our Principals' common shares which remain in escrow under the 18 month schedule as if we were originally an established issuer. We will "graduate" from being an "emerging" issuer to an "established" issuer if:

1 Our shares of common stock are listed on the Toronto Stock Exchange;
2 We are classified as a Tier 1 issuer on the TSX Venture Exchange.



Under the National Policy escrow agreement, our Principals' common shares may not be transferred or otherwise dealt with while they are in escrow unless the transfers or dealings are:

(i) transfers to our directors and senior officers, with approval of our board of directors;
(ii) transfers to a person or company that before the transfer holds more than 20% of the voting rights attached to our outstanding securities;
(iii) transfers to a person or company that after the transfer will hold more than 10% of the voting rights attached to our outstanding securities and has the right to elect or appoint one or more of our directors or senior officers;
(iv) transfers to an RRSP or similar trusteed plan provided that the only beneficiaries are the transferor or the transferor's spouse or children;
(v) transfers upon bankruptcy to the trustee in bankruptcy; pledges to a financial institution as collateral for a good faith loan, and upon a realization; or
(vi) tenders of escrowed securities to a take-over bid, provided that if the person tendering to the bid is a Principal of the company resulting from completion of the take-over bid, the securities the Principal receives in exchange for tendered escrowed securities will be placed in escrow on the basis of the resulting company's escrow classification.

Shares must remain in escrow after a permitted transfer.

The number and holders of our common shares which are subject to escrow under the escrow agreement are:

| Name of Principal | Number of Escrow Shares Held |
|---|---|
| Jeffrey Hillman | 5,400,108 |
| Mento A. Soponis | 1,244,592 |
| Robert Zahradnik | 756,000 |
| Cornet Capital Corp. [1] | 800,064 |

[1] Brian McAlister, one of our directors, is the sole shareholder and director of Cornet Capital Corp.

**TSX Venture Exchange Escrow Policy**

The TSX Venture Exchange applies its own escrow requirements to initial listings. The Exchange's Seed Share Resale Restrictions are hold periods of various lengths which apply where shares are issued to non-Principals prior to an initial public offering. The purchase price of those shares, and the time of their purchase relative to the date of issue of the receipt for preliminary prospectus receipt for an initial public offering determines which Exchange hold period will apply.

The following persons or corporations will be subject to TSX Venture Exchange escrow requirements:

| Name of non-Principal Shareholder | Number of Shares Held | Date Acquired |
|---|---|---|
| University of Florida Research Foundation, Inc. | 599,940 [1] | July 15, 1999 |

[1] These shares were issued to the University of Florida Research Foundation, Inc. as partial consideration for the license of our replacement therapy technology.

The University of Florida Research Foundation, Inc. will be subject to a Value Security Escrow Agreement dated March 28, 2003. A Value Security Agreement imposes a schedule of escrow release for TSX Venture Exchange Tier 2 Issuers that is identical to that of the National Escrow Policy described above.



**Pooling Agreement**

Our underwriter, Haywood Securities Inc., has required that certain of our shareholders who are not subject to escrow under the National Escrow Policy or TSX Venture Exchange requirements place their shares in escrow under an escrow agreement between ourselves, Computershare Trust Company, those shareholders and Haywood. The escrow agreement is dated March 28, 2003. The following shares will be subject to that escrow agreement.

| Name of non-Principal Shareholder | Number of Shares Held |
|---|---|
| Cleo Christine Allen | 50,000 |
| James Butler | 31,250 |
| Quickswood Ltd. | 125,000 |
| Ernest Mario | 31,250 |
| Amelia Investments Ltd. | 262,500 |
| Angel Investment Company Ltd. | 125,000 |

Under this escrow agreement, one sixth of the shares subject to escrow will be released on closing of our offering, and a further one sixth will be released every 3 months following. All of the shares will have been released from escrow 15 months from the closing.

## INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS

On February 22, 2001, Robert T. Zahradnik, a member of the board of directors, loaned us $57,418 as evidenced by a promissory note of even date therewith which accrues interest at the rate of 7% per annum until paid. The note is payable on demand, or 2 years from its date if demand is not made earlier. At March 31, 2003, the total outstanding balance of the note and accrued interest is $65,864. Mr. Zahradnik has agreed not to seek repayment of this loan from the proceeds of this offering.

On February 22, 2001, Jeffrey Hillman, our Chief Scientific Officer and chairman of the board of directors, loaned us $12,186 as evidenced by a promissory note of even date therewith which accrues interest at the rate of 7% per annum until paid. The note is payable on demand, or 2 years from its date if demand is not made earlier. At March 31, 2003, the total outstanding balance of the note was $14,816. Dr. Hillman has agreed not to seek repayment of this loan from the proceeds of this offering.

On February 28, 1999, Robert T. Zahradnik, a member of the board of directors, loaned us $15,000 as evidenced by a promissory note of even date therewith which accrues interest at the rate of 7% per annum until paid. The note is payable on demand, or 2 years from its date if demand is not made earlier. At March 31, 2003, the total outstanding balance of the note was $18,074. Mr. Zahradnik has agreed not to seek repayment of this loan from the proceeds of this offering.

In 2001 we incurred consulting fees of $60,000 payable to Jeffrey Hillman. The entire amount remains outstanding. We do not intend to pay these fees from the proceeds of this offering. Dr. Hillman has agreed not to seek repayment from the proceeds of this offering.

Under an agreement between ourselves and Cornet Capital Corp., a corporation wholly owned by Brian McAlister, dated March 20, 2002, as amended by an agreement dated December 2, 2002, Cornet Capital has agreed with us to place $1,000,000 of our common stock with investors and use its best efforts to raise an additional $2,500,000. In

consideration of Cornet's agreement, we issued 800,064 shares of our common stock to Cornet. These shares are held in escrow under an agreement between our company, Cornet and an escrow agent dated as of May, 2002. Under the agreement, the escrow agent will release the shares to Cornet upon receipt of notice from us that Cornet has raised at least $1,000,000 for us. We have agreed with Mr. McAlister that completion of this offering will constitute fulfillment of the agreement on Mr. McAlister's part, and the shares will be released from escrow on closing of this offering. Neither Cornet nor Mr. McAlister will receive any additional compensation.



The agreement with Cornet Capital also provides for a loan facility for up to $500,000 between Cornet and ourselves. Cornet has agreed to enter into a loan agreement with us under which we may draw down funds up to $500,000 for three years from December 2, 2002 as we need them. Advances under the loan agreement will bear interest at 3% per annum above the U.S. dollar prime rate of the Royal Bank of Canada. We will also issue to Cornet a number of shares of our common stock equal to 20% of the dollar amount of the advance, divided by the discounted market price of our shares on the TSX Venture Exchange.

On February 14, 2003, we issued an uncollateralized promissory note in the principal amount of $100,000 that pays interest at 10% per annum to Cornet Capital Corp. as security for a loan of $100,000 cash. Principal and interest is payable on demand and in any event before February 14, 2004. This borrowing was not made under the loan facility with Cornet Capital Corp. No shares were issued to Cornet Capital Corp. in connection with this borrowing. This promissory note will be repaid from the proceeds of this offering.

On April 29, 2003, we issued a further uncollateralized promissory note in the amount of $75,000 that pays interest at 10% per annum to Cornet Capital Corp. as security for a further loan of $75,000 cash. Principal and interest are payable on April 29, 2004. This borrowing was not made under the loan facility with Cornet Capital Corp. No shares were issued to Cornet Capital Corp. in connection with this borrowing. This promissory note will be repaid from the proceeds of this offering.

On May 1, 2002, we entered into an employment agreement with Mento A. Soponis, our president. Under the terms of our employment agreement with Mr. Soponis, we are obligated to pay initial compensation of $90,000 per annum until September 1, 2002 and at the rate of $180,000 thereafter. The term of the agreement is for a period of three years commencing May 1, 2002 and terminating April 30, 2005. We will reimburse Mr. Soponis for expenses he incurs while employed by us and if he dies during the term of the agreement, we will pay his estate his salary for the month he died and for three additional months thereafter. We may terminate Mr. Soponis without cause with 90 days notice and the payment of three months' salary beyond the termination date. Mr. Soponis is required to give us 90 days notice in the event of his resignation.

On May 1, 2002, we entered into an employment agreement with Jeffrey D. Hillman, our chief scientific officer. Under the terms of our employment agreement with Dr. Hillman, we are obligated to pay compensation of $120,000 per annum. The term of the agreement is for a period of three years commencing May 1, 2002 and terminating April 30, 2005. We will reimburse Dr. Hillman for expenses he incurs while employed by us and if he dies during the term of the agreement, we will pay his estate his salary for the month he died and for three additional months thereafter. We may terminate Dr. Hillman without cause with 90 days notice and the payment of three months' salary beyond the termination date. Dr. Hillman is required to give us 90 days notice in the event of his resignation.

We have entered into license and lease agreements with the University of Florida Research Foundation, Inc. The University of Florida Research Foundation, Inc. owns 599,940 shares of our common stock which represents 6.4% of our total outstanding shares prior to this offering and will own 5.0% of our total outstanding shares if the offering is successfully completed. The 5.0% ownership will continue to be evidenced by the 599,940 shares currently owned.

We hold our patented replacement therapy technology under license from the University of Florida Research Foundation Inc.

The license is dated August 4, 1998. It was amended on September 15, 2000, July 10, 2002, September 25, 2002 and March, 2003. It provides us with an exclusive world wide license to make, use and sell products and processes covered by patent no. 5,607,672. This patent covers the genetically altered strain of S. *mutans* which does not produce lactic acid, a pharmaceutical composition for administering the genetically altered strain, and the method of preventing tooth decay by administering the strain. The University of Florida Research Foundation, Inc. has reserved for itself and the

University of Florida the right to use and sell such products and services for research purposes only. Our license also provides the University of Florida Research Foundation, Inc. with a license, for research purposes only, to any improvements we make to the products and processes covered by the patent. Our license is for the period of the patent, subject to the performance of terms and conditions contained therein. The patent is dated March 4, 1997, and will expire on March 3, 2014.



Under the license, we have issued as partial consideration 599,940 shares of our common stock which is 6.4% of our total outstanding shares as of September 30, 2002. We are obligated to pay 5% of the selling price of our products to the University of Florida Research Foundation, Inc. If we sublicense the license, we are obligated to pay 20% of all amounts we receive from the sublicensee to the University of Florida Research Foundation, Inc. On December 31, 2005 and each year thereafter we are obligated to make a minimum royalty payment of $50,000. We are obligated to spend or cause to be spent at least an aggregate of $600,000 in 2003 and an aggregate of $1,000,000 in each calendar year following 2003 on the research, development and regulatory prosecution of our replacement therapy and *mutacin* 1140 technologies together, until a product which is covered wholly or partially by the claims of the patent, or is manufactured using a process which is covered wholly or partially by the claims of the patent, is sold commercially.

If we fail to make these minimum expenditures, the University of Florida Research Foundation, Inc. may terminate our license.

We must pay all patent costs and expenses incurred by the University of Florida Research Foundation, Inc. for the preparation, filing, prosecution, issuance and maintenance of the patents beyond $105,000. We must pay $100,000 for the patent expenses when we have received at least $1,000,000 in external funding. We will make this payment from the proceeds of this offering.

We have agreed to indemnify and hold the University of Florida Research Foundation, Inc. harmless from any damages caused as a result of the production, manufacture, sale, use, lease, consumption or advertisement of the product. Further, we are required to maintain liability insurance coverage appropriate to the risk involved in marketing the products. We have obtained liability insurance in the amount of $1,000,000.

We hold our patented *mutacin* 1140 technology under license from the University of Florida Research Foundation, Inc. dated June 22, 2000. It was amended on September 15, 2000, July 10, 2002, September 25, 2002 and March, 2003. It provides us with an exclusive world wide license to make, use and sell products and processes covered by patents no. 5,932,469 and 6,391,285. These patents together cover *mutacin* 1140, a pharmaceutical preparation containing *mutacin* 1140, and the method of controlling growth of bacteria by use of *mutacin* 1140. Our license is for a period of the patent, subject to the performance of terms and conditions contained therein. The University of Florida Research Foundation, Inc. has reserved for itself and the University of Florida the right to use and sell such products and services for research purposes only. Our license also provides the University of Florida Research Foundation, Inc. with a license, for research purposes only, to any improvements we make to the products and processes covered by the patent. Patent No. 5,932,469 is dated August 3, 1999 and expires August 2, 2016, and Patent No. 6,391,285 is dated May 21, 2002 and expires May 20, 2020. Under the terms of the license, we are obligated to pay 5% of the selling price of our products to the University of Florida Research Foundation, Inc. If we sublicense the license, we are obligated to pay 20% of the amounts we receive from the sublicensee to the University of Florida Research Foundation, Inc. In calendar year 2005 and each year thereafter we are obligated to make a minimum royalty payment of $50,000. We are obligated to spend or cause to be spent at least an aggregate of $600,000 in 2003 and an aggregate of $1,000,000 in each calendar year following 2003 on the research, development and regulatory prosecution of our replacement therapy and *mutacin* 1140 technologies together, until a product which is covered wholly or partially by the claims of the patent, or is manufactured using a process which is covered wholly or partially by the claims of the patent, is sold commercially.

If we fail to make these minimum expenditures, the University of Florida Research Foundation, Inc. may terminate our license.

We have agreed to indemnify and hold the University of Florida Research Foundation, Inc. harmless from any damages caused as a result of the production, manufacture, sale, use, lease, consumption or advertisement of the product. Further, we are required to maintain liability insurance coverage appropriate to the risk involved in marketing the products. We have obtained liability insurance in the amount of $1,000,000.

We also lease our office space at 12085 Research Drive, Alachua, Florida 32615 from the University of Florida. The annual rental is $24,610 pursuant to the terms of a lease from March 15, 2002 to March 14, 2003.

## LITIGATION

We are not a party to any pending litigation and, to the best of our knowledge, no litigation against us is contemplated or threatened.



## EXPERTS

The financial statements of Oragenics, Inc. at December 31, 2002, 2001 and 2000, and for each of the three years in the period ended December 31, 2002, appearing in this prospectus and registration statement have been audited by Ernst & Young LLP, independent certified public accountants, as set forth in their report thereon (which contains an explanatory paragraph describing conditions that raise substantial doubt about the Company's ability to continue as a going concern as described in Note 11 to the financial statements) appearing elsewhere herein, and are included in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

## LEGAL MATTERS

Conrad C. Lysiak, Attorney and Counselor at Law, 601 West First Avenue, Suite 503, Spokane, Washington 99201, telephone (509) 624-1475, has passed on the legality of the units and the other securities being registered.

## FINANCIAL STATEMENTS

Our fiscal year end is December 31. We will provide audited financial statements to our stockholders on an annual basis; the statements will be prepared by management and audited by independent certified public accountants.

## REPORT OF INDEPENDENT CERTIFIED PUBLIC ACCOUNTANTS

Board of Directors
Oragenics, Inc.

We have audited the accompanying balance sheets of Oragenics, Inc. as of December 31, 2002, 2001 and 2000, and the related statements of operations, changes in stockholders' deficit and cash flows for each of the three years in the period ended December 31, 2002. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the 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 audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Oragenics, Inc. at December 31, 2002, 2001 and 2000, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2002, in conformity with accounting principles generally accepted in the United States.

The accompanying financial statements have been prepared assuming the Company will continue as a going concern. As more fully discussed in Note 11 to the financial statements, the Company's deficit working capital and equity position raises substantial doubt about its ability to continue as a going concern. Management's plans as to these matters are also described in Note 11. The financial statements do not include any adjustments to reflect the possible future effects on the recoverability and classification of assets or the amounts and classification of liabilities that might result from the outcome of this uncertainty.

/s/ Ernst & Young LLP

February 14, 2003
Tampa, Florida



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## ORAGENICS, INC.

## BALANCE SHEETS

*(In US Dollars)*

| | December 31 | | |
|---|---|---|---|
| | **2002** | **2001** | **2000** |
| **Assets** | | | |
| Current assets: | | | |
| Cash and cash equivalents | **$ 25,580** | $ 200,480 | $ 11,585 |
| Costs associated with initial public offering | **271,937** | - | - |

| | | | |
|---|---|---|---|
| Prepaid expenses | **8,741** | - | 483 |
| Total current assets | **306,258** | 200,480 | 12,068 |
| Equipment | **4,658** | 785 | 2,355 |
| Total assets | **$ 310,916** | $ 201,265 | $ 14,423 |
| **Liabilities and stockholders' deficit** | | | |
| Current liabilities: | | | |
| Accounts payable and accrued expenses | **$ 232,811** | $ 70,039 | $ 2,183 |
| Accrued interest | **17,462** | 9,390 | 2,119 |
| Income tax payable | **-** | 16,000 | - |
| Notes payable to stockholders | **85,454** | 85,454 | 15,850 |
| Deferred compensation | **58,671** | 34,409 | 15,762 |
| Deferred revenue | **-** | - | 6,125 |
| Total current liabilities | **394,398** | 215,292 | 42,039 |
| Stockholders' deficit: | | | |
| Preferred stock, no par value; 20,000,000 shares authorized; none issued and outstanding at December 31, 2002, 2001, and 2000 | **-** | - | - |
| Common stock, $0.001 par value; 100,000,000 shares authorized; 9,425,704, 7,512,048 and 6,270,048 shares issued and outstanding at December 31, 2002, 2001 and 2000, respectively | **9,426** | 7,512 | 6,270 |
| Additional paid in capital | **628,234** | - | - |
| Accumulated deficit | **(721,142)** | (21,539) | (33,886) |
| Total stockholders' deficit | **(83,482)** | (14,027) | (27,616) |
| Total liabilities and stockholders' deficit | **$ 310,916** | $ 201,265 | $ 14,423 |

*See accompanying notes.*



**ORAGENICS, INC.**

**STATEMENTS OF OPERATIONS**

*(In US Dollars)*

| | Year ended December 31 | | |
|---|---|---|---|
| | **2002** | **2001** | **2000** |

| | | | |
|---|---|---|---|
| Revenue | **$ -** | $ 303,912 | $ 53,875 |
| Operating expenses: | | | |
| Research and development | **310,007** | 147,330 | 27,111 |
| General and administration | **399,693** | 123,135 | 42,207 |
| Total operating expenses | **709,700** | 270,465 | 69,318 |
| (Loss) income from operations | **(709,700)** | 33,447 | (15,443) |
| Other income (expense): | | | |
| Interest income | **2,169** | 3,297 | - |
| Interest expense | **(8,072)** | (7,271) | (1,469) |
| Total other expense, net | **(5,903)** | (3,974) | (1,469) |
| (Loss) income before income taxes | **(715,603)** | 29,473 | (16,912) |
| Income tax benefit (expense) | **16,000** | (16,000) | - |
| Net (loss) income | **$ (699,603)** | $ 13,473 | $ (16,912) |
| Basic and diluted net loss per share | **$ (0.08)** | $ - | $ - |
| Shares used to compute basic and diluted net loss per share | **8,884,239** | 6,375,533 | 6,270,048 |

*See accompanying notes.*



**ORAGENICS, INC.**

**STATEMENTS OF CHANGES IN STOCKHOLDERS' DEFICIT**
*(In US Dollars)*

| | **Common Stock** | | **Additional Paid In** | **Accumulated** | **Total Stockholders'** |
|---|---|---|---|---|---|
| | **Shares** | **Amount** | **Capital** | **Deficit** | **Deficit** |
| Balance at January 1, 2000 | 6,270,048 | $ 6,270 | $ - | $ (16,974) | $ (10,704) |
| Net loss | - | - | - | (16,912) | (16,912) |
| Balance at December 31, 2000 | 6,270,048 | 6,270 | - | (33,886) | (27,616) |

| | | | | | |
|---|---|---|---|---|---|
| Exercise of common stock options for cash | 1,242,000 | 1,242 | - | (1,126) | 116 |
| Net income | - | - | - | 13,473 | 13,473 |
| Balance at December 31, 2001 | 7,512,048 | 7,512 | - | (21,539) | (14,027) |
| Issuance of common stock | **1,913,656** | **1,914** | **628,234** | **-** | **630,148** |
| Net loss | **-** | **-** | **-** | **(699,603)** | **(699,603)** |
| Balance at December 31, 2002 | **9,425,704 $** | **9,426 $** | **628,234 $** | **(721,142) $** | **(83,482)** |

*See accompanying notes.*



**ORAGENICS, INC.**

**STATEMENTS OF CASH FLOWS**
*(In US Dollars)*

| | Year ended December 31 | | |
|---|---|---|---|
| | **2002** | **2001** | **2000** |
| **Operating activities** | | | |
| Net (loss) income | **$ (699,603)** | $ 13,473 | $ (16,912) |
| Adjustments to reconcile net (loss) income to net cash (used in) provided by operating activities: | | | |
| Depreciation | **1,585** | 1,570 | 905 |
| Noncash issuance of common stock | **122,148** | - | - |
| Changes in operating assets and liabilities: | | | |
| Costs associated with initial public offering | **(271,937)** | - | - |
| Prepaid expenses | **(8,741)** | 483 | (483) |
| Accounts payable and accrued expenses | **162,772** | 67,856 | 2,183 |
| Accrued interest | **8,072** | 7,271 | 1,468 |
| Income tax payable | **(16,000)** | 16,000 | - |
| Deferred compensation | **24,262** | 18,647 | 15,762 |
| Deferred revenue | **-** | (6,125) | 6,125 |
| Net cash (used in) provided by operating activities | **(677,442)** | 119,175 | 9,048 |
| **Investing activity** | | | |
| Purchases of equipment | **(5,458)** | - | (3,260) |
| Net cash used in investing activity | **(5,458)** | - | (3,260) |
| **Financing activities** | | | |
| Proceeds from issuance of notes payable to stockholders | **-** | 69,604 | - |
| Proceeds from issuance of common stock | **508,000** | - | - |
| Exercise of common stock options | **-** | 116 | - |

| | | | |
|---|---|---|---|
| Net cash provided by financing activities | **508,000** | 69,720 | - |
| Net (decrease) increase in cash and cash equivalents | **(174,900)** | 188,895 | 5,788 |
| Cash and cash equivalents at beginning of year | **200,480** | 11,585 | 5,797 |
| Cash and cash equivalents at end of year | **$ 25,580** | $ 200,480 | $ 11,585 |
| **Noncash financing activities** | | | |
| Common stock issued in connection with amendment to officer employment agreement | **$ 122,148** | $ - | $ - |
| Common stock issued in connection with investment bank services | **$ 192,016** | $ - | $ - |

*See accompanying notes.*



**ORAGENICS, INC.**

**NOTES TO FINANCIAL STATEMENTS**

**DECEMBER 31, 2002**

## 1. Organization and Significant Accounting Policies

Oragenics, Inc. (the Company) (formerly known as Oragen, Inc.) was incorporated in November 1996; however, operating activity did not commence until 1999. The Company is dedicated to the development of genetically engineered Streptococcus mutans for oral and other therapeutic applications.

**Basis of Presentation**

The financial statements of the Company, which have been prepared in accordance with accounting principles generally accepted in the United States, conform in all material respects with accounting principles generally accepted in Canada.

**Revenue Recognition**

The Company has earned revenues from a sponsored research agreement. Revenues relating to the evaluation of the Company's technology are recognized ratably over the period that the research is performed and the technology that is being evaluated.

**Concentrations of Credit Risk and Significant Customer**

The Company's cash and cash equivalents are deposited in one financial institution and consist of demand deposits. All revenues earned during 2001 and 2000 were the result of a sponsored research agreement (see Note 3).

**Use of Estimates**

The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

**Fair Value of Financial Instruments**

The fair value of the Company's cash and cash equivalents, accounts payable and accrued expenses approximate their carrying values due to their short-term nature.



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**1. Organization and Significant Accounting Policies (continued)**

**Cash Equivalents**

The Company considers all highly liquid investments with an original maturity of three months or less when purchased to be cash equivalents.

**Equipment**

Equipment is recorded at its acquisition cost. Depreciation is computed utilizing the declining balance and straight-line methods over the estimated useful lives (three years) of the related assets.

**Business Segments**

Pursuant to Statement of Financial Accounting Standards (SFAS) No. 131, *Disclosure About Segments of a Business Enterprise and Related Information*, the Company is required to report segment information. As the Company only operates principally in one business segment, no additional reporting is required.

**Stock-Based Compensation**

At December 31, 2002, the Company has a stock-based employee compensation plan, which is described more fully in Note 6. The Company accounts for the plan under the recognition and measurement principles of APB Opinion No. 25, *Accounting for Stock Issued to Employees,* and related Interpretations. No stock-based employee compensation cost is reflected in net income, as all options granted under those plans had an exercise price equal to the market value of the underlying common stock on the date of grant. The following table illustrates the effect on net loss and earnings per share if the company had applied the fair value recognition provisions of SFAS No. 123, *Accounting for Stock-Based Compensation,* to stock-based employee compensation. For the years ended December 31, 2001 and 2000, the fair value of the Company's employee stock awards was estimated to be zero using a minimum value method; therefore, there is no pro forma effect on net income (loss) for these years.

**1. Organization and Significant Accounting Policies (continued)**

| | Year ended December 31, 2002 |
|---|---|
| | *(In US Dollars)* |
| Net loss, as reported | $ (699,603) |
| Deduct: Total stock-based employee compensation expense determined under fair value based method for all awards, net of related tax effects | (2,925) |
| Pro forma net loss | $ (702,528) |
| | |
| Earnings per share: | |
| Basic and diluted - as reported | $ (.08) |
| Basic and diluted - pro forma | $ (.08) |

**Common Stock Split**

On March 25, 2002, the Board of Directors approved a 108 to 1 stock split of all outstanding shares. All share and per share information included in the financial statements has been retroactively adjusted to reflect this split. The Board of Directors approved an increase to the authorized shares of the preferred stock to 20,000,000 and to increase the authorized shares of common stock to 100,000,000.

**Net Income (Loss) Per Share**

The weighted-average shares outstanding include all common stock issued. In computing diluted loss per share, outstanding stock options representing 315,000 common shares for the year ended December 31, 2002 were excluded from the diluted loss per share computation because their effects would have been anti-dilutive.

**Research and Development Expenses**

Expenditures for research and development are expensed as incurred. The majority of the Company's activities are research and development related.



ORAGENICS, INC.

NOTES TO FINANCIAL STATEMENTS (Continued)

1. Organization and Significant Accounting Policies (continued)

**Income Taxes**

Income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases and operating and tax credit carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rate is recognized in operations in the period that includes the enactment date. Deferred tax assets are reduced to estimated amounts to be realized by the use of a valuation allowance.

**2. Equipment**

Equipment consists of the following:

| | December 31 | | |
|---|---|---|---|
| | **2002** | **2001** | **2000** |
| | *(In US Dollars)* | | |
| Computer equipment | $ 8,718 | $ 3,260 | $ 3,260 |
| Accumulated depreciation | (4,060) | (2,475) | (905) |
| | $ 4,658 | $ 785 | $ 2,355 |

Depreciation expense for 2002, 2001, and 2000 was $1,585, $1,570, and $905, respectively.

**3. Sponsored Research Agreement**

In May 2000, the Company entered into a sponsored research agreement with a major healthcare company (the Sponsor) providing the Sponsor an opportunity to evaluate certain technology owned by the Company. In 2001, the sponsored research agreement was extended for four months by the Sponsor with a payment of $250,000, which also allowed the Sponsor the exclusive opportunity to continue its evaluation and to negotiate rights to the technology. No agreement was negotiated in 2001 and the sponsored research agreement ended prior to December 31, 2001. As of December 31, 2001, all amounts received subject to the agreement have been recognized as revenue.





**4. Notes Payable to Stockholders**

The Company issued promissory notes for cash to two stockholders in the amounts of $69,604 and $15,000 in 2001 and 1999, respectively. These notes are payable upon demand and accrue interest at 7% per year. No principal or interest payments have been made on these obligations.

**5. Deferred Compensation**

During 2000, the Company entered into a two-year employment agreement with an officer and shareholder. The agreement provides for the deferral of compensation until a certain level of investment funding is received and requires the Company to accrue interest on the deferred balance at 7% per year. Beginning July 1, 2001, the agreement was amended whereby the deferral of compensation ceased. At December 31, 2002, 2001, and 2000, deferred compensation plus accrued interest totaled $39,130, $36,600, and $16,035, respectively. Compensation expense and interest expense relating to the employment agreement for the years ended December 31, 2002, 2001, and 2000 was $0, $18,647, and $15,762 and $2,530, $1,918, and $273, respectively.

In December 2002, compensation payments totaling $24,300 to two officers and directors of the Company were deferred due to limited cash flow of the Company. There is no provision to pay interest on these deferred payments.

**6. Stock Options**

The Company's 2002 Stock Option and Incentive Plan (the Plan) was adopted by the Board of Directors (the Board). The purpose is to advance the interests of the Company by affording certain employees and directors of the Company and key consultants and advisors an opportunity to acquire or increase their proprietary interests in the Company. The Plan authorizes the grant of stock options (incentive and non-statutory), stock appreciation rights and restricted stock. As of December 31, 2002, the Company had not awarded stock appreciation rights or restricted stock under the Plan. The Company has reserved an aggregate of 1,000,000 shares common stock for grants under the Plan, of which 685,000 shares are available for future grants as of December 31, 2002. The exercise price of each option shall be determined by the Board and an option's maximum term is five years.

A summary of the status of the Company's outstanding stock options, including employee stock options discussed above, as of December 31, 2002, 2001, and 2000 and changes during the periods ending on those dates is presented below:





**6. Stock Options (continued)**

| | Options | Weighted Average Exercise Price |
|---|---|---|
| Outstanding at January 1, 2000 | - | $ - |
| Granted | 1,242,000 | .01 |
| Outstanding at December 31, 2000 | 1,242,000 | .01 |
| Exercised | (1,242,000) | .01 |
| Outstanding at December 31, 2001 | | |

| | | |
|---|---|---|
| Outstanding at December 31, 2001 | - | - |
| Granted | 315,000 | 1.25 |
| Outstanding at December 31, 2002 | 315,000 $ | 1.25 |
| Exercisable at end of year | - $ | - |

The weighted-average per option fair value of options granted during the year is $.12 and the remaining contractual life of those options is four years. Options vest over a period of three to four years from respective grant dates. The fair value of these options was estimated at the date of grant using a minimum value option pricing model with the following weighted-average assumptions: weighted average risk-free interest rate of 2.49%; dividend yields of 0%; weighted-average volatility factors of the expected market price of the Company's common stock of 0; and a weighted average expected life of the option of four years.

**7. Retirement Plan**

During 2001, the Company established a defined contribution plan that covers substantially all of the employees of the Company. The plan generally allows for employer contributions up to 15% of each employee's salary, limited to $30,000 per year. Employees may also contribute up to $2,000 to the plan annually. Employees are fully vested in all contributions made to the plan. The total expense related to the plan for 2002 and 2001 was $0 and $8,938, respectively.





**8. Income Taxes**

The components of income tax expense (benefit) are as follows:

| | Year ended December 31 | | |
|---|---|---|---|
| | **2002** | **2001** | **2000** |
| | *(In US Dollars)* | | |
| Current - federal | **$ (14,000)** | $ 14,000 | $ - |
| Current - state | **(2,000)** | 2,000 | - |
| Total | **$ (16,000)** | $ 16,000 | $ - |

The Company had temporary differences between the carrying amounts of assets and liabilities for financial reporting

purposes and their respective income tax bases, as measured by enacted state and federal tax rates, as follows:

| | December 31 | | |
|---|---|---|---|
| | **2002** | **2001** | **2000** |
| | *(In US Dollars)* | | |
| Deferred tax assets: | | | |
| Net operating loss carryforward | **$ 213,417** | $ - | $ 3,750 |
| Deferred compensation | **23,855** | 12,948 | 5,931 |
| Consulting services | **28,223** | - | - |
| Tax credit | **16,211** | 5,154 | - |
| Total deferred tax assets | **281,706** | 18,102 | 9,681 |
| Less valuation allowance | **(281,706)** | (18,102) | (9,681) |
| Total net deferred taxes | **$ -** | $ - | $ - |





**8. Income Taxes (continued)**

The following is a reconciliation of tax computed at the statutory federal rate to the income tax expense in the statements of operations for the years ended December 31, 2002, 2001 and 2000:

| | Year ended December 31 | | |
|---|---|---|---|
| | **2002** | **2001** | **2000** |
| | *(In US Dollars)* | | |
| Income tax expense (benefit) computed at statutory federal rate of 34% | **$ (243,305)** | $ 10,021 | $ (5,750) |
| State income taxes (benefits), net of federal expense/benefit | **(25,947)** | 1,075 | (614) |
| Change in valuation allowance | **263,604** | 8,421 | 5,927 |
| Non-deductible expenses | **274** | 44 | - |
| Research and development credit | **16,212** | - | - |
| Other | **(26,838)** | (3,561) | 437 |
| Total | **$ (16,000)** | $ 16,000 | $ - |

SFAS No. 109, *Accounting for Income Taxes*, requires a valuation allowance to reduce the deferred tax assets reported if, based on the weight of the evidence, it is more likely than not that some portion or all of the deferred tax assets will

not be realized. After consideration of all of the evidence, both positive and negative, management has determined that a $281,706, $18,102 and $9,681 valuation allowance at December 31, 2002, 2001 and 2000, respectively, is necessary to reduce the deferred tax assets to the amount that will more likely than not be realized. The change in the valuation allowance for the years ended December 31, 2002, 2001 and 2000 was $263,604, $8,421 and $5,927, respectively. At December 31, 2002, the Company has available net operating loss carryforwards of $567,145, which expire in the year 2022.

**9. Lease**

The Company leases its office space and certain office equipment under a 12-month cancelable operating lease with annual renewal options. Total rent expense under this lease was $18,506, $9,142 and $9,901 for the years ended December 31, 2002, 2001 and 2000, respectively. The lease agreement ends in March 2003. The minimum lease payments that are due through the formal lease termination date in 2003 are $6,100.



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**10. Transactions with Related Parties**

Costs incurred for consulting services provided by a stockholder of the Company during 2002 and 2001 was approximately $15,000 and $60,000, respectively. The unpaid balance of $75,000 is included in accounts payable and accrued expenses at December 31, 2002.

The Company has two license agreements with the University of Florida Research Foundation, Inc. (UFRF) for their technologies. The Company issued 599,940 shares of common stock as partial consideration. The license agreements provide for, among other things, the Company to make minimum annual research expenditures of $600,000 in 2003 and $1 million thereafter to adhere to specific milestones and pay royalties on product sales, which beginning December 31, 2005 will be a minimum of $50,000 annually per agreement. Under the terms of the agreements, the Company or UFRF may terminate the agreements.

**11. Liquidity**

The accompanying financial statements have been prepared assuming the Company will continue as a going concern. In light of the Company's deficit working capital and equity positions and current projected operating results and cash flow, management believes additional capital in the form of debt or equity financing is required to maintain and expand its operations. There can be no assurance that the Company will be successful in its attempts to obtain the required funding. These financial statements do not give effect to any adjustments which might 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.

**12. Initial Public Offering**

The Company has filed an offering of 2,400,000 units at $1.25 per unit as an initial public offering (IPO) for gross proceeds of $3,000,000. Each unit consists of one share of the Company's common stock, one-half Series A Common

Share Purchase Warrant and one-half Series B Common Share Purchase Warrant. One whole Series A warrant allows the holder to purchase a share of the Company's stock at $2.00 per share for six months subsequent to the closing of the IPO date. One whole Series B warrant allows the holder to purchase a share of the Company's stock at $3.00 per share for nine months subsequent to the closing of the IPO date. In addition to receiving a cash commission for each share sold, the underwriting agent will receive 100,000 shares of common stock of the Company and warrants to purchase 500,000 shares of common stock of the Company at $1.25 per share for two years following the closing of the IPO. The cost of the IPO is estimated to be $500,000 including the agent's commission, which will result in net proceeds of $2,500,000 to the Company.



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**13. Subsequent Event**

On February 14, 2003, the Company obtained a $100,000 short-term loan from an investment banker and shareholder. Interest on the borrowing accrues at 10% and is payable with principal in one year.



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**Until _____, 2003, all dealers that effect transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This is in addition to the dealers' obligation to deliver a prospectus when acting as underwriters and with respect to their unsold allotments or subscriptions.**

## PART II. INFORMATION NOT REQUIRED IN PROSPECTUS

### ITEM 24. INDEMNIFICATION OF DIRECTORS AND OFFICERS.

As provided in our bylaws and under Florida law, our directors shall not be personally liable to our company or any other person for monetary damages for breach of duty of care or any other duty owed to our company as a director, unless the breach of or failure to perform those duties constitutes:

* 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;
* a transaction from which the director received an improper personal benefit, directly or indirectly;
* in a proceeding by or in the right of our company or a stockholder, an act or omission which involves a conscious disregard for the best interests of our company or which involves willful misconduct;
* in a proceeding by or in the right of someone other than our company or a stockholder, an act of 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; or
* a distribution made in violation of Florida law.

Our bylaws provide that we are required to indemnify any director, officer, employee or agent made a party to a proceeding because he is or was our director, officer, employee or agent against liability incurred in the proceeding if he acted in good faith and in a manner the director reasonably believed to be in or not opposed to our best interests and, in the case of any criminal proceeding, he had no reasonable cause to believe his conduct was unlawful.

Our bylaws and Florida law also provide that we shall indemnify a director, officer, employee or agent who has been successful on the merits or otherwise in the defense of any proceeding to which he was a party, or in defense of any claim, issue or matter therein, because he is or was a director, officer, employee or agent of our company against expenses actually and reasonably incurred by him in connection with such defense.

### ITEM 25. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION.

The estimated expenses of the offering, all of which are to be paid by the registrant, are as follows:

| | | |
|---|---|---|
| Underwriter's Commission | $ | 225,000 |
| Underwriter's Expenses | | 50,000 |
| SEC Registration Fee | | 885.5 |
| Alberta and British Columbia Securities Commissions and TSX Venture Exchange filing fees | | 10,000 |
| Printing Expenses | | 4,000 |
| Accounting Fees and Expenses | | 50,000 |
| Legal Fees and Expenses | | 225,000 |
| Transfer Agent Fees | | 1,000 |
| Warrant Agent Fees | | 1,000 |
| Miscellaneous Expenses | | 8,114.5 |
| **TOTAL** | $ | 575,000 |

**ITEM 26. RECENT SALES OF UNREGISTERED SECURITIES**

During the past three years, we have sold the shares of common stock which were not registered under the Securities Act of 1933, as amended.

| Name and Address | Date | Shares | Consideration | | |
|---|---|---|---|---|---|
| | | | Aggregate $ | | Average Cost per Common Share $ |
| Mento A. Soponis<br>4730 SW 103 Way<br>Gainesville, FL 32608 | 11/30/2001<br>03/25/2002 | 756,000 [1]<br>488,592 | 70<br>122,148 | [2] | .0000925<br>..25 |
| Robert Zahradnik<br>161 Stone Ridge Road<br>Franklin, MA 02038 | 07/15/1999<br>11/30/2001 | 270,000 [1]<br>486,000 | 25<br>45 | | .0000925<br>..0000925 |
| Cornet Capital Corp.[3]<br>7225 Blenheim Street<br>Vancouver, BC<br>Canada V6N 1S2 | 03/25/2002 | 800,064 | 200,016 | [4] | .25 |
| Cleo Christine Allen[5]<br>3504 West 11th Street<br>Vancouver, BC<br>Canada V6R 2K2 | 05/22/2002 | 50,000 | 40,000 | | .80 |
| James Butler[5]<br>109 Cutter Court<br>Ponte Vedra Beach, FL 32082 | 05/14/2002 | 31,250 | 25,000 | | .80 |
| Quickswood Ltd.[5]<br>The Jardine Building<br>Fourth Floor<br>33-35 Reid Street<br>Hamilton HM LX<br>Bermuda | 05/14/2002 | 125,000 | 100,000 | | .80 |
| Ernest Mario[5]<br>555 Byron Street #401<br>Palo Alto, CA 94301 | 05/14/2002 | 31,250 | 25,000 | | .80 |
| Amelia Investments Ltd.[5]<br>#19 Watergardens-6<br>Gibralter; via U.K. | 05/23/2002 | 262,500 | 210,000 | | .80 |
| Angel Investment Company Ltd.[5]<br>#19 Watergardens-6<br>Gibralter; via U.K. | 06/06/2002 | 125,000 | 100,000 | | .80 |

[1] Acquired on exercise of options.
[2] Consideration received in the form of services rendered.
[3] Brian McAlister, one of our directors, is the sole shareholder and director of Cornet Capital Corp.

[4] Consideration received in the form of $8,000 cash and $192,016 in services rendered.

[5] These shareholders entered into Registration Rights Agreements with us, at the time of their subscription, under which they were granted rights as follows: (a) 6 months or more after a firm commitment underwritten public underwriting resulting in our common stock being listed on a US national exchange or NASDAQ, at a price per share to the public of $8.00, with aggregate proceeds to us of at least $20 million, of our common shares pursuant to a United States Securities Act registration statement is closed, at least 50% of these shareholders may ask us in writing to file a registration statement under the United States Securities Act covering at least that number of securities held by them that would yield an aggregate offering price of at least $1,000,000 (which may be underwritten if they make that request). If we receive such a request, we have agreed to use our commercially reasonable efforts to effect a registration statement as soon as practicable, unless we determine in good faith that it would be materially detrimental to file such a registration statement. In that case, we may delay filing a registration statement for 120 days. These shareholders may only make this request of us twice; and (b) if, after we have conducted such an offering in the United States , we propose to register the sale of any of our capital stock under the United States Securities Act in connection with the public offering for cash, then we have agreed to notify each of these shareholders of the registration and include their securities in the registration if they make that request.

We also issued options exercisable to purchase 756,000 shares of common stock at $0.000092 per share to Mento A. Soponis and options to purchase 456,000 shares of common stock at $$0.000092 per share to Robert T. Zahradnik on August 1, 2000. All these options were exercised on November 30, 2001.

We issued the foregoing restricted securities to the foregoing individuals and entities pursuant to Section 4(2) of the Securities Act of 1933. All of the foregoing are sophisticated investors and were in possession of all material information relating to the company. Further, no commissions were paid to anyone in connection with the sale of the shares and general solicitation was not made to anyone.

**ITEM 27. EXHIBITS.**

The following exhibits are filed as part of this registration statement, pursuant to Item 601 of Regulation S-B.

| **Exhibit No.** | **Document Description** |
|---|---|
| 1.1 * | Letter of Intent with Haywood Securities Inc. |
| 1.2 * | Agency Agreement with Haywood Securities Inc. |
| 3.1 * | Articles of Incorporation. |
| 3.2 * | Bylaws |
| 3.3 * | Amended Articles of Incorporation |
| 3.4 * | Amended Articles of Incorporation |
| 4.1 * | Specimen Stock Certificate. |
| 4.2 * | Specimen Series A warrant certificate |
| 4.3 * | Specimen Series B warrant certificate |
| 4.4 * | Specimen underwriter's warrant certificate. |
| 5.1 * | Opinion of Conrad C. Lysiak, Esq. Regarding the legality of the securities being registered. |
| 10.1 * | License Agreement |
| 10.2 * | Amendment to License Agreement |
| 10.3 * | Second Amendment to License Agreement |
| 10.4 * | Third Amendment to License Agreement |
| 10.5 * | License Agreement |
| 10.6 * | Amendment to License Agreement |
| 10.7 * | Second Amendment to License Agreement |
| 10.8 * | Equity Agreement |
| 10.9 * | Employment Agreement with Mento Soponis |
| 10.10 * | Employment Agreement with Jeffrey D. Hillman |
| 10.11 * | First Amendment to Employment Agreement with Jeffrey D. Hillman |
| 10.12 * | Second Amendment to Employment Agreement with Jeffrey D. Hillman |

| | |
|---|---|
| 10.13 * | Employee Proprietary Information and Invention Agreement between ourselves and Jeffrey D. Hillman |
| 10.14 * | Incubator License Agreement - Office Lease |



| | |
|---|---|
| 10.15 * | First Amendment to Incubator License Agreement |
| 10.16 * | Second Amendment to Incubator License Agreement |
| 10.17 | Series A and B Warrant Indenture |
| 10.18 * | Renewal Term for Incubator License Agreement |
| 10.19 * | Escrow Agreement between our principals, ourselves and Computershare Trust Company |
| 10.20 * | Value Escrow Agreement between ourselves, the University of Florida Research Foundation, Inc. and Computershare Trust Company |
| 10.21 * | Pooling Agreement between our non-Principal shareholders and Haywood Securities Inc. |
| 10.22 * | Financing Agreement between ourselves and Cornet Capital Corp. |
| 10.23 * | First Agreement to Financing Agreement between ourselves and Cornet Capital Corp. |
| 10.24 * | Escrow Agreement between ourselves, Brian McAlister and Sutherland, Asbill and Brennan |
| 10.25 * | First Amendment to Escrow Agreement between ourselves, Brian McAlister and Sutherland, Asbill & Brennan. |
| 10.26 * | Stock Option Plan |
| 10.27 * | Transfer Agent, Registrar and Dividend Disbursing Agent Agreement for Common Stock |
| 10.29 * | Registration Rights Agreements between ourselves and Cleo Christine Allan, James Butler, Quickswood Ltd., Ernest Mario, Amelia Investments Ltd. and Angel Investment Company Ltd. |
| 10.30 * | Consultancy Agreement between us and ERA Consulting (USA) LLC |
| 10.31 * | Proprietary Information Agreements between ourselves and Brian Anderson, Brian McAlister, Robert Zahradnik, Howard Kuramitsu, and Steven Projan |
| 10.32 * | Confidential Information Agreement between us and Paul Hassie |
| 10.33 * | Agreement Waiving Registration Rights under Equity Agreement |
| 10.34 | Second Amendment to Financing Agreement between ourselves and Cornet Capital Corp. |
| 10.35 * | Consultancy Agreement between us and The Biologics Consulting Group, LLC |
| 10.36 * | Fourth Amendment to License Agreements |
| 10.37 * | Agreement between Dr. Robert Zahradnik and ourselves under which Dr. Zahradnik has agreed not to seek repayment of certain loans from the proceeds of this offering |
| 10.38 * | Agreement between Dr. Jeffrey Hillman and ourselves under which Dr. Hillman has agreed not to seek repayment of certain loans from the proceeds of this offering. |
| 10.39 * | Promissory Note with principal amount of $100,000 payable to Cornet Capital Corp. |
| 10.40 * | Second Amendment to Escrow Agreement |
| 10.41 | Promissory Note with principal amount of $75,000 payable to Cornet Capital Corp. |
| 23.1 * | Consent of Ernst & Young LLP |
| 23.2 * | Consent of Conrad C. Lysiak, Esq. |

**ITEM 28. 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:

a. To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;

b. To reflect in the prospectus any facts or events which, individually or together, represent a fundamental change in the information in the registration statement; and notwithstanding the forgoing, 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 SEC pursuant to Rule 424(b) (Section 230.424(b)) if, in the aggregate, the changes in the 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.

c. To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any change to such information in the registration statement.

2. That, for the purpose of determining any liability under the Securities Act of 1933, 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.

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 foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Act 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 Act and will be governed by the final adjudication of such issue.



**SIGNATURES**

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing of this Form SB-2 Registration Statement and has duly caused this Form SB-2 Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in Alachua, Florida, on this 1st day of May, 2003.

**ORAGENICS, INC.**

BY: /s/ Mento A. Soponis
Mento A. Soponis, President and Chief Executive Officer

BY: /s/ Paul A. Hassie
Paul A. Hassie, Secretary, Treasurer, Principal Accounting Officer and Chief Financial Officer

KNOW ALL MEN BY THESE PRESENT, that each person whose signature appears below constitutes and appoints Mento A. Soponis, as true and lawful attorney-in-fact and agent, with full power of substitution, for his and in his name,

place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this registration statement, and to file the same, therewith, with the Securities and Exchange Commission, and to make any and all state securities law or blue sky filings, granting unto said attorney-in-fact and agent, full power and authority to do and perform each and every act and thing requisite or necessary to be done in about the premises, as fully to all intents and purposes as he might or could do in person, hereby ratifying the confirming all that said attorney-in-fact and agent, or any substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Form SB-2 Registration Statement has been signed by the following persons in the capacities and on the dates indicated:

| Signature | Title | Date |
|---|---|---|
| /s/ Mento A. Soponis<br>Mento A. Soponis | President, Principal Executive Officer and a Member of the Board of Directors | May 1, 2003 |
| /s/ Paul A. Hassie<br>Paul A. Hassie | Chief Financial Officer and Principal Accounting Officer | May 1, 2003 |
| _____<br>Robert Zahradnik | Member of the Board of Directors | May 1, 2003 |
| /s/ Jeffery Hillman<br>Jeffrey Hillman | Member of the Board of Directors | May 1, 2003 |
| /s/ Brian McAlister<br>Brian McAlister | Member of the Board of Directors | May 1, 2003 |
| /s/ Brian Anderson<br>Brian Anderson | Member of the Board of Director | May 1, 2003 |

**WARRANT INDENTURE**

THIS WARRANT INDENTURE is dated as of **March 28, 2003,**

BETWEEN:

**ORAGENICS, INC.,** a Florida company located at 12085 Research Drive, Alachua, Florida 32615

(the "Company");

AND:

**COMPUTERSHARE TRUST COMPANY OF CANADA** , a trust company incorporated under the laws of Canada and authorized to carry on trust business in the Province of British Columbia and having a branch office at 4th Floor, 510 Burrard Street, Vancouver, British Columbia, V6C 3B9

(the "Trustee").

WHEREAS:

A. In connection with the Offering, the Company has filed a prospectus dated _____, offering for sale up to 2,400,000 Units, each Unit consisting of one Common Share, one-half of one non-transferable Series A Warrant and one-half of one non-transferable Series B Warrant, and the Company has agreed to issue up to 1,200,000 Series A Warrants and 1,200,000 Series B Warrants (collectively, the "Warrants") included in such Units pursuant to this Indenture;

B. Subject to the adjustment provisions in this Indenture, each whole Series A Warrant is exercisable to acquire one Warrant Share for a term of 6 months from the date of issuance at a price of US$2.00, and each whole Series B Warrant is exercisable to acquire one Warrant Share for a term of 9 months from the date of issuance at a price of US$3.00;

C. The Warrants are non-transferable.

D. All capitalized terms used in these recitals have the meanings assigned to them in Subsection 1.1 below;

E. All necessary resolutions have been passed by the Directors and all other proceedings taken and conditions complied with to authorize the execution and delivery of this Indenture and the execution and issue of the Warrants to be issued hereunder, to reserve the Warrant Shares for issuance upon the exercise of the Warrants and to make this Indenture legal, valid and binding upon the Company; and

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F. All things necessary have been done and performed to make the Warrants, when countersigned by the Trustee and issued as provided in this Indenture, legal, valid and binding on the Company with the benefits of and subject to the terms of this Indenture;

G. The statements made in Recitals A through F are representations of the Company and not of the Trustee;

H. The Trustee has agreed to enter into this Indenture and to hold all rights, interests and benefits contained in this Indenture for and on behalf of those persons who become Warrantholders pursuant to this Indenture;

NOW THEREFORE THIS INDENTURE WITNESSES that in consideration of the premises and the covenants of the parties, the Company hereby appoints the Trustee as trustee for the Warrantholders, to hold all rights, interests and benefits contained in this Indenture for and on behalf of those persons who become Warrantholders from time to time pursuant to this Indenture and it is hereby agreed and declared as follows:

**1. DEFINITIONS AND INTERPRETATION**

**1.1 Definitions**

In this Indenture, unless otherwise specified:

(a) "Agent" means Haywood Securities Inc.;

(b) "Alberta Act" means the *Securities Act* (Alberta) as amended;

(c) "Applicable Legislation" means the provisions of the statutes of Canada and its provinces and the regulations under those statutes relating to trust indentures or the rights, duties or obligations of corporations and trustees under trust indentures as are from time to time in force and applicable to this Indenture;

(d) "Applicable Securities Laws" means the applicable securities laws and regulations, together with the related rules, policies, notices and orders of the Provinces of British Columbia and Alberta;

(e) "B.C. Act" means the *Securities Act* (British Columbia), as amended;

(f) "business day" means a day that is not a Saturday, Sunday, or civic or statutory holiday in British Columbia or Alberta;

(g) "Closing Date" means the day on which the Warrants are issued by the Company;

(h) "Common Shares" means shares of common stock, par value $.001of the Company; provided that if the exercise rights are subsequently adjusted or altered pursuant to Subsection 6, "Common Shares" will thereafter mean the shares of common stock or other securities or property that a Warrantholder is entitled to on an exchange after the adjustment;



(i) "Convertible Security" means a security of the Company (other than the Warrants) convertible into or exchangeable for or otherwise carrying the right to acquire Common Shares;

(j) "Current Market Price" at any date, means the weighted average price per Common Share at which the Common Shares have traded:

(i) on the Exchange;

(ii) if the Common Shares are not listed on the Exchange, on any stock exchange upon which the Common Shares are listed as may be selected for this purpose by the Directors and approved by the Trustee; or

(iii) if the Common Shares are not listed, on the over-the-counter market;

during the 20 consecutive trading days (on each of which at least 500 Common Shares are traded in board lots) ending the third trading day before such date, and the weighted average price will be determined by dividing the aggregate sale price of all Common Shares sold in board lots on the exchange or market, as the case may be, during the 20 consecutive trading days by the number of Common Shares sold;

(k) "Director" means a director of the Company for the time being, and reference without more to action by the directors means action by the directors of the Company as a board or, whenever duly empowered, action by an executive committee of the board;

(l) "dividends in the ordinary course" means such dividends declared payable on a Common Share in any fiscal year of the Company to the extent that such dividends or distributions in the aggregate do not exceed 5% of the Exercise Price in effect at the time and for such purposes the amount of any dividends or distributions paid in other than cash or shares shall be the fair market value of such dividends as determined by the directors;

(m) "Exchange" means the TSX Venture Exchange;

(n) "Exercise Price", if used in relation to the Series A Warrant, means US $2.00 and, if used in relation to the Series B Warrant, means US $3.00;

(o) "Offering" means the Company's initial public offering of 2,400,000 Units;

(p) "person" means an individual, a corporation, a partnership, a trustee or any unincorporated organization and words importing persons have a similar meaning;

(q) "Price Adjustment Factor", at any time, means that number (as may be adjusted by Subsection 6 of this Indenture) which, when multiplied by the Exercise Price, gives the Subscription Price and that number, as at the date of this Indenture, is equal to one;

(r) "Regulatory Authorities" means the British Columbia Securities Commission, the Alberta Securities Commission and the Exchange;



(s) "Series A Warrant" means one whole non-transferable share purchase warrant authorized to be created by the Company, one-half of which is issued as part of each Unit and certified pursuant to this Indenture and entitling the holder thereof, subject to adjustment in accordance with the terms of this Indenture, to purchase one Warrant Share at any time during the Warrant Exercise Period at the Exercise Price;

(t) "Series A Warrant Certificate" means a warrant certificate in the form appended as Schedule "A" to this Indenture;

(u) "Series A Warrant Holder" or "Series B Warrant Holder" means a holder of that particular class of Warrants, as the case may be, for the time being;

(v) "Series B Warrant" means one whole non-transferable share purchase warrant authorized to be created by the Company, one-half of which is issued as part of each Unit and certified pursuant to this Indenture and entitling the holder thereof, subject to adjustment in accordance with the terms of this Indenture, to purchase one Warrant Share at any time during the Warrant Exercise Period at the Exercise Price;

(w) "Series B Warrant Certificate" means a warrant certificate in the form set out as Schedule "B" to this Indenture;

(x) "Special Resolution" has the meaning given in Subsection 9.14;

(y) "Subscription Price" means at any time the subscription price payable for one Warrant Share upon the exercise at that time of either a Series A Warrant or Series B Warrant and calculated as the price which is the product of the Exercise Price and the Price Adjustment Factor as at that time;

(z) "trading day" with respect to a stock exchange means a day on which the stock exchange is open for business;

(aa) "Transfer Agent" means the transfer agent for the time being of the Common Shares;

(bb) "Trustee" means Computershare Trust Company of Canada, or any lawful successor thereto, including through the operation of Subsection 11.8;

(cc) "Unit" means a unit of the Company issued pursuant to the Offering, each consisting of one Common Share, one-half of one Series A Warrant and one-half of one Series B Warrant;

(dd) "Warrants" means the Series A Warrants and the Series B Warrants;

(ee) "Warrant Exercise Period" means the period during which Warrantholders may exercise the Warrants, commencing on the date hereof and ending at 4:30 p.m. (Vancouver time) on:

(i) for the Series A Warrants, the date which is 6 months from the date of issuance of the Series A Warrants; and

(ii) for the Series B Warrants, the date which is 9 months from the date or issuance of the Series B Warrants;

(ff) "Warrant Indenture" means this Indenture pursuant to which the Warrants will be issued and governed;

(gg) "Warrant Share" means a Common Share issuable upon exercise of one Warrant;

(hh) "Warrantholders" means the holders of the Warrants for the time being; and

(ii) "written order of the Company", "written request of the Company", "written consent of the Company" and "certificate of the Company" mean respectively a written order, request, consent and certificate signed in the name of the Company by any one Director or officer and may consist of one or more instruments so executed.

**1.2 Interpretation**

For the purposes of this Indenture and unless otherwise provided or unless the context otherwise requires:

(a) "this Indenture", "herein", "hereby" and similar expressions mean or refer to this Warrant Indenture and any indenture, deed or instrument supplemental or ancillary hereto; and the expressions "Article", "section" or "subsection" followed by a number or letter mean and refer to the specified Article, Subsection or Subsection of this Indenture;

(b) words importing the singular include the plural and *vice versa* and words importing the masculine gender include the feminine and neuter genders;

(c) the division of this Indenture into Articles, sections, subsections and paragraphs, the provision of a table of contents and the insertion of headings are for convenience of reference only and will not affect the construction or interpretation of this Indenture;

(d) any capitalized term in this Indenture which is not defined in Subsection 1.1 will have the meanings defined elsewhere in this Indenture; and

(e) in the event that any day on which the Warrant Exercise Period expires or on or before which any action is required to be taken under this Indenture is not a business day, then the Warrant Exercise Period will expire on or the action will be required to be taken on or before the next succeeding day that is a business day.

**1.3 Schedules**

Schedule "A" and Schedule "B" attached to this Indenture are integral parts of this Indenture.



**1.4 Time of the Essence**

Time is of the essence in all respects in this Indenture, the Warrants, the Series A Warrant Certificates and the Series B Warrant Certificates.

**1.5 Applicable Law**

This Indenture, the Warrants, the Series A Warrant Certificates and the Series B Warrant Certificates will be construed and enforced in accordance with the laws of the Province of British Columbia and will be treated in all respects as British Columbia contracts, and the Company, the Trustee and the Warrantholders each attorn and submit to the non-exclusive jurisdiction of the Courts of British Columbia in connection with any disputes which may arise hereunder or under the Warrants.

**1.6 Meaning of "outstanding" for Certain Purposes**

Every Series A or Series B Warrant Certificate certified and delivered by the Trustee under this Indenture will be deemed to be outstanding until the expiry of the Warrant Exercise Period, as applicable, or until it is surrendered to the Trustee upon the exercise thereof pursuant to Subsection 5, provided however that:

(a) a Warrant which has been partially exercised will be deemed to be outstanding only to the extent of the unexercised part of the Warrant;

(b) where a Series A or Series B Warrant Certificate has been issued in substitution for a Series A or Series B Warrant Certificate which has been lost, stolen or destroyed, only one of them will be counted for the purpose of determining the number of Warrants outstanding; and

(c) for the purpose of any provision of this Indenture entitling holders of outstanding Warrants to vote, sign consents, requests or other instruments or take any other action under this Indenture, Warrants owned legally or equitably by the Company will be disregarded, except that:

(i) for the purpose of determining whether the Trustee will be protected in relying on any such vote, consent, request or other instrument or other action, only the Warrants of which the Trustee has notice that they are so owned will be so disregarded; and

(ii) Warrants so owned which have been pledged in good faith other than to the Company will not be so disregarded if the pledgee will establish to the satisfaction of the Trustee the pledgee's right to vote the Warrants in his discretion free from the control of the Company, and the terms of the pledge thereof as to the right to vote will govern.



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**2. ISSUE OF WARRANTS**

**2.1 Creation and Issue of Warrants**

A total of up to 1,200,000 Series A Warrants and 1,200,000 Series B Warrants, each Warrant entitling the holder thereof to purchase one Warrant Share, as adjusted from time to time pursuant to this Indenture, are hereby created and issued, executed by the Company and certified by or on behalf of the Trustee, and delivered by the Company in accordance with Subsection 2.4.

**2.2 Terms of Warrants**

Subject as hereinafter provided in this Indenture, each Warrant will be non-transferable and will entitle its holder, upon exercise in accordance with this Indenture, to purchase one Warrant Share at any time during the Warrant Exercise Period at the Exercise Price, as applicable.

**2.3 Form of Warrants**

The Warrants will be initially evidenced by Series A Warrant Certificates and Series B Warrant Certificates with such additions, variations or omissions as may be permitted by the provisions of this Indenture or may from time to time be agreed upon between the Company and the Trustee and will be numbered in the manner as the Company with the approval of the Trustee may prescribe, and will bear such legends as may be required under the Applicable Securities Laws.

**2.4 Warrant Certificates**

Series A Warrant Certificates and Series B Warrant Certificates to be issued and delivered from time to time under this Indenture will be executed by the Company and certified by the Trustee to or upon the written order of the Company, without the Trustee receiving any consideration for such certification.

**2.5 Issue in Substitution for Warrants**

If a Series A Warrant Certificate or Series B Warrant Certificate becomes mutilated or is lost, destroyed or stolen (the "Old Certificate"), the Company, subject to Subsection 2.6, will issue and thereupon the Trustee will countersign or certify and deliver a new certificate of like tenor as the Old Certificate in exchange for and in place of and on surrender and cancellation of the mutilated certificate or in lieu of and in substitution for the lost, destroyed or stolen certificate, and the substituted Series A or Series B Warrant Certificate will entitle the holder thereof to the same rights and benefits and will bear the same legends as the Old Certificate.

**2.6 Conditions for Replacement of Warrants**

The applicant for the issue of a new certificate pursuant to Subsection 2.5 will bear the cost of the issue thereof and in case of loss, destruction or theft will, as a condition precedent to the issue thereof:

(a) furnish to the Company and to the Trustee, or the Transfer Agent such evidence of ownership and of the loss, destruction or theft of the certificate to be replaced as is satisfactory to the Company and to the Trustee, or the Transfer Agent acting reasonably,

(b) if so required, furnish an indemnity and surety bond in amount and form satisfactory to the Company and to the Trustee, or the Transfer Agent acting reasonably, and

(c) pay the reasonable charges of the Company and the Trustee, or the Transfer Agent, in connection therewith.

**2.7 Warrantholder not a Shareholder**

Nothing in this Indenture or in the ownership of a Warrant evidenced by a Series A Warrant Certificate or Series B Warrant Certificate, or otherwise, will be construed as conferring on a Warrantholder any right or interest whatsoever as a shareholder of the Company, including but not limited to any right to vote at, to receive notice of, or to attend, any meeting of shareholders or any other proceeding of the Company or any right to receive any dividend or other distribution.

**2.8 Warrants to Rank Pari Passu**

Except as otherwise provided in this Indenture, each Warrant will rank *pari passu* with all other Warrants, whatever may be the actual date of issue of the Series A or Series B Warrant Certificates that evidence them.

**2.9 Execution of Warrants**

Series A Warrant Certificates and Series B Warrant Certificates will be signed by any one Director and/or officer of the Company. The signature of such Director or officer may be mechanically reproduced and Series A and Series B Warrant Certificates bearing such mechanically reproduced signatures will be binding upon the Company as if they had been manually signed by the Director or officer. Notwithstanding that any of the persons whose manual or mechanically reproduced signature appears on any Series A or Series B Warrant Certificates as the officer or Director may no longer, prior to the certification and delivery of the Series A or Series B Warrant Certificate, hold the official capacity in which he signed, any Series A or Series B Warrant Certificate signed as aforesaid will be valid and binding upon the Company when the Series A or Series B Warrant Certificate has been certified by the Trustee in accordance with Subsection 2.10.



**2.10 Certification by the Trustee**

No Series A Warrant Certificate or Series B Warrant Certificate will be issued, or if issued, will be valid or entitle the holder to the benefit of this Indenture until it has been certified by the Trustee by being countersigned by or on behalf of the Trustee and the countersignature upon any Series A or Series B Warrant Certificate will be conclusive evidence as against the Company that the Series A or Series B Warrant Certificate so countersigned has been duly issued under this Indenture and is a valid obligation of the Company, and that the holder is entitled to the benefit of this Indenture.

**2.11 Effect of Certification**

The countersigning by or on behalf of the Trustee on any Series A Warrant Certificate or Series B Warrant Certificate issued under this Indenture will not be construed as a representation or warranty by the Trustee as to the validity of this Indenture or of the Warrants and the Trustee will in no respect be liable or answerable for the use made of any Series A or Series B Warrant Certificate or of the consideration therefor, except as otherwise specified in this Indenture. The

countersignature of or on behalf of the Trustee will, however, be a representation and warranty by the Trustee that the Series A or Series B Warrant Certificate has been duly countersigned by or on behalf of the Trustee pursuant to the provisions of this Indenture.

**3. EXCHANGE OF WARRANTS**

**3.1 Exchange of Warrants**

A Warrantholder may, at any time after the date of issue of a Warrant Certificate and prior to the expiry of the Warrant Exercise Period, upon surrender of such Warrant Certificate to the Trustee at its principal transfer office in the City of Vancouver exchange the Warrant Certificate for two or more Warrant Certificates entitling the Warrantholder to subscribe, in the aggregate, for the same number of Warrant Shares for which the Warrantholder may subscribe under the surrendered Warrant Certificate.

**3.2 Charges for Exchange**

On each exchange the Trustee may make a sufficient charge to reimburse it for any tax or other governmental charge required to be paid and, in addition, a reasonable charge for every Warrant Certificate issued upon the exchange and payment of the charges will be made by the party requesting the exchange, as a condition precedent to such exchange.



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**4. REGISTER OF WARRANTS**

**4.1 Register of Warrants**

The Company will cause to be kept by and at the principal offices of the Trustee in the City of Vancouver and by the Trustee or such other registrar as the Company, with the approval of the Trustee, may appoint, at such other place or places, if any, as the Company may designate with the approval of the Trustee, registers in which will be entered in alphabetical order the names and addresses (including street and number, if any) of the holders of Series A Warrants and Series B Warrants and particulars of the Series A and Series B Warrants held by them respectively.

**4.2 Register to be Open for Inspection**

The registers referred to in Subsection 4.1 will at all reasonable times be open for inspection by the Company, the Trustee or any Warrantholder. The Trustee and every registrar will from time to time when requested so to do by the Company, by the Trustee or by a Warrantholder furnish the Company, the Trustee or upon payment by the Warrantholder of a reasonable fee, the Warrantholder, as the case may be, with a list of names and addresses of holders of Series A Warrants or Series B Warrants, as the case may be, entered on the registers kept by them and showing the number of Series A or Series B Warrants held by each such holder.

**5. EXERCISE OF WARRANTS**

**5.1 Method of Exercise of Warrants**

Subject to and upon compliance with the provisions of this Subsection 5, a Warrantholder may, during the Warrant Exercise Period, exercise the right of purchase under a Series A Warrant Certificate or Series B Warrant Certificate, as provided in this Indenture, by surrendering the Series A or Series B Warrant Certificate, as applicable, to the Trustee at its principal transfer office in the City of Vancouver during normal business hours on a business day, together with a fully completed and duly executed exercise form (in the form attached to, or imprinted upon, the Series A or Series B Warrant Certificate), and the Subscription Price applicable at the time of the surrender calculated in accordance with the provisions of this Indenture.

**5.2 Payment of Subscription Price**

The Subscription Price for Warrant Shares subscribed for under Warrants will be paid by certified cheque, bank draft or money order payable to or to the order of the Company or to the Trustee at par at the city where the Series A Warrant Certificate or Series B Warrant Certificate is surrendered.

**5.3 Effect of Exercise of Warrants**

Subject to Subsection 5.4, on exercise of a Warrant, the Company will cause to be issued to the person or persons in whose name or names the Warrant Shares so subscribed for are to be issued as specified in the exercise form the number of Warrant Shares to be issued to such person or persons and such person or persons will become a shareholder or shareholders of the Company in respect of those Warrant Shares with effect from the date on which the Warrant is exercised and will be entitled to delivery of a certificate or certificates evidencing the Warrant Shares and the Company will cause the certificate or certificates to be mailed to such person or persons at the address or addresses specified in the exercise form within four business days of the date on which the Warrant is exercised.

**5.4 Delivery of Share Certificates and Warrant Certificates**

Notwithstanding any provision contained in this Indenture to the contrary, the Company will not be required to deliver certificates for Warrant Shares in any period while the share transfer books of the Company are closed prior to any meeting of shareholders or for the payment of dividends or for any other purpose and, in the event of the exercise of any Warrant during any such period, delivery of certificates for Warrant Shares may be postponed for a period not exceeding four business days after the date of the reopening of the share transfer books.

**5.5 Completion of Exercise Form**

Every exercise form will be signed by the Warrantholder who desires to exercise in whole or in part the right of purchase therein provided for, will specify the number of Warrant Shares that the Warrantholder wishes to purchase (being not more than he is entitled to purchase), the person or persons in whose name or names the Warrant Shares which the subscriber desires to purchase are to be issued and his or their address or addresses and the number of Warrant Shares to be issued to each such person, if more than one is so specified.

**5.6 Payment of Applicable Taxes and Charges**

If any Warrant Shares subscribed for are to be issued to a person or persons other than the Warrantholder, the Warrantholder must pay to the Company or to the Trustee on its behalf an amount equal to all exigible transfer taxes or other government charges, and the Company will not be required to issue or deliver any certificate evidencing any Warrant Shares unless or until that amount has been so paid or the Warrantholder has established to the satisfaction of the Company that the taxes and charges have been paid or that no taxes or charges are owing.



**5.7 Partial Exercise of Warrant**

A Warrantholder may subscribe for and purchase any lesser number of Warrant Shares than the number of Warrant Shares to which such holder is entitled upon the exercise of Warrants, in which case the Warrantholder will be entitled to receive a new Series A Warrant Certificate or Series B Warrant Certificate, as applicable, in respect of the Warrant Shares purchasable under the Series A or Series B Warrant Certificate and not then subscribed for and purchased, and the Trustee will issue a new Series A or Series B Warrant Certificate, as applicable, upon surrender of the Series A or Series B Warrant Certificate, if satisfied that the new Series A or Series B Warrant Certificate is properly issuable.

**5.8 Expiration of Warrants**

No holder of any Warrant or any other person shall have any rights, under or by virtue of such Warrant or of this Indenture, to subscribe for or purchase any Warrant Shares at any time subsequent to the Warrant Exercise Period. Following the Warrant Exercise Period, all rights under this Indenture and/or under any of the Warrants in respect of which the right of subscription and purchase herein and therein provided for shall not theretofore have been exercised shall wholly cease and terminate and said Warrants shall be wholly void and of no value or effect.

**5.9 Surrender of Warrant Certificate**

Surrender of a Series A Warrant Certificate or Series B Warrant Certificate and the exercise form and payment of the Subscription Price will be deemed to have been effected only on personal delivery thereof to, or if sent by mail or other

means of transmission, on actual receipt thereof by, the Trustee at the office specified in Subsection 5.1.

**5.10 Cancellation of Surrendered Warrants**

All Warrants exercised as provided in Subsection 5.1, partially exercised as provided in Subsection 5.7 or exchanged for other Warrants as provided in Subsection 3.1 will be cancelled and destroyed by the Trustee and, if required by the Company, the Trustee will furnish the Company with a certificate as to the destruction.

**6. ADJUSTMENT OF SUBSCRIPTION PRICE AND NUMBER OF WARRANT SHARES**

**6.1 Definitions**

In this Article, each of the terms "record date" and "effective date" mean the close of business on the relevant date.



**6.2 Adjustment of Subscription Price and Subscription Rights**

The Subscription Price and the number of Warrant Shares to be acquired by a Warrantholder on exercise of Warrants will be adjusted from time to time in the events and in the manner provided and in accordance with the provisions of and rules set out in this Subsection 6.

**6.3 Share Reorganization**

If and whenever at any time from the date of this Indenture to the expiry of the Warrant Exercise Period, the Company:

(a) issues Common Shares or Convertible Securities to all or substantially all of the holders of Common Shares by way of stock dividend, other than (i) the issue from time to time of Common Shares or Convertible Securities by way of stock dividend to shareholders who elect to receive Common Shares or Convertible Securities in lieu of cash dividends in the ordinary course or pursuant to a dividend reinvestment plan or (ii) as dividends in the ordinary course,

(b) subdivides the outstanding Common Shares into a greater number of shares, or

(c) combines or consolidates the outstanding Common Shares into a lesser number of shares,

each of such events being a "Share Reorganization", the Price Adjustment Factor will be adjusted, effective immediately after the record date for the dividend or, in the case of a subdivision, combination, consolidation or reduction, effective immediately after the record date or the effective date if no record date is fixed, to the number that is the product of:

(i) the Price Adjustment Factor in effect on that effective date or record date; and

(ii) the fraction of which:

(A) the numerator is the total number of Common Shares outstanding on that effective date or record date before giving effect to the Share Reorganization, and

(B) the denominator is the total number of Common Shares that are or would be outstanding immediately after that effective date or record date after giving effect to the Share Reorganization.



Common Shares (and Common Shares issuable upon conversion or exchange of Convertible Securities) issued or to be issued under a Share Reorganization will be deemed to be outstanding on the record date or effective date for such Share Reorganization for the purpose of calculating the number of outstanding Common Shares under Paragraph 6.4(a) and 6.4(c). To the extent that any Convertible Securities issued to holders of Common Shares by way of a stock dividend are not so converted or exchanged into or for Common Shares prior to the expiration of the right to do so, the

conversion price will then be readjusted to the conversion price which would then be in effect based upon the number of Common Shares actually issued upon the conversion or exchange of the Convertible Securities.

**6.4 Rights Offering**

(a) If and whenever at any time from the date of this Indenture to the expiry of the Warrant Exercise Period, the Company fixes a record date for the issuance of rights, options or warrants to all or substantially all of the holders of the outstanding Common Shares entitling them, for a period expiring not more than 45 days after the record date, to subscribe for or purchase Common Shares or Convertible Securities at a price per share (or having a conversion price per share) less than 95% of the Current Market Price on the earlier of the record date and the date on which the Company announces its intention to make such issuance (any such issuance being a "Rights Offering"), the Price Adjustment Factor will be adjusted on the record date so that it will equal the number which is the product of the Price Adjustment Factor in effect immediately prior to the record date and the fraction:

(i) the numerator of which will be the total number of Common Shares outstanding immediately prior to the record date plus a number of Common Shares equal to the number arrived at by multiplying the total number of additional Common Shares offered for subscription or purchase or into or for which the total number of Convertible Securities so offered are convertible or exchangeable by the quotient obtained by dividing the purchase or subscription price for each Common Share offered for subscription or purchase or the conversion price for each Convertible Security so offered by such Current Market Price for the Common Shares; and

(ii) the denominator of which will be the total number of Common Shares outstanding immediately prior to such record date plus the total number of additional Common Shares offered for subscription or purchase or into or for which the total number of Convertible Securities so offered are convertible or exchangeable.

The adjustment will be made successively whenever a record date is fixed, provided that if two or more such record dates or dates of announcement, as applicable, or record dates or dates of announcement, as applicable, referred to in Subsection 6.4(c) are fixed within a period of 35 trading days, the adjustment will be made successively as if each of such record dates occurred on the earliest of such record dates. To the extent that any rights, options or warrants are not so issued or any of the rights, options or warrants so issued are not exercised prior to the expiration thereof, or any Convertible Securities are not so converted into or exchanged for Common Shares prior to the expiration of the right to do so, the Price Adjustment Factor will be readjusted to the Price Adjustment Factor in effect immediately prior to the record date, and the Price Adjustment Factor will be further adjusted based upon the number of additional Common Shares actually delivered upon the exercise of the rights, options or warrants, or issued upon the conversion or exchange of the Convertible Securities, as the case may be.



(b) If and whenever at any time from the date of this Indenture to the expiry of the Warrant Exercise Period, the Company fixes a record date for the issuance of rights, options or warrants to all or substantially all the holders of the outstanding Common Shares entitling them, for a period expiring not more than 45 days after such record date, to subscribe for or purchase Common Shares or Convertible Securities at a price per share (or having a conversion price per share) not less than 95% of the Current Market Price on the earlier of the record date and the date on which the Company announces its intention to make such issuance, the Price Adjustment Factor will not be adjusted.

(c) If the purchase price provided for in any right, warrant or option issued in connection with a Rights Offering is decreased, or the conversion price for Convertible Securities issued in connection with a Share Reorganization is increased, the Price Adjustment Factor will forthwith be changed to whatever Price Adjustment Factor would have been obtained had the adjustment made in connection with the issuance of all such rights, warrants, options or Convertible Securities been made upon the basis of the purchase price as so decreased or the conversion price as so increased, provided that the provisions of this Subsection 6.4(c) will not apply to any increase or decrease resulting from provisions in any rights, warrants, options or securities designed to prevent dilution if the increase or decrease will not have been proportionately greater than the change, if any, in the Price Adjustment Factor to be made at the same time pursuant to the provisions of this Section 6.4.

**6.5 Special Distribution**

If and whenever at any time from the date of this Indenture to the expiry of the Warrant Exercise Period the Company will fix a record date for the making of an issue or distribution to all or substantially all the holders of its outstanding Common Shares resident in Canada of:

(a) shares of any class, excluding Common Shares or Convertible Securities referred to in Paragraph 6.3(a), whether of the Company or any other corporation;

(b) rights, options or warrants, excluding those referred to in Paragraphs 6.4(a) and 6.4(b);

(c) evidences of its indebtedness; or

(d) property, cash or other assets, excluding dividends in the ordinary course or property distributed in lieu thereof at the option of the shareholders

(any of such events being a Special Distribution) then, in each such case, the Price Adjustment Factor will be adjusted on the record date so that it will equal the number that is the product of the Price Adjustment Factor in effect immediately prior to the record date and the fraction:



(i) the numerator of which will be the total number of Common Shares outstanding immediately prior to the record date multiplied by the Current Market Price on the earlier of the day immediately prior to such record date and the date on which the Company announces its intention to make such issuance, less the aggregate fair market value (as determined by the Directors with the approval of the Trustee, which determination, absent manifest error, will be conclusive) of the shares or rights, options or warrants or evidences of indebtedness or property, cash or assets so distributed, and

(ii) the denominator of which will be the total number of Common Shares outstanding immediately prior to the record date multiplied by such Current Market Price, provided that in no case will the denominator be less than 1.0.

The adjustment will be made successively whenever a record date is fixed, provided that if two or more such record dates or dates of announcement, as applicable, or record dates or dates of announcement, as applicable, referred to in Paragraph 6.4(a) are fixed within a period of 35 trading days, the adjustment will be made successively as if each of such record dates occurred on the earliest of such record dates. To the extent that any distribution is not so made, the Price Adjustment Factor will then be readjusted to the Price Adjustment Factor which would then be in effect if the record date had not been fixed or to the Price Adjustment Factor which would then be in effect based upon the shares or rights, options or warrants or evidences of indebtedness or property, cash or assets actually distributed, as the case may be.

**6.6 Adjustment in Number of Common Shares**

On any adjustment of the Price Adjustment Factor pursuant to sections 6.3, 6.4(a) or 6.5, including any readjustment, the number of Warrant Shares purchasable on exercise of one Warrant will be adjusted, effective at the same time as the adjustment of the Price Adjustment Factor, by multiplying the number of Warrant Shares so purchasable immediately before the adjustment by a fraction which is the reciprocal of the fraction used in the adjustment of the Price Adjustment Factor.

**6.7 Corporate Reorganization**

(a) If and whenever at any time from the date of this Indenture to the expiry of the Warrant Exercise Period there is:

(i) a reclassification of the Common Shares outstanding, a change of Common Shares into other shares or securities, or any other capital reorganization of the Company except as described in Subsections 6.3, 6.4(a), 6.4(b) or 6.5;

(ii) a consolidation, merger or amalgamation of the Company with or into another body corporate resulting

in a reclassification of outstanding Common Shares or a change of Common Shares into other shares or securities; or

(iii) a transaction whereby all or substantially all the Company's undertaking and assets become the property of another corporation



(any of those events being a "Corporate Reorganization"), a holder who thereafter exercises Warrants will, subject to compliance with all applicable securities legislation and policies, be entitled to receive and will accept, for the Subscription Price then in effect, in lieu of the Warrant Shares (and any other securities to which Warrantholders are then entitled on the exercise of Warrants) to which he would otherwise have been entitled on exercise immediately prior to the Corporate Reorganization, the kind and amount of shares or other securities or property (including cash) that he would have been entitled to receive as a result of the Corporate Reorganization if, on the effective date thereof, he had been the holder of the number of Warrant Shares (and any other securities to which Warrantholders are then entitled on the exercise of Warrants) to which he would have been entitled on the exercise of the Warrant or Warrants immediately prior to the Corporate Reorganization.

(b) As a condition precedent to taking any action that would require an adjustment pursuant to Subsection 6.7(a), the Company will take all action that, in the opinion of counsel, is necessary in order that the Company, any successor or any successor to its assets and undertaking, will be obligated to and may validly and legally issue as fully paid and non-assessable all the Warrant Shares or other shares or securities or property to which Warrantholders will be entitled on the exercise of Warrants thereafter.

(c) If necessary as a result of any Corporate Reorganization, appropriate adjustments will be made in the application of the provisions set forth in this Subsection 6 with respect to the rights and interests of Warrantholders to the end that the provisions set forth in this Subsection 6 will thereafter correspondingly be made applicable as nearly as may reasonably be possible to any shares or other securities or property thereafter deliverable on the exercise of a Warrant. Any such adjustment will be subject to compliance with all applicable securities legislation and policies and will be made by and set forth in an amendment hereto approved by the directors and by the Trustee and will for all purposes be conclusively deemed to be an appropriate adjustment.

**6.8 Subscription Rights Adjustment Rules**

The following rules and procedures will be applicable to adjustments made pursuant to Subsections 6.1 to 6.7:

(a) the adjustments and readjustments provided for in Subsections 6.l to 6.7 will be cumulative and, subject to Subsection 6.8(b), will apply (without duplication) to successive issues, subdivisions, combinations, consolidations, distributions and other events that require an adjustment;



(b) no adjustment in the Price Adjustment Factor, or resulting adjustment in the number of Warrant Shares issuable on exercise of Warrants, will be made unless the adjustment would result in a change of at least 1% in the prevailing Price Adjustment Factor or the number of Warrant Shares purchasable upon the exercise of the Warrants would change by at least one one-hundredth of a share; provided that any adjustment that would have been required to be made except for the provisions of this Subsection 6.8(b), will be carried forward and taken into account in the next adjustment;

(c) no adjustment will be made in respect of an event described in Subsection 6.3(a) or Subsections 6.4 or 6.5 if the Warrantholders are entitled to participate in the event on the same terms, mutatis mutandis, as if they had exercised their Warrants immediately before the effective date of or record date for the event and Warrantholders will not be entitled to so participate without compliance with all applicable securities legislation and policies;

(d) for the purposes of Subsections 6.3, 6.4(a), 6.4(b) and 6.5, there will be deemed not to be outstanding:

(i) any Common Share owned by or held for the account of the Company,

(ii) any Common Share owned by or held for the account of any subsidiary of the Company;

(e) any dispute that arises at any time with respect to any adjustment pursuant to this Indenture will be conclusively determined (as between the Company, the Warrantholders, the Trustee and all transfer agents and shareholders of the Company) by the auditors of the Company or, if they are unable or unwilling to act, by such firm of independent chartered accountants as is selected by the directors and is acceptable to the Trustee, and any determination, absent manifest error, by them will be binding on the Company, the Warrantholders, the Trustee and all transfer agents and shareholders of the Company; and

(f) in the absence of a resolution of the Directors fixing the record date for an event referred to in sections 6.1 to 6.7, the Company will be deemed to have fixed as the record date therefor the date on which the event is effected or such date as may be required by law.

**6.9 Postponement of Subscription**

In any case in which Subsections 6.1 to 6.7 requires an adjustment to take effect immediately after the effective date of or record date for an event, and a Warrant is exercised after that date and before the consummation of the event (which in the case of rights, options and warrants will be the date the rights, options and warrants are issued), the Company may postpone until consummation issuing to the Warrantholder such of the shares, securities or property to which he is entitled pursuant to the exercise as exceeds those to which he would have been entitled if the Warrant had been exercised immediately before that date, provided however, that the Company will deliver to the Warrantholder an appropriate instrument evidencing such holders right to receive such additional shares, securities or property upon the occurrence and consummation of such event and the right to receive any dividend or other distribution in respect of such additional shares, securities or property declared in favour of the holders of record of Common Shares or of such securities or property on or after that date or such later date as such holder would, but for the provisions of this Subsection 6.9, have become the holder of record of such additional shares or of such securities or property.



**6.10 Notice of Certain Events**

(a) At least 21 days before the effective date of or record date for any event referred to in Subsections 6.1 to 6.7, other than a subdivision or consolidation of the Common Shares, that requires or might require an adjustment in the subscription rights pursuant to a Warrant, including the Price Adjustment Factor and the number of Warrant Shares purchasable on exercise of Warrants, the Company will:

(i) file with the Trustee a certificate of the Company specifying the particulars of the event and, to the extent determinable, any adjustment required and the computation of the adjustment, and

(ii) give notice to the Warrantholders of the particulars of the event and, to the extent determinable, any adjustment required.

The notice need only set forth particulars as have been determined at the date that notice is given.

(b) If any adjustment for which a notice pursuant to Paragraph 6.10(a) is given is not then determinable, the Company will promptly after the adjustment is determinable:

(i) file with the Trustee a certificate of the Company showing the computation of the adjustment; and

(ii) give notice to the Warrantholders of the adjustment.

**6.11 No Fractional Common Shares**

Under no circumstances will the Company be obliged to issue any fractional Warrant Shares upon the exercise of one or more Warrants. To the extent that the holder of one or more Warrants would otherwise have been entitled to receive on the exercise or partial exercise thereof a fraction of a Warrant Share, that holder may exercise that right in respect of

the fraction only in combination with another Warrant or Warrants that in the aggregate entitle the holder to acquire a whole number of Warrant Shares. If not so exercised, the Company will not pay any amount to the holder in satisfaction of the right to otherwise have received a fraction of any of the Warrant Shares.

**6.12 Reclassifications, Reorganizations, etc.**

In case of:

(a) any reclassifications or change of the Common Shares (other than a change in par value, or from par value to no par value, or from no par value to par value, or as a result of a subdivision or consolidation);



(b) any amalgamation, consolidation or merger of the Company with, or amalgamation, consolidation or merger of the Company into, any other corporation (other than an amalgamation, consolidation or merger in which the Company is the continuing corporation and which does not result in any reclassification or change, other than as aforesaid, of the Common Shares);

(c) a reorganization of the Company; or

(d) any sale, transfer or other disposition of all or substantially all of the assets of the Company,

the Company or the corporation formed by the amalgamation or the corporation into which the Company will have been merged or the reorganized Company, or the corporation which will have acquired such assets, as the case may be, will execute and deliver to the Trustee a supplemental indenture providing that the holder of Warrants then outstanding will have the right thereafter (until the expiry of the Warrant Exercise Period) to exercise Warrants only into the kind and amount of shares and other securities and property (including cash) receivable upon such reclassification, change, amalgamation, merger, reorganization, sale, transfer or other disposition by a holder of the number of Warrant Shares which were purchasable upon the exercise of the Warrants had the Warrants been exercised immediately prior to the reclassification, change, amalgamation, merger, reorganization, sale, transfer or other disposition. The supplemental indenture will provide for adjustments which will be as nearly equivalent as may be practicable to the adjustments provided for in this Section 6. The provisions of this Subsection 6.12 will apply to successive reclassifications, changes, amalgamations, mergers, reorganizations, sales, transfers or other dispositions.

**7. RIGHTS AND COVENANTS**

**7.1 General Covenants of the Company**

The Company represents, warrants and covenants with the Trustee for the benefit of the Trustee and the Warrantholders that:

(a) it will at all times maintain its existence, carry on and conduct its business in a proper, efficient and business-like manner and in accordance with good business practice, keep or cause to be kept proper books of account in accordance with generally accepted accounting practice, and, if and whenever required in writing by the Trustee, file with the Trustee copies of all annual statements of the Company furnished to its shareholders during the term of this Indenture;

(b) it is duly authorized to create and issue the Warrants to be issued under this Indenture and the Series A Warrant Certificates and Series B Warrant Certificates when issued and certified as provided in this Indenture will be legal, valid and binding obligations of the Company;

(c) subject to the provisions of this Indenture, it will cause the Warrant Shares from time to time subscribed for and purchased pursuant to the exercise of Warrants, and the certificates representing such Warrant Shares, to be duly and validly issued;

(d) at all times while any Warrants are outstanding it will reserve and there will remain unissued out of its authorized capital a number of Common Shares sufficient to enable the Company to meet its obligation to issue Warrant Shares on the exercise of Warrants outstanding under this Indenture from time to time;

(e) upon the exercise by the holder of any Warrants of the right of purchase provided for therein and in this Indenture and, upon payment of the Subscription Price applicable thereto for each Warrant Share in respect of which the right of purchase is so exercised, all Warrant Shares issuable upon the exercise will be duly and validly issued as fully paid and non-assessable;

(f) the Company will use its best efforts to maintain the listing of the Common Shares on the Exchange for a period of at least 9 months from the date hereof;

(g) the Company will use its commercially reasonable efforts to maintain its status as a reporting issuer" pursuant to and not in default of each of the B.C. Act and the Alberta Act for a period of 9 months from the date hereof;

(h) the Company will use its best efforts to keep the registration statement filed under the United States Securities Act of 1933, effective continuously during the term of the Warrants, and will notify the Trustee in writing in the event that the registration statement is no longer effective at any time during such term; and

(i) it will do, execute, acknowledge and deliver or cause to be done, executed, acknowledged and delivered all other acts, deeds and assurances in law as the Trustee may reasonably require for better accomplishing and effecting the intentions and provisions of this Indenture.

**7.2 Trustee's Remuneration and Expenses**

The Company will pay to the Trustee from time to time such reasonable remuneration for its services under this Indenture as may be agreed upon between the Company and the Trustee and will pay or reimburse the Trustee upon its request for all reasonable expenses, disbursements and advances properly incurred or made by the Trustee in the administration or execution of the trusts hereby created (including the reasonable compensation and the disbursements of its counsel and all other advisors and assistants not regularly in its employ), both before any default under this Indenture and thereafter until all duties of the Trustee under the trusts hereof will be finally and fully performed, except any such expense, disbursement or advance as may arise from the negligence or wilful misconduct of the Trustee, its servants or agents or its counsel or other advisors or assistants aforesaid. Any amount due under this Subsection 7.2 and unpaid 30 days after request for such payment will bear interest from the expiration of such 30 days at the Trustee's then current rate on overdue accounts.

**7.3 Notice to Warrantholders of Certain Events**

The Company covenants with the Trustee for the benefit of the Trustee and the Warrantholders that, so long as any of the Warrants are outstanding, it will not:

(a) pay any dividend payable in shares of any class to the holders of its Common Shares or make any other distribution (other than a cash distribution made as a dividend out of retained earnings or contributed surplus legally available for the payment of dividends) to the holders of its Common Shares;



(b) offer to the holders of its Common Shares rights to subscribe for or to purchase any Common Shares or shares of any class or any other securities, rights, warrants or options other than to directors, officers, consultants and employees under a stock option plan;

(c) make any repayment of capital on, or distribution of evidences of indebtedness or any of its assets (excluding cash dividends in the ordinary course) to the holders of, its Common Shares;

(d) amalgamate, consolidate or merge with any other person or sell or lease the whole or substantially the whole of its assets or undertaking;

(e) effect any subdivision, consolidation or reclassification of its Common Shares; or

(f) liquidate, dissolve or wind-up;

unless, in each such case, the Company will have given notice, in the manner specified in Subsection 12.2, to Warrantholders, of the action proposed to be taken and the date on which (a) the books of the Company will close or a record will be taken for such dividend, repayment, distribution, subscription rights or other rights, warrants or securities, or (b) such subdivision, consolidation, reclassification, amalgamation, merger, sale or lease, dissolution, liquidation or winding-up will take place, as the case may be, provided that the Company will only be required to specify in the notice those particulars of the action as will have been fixed and determined at the date on which the notice is given. The notice will also specify the date as of which the holders of Common Shares of record will participate in the dividend, repayment, distribution, subscription of rights or other rights, warrants or securities, or will be entitled to exchange their Common Shares for securities or other property deliverable upon such reclassification, amalgamation, merger, sale or lease, other disposition, dissolution, liquidation or winding-up, as the case may be. The notice will be given, with respect to the actions described in Paragraphs (a), (b), (c), (d), (e) and (f) above not less than 21 days prior to the record date or the date on which the Company's transfer books are to be closed with respect thereto.

**7.4 Closure of Common Share Transfer Book**

The Company further covenants and agrees that it will not during the period of any notice given under Subsection 7.3 close its share transfer books or take any other corporate action which might deprive the Warrantholders of the opportunity of exercising their Warrants; provided that nothing contained in this Subsection 7.4 will be deemed to affect the right of the Company to do or take part in any of the things referred to in Subsection 7.3 or to pay cash dividends on the shares of any class or classes in its capital from time to time outstanding.



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**8. ENFORCEMENT**

**8.1 Enforcement of Rights of Warrantholders**

No Warrantholder will have the right to institute any action or proceeding or to exercise any other remedy authorized by this Indenture for the purpose of enforcing any rights on behalf of all Warrantholders for the execution of any trust or power under this Indenture unless a requisition, in writing signed by holders of Warrants sufficient to purchase not less than 10% of the aggregate number of Warrant Shares which could be purchased under the Warrants then outstanding, requesting the Trustee to so act, and the indemnity referred to in Subsections 9.13(c) and 11.2(c) have been tendered to the Trustee and the Trustee will have failed to act within a reasonable time thereafter; in such case, but not otherwise, any Warrantholder acting on behalf of himself and all other Warrantholders will be entitled to take proceedings in any court of competent jurisdiction such as the Trustee might have taken.

**8.2 No Prejudice of Rights**

No one or more Warrantholders will have any right in any manner whatsoever to affect, disturb or prejudice the rights hereby created by his or their action, or to enforce any right under this Indenture or under any Warrant Certificate, except subject to the conditions and in the manner provided in this Indenture and all powers and trusts under this Indenture will be exercised and all proceedings at law will be instituted, had and maintained by the Trustee, except only as provided in this Indenture, and in any event for the equal benefit of all Warrantholders.

**8.3 No Personal Liability**

This Indenture and the Warrants issued under this Indenture are solely corporate obligations and no personal liability whatsoever will attach to or be incurred by the shareholders, officers or Directors, past, present or future, of the Company, or of any of its subsidiaries, or any successor corporation, under or by reason of the obligations, covenants or agreements contained in this Indenture or in the Warrant Certificates; and any personal liability of any nature whatsoever either at common law, in equity or by statute of, and any right or claim against any such shareholder, officer or Director are hereby expressly waived as a condition of and as consideration for the execution of this Indenture and the issue of the Warrants.



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**9. MEETINGS OF series A and series b WARRANTHOLDERS**

**9.1 Right to Convene Meetings as a Class**

The Trustee or the Company may, and the Trustee will on receipt of a requisition in writing signed by the holders of Series A or Series B Warrants, as the case may be, sufficient to purchase not less than 10% of the aggregate number of Warrant Shares which could be purchased under the Series A or Series B Warrants then outstanding, and upon being indemnified and funded to its reasonable satisfaction by the Company or by the Series A or Series B Warrantholders signing the requisition against the costs which may be incurred in connection with the calling and holding of the meeting, at any time and from time to time convene a meeting of the Series A or Series B Warrantholders. If the Trustee fails to convene such a meeting within 21 days after receipt of the requisition and indemnity and funds, the Company or any one of the Series A or Series B Warrantholders may convene the meeting.

**9.2 Place for Holding Meetings**

Every meeting of Series A or Series B Warrantholders, as the case may be, will be held in the City of Vancouver, British Columbia, or at such other place as the Trustee will determine.

**9.3 Notice**

At least 21 days' notice specifying the place, day and hour of meeting and the general nature of business to be transacted will be given prior to any meeting of Series A or Series B Warrantholders, as the case may be, but it will not be necessary to specify in the notice the terms of any resolution to be proposed. Notice of a meeting of Series A or Series B Warrantholders will be given to the Series A or Series B Warrantholders in the manner provided in Subsection 12.2. Notice will be given to the Company unless the meeting is convened by the Company and to the Trustee unless the meeting is convened by the Trustee. Any accidental omission in the notice of a meeting will not invalidate any resolution passed at the meeting.

**9.4 Chair**

A person, who need not be a Series A or Series B Warrantholder, nominated in writing by the Trustee, will chair a meeting of Series A or Series B Warrantholders, as the case may be, and if no such person is nominated or if the person nominated will not be present within 15 minutes after the time appointed for holding the meeting, the Series A or Series B Warrantholders present will choose a person present to be chairman.



**9.5 Quorum**

With respect to the quorum required for a meeting of Series A or Series B Warrantholders, as the case may be,:

(a) at any meeting of the Series A or Series B Warrantholders a quorum will consist of two or more Series A or Series B Warrantholders present in person or by proxy holding Series A or Series B Warrants sufficient to purchase not less than 20% of aggregate number of Warrant Shares that could be purchased under the Series A or Series B Warrants then outstanding;

(b) if a quorum of the particular class of Warrantholders is not present within half an hour from the time fixed for holding any meeting, the meeting, if convened by the Series A or Series B Warrantholders or by a requisition of Series A or Series B Warrantholders, will be dissolved; but if otherwise convened, the meeting will stand adjourned without notice to the same day in the next week following (unless that day is not a business day in which case the meeting will stand adjourned to the next business day thereafter) at the same time and place; and

(c) at the adjourned meeting, the Series A or Series B Warrantholders present in person or by proxy will form a quorum and may transact the business for which the meeting was originally convened notwithstanding that they may not hold Series A or Series B Warrants sufficient to purchase at least 20% of the aggregate number of Warrant Shares that could be purchased under the Series A or Series B Warrants then outstanding.

**9.6 Power to Adjourn**

The chairman of any meeting at which a quorum of Series A or Series B Warrantholders, as the case may be, is present

may, with the consent of the meeting, adjourn any meeting and no notice of the adjournment need be given except such notice, if any, as the meeting may prescribe.

**9.7 Show of Hands**

Every question submitted to a meeting of Series A or Series B Warrantholders, as the case may be, other than a question to be resolved by a Special Resolution will be decided in the first place by a majority of the votes given on a show of hands and unless a poll is duly demanded as provided in this Indenture, a declaration by the chairman that a resolution has been carried or carried unanimously or by a particular majority or lost or not carried by a particular majority will be conclusive evidence of that fact. In the case of an equality of votes on a show of hands, the chairman of the meeting will not have a casting vote.



**9.8 Poll**

On every Special Resolution to be passed at a meeting of Series A or Series B Warrantholders, as the case may be, and on any other question submitted to a meeting when directed by the chairman or when demanded by any one or more of the Series A or Series B Warrantholders acting in person or by proxy and entitled to acquire in the aggregate at least 5% of the aggregate number of Warrant Shares that could be acquired pursuant to all Series A or Series B Warrants then outstanding, a poll will be taken in the manner as the chairman will direct. Questions other than those to be resolved by Special Resolution will, if a poll be taken, be decided by the votes of the holders of Series A or Series B Warrants sufficient to purchase a majority of the Warrant Shares which could be purchased under the Series A or Series B Warrants represented at the meeting and voted on the poll. If at any meeting of a class of Warrantholders a poll is so demanded as aforesaid on the election of a chairman or on a question of adjournment, it will be taken forthwith. If at any meeting of a class of Warrantholders a poll is so demanded on any other question, or a Special Resolution is to be voted upon, a poll will be taken in such manner and either at once or after an adjournment as the chairman directs. The result of a poll will be deemed to be the decision of the meeting at which the poll was demanded and will be binding on all holders of Series A or Series B Warrants.

**9.9 Voting**

On a show of hands every person who is present and entitled to vote, whether as a Series A or Series B Warrantholder or as proxy for one or more absent Series A or Series B Warrantholders or both, as the case may be, will have one vote. On a poll each Series A or Series B Warrantholder present in person or represented by a proxy duly appointed by instrument in writing will be entitled to one vote in respect of each Warrant Share purchasable under Warrants of which he will then be the holder.

**9.10 Proxy need not be Warrantholder**

A proxy need not be a Series A or Series B Warrantholder, as applicable.

**9.11 Regulations**

The Trustee, or the Company with the approval of the Trustee, may from time to time make or vary such regulations as it will think fit providing for and governing the following:

(a) the issue of voting certificates:

(i) by any bank, trust company or other depositary approved by the Trustee, certifying that specified Warrants have been deposited with it by a named holder and will remain on deposit until after the meeting;

(ii) by any bank, trust company, insurance company, governmental department or agency approved by the Trustee, certifying that it is the holder of specified Warrants and will continue to hold the same until after the meeting;

which voting certificates will entitle the holders named therein to be present and vote at any meeting and at any adjournment thereof or to appoint a proxy or proxies to represent them and vote for them at any meeting and at any adjournment thereof, in the same manner and with the same effect as though the holders named in the voting certificates were the actual holders of the specified Warrants;

(b) the form of the instrument appointing a proxy (which will be in writing), the manner in which the same will be executed and the form of any authority under which a person executes a proxy on behalf of a Series A or Series B Warrantholder;

(c) the deposit of voting certificates, instruments appointing proxies or authorities at such place or places as the Trustee (or the Company or Series A or Series B Warrantholders in case the meeting is convened by the Company or the Series A or Series B Warrantholders, as the case may be) may in the notice convening the meeting direct and the time (if any) before the holding of the meeting or adjourned meeting at which the same will be deposited;

(d) the deposit of voting certificates or instruments appointing proxies at some place or places other than the place at which the meeting is to be held and for particulars of the voting certificates or instruments appointing proxies to be faxed or notified by other means of communication before the meeting to the Company or to the Trustee and for the voting of voting certificates and proxies so deposited as if the voting certificates or the instruments themselves were produced at the meeting or deposited at any other place required pursuant to Paragraph 9.11(c); and

(e) generally for the calling of meetings of Series A or Series B Warrantholders and the conduct of business thereat.

Any regulations so made will be binding and effective and votes given in accordance therewith will be valid and will be counted. Except as the regulations may provide, the only persons who will be recognized at any meeting as the holders of any Series A or Series B Warrants, as the case may be, or as entitled to vote or to be present at the meeting in respect thereof, will be registered Series A or Series B Warrantholders and persons whom registered Series A or Series B Warrantholders have by instrument in writing duly appointed as their proxies.

**9.12 Company and Trustee may be Represented**

The Company and the Trustee by their respective officers and Directors and the counsel of the Company and the Trustee may attend any meeting of Series A or Series B Warrantholders but will not be entitled to vote.

**9.13 Powers Exercisable by Special Resolution**

In addition to all other powers conferred on them by the other provisions of this Indenture or by law, the Series A or Series B Warrantholders, as the case may be, will have the following powers, exercisable from time to time by Special Resolution passed at a meeting of their particular class:



(a) to agree to any amendment, modification, abrogation, alteration, compromise or arrangement of the rights of Series A or Series B Warrantholders or the Trustee in that capacity or on behalf of the Series A or Series B Warrantholders against the Company whether the rights arise under this Indenture or otherwise;

(b) to agree to any change in or omission from the provisions of the Series A or Series B Warrant Certificate and this Indenture or any ancillary or supplemental instrument which may be agreed to by the Company, and to authorize the Trustee to concur in and execute any ancillary or supplemental indenture embodying any change or omission;

(c) to require the Trustee to enforce any of the obligations of the Company under this Indenture or any supplemental instrument or to enforce any of the rights of the Series A or Series B Warrantholders in any manner specified in an Special Resolution, or to refrain from enforcing any such covenant or right, upon the Trustee being furnished with such indemnity and funds as it may in its discretion require;

(d) to remove the Trustee or its successor or successors in office and to appoint a new trustee or trustees to take

the place of the trustee or trustees so removed;

(e) to waive and direct the Trustee to waive any default on the part of the Company in complying with any provision of this Indenture either unconditionally or upon any conditions specified in the Special Resolution;

(f) to restrain any Series A or Series B Warrantholder from taking or instituting or continuing any suit, action or proceeding against the Company for the enforcement of any of the obligations of the Company under this Indenture or to enforce any right of the particular class of Warrantholders; and

(g) to amend, alter or repeal any Special Resolution previously passed or consented to by Series A or Series B Warrantholders.

**9.14 Meaning of "Special Resolution"**

(a) The expression Special Resolution' when used in this Indenture means, subject as provided in this Subsection 9.14, a resolution proposed at a meeting of the Series A or Series B Warrantholders, as the case may be, duly convened for that purpose and held in accordance with the provisions of this Section 9 at which there are present in person or by proxy Series A or Series B Warrantholders entitled to acquire at least 20% of the aggregate number of Warrant Shares that can be acquired pursuant to all the then outstanding Series A or Series B Warrants and passed by the affirmative votes of Series A or Series B Warrantholders entitled to acquire not less than two-thirds of the aggregate number of Warrant Shares that can be acquired pursuant to all the Series A or Series B Warrants represented at the meeting and voted on the poll upon the resolution.



(b) If, at any meeting called for the purpose of passing a Special Resolution, Warrantholders entitled to acquire 20% of the aggregate number of Warrant Shares that can be acquired pursuant to all the then outstanding Series A or Series B Warrants are not present in person or by proxy within half an hour after the time appointed for the meeting, then the meeting, if convened by Series A or Series B Warrantholders, will be dissolved; but in any other case it will stand adjourned to such day, being not less than 15 or more than 60 days later, and to such place and time as may be appointed by the chairman. Not less than 10 days' notice will be given of the time and place of the adjourned meeting in the manner provided in Subsection 12.2. The notice will state that at the adjourned meeting the Series A or Series B Warrantholders present in person or by proxy will form a quorum but it will not be necessary to set forth the purposes for which the meeting was originally called or any other particulars. At the adjourned meeting the Series A or Series B Warrantholders present in person or by proxy will form a quorum and may transact the business for which the meeting was originally convened and a resolution proposed at the adjourned meeting and passed by the requisite vote as provided in Paragraph 9.14(a) will be a Special Resolution within the meaning of this Indenture notwithstanding that Series A or Series B Warrantholders entitled to acquire 20% of the aggregate number of Warrant Shares that can be acquired pursuant to all the then outstanding Series A or Series B Warrants are not present in person or by proxy at the adjourned meeting.

(c) Votes on a Special Resolution will always be given on a poll and no demand for a poll on a Special Resolution will be necessary.

(d) All actions that may be taken and all powers that may be exercised by the Series A or Series B Warrantholders at a meeting held as provided above in this Section 9 may also be taken and exercised by Series A or Series B Warrantholders entitled to acquire two-thirds of the aggregate number of Warrant Shares that can be acquired pursuant to all the then outstanding Series A or Series B Warrants by an instrument in writing signed in one or more counterparts by Series A or Series B Warrantholders in person or by attorney duly appointed in writing and the expression "Special Resolution" when used in this Indenture will include an instrument so signed.

**9.15 Powers Cumulative**

Any one or more of the powers or combination of the powers in this Indenture exercisable by the Series A or Series B Warrantholders, as the case may be, by Special Resolution or otherwise may be exercised from time to time and the exercise of any one or more of the powers or any combination of powers from time to time will not be deemed to exhaust the rights of the Series A or Series B Warrantholders to exercise the same or any other power or powers or combination of powers then or any power or powers or combinations of powers thereafter.

**9.16 Minutes**

Minutes of all resolutions and proceedings at every meeting of Series A or Series B Warrantholders, as the case may be, will be made and duly entered in books to be provided for that purpose by the Trustee at the expense of the Company, and any minutes if purporting to be signed by the chairman of the meeting or by the chairman of the next succeeding meeting of Series A or Series B Warrantholders, will be *prima facie* evidence of the matters therein stated and, until the contrary is proved, every meeting for which minutes have been made, will be deemed to have been duly convened and held and all resolutions passed or proceedings taken at such meeting, to have been duly passed and taken.

**9.17 Binding Effect of Resolutions**

Every resolution and every Special Resolution duly passed at a meeting of the Series A or Series B Warrantholders, as the case may be, duly convened and held or any consent in writing having the effect of a Special Resolution will be binding upon all the Series A or Series B Warrantholders (including their successors and assigns) whether or not present or represented and voting at the meeting or signatories to the consent, as the case may be, and each of the Series A or Series B Warrantholders and the Trustee, subject to the provisions for its indemnity contained in this Indenture, will be bound to give effect thereto.

**10. SUPPLEMENTAL INDENTURES AND SUCCESSOR COMPANIES**

**10.1 Provision for Supplemental Indentures for Certain Purposes**

From time to time the Company (when authorized by the directors) and the Trustee may, subject to the provisions of these presents, and they will, when so directed by these presents, execute and deliver by their proper officers or Directors, as the case may be, indentures or instruments supplemental hereto, which thereafter will form part of this Indenture, for any one or more or all of the following purposes:

(a) setting forth any adjustments resulting from the application of the provisions of Section 6;

(b) adding hereto such additional covenants and enforcement provisions as in the opinion of counsel are necessary or advisable, and are not in the opinion of the Trustee, based on the advice of counsel, prejudicial to the interests of the Warrantholders;

(c) giving effect to any Special Resolution passed as provided in Section 9;

(d) making any modification in the form of the Series A Warrant Certificate or Series B Warrant Certificate which, in the opinion of counsel for the Company, does not affect the substance thereof and is allowed by the Regulatory Authorities;



(e) making any additions to, deletions from or alterations of the provisions of this Indenture which, in the opinion of the Trustee, based on the advice of its counsel, do not materially and adversely affect the interests of the Warrantholders and are necessary or advisable in order to incorporate, reflect or comply with any Applicable Legislation;

(f) evidencing the succession of successor companies to the Company and the covenants of and obligations assumed by such successor companies;

(g) for any other purpose not inconsistent with the terms of this Indenture, including the correction or rectification of any ambiguities, defective provisions, errors or omissions in this Indenture, provided that in the opinion of the Trustee, based on the advice of its counsel, the rights of the Trustee or of the Warrantholders are in no way prejudiced thereby.

**10.2 Correction of Manifest Errors**

The Company and the Trustee may correct typographical, clerical and other manifest errors in this Indenture, provided that such correction will in the opinion of counsel to the Trustee in no way prejudice the rights of the Trustee or of the Warrantholders under this Indenture, and the Company and the Trustee may execute and deliver all such documents as may be necessary to correct such errors.

**10.3 Amending Adjustment Provisions**

The Company and the Trustee may modify the adjustments resulting from the application of the provisions of Section 6 if a modification is required in compliance with all applicable securities legislation and policies contemplated by the provisions of Section 6 and the Company and the Trustee may execute and deliver such documents as may be necessary to effect the modification.

**10.4 Successor Companies**

In the case of the consolidation, amalgamation, merger or transfer of the undertaking or assets of the Company as an entirety or substantially as an entirety to another corporation ("successor corporation"), the successor corporation resulting from the consolidation, amalgamation, merger or transfer (if not the Company) will be bound by the provisions of this Indenture and for the due and punctual performance and observance of each and every covenant and obligation contained in this Indenture to be performed by the Company and, if requested by the Trustee, will by supplemental indenture satisfactory in form to the Trustee and executed and delivered to the Trustee, expressly assume those obligations.



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**11. CONCERNING THE TRUSTEE**

**11.1 Trust Indenture Legislation**

If and to the extent that any provision of this Indenture limits, qualifies or conflicts with a mandatory requirement of Applicable Legislation, the mandatory requirement will prevail. The Company and the Trustee agree that each will at all times in relation to this Indenture and any action to be taken under this Indenture observe and comply with and be entitled to the benefits of Applicable Legislation.

**11.2 Rights and Duties of Trustee**

The rights and duties of the Trustee are as follows:

(a) In the exercise of the rights, duties and obligations prescribed or conferred by the terms of this Indenture, the Trustee will act honestly and in good faith with a view to the best interests of the Warrantholders and will exercise that degree of care, diligence and skill that a reasonably prudent trustee would exercise in comparable circumstances.

(b) No provision of this Indenture will be construed to relieve the Trustee from liability for its own gross negligence, wilful misconduct or fraud.

(c) Subject only to Paragraph 11.2(a), the obligation of the Trustee to commence or continue any act, action or proceeding for the purpose of enforcing any rights of the Trustee or the Warrantholders under this Indenture will be conditional upon the Warrantholders furnishing, when required by notice in writing by the Trustee, sufficient funds to commence or continue such act, action or proceeding and an indemnity reasonably satisfactory to the Trustee to protect and hold harmless the Trustee against the costs, charges and expenses and liabilities to be incurred thereby and any loss and damage it may suffer by reason thereof.

(d) No provision of this Indenture will require the Trustee to expend or risk its own funds or otherwise incur financial liability in the performance of any of its duties or in the exercise of any of its rights or powers unless indemnified and funded as provided in Paragraph 11.2(c).

(e) The Trustee may, before commencing or at any time during the continuance of any such act, action or proceeding require the Warrantholders at whose instance it is acting to deposit with the Trustee the Warrant Certificates held by them, for which Warrant Certificates the Trustee will issue receipts.

**11.3 Evidence, Experts and Advisers**

(a) In addition to the reports, certificates, opinions and other evidence required by this Indenture, the Company will furnish to the Trustee such additional evidence of compliance with any provision of this Indenture, and in such form, as is prescribed by Applicable Legislation or as the Trustee reasonably requires by written notice to the Company.

(b) In the exercise of any right or duty under this Indenture the Trustee, if it is acting in good faith, may rely as to the authority of the person signing and, as to the truth of any statement or the accuracy of any opinion expressed therein, on any statutory declaration, opinion, report, certificate or other evidence furnished to the Trustee pursuant to any provision of this Indenture or of Applicable Legislation or pursuant to a request of the Trustee.

(c) Whenever Applicable Legislation requires that evidence referred to in Paragraph 11.3(a) be in the form of a statutory declaration, the Trustee may accept the statutory declaration in lieu of a certificate of the Company required by any provision of this Indenture.

(d) Any statutory declaration may be made by one or more of the chairman, president or secretary of the Company.

(e) The Trustee may, at the expense of the Company, employ or retain such counsel, accountants, engineers, appraisers, or other experts or advisers as it reasonably requires for the purpose of discharging its duties under this Indenture and may pay reasonable remuneration for all services so performed by any of them, without taxation of costs of any counsel, and will not be responsible for any misconduct or negligence on the part of any of them who has been selected with due care by the Trustee.

**11.4 Securities, Documents and Monies Held by Trustee**

Any securities, documents of title or other instruments that may at any time be held by the Trustee subject to the trusts hereof may be placed in deposit vaults of the Trustee or of any of the Canadian Imperial Bank of Commerce, Bank of Montreal, Bank of Nova Scotia, TD Canada Trust, the Royal Bank of Canada and the HSBC or deposited for safekeeping with any of those Canadian chartered banks. Unless otherwise expressly provided in this Indenture, any monies held pending the application or withdrawal thereof under any provision of this Indenture, may be deposited in the name of the Trustee in any of the foregoing Canadian chartered banks at the rate of interest then current on similar deposits or, with the consent of the Company may be (i) deposited in the deposit department of the Trustee or any other loan or trust company authorized to accept deposits under the laws of Canada or a province thereof whose short term debt obligations or deposits have a rating of at least R1 as rated by Dominion Bond Rating Service, or (ii) invested in securities issued or guaranteed by the Government of Canada or a province thereof or in obligations, maturing not more than one year from the date of investment of or guaranteed by any of the foregoing Canadian chartered banks or loan or trust companies. All interest or other income received by the Trustee in respect of such deposits and investments will belong to the Company.

**11.5 Action by Trustee to Protect Interests**

The Trustee will have power to institute and to maintain such actions and proceedings as it may consider necessary or expedient to preserve or protect its interests and the interests of the Warrantholders.

**11.6 Trustee not Required to Give Security**

The Trustee will not be required to give any bond or security in respect of the execution of the trusts and powers of this Indenture or otherwise in respect of the premises.

**11.7 Protection of Trustee**

By way of supplement to the provisions of any law for the time being relating to trustees:

(a) the Trustee will not be liable for or by reason of any statements of fact or recitals in this Indenture, in the legends in the Warrant Certificates (except the representation contained in Subsection 11.9 and by virtue of the countersignature of the Trustee on the Warrant Certificates) or required to verify the same, but all such

statements or recitals are and will be deemed to be made by the Company;

(b) the Trustee will not be bound to give notice to any person or persons of the execution of this Indenture;

(c) the Trustee will not incur any liability or responsibility whatever or be in any way responsible for the consequence of any breach on the part of the Company of any obligation contained in this Indenture or of any acts of the directors, officers, employees or agents of the Company;

(d) the Trustee is not at any time under any duty or responsibility to a Warrantholder to determine whether any facts exist which require any adjustment contemplated by Section 6, or with respect to the nature or extent of any such adjustment when made, or with respect to the method employed in making the same;

(e) the Trustee is not accountable with respect to the validity or value (or the kind or amount) of any shares or other securities or property which may at any time be issued or delivered upon the exercise of the rights attaching to any Warrant; and

(f) the Trustee is not responsible for any failure of the Company to make any cash payment or any failure of the Company to issue, transfer or deliver Warrant Shares or certificates for the same upon the surrender of any Warrants for the purpose of the exercise of such rights or to comply with any of the covenants contained in this Section 11.



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**11.8 Replacement of Trustee**

(a) The Trustee may resign its trust and be discharged from all further duties and liabilities under this Indenture, by giving to the Company and the Warrantholders not less than 90 days' notice in writing or, if a new Trustee has been appointed, such shorter notice as the Company accepts as sufficient.

(b) The Warrantholders by Special Resolution may at any time remove the Trustee and appoint a new Trustee.

(c) If the Trustee so resigns or is so removed or is dissolved, becomes bankrupt, goes into liquidation or otherwise becomes incapable of acting under this Indenture, the Company will forthwith appoint a new Trustee unless a new Trustee has already been appointed by the Warrantholders.

(d) Failing appointment by the Company, the retiring Trustee or any Warrantholder may apply to the Supreme Court of British Columbia, on such notice as the Court directs, for the appointment of a new Trustee.

(e) Any new Trustee so appointed by the Company or by the Court will be subject to removal as aforesaid by the Warrantholders.

(f) Any new Trustee appointed under any provision of this Subsection 11.8 must be a corporation authorized to carry on the business of a trust company in British Columbia and, if required by the Applicable Legislation, in any other province.

(g) On any appointment the new Trustee will be vested with the same powers, rights, duties and responsibilities as if it had been originally named in this Indenture as Trustee without any further assurance, conveyance, act or deed, but there will be immediately executed, at the expense of the Company, all such conveyances or other instruments as, in the opinion of counsel, are necessary or advisable for the purpose of assuring the powers, rights, duties and responsibilities to the new Trustee.

(h) On the appointment of a new Trustee, the Company will promptly give notice thereof to the Warrantholders.

(i) A corporation into or with which the Trustee is merged or consolidated or amalgamated, or a corporation succeeding to the trust business of the Trustee, will be the successor to the Trustee under this Indenture without any further act on its part or on the part of any party hereto if the corporation would be eligible for appointment as a new Trustee under Paragraph 11.8(f).

(j) A Warrant Certificate certified but not delivered by a predecessor Trustee may be delivered by the new or successor Trustee in the name of the predecessor Trustee or successor Trustee.

**11.9 Conflict of Interest**

(a) The Trustee represents to the Company that at the time of the execution and delivery of this Indenture no material conflict of interest exists between its role as a fiduciary under this Indenture and its role in any other capacity and if a material conflict of interest arises hereafter it will, within 90 days after ascertaining that it has a material conflict of interest, either eliminate the conflict of interest or resign its trust under this Indenture.

(b) Subject to Paragraph 11.9(a), the Trustee in its personal or any other capacity may buy, lend on and deal in securities of the Company and generally may contract and enter into financial transactions with the Company or any subsidiary of the Company without being liable to account for any profit made thereby.

**11.10 Acceptance of Trust**

The Trustee hereby accepts the trusts in this Indenture declared and provided for and agrees to perform them on the terms and conditions in this Indenture set forth.

**11.11 Indemnity**

The Company will indemnify and save harmless the Trustee, its successors and assigns, their respective and current and former officers, directors, employees and agents, from and against any and all claims, losses (other than loss of profits), actions, suits, costs, damages and expenses incurred by the Trustee as a result of or by reason of any act or omission of the Trustee in relation to this Indenture, other than acts or obligations taken or made as a result of the fraud or gross negligence of the Trustee.

**11.12 Survival of Termination**

The indemnity of the Trustee provided for herein shall survive the termination of this Indenture and the resignation of the Trustee, except in circumstances where the Trustee has acted with gross negligence, wilful misconduct or fraud, and the rights and obligations of the parties hereunder.

**12. GENERAL**

**12.1 Notice to Company and Trustee**

(a) Unless otherwise expressly provided in this Indenture, any notice to be given under this Indenture to the Company or the Trustee will be deemed to be validly given if delivered or if sent by registered letter, postage prepaid or if transmitted by fax:



(i) if to the Company:

Oragenics, Inc.
12085 Research Drive
Alachua, Florida 32615

Attention: Secretary
Telephone: (386) 418-4018
Facsimile: (386) 462-0875

(ii) if to the Trustee:

Computershare Trust Company of Canada
3rd Floor, 510 Burrard Street
Vancouver, BC V6C 3B9

Attention: Manager, Corporate Trust Department
Telephone: (604) 661-9400
Facsimile: (604) 685-4079

and any notice given in accordance with the foregoing will be deemed to have been received on the date of delivery or, if mailed, on the fifth business day following the day of the mailing of the notice or, if transmitted by fax, at the time of transmission.

(b) The Company or the Trustee, as the case may be, may from time to time notify the other in the manner provided in Paragraph 12.1(a) of a change of address which, from the effective date of the notice and until changed by like notice, will be the address of the Company or the Trustee, as the case may be, for all purposes of this Indenture.

(c) If, by reason of a strike, lockout or other work stoppage, actual or threatened, involving postal employees, any notice to be given to the Trustee or to the Company under this Indenture could reasonably be considered unlikely to reach its destination, the notice will be valid and effective only if it is delivered to an officer of the party to which it is addressed or if it is delivered to that party at the appropriate address provided in Paragraph 12.1(a) by cable, telegram, telex, fax or other means of prepaid, transmitted, or recorded communication and any notice delivered in accordance with the foregoing will be deemed to have been received on the date of delivery to the officer or if delivered by cable, telegram, telex, fax or other means of prepaid, transmitted, recorded communication, on the first business day following the date of the sending of the notice by the person giving the notice.



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**12.2 Notice to Warrantholders**

(a) Unless otherwise expressly provided in this Indenture, any notice to be given under this Indenture to Warrantholders will be deemed to be validly given if the notice is sent by prepaid mail, addressed to the holder or delivered by hand or transmitted by fax (or so mailed to certain holders and so delivered to other holders and so faxed to other holders) at their respective addresses and fax numbers appearing on the register maintained by the Trustee and if in the case of joint holders of any Warrants more than one address or fax number appears on the register in respect of that joint holding, the notice will be addressed or delivered, as the case may be, only to the first address or fax number, as the case may be, so appearing. The Trustee will give, in the same manner as for Warrantholders set out above, a copy of each such notice to the Agent in the manner provided at Paragraph 12.1(a) as follows: Haywood Securities Inc., Suite 2000, 400 Burrard Street, Vancouver, BC V6C 3A6, Attention: Fabio Banducci. Any notice so given will be deemed to have been given on the day of delivery by hand or fax, or on the next business day if delivered by mail.

(b) If, by reason of strike, lock-out or other work stoppage, actual or threatened, involving postal employees, any notice to be given to the Warrantholders could reasonably be considered unlikely to reach its destination, the notice may be published or distributed once in the Report on Business section of the National edition of The Globe and Mail newspaper, or, in the event of a disruption in the circulation of that newspaper, once in a daily newspaper in the English language approved by the Trustee of general circulation in the City of Vancouver; provided that in the case of a notice convening a meeting of the holders of Warrants, the Trustee may require such additional publications of that notice, in the same or in other cities or both, as it may deem necessary for the reasonable protection of the holders of Warrants or to comply with any applicable requirement of law or any stock exchange. Any notice so given will be deemed to have been given on the day on which it has been published in all of the cities in which publication was required (or first published in a city if more than one publication in that city is required). In determining under any provision of this Indenture, the date when notice of any meeting or other event must be given, the date of giving notice will be included and the date of the meeting or other event will be excluded.

**12.3 Satisfaction and Discharge of Indenture**

On the date by which there has been delivered to the Trustee for exercise or destruction all Warrant Certificates theretofore certified under this Indenture, and if all Warrant Shares required to be issued in compliance with the

provisions of this Indenture have been issued and delivered under this Indenture, this Indenture will cease to be of further effect and the Trustee, on demand of and at the cost and expense of the Company and on delivery to the Trustee of a certificate of the Company stating that all conditions precedent to the satisfaction and discharge of this Indenture have been complied with and on payment to the Trustee of the fees and other remuneration payable to the Trustee, will execute proper instruments acknowledging satisfaction of and discharging this Indenture.



**12.4 Sole Benefit of Parties and Warrantholders**

Nothing in this Indenture expressed or implied, will give or be construed to give to any person other than the parties hereto and the Warrantholders, as the case may be, any legal or equitable right, remedy or claim under this Indenture, or under any covenant or provision contained in this Indenture, all covenants and provisions being for the sole benefit of the parties hereto and the Warrantholders.

**12.5 Discretion of Directors**

Any matter provided in this Indenture to be determined by the directors will be determined by the directors in their sole discretion, and a determination so made, absent manifest error, will be conclusive.

**12.6 Counterparts and Formal Date**

This Indenture may be simultaneously executed in several counterparts, each of which when so executed will be deemed to be an original and the counterparts together will constitute one and the same instrument and notwithstanding their date of execution will be deemed to bear the date as of March 28, 2003.

[BALANCE OF THIS PAGE HAS BEEN LEFT BLANK INTENTIONALLY].



IN WITNESS WHEREOF the parties hereto have executed this Indenture by their proper officers in that behalf.

ORAGENICS, INC.

Per: /s/ Mento A. Soponis
Authorized Signatory

COMPUTERSHARE TRUST COMPANY
OF CANADA

Per: /s/ Monica Muller
Authorized Signatory

Per: /s/ Nicole Clement
Authorized Signatory

**SCHEDULE A**
**to the Warrant Indenture between**
**Oragenics, Inc. and**
**Computershare Trust Company of Canada**
**dated _____, 2003**

**FORM OF WARRANT CERTIFICATE - series a warrants**

THE PURCHASE WARRANTS REPRESENTED BY THIS CERTIFICATE WILL BE VOID AND OF NO VALUE UNLESS EXERCISED ON OR BEFORE 4:30 P.M. (VANCOUVER TIME) _____, 200__

WARRANT CERTIFICATE

| | |
|---|---|
| Warrant Certificate Number | _____SERIES A WARRANTS ("Warrants") entitling the holder to acquire, subject to adjustment, one share of common stock for every one Warrant represented hereby |

ORAGENICS, INC.
INCORPORATED UNDER THE LAWS OF THE STATE OF FLORIDA

THIS IS TO CERTIFY THAT _____ (hereinafter referred to as the "holder") is the registered holder of the number of Warrants to purchase shares of common stock ("Common Shares") of Oragenics, Inc. (the "Company") as set forth in this Series A Warrant certificate ("Warrant Certificate"). Each Warrant represented hereby entitles the holder thereof to acquire one fully paid and non-assessable Common Share in the capital of the Company without par value (a "Warrant Share"), as such shares were constituted on _____, 2003 in the manner and subject to the restrictions and adjustments set forth herein at any time and from time to time until 4:30 p.m. (Vancouver time) (the "Time of Expiry") on _____, 200__ (the 'Expiry Date"), at a price of US$2.00.

The right to acquire Warrant Shares hereunder may only be exercised by the holder within the time set forth above by surrendering this Warrant Certificate to Computershare Trust Company of Canada (the "Trustee") at the principal office of the Trustee in the City of Vancouver together with a duly completed and executed Exercise Form in the form attached and remitting a certified cheque, bank draft or money order in lawful money of the United States payable to the order of the Company or the Trustee at par where this Warrant Certificate is so surrendered for the aggregate purchase price of the Warrant Shares so subscribed for.

These Warrants shall be deemed to be surrendered only upon personal delivery hereof or, if sent by mail or other means of transmission, upon actual receipt thereof by the Trustee at the office referred to above.



Upon surrender of these Warrants, the person or persons in whose name or names the Warrant Shares issuable upon exercise of the Warrants are to be issued shall be deemed for all purposes (except as provided in the Indenture hereinafter referred to) to be the holder or holders of record of such Warrant Shares and the Company has covenanted that it will (subject to the provisions of the Indenture) cause a certificate or certificates representing such Warrant Shares to be delivered or mailed to the person or persons at the address or addresses specified in the Exercise Form within four Business Days.

If, at the time of exercise by the Warrantholder of any of the Warrants represented by this Warrant Certificate, the registration statement filed by the Company under the United States Securities Act of 1933 (the "1933 Act") on _____ is no longer effective, then this Warrant may not be exercised in the United States or by or on behalf of a U.S. person, as such terms are defined in Regulation S under the 1933 Act, unless the Warrantholder has delivered to the Company a written opinion of counsel to the effect that the exercise of the Warrant and the Warrant Shares to be delivered upon exercise hereof have been registered under the 1933 Act or an available exemption from the registration requirements thereunder.

The registered holder of this Series A Warrant Certificate may acquire any lesser number of Warrant Shares than the number of Warrant Shares which may be acquired for the Warrants represented by this Warrant Certificate. In such event, the holder shall be entitled to receive a new certificate for the balance of the Warrant Shares which may be acquired. No fractional Warrant Shares will be issued.

The Warrants represented by this Warrant Certificate are issued under and pursuant to a Warrant indenture (the "Indenture") made as of _____, 2003 between the Company and the Trustee. Reference is made to the Indenture and any instrument supplemental thereto for a full description of the rights of the holders of the Warrants and the terms and conditions upon which the Warrants are, or are to be issued and held, with the same effect as if the provisions of the Indenture and all instruments supplemental thereto were set forth herein. By acceptance hereof, the holder assents to all provisions of the Indenture. In the event of a conflict between the provisions of the Warrant Certificate and the Indenture, the provisions of the Indenture shall govern. Capitalized terms used in the Indenture have the same meaning herein as therein unless otherwise defined.

In the event of any alteration of the Common Shares, including any subdivision, consolidation or reclassification, and in the event of any form of reorganization of the Company including any amalgamation, merger or arrangement, the holders of Warrants shall, upon exercise of the Warrants following the occurrence of any of those events, be entitled to receive the same number and kind of securities that they would have been entitled to receive had they exercised their Warrants immediately prior to the occurrence of those events.

The registered holder of this Warrant Certificate may at any time prior to the Expiry Date upon surrender hereof to the Trustee at its principal office in the City of Vancouver, exchange this Warrant Certificate for other certificates entitling the holder to acquire in the aggregate the same number of Warrant Shares as may be acquired under this Warrant Certificate.

The holding of the Warrants evidenced by this Warrant Certificate shall not constitute the holder hereof a shareholder of the Company or entitle the holder to any right or interest in respect thereof except as expressly provided in the Indenture or in this Warrant Certificate.



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The Indenture provides that all holders of Warrants shall be bound by any resolution passed at a meeting of the holders held in accordance with the provisions of the Indenture and resolutions signed by the holders of Warrants entitled to acquire a specified majority of the Warrant Shares which may be acquired pursuant to all the outstanding Warrants.

This Warrant Certificate shall not be valid for any purpose whatsoever unless and until it has been certified by or on behalf of the Trustee.

Time shall be of the essence hereof. This Warrant Certificate shall be governed by and construed in accordance with the laws of the Province of British Columbia and the federal laws applicable therein and shall be treated in all respects as a British Columbia contract.

IN WITNESS WHEREOF the Company has caused this Warrant Certificate to be signed by its duly authorized officers as of _____, 2003.

ORAGENICS, INC.

By:
President and Chief Executive Officer

Countersigned by:

COMPUTERSHARE TRUST COMPANY OF CANADA

Trustee

By:
Authorized Signatory



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**EXERCISE FORM**

TO: Computershare Trust Company of Canada

AND: Oragenics, Inc.

(a) The undersigned hereby exercises the right to acquire Common Shares of Oragenics, Inc. (or such number of other securities or property to which such Series A Warrants entitle the undersigned in lieu thereof or in addition thereto under the provisions of the Indenture referred to in the accompanying Series A Warrant Certificate in accordance with and subject to the provisions of such Indenture and encloses a bank draft, certified cheque or money order in lawful money of the United States payable to Oragenics, Inc.

(b) The Common Shares (or other securities or property) are to be issued as follows:

Name: _____
(print clearly)

Address in full: _____
Social Insurance or Social Security Number: _____
Number of Common Shares: _____

Note: If further nominees intended, please attach (and initial) schedules giving these particulars.

Such securities (please check one):

(a) _____ should be sent by first class mail to the following address:

OR

(b) _____ should be held for pick up at the office of the Trustee at which this Series A Warrant Certificate is deposited.

If the number of Warrants exercised is less than the number of Warrants represented hereby, the undersigned requests that the new Series A Warrant Certificate representing the balance of the Warrants be registered in the name of _____.

Such securities (please check one):

(a) _____ should be sent by first class mail to the following address:

OR

(b) _____ should be held for pick up at the office of the Trustee at which this Warrant Certificate is deposited.

If, at the time of exercise hereunder, the registration statement filed by Oragenics, Inc. under the United States *Securities Act* of 1933 (the "1933 Act") on _____ is no longer effective, then the undersigned represents, warrants and certifies as follows (if the registration statement is no longer effective, one of the following must be checked):

(A) _____ the undersigned holder at the time of exercise of the Warrant is not in the United States, is not a "U.S. person" as defined in Regulation S under the 1933 Act and is not exercising the Warrant on behalf of, or for the account or benefit of a U.S. person and did not execute or deliver this subscription form in the United States; OR

(B) _____ the undersigned holder has delivered to the Company and the Company's transfer agent an opinion of counsel (which will not be sufficient unless it is in form and substance satisfactory to the Company) to the effect that an exemption from the registration requirements of the 1933 Act and applicable state securities laws is available.

The undersigned holder understands that unless Box (A) above is checked, the certificate representing the Common Shares issued upon exercise of the Series A Warrant will bear a legend restricting transfer without registration under the 1933 Act and applicable state securities laws unless an exemption form registration is available. A share certificate bearing such a legend is not considered to be good delivery under the Rules and Policies of the TSX Venture Exchange.

In the absence of instructions to the contrary, the securities or other property will be issued in the name of or to the holder hereof and will be sent by first class mail to the last address of the holder appearing on the register maintained for the Warrants.

DATED the _____ day of _____, _____

_____ _____
Signature Guaranteed (Signature of Warrantholder)

_____
Print full name

_____

_____
Print full address

1. The registered holder may exercise its right to receive Common Shares by completing this form and surrendering this form and the Warrant Certificate representing the Warrants being exercised to Computershare Trust Company of Canada at its principal office at 510 Burrard Street, Vancouver, British Columbia, V6C 3B9. Certificates for Common Shares will be delivered or mailed within five business days after the exercise of the Warrants.



2. If the Exercise Form indicates that Common Shares are to be issued to a person or persons other than the registered holder of the Certificate, the signature of such holder of the Exercise Form must be guaranteed by a Schedule "A" major chartered bank, a trust company, or a member of an acceptable medallion guarantee program. The Guarantor must affix a stamp bearing the actual words 'Signature Guaranteed".

Please note signature guarantees are not accepted from treasury branches or credit unions unless they are members of the Stamp Medallion Program.

3. If the Exercise Form is signed by a trustee, executor, administrator, curator, guardian, attorney, officer of a corporation or any person acting in a fiduciary or representative capacity, the certificate must be accompanied by evidence of authority to sign satisfactory to the Trustee and the Company.

**SCHEDULE B**
**to the Warrant Indenture between**
**Oragenics, Inc. and**
**Computershare Trust Company of Canada**
**dated _____, 2003**

**FORM OF WARRANT CERTIFICATE - series b warrants**

THE PURCHASE WARRANTS REPRESENTED BY THIS CERTIFICATE WILL BE VOID AND OF NO VALUE UNLESS EXERCISED ON OR BEFORE 4:30 P.M. (VANCOUVER TIME) _____, 200__

WARRANT CERTIFICATE

| | |
|---|---|
| Warrant Certificate Number | _____SERIES B WARRANTS ("Warrants") entitling the holder to acquire, subject to adjustment, one share of common stock for every one Warrant represented hereby |

ORAGENICS, INC.
INCORPORATED UNDER THE LAWS OF THE STATE OF FLORIDA

THIS IS TO CERTIFY THAT _____ (hereinafter referred to as the "holder") is the registered holder of the number of Warrants to purchase shares of common stock ("Common Shares") of Oragenics, Inc. (the "Company") as set forth in this Series B Warrant certificate ("Warrant Certificate"). Each Warrant represented hereby entitles the holder thereof to acquire one fully paid and non-assessable Common Share in the capital of the Company without par value, as such shares were constituted on _____, 2003 (a "Warrant Share") in the manner and subject to the restrictions and adjustments set forth herein at any time and from time to time until 4:30 p.m. (Vancouver time) (the "Time of Expiry") on _____, 200__ (the 'Expiry Date"), at a price of US$3.00.

The right to acquire Warrant Shares hereunder may only be exercised by the holder within the time set forth above by surrendering this Warrant Certificate to Computershare Trust Company of Canada (the "Trustee") at the principal office of the Trustee in the City of Vancouver together with a duly completed and executed Exercise Form in the form attached and remitting a certified cheque, bank draft or money order in lawful money of the United States payable to the order of the Company or the Trustee at par where this Warrant Certificate is so surrendered for the aggregate purchase price of the Warrant Shares so subscribed for.

These Warrants shall be deemed to be surrendered only upon personal delivery hereof or, if sent by mail or other means of transmission, upon actual receipt thereof by the Trustee at the office referred to above.



Upon surrender of these Warrants, the person or persons in whose name or names the Warrant Shares issuable upon exercise of the Warrants are to be issued shall be deemed for all purposes (except as provided in the Indenture hereinafter referred to) to be the holder or holders of record of such Warrant Shares and the Company has covenanted that it will (subject to the provisions of the Indenture) cause a certificate or certificates representing such Warrant

Shares to be delivered or mailed to the person or persons at the address or addresses specified in the Exercise Form within four Business Days.

If, at the time of exercise by the Warrantholder of any of the Warrants represented by this Warrant Certificate, the registration statement filed by the Company under the United States Securities Act of 1933 (the "1933 Act") on _____ is no longer effective, then this Warrant may not be exercised in the United States or by or on behalf of a U.S. person, as such terms are defined in Regulation S under the 1933 Act, unless the Warrantholder has delivered to the Company a written opinion of counsel to the effect that the exercise of the Warrant and the Warrant Shares to be delivered upon exercise hereof have been registered under the 1933 Act or an available exemption from the registration requirements thereunder.

The registered holder of this Series B Warrant Certificate may acquire any lesser number of Warrant Shares than the number of Warrant Shares which may be acquired for the Warrants represented by this Warrant Certificate. In such event, the holder shall be entitled to receive a new certificate for the balance of the Warrant Shares which may be acquired. No fractional Warrant Shares will be issued.

The Warrants represented by this Warrant Certificate are issued under and pursuant to a Warrant indenture (the "Indenture") made as of _____, 2003 between the Company and the Trustee. Reference is made to the Indenture and any instrument supplemental thereto for a full description of the rights of the holders of the Warrants and the terms and conditions upon which the Warrants are, or are to be issued and held, with the same effect as if the provisions of the Indenture and all instruments supplemental thereto were set forth herein. By acceptance hereof, the holder assents to all provisions of the Indenture. In the event of a conflict between the provisions of the Warrant Certificate and the Indenture, the provisions of the Indenture shall govern. Capitalized terms used in the Indenture have the same meaning herein as therein unless otherwise defined.

In the event of any alteration of the Common Shares, including any subdivision, consolidation or reclassification, and in the event of any form of reorganization of the Company including any amalgamation, merger or arrangement, the holders of Warrants shall, upon exercise of the Warrants following the occurrence of any of those events, be entitled to receive the same number and kind of securities that they would have been entitled to receive had they exercised their Warrants immediately prior to the occurrence of those events.

The registered holder of this Warrant Certificate may at any time prior to the Expiry Date upon surrender hereof to the Trustee at its principal office in the City of Vancouver, exchange this Warrant Certificate for other certificates entitling the holder to acquire in the aggregate the same number of Warrant Shares as may be acquired under this Warrant Certificate.

The holding of the Warrants evidenced by this Warrant Certificate shall not constitute the holder hereof a shareholder of the Company or entitle the holder to any right or interest in respect thereof except as expressly provided in the Indenture or in this Warrant Certificate.



The Indenture provides that all holders of Warrants shall be bound by any resolution passed at a meeting of the holders held in accordance with the provisions of the Indenture and resolutions signed by the holders of Warrants entitled to acquire a specified majority of the Warrant Shares which may be acquired pursuant to all the outstanding Warrants.

This Warrant Certificate shall not be valid for any purpose whatsoever unless and until it has been certified by or on behalf of the Trustee.

Time shall be of the essence hereof. This Warrant Certificate shall be governed by and construed in accordance with the laws of the Province of British Columbia and the federal laws applicable therein and shall be treated in all respects as a British Columbia contract.

IN WITNESS WHEREOF the Company has caused this Warrant Certificate to be signed by its duly authorized officers as of _____, 2003.

ORAGENICS, INC.

By:_____

President and Chief Executive Officer

Countersigned by:

COMPUTERSHARE TRUST COMPANY OF CANADA
Trustee

By:_____
Authorized Signatory



---

**EXERCISE FORM**

TO: Computershare Trust Company of Canada

AND: Oragenics, Inc.

(a) The undersigned hereby exercises the right to acquire Common Shares of Oragenics, Inc. (or such number of other securities or property to which such Series B Warrants entitle the undersigned in lieu thereof or in addition thereto under the provisions of the Indenture referred to in the accompanying Series B Warrant Certificate in accordance with and subject to the provisions of such Indenture and encloses a bank draft, certified cheque or money order in lawful money of the United States payable to Oragenics, Inc.

(b) The Common Shares (or other securities or property) are to be issued as follows:

Name: _____
(print clearly)

Address in full: _____
Social Insurance or Social Security Number: _____

Number of Common Shares: _____

Note: If further nominees intended, please attach (and initial) schedules giving these particulars.

Such securities (please check one):

(a) _____ should be sent by first class mail to the following address:

OR

(b) _____ should be held for pick up at the office of the Trustee at which this Series B Warrant Certificate is deposited.

If the number of Warrants exercised is less than the number of Warrants represented hereby, the undersigned requests that the new Series B Warrant Certificate representing the balance of the Warrants be registered in the name of _____.

Such securities (please check one):

(a) _____ should be sent by first class mail to the following address:

OR

(b) _____ should be held for pick up at the office of the Trustee at which this Warrant Certificate is deposited.



If, at the time of exercise hereunder, the registration statement filed by Oragenics, Inc. under the United States Securities Act of 1933 (the "1933 Act") on _____ is no longer effective, then the undersigned represents, warrants and certifies as follows (if the registration statement is no longer effective, one of the following must be checked):

(A) _____ the undersigned holder at the time of exercise of the Warrant is not in the United States, is not a "U.S. person" as defined in Regulation S under the 1933 Act and is not exercising the Warrant on behalf of, or for the account or benefit of a U.S. person and did not execute or deliver this subscription form in the United States; OR

(B) _____ the undersigned holder has delivered to the Company and the Company's transfer agent an opinion of counsel (which will not be sufficient unless it is in form and substance satisfactory to the Company) to the effect that an exemption from the registration requirements of the 1933 Act and applicable state securities laws is available.

The undersigned holder understands that unless Box (A) above is checked, the certificate representing the Common Shares issued upon exercise of the Series B Warrant will bear a legend restricting transfer without registration under the 1933 Act and applicable state securities laws unless an exemption form registration is available. A share certificate bearing such a legend is not considered to be good delivery under the Rules and Policies of the TSX Venture Exchange.

In the absence of instructions to the contrary, the securities or other property will be issued in the name of or to the holder hereof and will be sent by first class mail to the last address of the holder appearing on the register maintained for the Warrants.

DATED the _____ day of _____, _____

_____ _____
Signature Guaranteed (Signature of Warrantholder)

_____
Print full name

_____

_____
Print full address

1. The registered holder may exercise its right to receive Common Shares by completing this form and surrendering this form and the Warrant Certificate representing the Warrants being exercised to Computershare Trust Company of Canada at its principal office at 510 Burrard Street, Vancouver, British Columbia, V6C 3B9. Certificates for Common Shares will be delivered or mailed within five business days after the exercise of the Warrants.



2. If the Exercise Form indicates that Common Shares are to be issued to a person or persons other than the registered holder of the Certificate, the signature of such holder of the Exercise Form must be guaranteed by a Schedule "A" major chartered bank, a trust company, or a member of an acceptable medallion guarantee program. The Guarantor must affix a stamp bearing the actual words 'Signature Guaranteed".

Please note - signature guarantees are not accepted from treasury branches or credit unions unless they are members of the Stamp Medallion Program.

3. If the Exercise Form is signed by a trustee, executor, administrator, curator, guardian, attorney, officer of a corporation or any person acting in a fiduciary or representative capacity, the certificate must be accompanied by evidence of authority to sign satisfactory to the Trustee and the Company.

Exhibit 10.34

ORAGENICS

December 2, 2002

Cornet Capital Cop.
7225 Blenheim Street
Vancouver, B.C. V6N 1S2

Dear Sirs:

This letter agreement is entered as of the date first written above as an amendment to that certain Agreement between Cornet Capital Corp. ("Cornet") and Oragenics, Inc., formerly known as Oragen ("Oragenics"), dated March 18, 2002 (the "Financing Agreement"). It supercedes and replaces entirely the previous agreement in letter form of even date between us (the "Previous Amendment") amending the Financing Agreement.

Among other things, the Financing Agreement requires Cornet, in its capacity as an equity financing consultant to Oragenics, to enter into a loan agreement of up to $500,000, which such funds to be drawn down on an 'if needed' basis by Oragenics. The parties desire to further clarify the terms under which the loan shall be entered into by Cornet.

Accordingly, the parties hereby amend the Financing Agreement by restating in its entirety the paragraph referencing the Loan Facility as follows:

| | |
|---|---|
| Loan Facility: | $500,000 |
| | The Consultant will enter into an agreement to lend to Oragenics up to US$500,000. The principal terms of such loan agreement will be as follows: |
| | (A) Oragenics may draw down on the loan facility for 3 years from the date hereof. Funds will be drawn down on an "as needed" basis. Oragenics, acting reasonably, will determine whether funds are needed under the loan facility; |
| | (B) Advances under the loan facility will be due and payable on that date which falls 1 year from the date of advance. |
| | (C) Advances will bear simple interest at the rate of 3% per annum above the prime lending rate for US dollar loans of the Royal Bank of Canada from time to time until repayment, before and after maturity, default or judgment; |
| | (D) The Consultant will be paid a bonus for each advance under the loan agreement in shares of common stock of the Company. The bonus will be a number of shares equal to 20% of the total dollar amount of the advance, divided by the Discounted Market Price (as defined in the TSX Venture Exchange Corporate Finance Manual) of the shares as of the date of the advance. |

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The obligations of the parties under the loan agreement will be subject to all applicable U.S. and Canadian securities laws, all rules and regulations of the TSX Venture Exchange and any other exchange on which the securities of Oragenics are or may be traded.

If the foregoing accurately sets forth our agreement with respect to the matters described herein, please sign and return four copies of this letter agreement in the space provided below.

Very truly yours,

ORAGENICS, INC.

BY: /s/ Mento Soponis
Mento Soponis
President and CEO

Agreed to and accepted as of the date first written above.

CORNET CAPITAL CORP.

BY: /s/ Brian McAlister
Brian McAlister
President

Exhibit 10.41

Alachua, Florida April 29, 2003 $75,000

**PROMISSORY NOTE**

**Oragenics, Inc**, a Florida corporation with offices in Alachua, Florida, for value received, promises to pay to **Cornet Capital Corp.** , of Vancouver, British Columbia, on April 29, 2004, the principal sum of seventy-five thousand dollars ($75,000) plus interest thereon from the date hereof until paid at the rate of ten percent (10.0%) per annum (computed on the basis of a 360-day year of twelve 30-day months).

If not sooner paid, the principal and interest thereon shall be due and payable on the first anniversary of this Note. In the event of default of payment by Oragenics when due, Oragenics shall pay to Cornet Capital Corp. such further amounts as shall be sufficient to cover the costs and expenses incurred by Cornet Capital Corp. in collecting any sum due on this Note or otherwise enforcing any of its rights hereunder.

IN WITNESS WHEREOF, the undersigned has executed this Promissory Note as of the 29th day of April, 2003.

Oragenics, Inc.

/s/ Mento A. Soponis
President