

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

Registration fees were previously paid in connection with the original filing of this registration statement.

This Post-Effective Amendment No. 1 relates solely to the holders of underwriter warrants to purchase our 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.

PROSPECTUS

ORAGENICS, INC.

297,724 SHARES OF COMMON STOCK,
ISSUABLE UPON EXERCISE OF WARRANTS

This prospectus is being used to register the resale of 297,724 shares of common stock to be issued upon the exercise of warrants by the warrant holders.

Our common stock is listed on the American Stock Exchange under the symbol "ONI."

INVESTING IN OUR COMMON STOCK INVOLVES RISKS. SEE "RISK FACTORS" ON PAGE 4.

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.

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.

The date of this prospectus is October ___, 2004.

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the SEC. The selling stockholders named in this prospectus may sell up to 297,724 shares of our common stock. This prospectus provides you with a general description of the common stock the selling stockholders may offer. You should read this prospectus as well as additional information described under "Where You Can Find Additional Information" and "Incorporation of Certain Information by Reference."

You should rely only on the information contained or incorporated by reference in this prospectus. We have not authorized anyone to provide you with different information. We are not making an offer to sell the common stock in any state where the offer is not permitted. You should not assume that the information contained in this prospectus is accurate as of any date other than the date on the front cover of those documents.

Unless the context otherwise requires, the terms "we," "our," "us," "the company" and "Oragenics" refer to Oragenics, Inc., a Florida corporation, and not to the selling stockholders.

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SUMMARY

This summary highlights selected information from this prospectus and should be read together with the more detailed information and financial data and statements contained elsewhere and incorporated by reference 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 4.

OVERVIEW

We were incorporated in Florida in 1996. We amended our articles of incorporation on May 8, 2002, in order to change our name from Orogen, 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. Our executive office is located at 12085 Research Drive, Alachua, FL 32615. This is also our mailing address. Our registered office is 4730 S.W. 103 Way, Gainesville, Florida 32608. 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 company aimed at adding value to novel technologies and products sourced from innovative research at the University of Florida and other academic centers. Our aim is to in-license and develop products through human proof-of-concept (Phase I or II of the Federal Food and Drug Administration's (FDA's) regulatory process discussed below) prior to partnering with major pharmaceutical, biotechnology or healthcare product firms for advanced clinical development and commercialization. We have generated no substantial 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.

We are currently developing the following products, each of which addresses potential market opportunities:

- [X] REPLACEMENT THERAPY is a single, painless topical treatment that has the potential to offer life-long protection from most tooth decay. We expect to initiate Phase I safety studies with this product during 2004.
- [X] MUTACIN 1140 is a novel antibiotic with activity against essentially all Gram-positive bacteria including vancomycin-resistant *Staphylococcus aureus*. Researchers have not succeeded to-date in demonstrating bacterial resistance to this antibiotic. We are currently in early preclinical stages of development for Mutacin 1140.
- [X] "PROBIOTIC" TECHNOLOGY employs naturally occurring beneficial bacteria to promote oral and periodontal health. Probiotics are widely employed in Japan and Europe and acceptance in the United States is growing. Such products may be marketed as "health supplements" without the need for regulatory filings, offering the opportunity for near-term commercialization.
- [X] "OTHER" TECHNOLOGIES include technologies that we may develop from our research and development activities or that we may license, including our recently licensed technology called in vivo induced antigen technology that enables the simple, fast identification of novel and potentially important gene targets associated with the natural onset and progression of infections, cancers and other diseases in humans and other living organisms, including plants.

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THE OFFERING

On June 24, 2003, we completed an initial public offering. The managing underwriter for our initial public offering was Haywood Securities, Inc. Under the registration statement, we registered 2,400,000 units at a price of \$1.25 per unit. Each unit consisted of one share of common stock, one half of one non-transferable Series A common stock purchase warrant and one half of one non-transferable Series B common stock purchase warrant. The shares of common stock sold in our initial public offering and eligible for issuance upon exercise of the warrants were registered under this registration statement (File No. 333-100568) which was declared effective by the Securities and Exchange Commission on June 11, 2003. One whole Series A warrant was exercisable on or before December 24, 2003 to acquire one share of common stock at a price of \$2.00 per share. One whole Series B warrant was exercisable on or before March 24, 2004 to acquire one share of common stock at a price of \$3.00 per share. All 2,400,000 units were sold in the offering which provided gross proceeds of \$3,000,000 and net proceeds to us of \$2,282,612 after deducting \$717,388 in commissions paid to the underwriter and other expenses incurred in connection with the offering. In addition, the underwriter received warrants to purchase 500,000 shares at \$1.25 per share on or before June 24, 2005. Through September 30, 2004, 1,200,000 of the Series A Warrants, 995,400 of the Series B Warrants and 202,276 of the underwriter's warrants were exercised for total cash proceeds to us of \$5,639,045 and 2,397,676 additional shares of our common stock have been issued.

In this amendment to our registration statement we are updating information in this prospectus in connection with the resale of an aggregate of 297,724 shares of our common stock issuable in connection with the exercise of underwriters warrants.

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SELECTED FINANCIAL DATA

The following selected financial data for the three years ended December 31,

2003 is derived from our audited financial statements, which have been audited by Ernst & Young LLP, independent registered certified public accounting firm. The income statement data for the years ended December 31, 2003 and 2002 and the balance sheet data as of December 31, 2003 are derived from our financial statements, which were audited by Ernst & Young LLP, our independent registered certified public accounting firm, and are included elsewhere in this prospectus. The income statement data for the year ended December 31, 2001 and the balance sheet data as of December 31, 2002 and 2001 are derived from audited financial statements that are not included herein. The financial data as of and for the six month period ended June 30, 2004, is derived from unaudited financial statements. The unaudited financial statements include all adjustments, consisting of normal recurring accruals, which we consider necessary for a fair presentation of the financial position and the results of operations for this period.

Operating results for the six month period ended June 30, 2004 are not necessarily indicative of the results that may be expected for the entire year ending December 31, 2004. The data should be read in conjunction with the financial statements, related notes and other financial information included herein.

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	JUNE 30, 2004 (1)	DECEMBER 31,	DECEMBER 31,	DECEMBER 31,
	-----	-----	-----	-----
BALANCE SHEET:	2003(1)	2001(1)	2002(1)	
<S>	<C>	<C>	<C>	<C>
Total Assets	\$5,369,492	\$3,650,765	\$ 310,916	\$ 201,265
Total Liabilities	211,675	210,868	394,398	215,292
Total Long Term Liabilities	--	--	--	--
Cash Dividends Per Share	--	--	--	--
Stockholders' Equity (Deficit)	5,157,817	3,439,897	(83,482)	(14,027)

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	SIX MONTHS ENDED		YEAR ENDED DECEMBER 31	
	-----	-----	-----	-----
	JUNE 30, 2004	2003 (1)	2002 (1)	2001 (1)
<S>	<C>	<C>	<C>	<C>
Total Revenue	\$ 44,235	\$ -0-	\$ -0-	\$ 303,912
Total Expenses	1,267,662	1,667,951	709,700	270,465
Income (Loss) from Operations	(1,223,427)	(1,667,951)	(709,700)	33,447
Net Income (Loss)	(1,205,102)	(1,672,954)	(699,603)	13,473
Net Income (Loss) per Share-basic and diluted	(0.09)	(0.15)	(0.08)	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

WE HAVE EXPERIENCED A HISTORY OF LOSSES AND EXPECT TO INCUR FUTURE LOSSES. WE HAVE GENERATED EXTREMELY LIMITED REVENUE FROM OUR OPERATIONS, AND NO REVENUE FROM SALES. THEREFORE, WE MUST CONTINUE TO RAISE MONEY FROM INVESTORS AND SEEK PARTNERS WITH WHOM TO COLLABORATE IN OUR RESEARCH AND DEVELOPMENT EFFORTS SO AS

TO FUND OUR OPERATIONS. IF WE ARE UNABLE TO FUND OUR OPERATIONS, WE MAY CEASE DOING BUSINESS.

We have recorded minimal revenue to date and we have incurred a cumulative operating loss of approximately \$3,593,000 through June 30, 2004. 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 preclinical 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 have limited capital resources and it is likely that we will require additional capital to meet our future capital requirements. There is no assurance that such capital will be available to us or, if available, be on terms acceptable to us. To the extent we are unable to raise additional capital and our operating losses continue, we will need to take actions to reduce our costs of operations, which may adversely impact future operations, employee morale, business relations and other aspects of our business. An increase in capital resulting from a capital raising transaction under adverse business circumstances could result in substantial dilution to existing holders of our common stock and adversely impact our stock price.

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 MAY 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 preclinical and clinical testing. These processes are lengthy and expensive. We cannot assure that such trials will demonstrate the safety or effectiveness of our technologies. There is a possibility 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 first investigational new drug application three times to respond to the FDA's concerns. We filed a new investigational new drug application in March of 2003. This investigational new drug application has also been placed on hold until we satisfy the FDA's safety 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 all of our technologies we may have to cease operations.

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 MAY HAVE TO CEASE OPERATIONS.

All of our 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 may 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. If our science proves to be flawed, incorrect or otherwise fails, we will not be able to create a marketable product or generate revenues and we may have to cease operations.

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 manufacture 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. 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. Additional financings could result in substantial dilution to existing shareholders. We anticipate we will remain engaged in research and development for a considerable period of time, and there can be no assurance that we will be able to generate adequate revenue from operations.

IT IS POSSIBLE THAT OUR REPLACEMENT THERAPY AND ORAL PROBIOTIC TECHNOLOGY WILL BE LESS EFFECTIVE IN HUMANS THAN THEY HAVE BEEN SHOWN TO BE IN ANIMALS. IT IS POSSIBLE OUR MUTACIN 1140 TECHNOLOGY WILL BE SHOWN TO BE INEFFECTIVE OR HARMFUL IN HUMANS. IF ANY OF THESE TECHNOLOGIES ARE SHOWN TO BE INEFFECTIVE OR HARMFUL IN HUMANS, WE WILL BE UNABLE TO GENERATE REVENUES FROM THEM, AND WE MAY HAVE TO CEASE OPERATIONS.

To date the testing of our replacement therapy technology has been undertaken solely in animals. Those studies have proven our genetically altered strain of *Streptococcus mutans* ("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. To date the testing of our oral probiotic technology has been undertaken solely in animals. Those studies have shown our technology to be effective at helping to reduce certain bacteria that are believed to cause periodontal disease. It is possible that our probiotic technology will not be effective in reducing those bacteria and will not improve periodontal health. If our oral probiotic technology is shown to be ineffective or harmful to humans, we will be unable to commercialize it and generate revenues from sales. To date the testing of the antibiotic substance, Mutacin 1140, has been undertaken solely in the laboratory. We have not yet conducted animal or human studies of Mutacin 1140. It is possible that when these studies are conducted, 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 our technologies, we may have to cease operations.

IT IS POSSIBLE WE WILL BE UNABLE TO FIND A METHOD TO PRODUCE MUTACIN 1140 IN LARGE-SCALE COMMERCIAL QUANTITIES. IF WE CANNOT, WE WILL BE UNABLE TO UNDERTAKE THE PRECLINICAL AND CLINICAL TRIALS THAT ARE REQUIRED IN ORDER TO OBTAIN FDA PERMISSION TO SELL IT, WE WILL BE UNABLE TO GENERATE REVENUES FROM PRODUCT SALES, 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 preclinical and Phase I clinical studies that 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 economically. To date we have not found 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.

BEGINNING IN 2004, WE MUST SPEND AT LEAST \$1 MILLION ANNUALLY ON DEVELOPMENT OF OUR REPLACEMENT THERAPY AND MUTACIN 1140 TECHNOLOGIES UNDER OUR LICENSE AGREEMENTS WITH THE UNIVERSITY OF FLORIDA RESEARCH FOUNDATION, INC. WE MUST ALSO COMPLY WITH CERTAIN OTHER CONDITIONS OF OUR LICENSES. IF WE DO NOT, OUR LICENSES TO THESE 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 terms of the licenses, we must spend at least \$1 million per year beginning in 2004 and thereafter on development of those technologies before the first commercial sale of products derived from those technologies. If we do not, our licenses could be terminated. Until commercial sales of such products take place, we will not be earning revenues from the sale of products and 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. There is no assurance we will be able to raise the financing necessary to meet our obligations under our licenses. If we cannot, we may lose our licenses to these technologies and 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. There is no assurance that we will be able to comply with these conditions. If we cannot, and if our license is terminated, our investment in development of our replacement therapy and Mutacin 1140 technologies will become valueless and we may have to cease operations.

IF CLINICAL TRIALS FOR OUR PRODUCTS ARE UNSUCCESSFUL OR DELAYED, WE WILL BE UNABLE TO MEET OUR ANTICIPATED DEVELOPMENT AND COMMERCIALIZATION TIMELINES, WHICH COULD CAUSE OUR STOCK PRICE TO DECLINE.

Before obtaining regulatory approvals for the commercial sale of any products, we must demonstrate through preclinical testing and clinical trials that our products are safe and effective for use in humans. Conducting clinical trials is a lengthy, time-consuming and expensive process.

Completion of clinical trials may take several years. Commencement and rate of completion of clinical trials may be delayed by many factors, including:

- o lack of efficacy during the clinical trials;
- o unforeseen safety issues;
- o slower than expected patient recruitment; and
- o government or regulatory delays.

Results from preclinical testing and early clinical trials are often not predictive of results obtained in later clinical trials. A number of new products have shown promising results in clinical trials, but subsequently failed to establish sufficient safety and efficacy data to obtain necessary regulatory approvals. Data obtained from preclinical and clinical activities are susceptible to varying interpretations, which may delay, limit or prevent regulatory approval. In addition, regulatory delays or rejections may be encountered as a result of many factors, including perceived defects in the design of the clinical trials and changes in regulatory policy during the period of product development. Any delays in, or termination of, our clinical trials will materially and adversely affect our development and commercialization timelines, which would adversely affect our business and cause our stock price to decline.

WE INTEND TO CONSIDER RELYING ON THIRD PARTIES TO PAY THE MAJORITY OF COSTS RELATING TO 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 THE COSTS OURSELVES. WE MAY BE UNABLE TO DO SO, AND IF WE ARE NOT, WE MAY HAVE TO CEASE OPERATIONS.

We intend to consider sublicensing our technologies to strategic partners prior to commercialization. If we do so, our sublicensees will pay the costs of any remaining clinical trials, and manufacturing and marketing of 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 cannot be assured we would be able to obtain the necessary financing. If we cannot obtain financing, we may have to cease operations.

IF OUR EXPECTED COLLABORATIVE PARTNERSHIPS DO NOT MATERIALIZE OR FAIL TO PERFORM AS EXPECTED, WE WILL BE UNABLE TO DEVELOP OUR PRODUCTS AS ANTICIPATED.

We expect to enter into collaborative arrangements with third parties to develop certain products. We cannot assure you that we will be able to enter into these collaborations or that, if entered, they will produce successful products. If we fail to maintain our existing collaborative arrangements or fail to enter into additional collaborative arrangements, the number of products from which we could receive future revenues would decline.

Our dependence on collaborative arrangements with third parties subjects us to a number of risks. These collaborative arrangements may not be on terms favorable to us. Agreements with collaborative partners typically allow partners significant discretion in electing whether or not to pursue any of the planned activities. We cannot control the amount and timing of resources our collaborative partners may devote to products based on the collaboration, and our partners may choose to pursue alternative products. Our partners may not perform their obligations as expected. Business combinations or significant changes in a collaborative partner's business strategy may adversely affect a partner's willingness or ability to complete its obligations under the arrangement. Moreover, we could become involved in disputes with our partners, which could lead to delays or termination of the collaborations and time-consuming and expensive litigation or arbitration. Even if we fulfill our obligations under a collaborative agreement, our partner can terminate the agreement under certain circumstances. If any collaborative partner were to terminate or breach our agreement with it, or otherwise fail to complete its obligations in a timely manner, our chances of successfully commercializing products would be materially and adversely affected.

IF OUR INTELLECTUAL PROPERTY RIGHTS DO NOT ADEQUATELY PROTECT OUR PRODUCTS OR TECHNOLOGIES, OTHERS COULD COMPETE AGAINST US MORE DIRECTLY, WHICH WOULD HURT OUR PROFITABILITY.

Our success depends in part on our ability to obtain patents or rights to patents, protect trade secrets, operate without infringing upon the proprietary rights of others, and prevent others from infringing on our patents, trademarks and other intellectual property rights. We will be able to protect our intellectual property from unauthorized use by third parties only to the extent that it is covered by valid and enforceable patents, trademarks and licenses. Patent protection generally involves complex legal and factual questions and, therefore, enforceability of patent rights cannot be predicted with certainty. Patents, if issued, may be challenged, invalidated or circumvented. Thus, any patents that we own or license from others may not provide adequate protection against competitors. In addition, any future patent applications may fail to result in patents being issued. Also, those patents that are issued may not provide us with adequate proprietary protection or competitive advantages against competitors with similar technologies. Moreover, the laws of certain foreign countries do not protect intellectual property rights to the same extent as do the laws of the United States.

In addition to patents and trademarks, we rely on trade secrets and proprietary know-how. We seek protection of these rights, in part, through confidentiality and proprietary information agreements. These agreements may not provide meaningful protection or adequate remedies for violation of our rights in the event of unauthorized use or disclosure of confidential and proprietary information. Failure to protect our proprietary rights could seriously impair our competitive position.

IF THIRD PARTIES CLAIM WE ARE INFRINGING THEIR INTELLECTUAL PROPERTY RIGHTS, WE COULD SUFFER SIGNIFICANT LITIGATION OR LICENSING EXPENSES OR BE PREVENTED FROM MARKETING OUR PRODUCTS.

Our commercial success depends significantly on our ability to operate without infringing the patents and other proprietary rights of others. However,

regardless of our intent, our technologies may infringe the patents or violate other proprietary rights of third parties. In the event of such infringement or violation, we may face litigation and may be prevented from pursuing product development or commercialization. We may receive in the future, notice of claims of infringement of other parties' proprietary rights. Infringement or other claims could be asserted or prosecuted against us in the future and it is possible that past or future assertions or prosecutions could harm our business. 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 and we have not heard anything further from them. If necessary, we are prepared to assert our rights vigorously with respect to such matter. If litigation should ensue and we are unsuccessful in that litigation, we could be enjoined for a period of time from marketing products which infringe any valid patent rights held or licensed by B.C. International Corporation and/or we could owe substantial damages. If we become involved in any claims, litigation, interference or other administrative proceedings, we may incur substantial expense and the efforts of our technical and management personnel may be significantly diverted. Any future claims or adverse determinations with respect to our intellectual property rights may subject us to loss of our proprietary position or to significant liabilities, may require us to seek licenses from third parties, cause delays in the development and release of new products or services and/or may restrict or prevent us from manufacturing and selling certain of our products. If we are required to seek licenses from third parties, costs associated with these arrangements may be substantial and may include ongoing royalties. Furthermore, we may not be able to obtain the necessary licenses on satisfactory terms, if at all.

WE ARE SUBJECT TO SUBSTANTIAL GOVERNMENT REGULATION, WHICH COULD MATERIALLY ADVERSELY AFFECT OUR BUSINESS.

The production and marketing of products which may be developed from our technologies and our ongoing research and development, preclinical testing and clinical trial activities are subject to extensive regulation and review by numerous governmental authorities. Most of the technologies we are developing must undergo rigorous preclinical and clinical testing and an extensive regulatory approval process before they can be marketed. This process makes it longer, harder and more costly to bring products which may be developed from our technologies to market, and we cannot guarantee that any of such products will be approved. The pre-marketing approval process can be particularly expensive, uncertain and lengthy, and a number of products for which FDA approval has been sought by other companies have never been approved for marketing. In addition to testing and approval procedures, extensive regulations also govern marketing, manufacturing, distribution, labeling, and record-keeping procedures. If we do not comply with applicable regulatory requirements, such violations could result in warning letters, non-approval, suspensions of regulatory approvals, civil penalties and criminal fines, product seizures and recalls, operating restrictions, injunctions, and criminal prosecution.

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

Any manufacturing facilities would also be subject to continual review and inspection. The FDA has stated publicly that compliance with manufacturing regulations will be scrutinized more strictly. A governmental authority may challenge our compliance with applicable federal, state and foreign regulations. In addition, any discovery of previously unknown problems with one of our products or facilities may result in restrictions on the product or the facility, including withdrawal of the product from the market or other enforcement actions.

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From time to time, legislative or regulatory proposals are introduced that could alter the review and approval process relating to our technologies. It is possible that the FDA will issue additional regulations further restricting the sale of our proposed products. Any change in legislation or regulations that govern the review and approval process relating to our future technologies could make it more difficult and costly to obtain approval for new products based on our technologies, or to produce, market, and distribute such products if approved.

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 CEASE OPERATIONS.

The commercial success of our replacement therapy, oral probiotics and Mutacin 1140 technologies 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 in the United States and around the world. Future scientific developments, media coverage and political events may diminish such support. Public attitudes may be influenced by claims that health products based on 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 may be unable to generate sufficient revenues from our technologies, which may cause us to have to cease operations.

WE MAY BE EXPOSED TO PRODUCT LIABILITY CLAIMS IF PRODUCTS BASED ON OUR TECHNOLOGIES ARE MARKETED AND SOLD. BECAUSE OUR LIABILITY INSURANCE COVERAGE WILL HAVE LIMITATIONS, 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. Although we currently carry \$2,000,000 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.

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.

OUR STOCK PRICE HISTORICALLY HAS BEEN VOLATILE AND OUR STOCK'S TRADING VOLUME HAS BEEN LOW.

Although our common stock began trading on the American Stock Exchange under the symbol "ONI" in May, 2004, the trading price of our common stock has been, and may be, subject to wide fluctuations in response to a number of factors, many of which are beyond our control. These factors include:

- o quarter-to-quarter variations in our operating results;
- o the results of testing, technological innovations, or new commercial products by us or our competitors;
- o governmental regulations, rules, and orders;
- o general conditions in the healthcare, dentistry, or biotechnology industries;
- o comments and/or earnings estimates by securities analysts;
- o developments concerning patents or other intellectual property rights;
- o litigation or public concern about the safety of our products;
- o announcements by us or our competitors of significant acquisitions, strategic partnerships, joint ventures or capital commitments;
- o additions or departures of key personnel;
- o release of escrow or other transfer restrictions on our outstanding shares of common stock or sales of additional shares of common stock;
- o potential litigation;
- o adverse announcements by our competitors; and
- o the additional sale of common stock by us in a capital raising transaction.

Historically, the daily trading volume of our common stock has been relatively low. We cannot guarantee that an active public market for our common stock will be sustained or that the average trading volume will remain at present levels or increase. In addition, the stock market in general, has experienced significant price and volume fluctuations. Volatility in the market price for particular companies has often been unrelated or disproportionate to the operating performance of those companies. Broad market factors may seriously harm the market price of our common stock, regardless of our operating performance. In addition, securities class action litigation has often been initiated following periods of volatility in the market price of a company's securities. A securities class action suit against us could result in substantial costs, potential liabilities, and the diversion of management's attention and resources. Since our initial public offering and through September 30, 2004 our stock price has fluctuated from \$4.50 to \$1.69 per share. To the extent our stock price fluctuates and/or remains low, it could impair our ability to raise capital through the offering of additional equity securities.

FUTURE SALES OF OUR COMMON STOCK MAY DEPRESS OUR STOCK PRICE.

The market price of our common stock could decline as a result of sales of substantial amounts of our common stock in the public market, or the perception that these sales could occur. In addition, these factors could make it more difficult for us to raise funds through future offerings of common stock. As of September 30, 2004, there were 14,323,380 shares of our common stock outstanding, with another 297,724 shares of common stock issuable upon exercise of our underwriter warrants, 960,000 shares issuable upon exercise of options issued and an additional 540,000 shares available for issuance under our stock option plans. The issuance of our stock underlying these options is covered by an S-8 registration statement we filed with the SEC. The Company currently has approximately 5,280,422 shares of common stock held in escrow pursuant to Canadian law and underwriter requirements in connection with its initial public offering pursuant to escrow agreements. These shares are released from escrow periodically in three- and six -month increments and are subject to the limitations of the respective escrow agreements. Of these shares 4,920,458 are held by principals of the Company and 359,964 are held by the University of Florida Research Foundation, Inc. On December 24, 2004, approximately 1,230,115 shares held by principals (including a former director) will be released from escrow as well as 89,991 shares held by the University of Florida Research Foundation, Inc. The shares held by the principals (excluding the former director) will be subject to Rule 144 for resales. The shares held by the University of Florida Research Foundation, Inc. will be eligible for resale without restriction.

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WE MAY BE UNABLE TO MAINTAIN THE LISTING OF OUR COMMON STOCK ON THE AMERICAN STOCK EXCHANGE AND THAT WOULD MAKE IT MORE DIFFICULT FOR SHAREHOLDERS TO DISPOSE OF THEIR COMMON STOCK.

Our common stock is listed on the American Stock Exchange. We cannot guarantee that it will always be listed. The American Stock Exchange rules for continual listing include minimum market capitalization and other requirements, which we may not meet in the future, particularly if the price of our common stock declines.

If our common stock is delisted from the American Stock Exchange, trading in our common stock would be conducted, if at all, on the NASD's OTC Bulletin Board in the United States. This would make it more difficult for stockholders to dispose of their common stock and more difficult to obtain accurate quotations on our common stock. This could have an adverse effect on the price of our common stock.

WE MUST MAINTAIN A CURRENT PROSPECTUS AND REGISTRATION STATEMENT IN ORDER FOR OUR OUTSTANDING WARRANTS TO BE EXERCISED BY THEIR HOLDERS.

We may need to meet state registration requirements for sales of securities in states where an exemption from registration is not otherwise available. There are currently 297,724 shares of common stock issuable upon exercise of the underwriter warrants at \$1.25 per share. Shares acquired upon the exercise of these warrants will be restricted. Resales of such shares will require the Company to have a post effective amendment to its registration statement on Form SB-2 filed and declared effective by the U.S. Securities and Exchange Commission. It is possible that we may be unable to cause a registration statement covering the common stock underlying the warrants to be effective. The warrants may expire unexercised, which would result in the holders losing all the value of their investment in the warrants. There can be no assurance that we will be able to maintain an effective registration statement relating to the resale of common stock upon exercise of the warrants. If we are unable to maintain an effective registration for the resale of common stock upon exercise of the warrants, we may be subject to claims by the warrant holders.

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SPECIAL NOTE REGARDING FORWARD LOOKING STATEMENTS

Some of the statements made under the headings "Summary," "Risk Factors," "Management's Discussion and Analysis of Financial Condition and Results of

Operations," "Business" and elsewhere in this prospectus may contain forward-looking statements which reflect our current views with respect to, among other things, future events and financial performance. You can identify these forward-looking statements by the use of forward-looking words such as "believe," "expect," "potential," "continue," "may," "will," "should," "seek," "predict," "intend," "plan," "estimate," "anticipate" or the negative version of those words or other comparable words. Any forward-looking statements contained in this prospectus are based upon our historical performance and on current plans, estimates and expectations. The inclusion of this forward-looking information should not be regarded as a representation by us or any other person that the future plans, estimates or expectations contemplated by us will be achieved. Forward-looking statements are statements regarding the intent, belief or current expectations, estimates or projections of our directors or our officers about us and the industry in which we operate, and assumptions made by management, and include among other items, (i) our strategies regarding growth, including our intention to develop and market our products; (ii) our financing plans; (iii) trends affecting our financial condition or results of operations; (iv) our ability to continue to control costs and to meet our liquidity and other financing needs; (v) our ability to respond to and meet regulatory demands. Although we believe our expectations are based on reasonable assumptions, we can give no assurance that the anticipated results will occur. Such forward-looking statements are subject to various risks and uncertainties. Accordingly, there are or will be important factors that could cause our actual results to differ materially from those indicated in these statements. We believe that these factors include but are not limited to those described under "Risk Factors." These factors should not be construed as exhaustive and should be read in conjunction with the other cautionary statements that are included in this prospectus. We undertake no obligation to publicly update or review any forward-looking statement, whether as a result of new information future developments or otherwise.

If one or more of these or other risks or uncertainties materialize, or if our underlying assumptions prove to be incorrect, actual results may vary materially from what we projected. Any forward-looking statements you read in this prospectus reflect our current views with respect to future events and are subject to these and other risks, uncertainties and assumptions relating to our operations, financial condition, growth strategy and liquidity. You should specifically consider the factors identified in this prospectus that could cause actual results to differ before making an investment decision.

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USE OF PROCEEDS

Our initial public offering was made in the Canadian provinces of British Columbia and Alberta through our underwriter, Haywood Securities Inc. We 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 also agreed to issue shares and warrants to Haywood. In addition to Haywood's commission, we incurred further expenses in connection with the offering of \$492,388. The net proceeds of our initial public offering (including proceeds received from the exercise of any remaining warrants) yields the funds available to us. We will receive proceeds from the exercise of the underwriter warrants in the amount of \$372,155, assuming all remaining warrants are exercised. We will not receive any proceeds from the resale of the common stock that the underwriter warrant holders acquired upon the exercise of the underwriter warrants.

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SELLING SECURITY HOLDERS

The selling shareholders named below may from time to time offer and sell pursuant to this prospectus up to an aggregate of 297,724 shares of our common stock upon exercise of the underwriter warrants. The following table sets forth as of October 6, 2004, the number of shares of our common stock that the selling shareholders beneficially own and the number of shares being registered for resale by the selling shareholders. The percentage of outstanding shares beneficially owned before and after the offering is based on 14,323,380 shares of common stock outstanding as of September 30, 2004 and assumes these selling

shareholders do not acquire any additional shares of common stock. The term "selling shareholders," as used in this prospectus, includes the holder listed below and its transferees, pledgees, donees, heirs or other successors receiving shares from the holder listed below after the date of this prospectus. The selling shareholders may sell, transfer or otherwise dispose of some or all of their shares of our common stock in transactions exempt from the registration requirements of the Securities Act.

The information included below is based upon information provided by the individuals and entities named below as of the dates indicated. The selling shareholders may from time to time offer and sell any or all of their shares that are registered under this prospectus. Because the selling shareholders are not obligated to sell their shares, and because the selling shareholders may also acquire publicly traded shares of our common stock, we can only estimate how many shares of our common stock the selling shareholders will own after this offering based upon the information they provided to us as of the dates indicated. We may update, amend or supplement this prospectus from time to time to update the disclosure in this section.

<TABLE>
<CAPTION>

SELLING SHAREHOLDERS	SHARES OF COMMON STOCK BENEFICIALLY OWNED BEFORE THE OFFERING			SHARES OF COMMON STOCK BENEFICIALLY OWNED AFTER THE OFFERING		
	SHARES		PERCENT	OFFERED(1)	NUMBER	PERCENT
	NUMBER	PERCENT				
<S>	<C>	<C>	<C>	<C>	<C>	<C>
Haywood Securities Inc.(2)	93,200	*	93,200	--		*
Philip Loh	440	*	440	--		*
Steve McKee	60,292	*	59,892	400		*
Stewart Swette	13,200	*	13,200	--		*
Fabio Banducci(3)	6,404	*	6,404	--		*
William Vance	88	*	88	--		*
Canaccord Capital Corporation(4)	27,000	*	27,000	--		*
Wolverton Securities Ltd	22,500	*	22,500	--		*
RBC Dominion Securities	75,000	*	75,000	--		*
Total	298,124	2%	297,724	400		*

</TABLE>

* Less than one percent

(1) Represents shares acquired or able to be acquired upon exercise of the outstanding underwriter warrants.

(2) Haywood Securities Inc. was the underwriter for our initial public offering and the shares listed represent the shares able to be acquired by Haywood Securities Inc. on the balance of the outstanding underwriter warrants still held by Haywood Securities Inc. which it received in connection with our initial public offering.

(3) This individual was previously affiliated with Haywood Securities Inc. and received underwriter warrants as transferee from Haywood Securities Inc.

(4) Canaccord Capital Corporation is the record owner. The beneficial owners are Harold G. Leishman (13,500 shares) and J.A. David Leishman (13,500 shares).

PLAN OF DISTRIBUTION : TERMS OF THE OFFERING

On June 24, 2003 we consummated our initial public offering through our underwriter, Haywood Securities Inc. (Haywood), consisting of 2.4 million units, at a price of \$1.25 per unit. Our offering was made only in the Canadian provinces of British Columbia and Alberta. Each unit consisted 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 was exercisable 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 was exercisable for 9 months from the closing date to acquire a further share of common stock at \$3.00 per share. The Series A warrants and Series B warrants have expired. Exercises of the Series A warrants and Series B warrants resulted in the aggregate issuance of 2,195,400 shares of our common stock and \$5,386,200 proceeds.

In connection with our initial public offering we entered into an agency agreement dated March 28, 2003 with Haywood. Haywood agreed to offer our units for sale to the public in British Columbia and Alberta. Our offering was a "best efforts" offering, on an "all or none" basis. We paid Haywood a sales commission equal to 7.5% of the selling price for each unit sold to an investor under our offering. We originally issued 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. Of such original issuance 297,794 remain outstanding. We also issued 100,000 shares of our common stock to Haywood under the agency agreement. We reimbursed Haywood for its reasonable expenses in connection with our offering.

The underlying shares of common stock we issued to Haywood upon exercise of the warrants 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 the shares of common stock underlying its warrants pursuant to its prospectus delivery requirements.

Haywood formed a selling group of Canadian registered investment dealers to assist with sales of the units as subagents. No selling group members were members of the National Association of Securities Dealers in the United States. Haywood paid the 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 was paid from Haywood's compensation. No additional compensation was paid by us to members of the selling group.

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 our failure to comply with any of our obligations under the agency agreement, 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.

Applicable United States securities laws require that we register the shares which Haywood may acquire on exercise of the warrants we will issue to them, or use an available exemption in order to legally issue them.

This prospectus covers the re-sale by the selling shareholders of the shares of our common stock that the selling shareholders may receive upon exercise of the underwriter warrants.

The selling shareholders may sell the common shares in the over-the-counter market or otherwise, at market prices prevailing at the time of sale, at prices related to the prevailing market prices, or at negotiated prices. In addition, the selling shareholders may sell some or all of their common shares through:

- o a block trade in which a broker-dealer may resell a portion of the block, as principal, in order to facilitate the transaction;

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- o purchases by a broker-dealer, as principal, and resale by the broker-dealer for its account; or
- o ordinary brokerage transactions and transactions in which a broker solicits purchasers.

When selling the common shares, the selling shareholders may enter into hedging transactions. For example, the selling shareholders may:

- o enter into transactions involving short sales of the common shares by broker-dealers;
- o sell common shares short themselves and redeliver such shares to close out their short positions;
- o enter into option or other types of transactions that require the selling shareholder to deliver common shares to a broker-dealer, who will then resell or transfer the common shares under this prospectus; or
- o loan or pledge the common shares to a broker-dealer, who may sell the loaned shares or, in the event of default, sell the pledged shares.

The selling shareholders may negotiate and pay broker-dealers commissions, discounts or concessions for their services. Broker-dealers engaged by the selling shareholders may allow other broker-dealers to participate in resales. However, the selling shareholders and any broker-dealers involved in the sale or resale of the common shares may qualify as "underwriters" within the meaning of the Section 2(a)(11) of the Securities Act of 1933 (the "1933 Act"). In addition, the broker-dealers' commissions, discounts or concession may qualify as underwriters' compensation under the 1933 Act. If the selling shareholders qualify as "underwriters," they will be subject to the prospectus delivery requirements of Section 5(b)(2) of the 1933 Act.

In addition to selling their common shares under this prospectus, the selling shareholders may:

- o agree to indemnify any broker-dealer or agent against certain liabilities related to the selling of the common shares, including liabilities arising under the 1933 Act;
- o transfer their common shares in other ways not involving market makers or established trading markets, including directly by gift, distribution, or other transfer; or
- o sell their common shares under Rule 144 of the 1933 Act rather than under this prospectus, if the transaction meets the requirements of Rule 144.

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LEGAL MATTERS

Certain legal matters with respect to the securities offered through this prospectus will be passed upon for us by Shumaker, Loop & Kendrick, LLP.

EXPERTS

The financial statements of Oragenics, Inc. at December 31, 2003, and for each

of the two years in the period ended December 31, 2003, appearing in this prospectus and registration statement have been audited by Ernst & Young LLP, independent registered certified public accounting firm, as set forth in their report which is incorporated herein by reference, and have been so incorporated in reliance upon such report given on the authority of such firm as experts in accounting and auditing.

WHERE YOU CAN FIND ADDITIONAL INFORMATION

Because we are subject to the informational requirements of the Exchange Act, we file reports, proxy statements and other information with the SEC. You may read and copy these reports, proxy statements and other information at the public reference facilities maintained by the SEC at Room 1024, 450 Fifth Street, N.W., Washington, D.C. 20549. You may also obtain copies of those materials at prescribed rates from the public reference section of the SEC at 450 Fifth Street, Washington, D.C. 20549. The public may obtain information on the operation of the public reference room by calling the SEC at (800) SEC-0330. In addition, we are required to file electronic versions of those materials with the SEC through the SEC's EDGAR system. The SEC maintains a web site at <http://www.sec.gov> that contains reports, proxy and information statements and other information regarding registrants that file electronically with the SEC.

We have filed with the SEC a post-effective amendment to our registration statement on SB-2 Form S-3 under the Securities Act with respect to the securities offered with this prospectus. This prospectus does not contain all of the information in the registration statement as allowed under the rules and regulations of the SEC. You should refer to the registration statement for further information with respect to us and our securities. Statements contained in this prospectus as to the contents of any contract or other document are not necessarily complete and, in each instance, we refer you to the copy of each contract or document filed as an exhibit to the registration statement. Copies of the registration statement, including exhibits, may be inspected without charge at the SEC's principal office in Washington, D.C., and you may obtain copies from this office upon payment of the fees prescribed by the SEC.

We will furnish without charge to each person to whom a copy of this prospectus is delivered, upon written or oral request, a copy of the information that has been incorporated by reference into this prospectus (except exhibits, unless they are specifically incorporated by reference into this prospectus). You should direct any requests for copies to: Oragenics, Inc., 12085 Research Drive, Alachua, Florida 32615, Attention: Investor Relations, Telephone: (386) 418-4018.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to incorporate by reference the information we file with them, which means that we can disclose important information to you by referring you to those documents. We incorporate by reference in this prospectus supplement the information contained in the following documents:

- o our annual report on Form 10-KSB for the fiscal year ended December 31, 2003, filed with the SEC on March 28, 2003;
- o our quarterly reports on Form 10-QSB for the quarters ended March 31, 2004 and June 30, 2004, filed with the SEC on May 7, 2004 and August 11, 2004, respectively;
- o our current reports on Form 8-K filed with the SEC on January 5, 2004, January 22, 2004, February 2, 2004, February 18, 2004, March 4, 2004, March 15, 2004, March 29, 2004, May 14, 2004, September 22, 2004, and September 29, 2004;
- o the description of our common stock contained in our registration statement on Form 8-A, No. 001-32188 filed with the SEC on May 19, 2004 under Section 12(b) of the Exchange Act, including any amendment or report filed for the purpose of updating such description; and

- o all documents that we file with the SEC under Sections 13(a), 13(c), 14 or 15 of the Exchange Act until all of the securities that we may offer with this prospectus and prospectus supplement are sold.

You may obtain copies of those documents from us, free of cost, by contacting us at the address or telephone number provided in "Where you can find more information" immediately above.

Information that we file later with the SEC and that is incorporated by reference into this prospectus will automatically update information contained in this prospectus or that was previously incorporated by reference into this prospectus. You will be deemed to have notice of all information incorporated by reference in this prospectus as if that information was included in this prospectus.

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ORAGENICS, INC.

OCTOBER __, 2004

YOU SHOULD RELY ONLY ON THE INFORMATION CONTAINED IN THIS PROSPECTUS. 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.

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 this offering, all of which are to be paid by the registrant, are as follows:

Registration Fee	\$	*
Alberta and British Columbia Securities Commissions and TSX Venture Exchange filing fees		--
American Stock Exchange Fees		
Accounting Fees and Expenses		25,000
Legal Fees and Expenses		40,000
Transfer Agent Fees		--
Warrant Agent Fees		--
Miscellaneous Expenses		15,000
TOTAL	\$	80,000

* Previously paid

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ITEM 26. RECENT SALES OF UNREGISTERED SECURITIES

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

<TABLE>

<CAPTION>

NAME AND ADDRESS	DATE	SHARES	CONSIDERATION	
			AVERAGE COST PER COMMON	
		AGGREGATE \$	SHARE \$	
<S>	<C>	<C>	<C>	<C>
Mento A. Sponis 4730 SW 103 Way Gainesville, FL 32608	11/30/2001 03/25/2002	756,000 [1] 488,592	70 [2] 122,148	.0000925 .25
Robert Zahradnik 161 Stone Ridge Road Franklin, MA 02038	07/15/1999 11/30/2001	270,000 [1] 486,000	25 45	.0000925 .0000925

Cornet Capital Corp.[3] 7225 Blenheim Street Vancouver, BC Canada V6N 1S2	03/25/2002	800,064	200,016 [4]	.25
Cleo Christine Allen 3504 West 11th Street Vancouver, BC Canada V6R 2K2	05/22/2002	50,000	40,000	.80
James Butler 109 Cutter Court Ponte Vedra Beach, FL 32082	05/14/2002	31,250	25,000	.80
Quickswood Ltd. The Jardine Building Fourth Floor 33-35 Reid Street Hamilton HM LX Bermuda	05/14/2002	125,000	100,000	.80
Ernest Mario 555 Byron Street #401 Palo Alto, CA 94301	05/14/2002	31,250	25,000	.80
Amelia Investments Ltd. #19 Watergardens-6 Gibraltar; via U.K.	05/23/2002	262,500	210,000	.80
Angel Investment Company Ltd. #19 Watergardens-6 Gibraltar; 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 former 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.

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We also issued options exercisable to purchase 756,000 shares of common stock at \$0.0000925 per share to Mento A. Sponis and options to purchase 486,000 shares of common stock at \$0.0000925 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.

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ITEM 27. EXHIBITS.

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

<TABLE>
<CAPTION>

INCORPORATED BY REFERENCE

EXHIBIT NUMBER	EXHIBIT DESCRIPTION	FORM	FILING FILE NO	FILED EXHIBIT	DATE	HEREWITH
1.1	Agency Agreement with Haywood Securities,	SB-2/A-3	333-100568	12	04/09/03	

	Inc.					
3.1	Articles of Incorporation	SB-2	333-100568	3.1	10/16/02	
3.2	Bylaws	SB-2	333-100568	3.2	10/16/02	
3.3	Amended Articles of Incorporation	SB-2	333-100568	3.3	10/16/02	
3.4	Amended Articles of Incorporation	SB-2	333-100568	3.4	10/16/02	
4.1	Specimen Stock Certificate	SB-2	333-100568	4.1	10/16/02	
4.4	Specimen underwriter's warrant certificate	SB-2	333-100568	4.4	10/16/02	
5.1	Opinion of Shumaker, Loop & Kendrick, LLP regarding legality of the securities being registered					
10.1	License Agreement	SB-2	333-100568	10.1	10/16/02	
10.2	Amendment to License Agreement	SB-2	333-100568	10.2	10/16/02	
10.3	Second Amendment to License Agreement	SB-2	333-100568	10.3	10/16/02	
10.4	Third Amendment to License Agreement	SB-2	333-100568	10.4	10/16/02	
10.5	License Agreement	SB-2	333-100568	10.5	10/16/02	
10.6	Amendment to License Agreement	SB-2	333-100568	10.6	10/16/02	
10.7	Second Amendment to License Agreement	SB-2	333-100568	10.7	10/16/02	
10.8	Equity Agreement	SB-2/A-2	333-100568	10.8	2/10/03	
10.11	First Amendment to Employment Agreement with Jeffrey D. Hillman	SB-2	333-100568	99.3	10/16/02	
10.14	Incubator License Agreement - Office Lease	SB-2	333-100568	99.5	10/16/02	
10.15	First Amendment to Incubator License Agreement	SB-2	333-100568	99.6	10/16/02	
10.16	Second Amendment to Incubator License Agreement	SB-2	333-100568	99.7	10/16/02	
10.17	Series A and B Warrant Indenture	SB-2/A-5	333-100568	10.17	12/23/02	
10.18	Renewal Term for Incubator License Agreement	SB-2	333-100568	99.8	10/16/02	
10.19	Escrow Agreement between our principals, ourselves and Computershare Trust Company	SB-2	333-100568	99.10	10/16/02	
10.20	Value Escrow Agreement between ourselves, the University of Florida Research Foundation, Inc. and Computershare Trust Company	SB-2	333-100568	99.11	10/16/02	
10.21	Pooling Agreement between our non-Principal shareholders and Haywood Securities Inc.	SB-2/A-3	333-100568	10.21	4/9/03	
10.22	Financing Agreement between ourselves and Cornet Capital Corp.	SB-2	333-100568	99.13	10/16/02	
10.23	First Amendment to Financing Agreement between ourselves and Cornet Capital Corp.	SB-2	333-100568	99.15	10/16/02	
10.24	Escrow Agreement between ourselves, Brian McAlister and Sutherland, Asbill and Brennan	SB-2	333-100568	99.14	10/16/02	

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EXHIBIT NUMBER	EXHIBIT DESCRIPTION	FILING FORM	FILED FILE NO	EXHIBIT	DATE	HEREWITH
10.25	First Amendment to Escrow Agreement between ourselves, Brian McAlister and Sutherland, Asbill and Brennan	SB-2/A-1	333-100568	10.25	12/23/02	
10.26	Stock Option Plan	SB-2	333-100568	99.16	10/16/02	
10.27	Transfer Agent, Registrar and Dividend Disbursing Agent Agreement for Common Stock	SB-2/A-3	333-100568	10.27	4/9/03	
10.28	Warrant Agreement and Registrar Agreement	SB-2/A-1	333-100568	10.28	12/23/02	
10.29	Registration Rights Agreements between ourselves and Cleo Christine Allan, James Butler, Quickwood Ltd., Ernest Mario, Amelia Investments Ltd. and Angel Investment Company Ltd.	SB-2/A-3	333-100568	10.29	4/9/03	
10.31	Proprietary Information Agreements between ourselves and Brian Anderson, Brian McAlister, Robert Zahradnik, Howard Kuramitsu, and Steven Projan	SB-2	333-100568	99.23	10/16/02	
10.32	Confidential Information Agreement between us and Paul Hassie	SB-2	333-100568	99.24	10/16/02	
10.34	Second Amendment to Financing Agreement between ourselves and Cornet Capital Corp.	SB-2/A-5	333-100568	10.34	5/5/03	
10.36	Fourth Amendment to License Agreements	SB-2/A-3	333-100568	10.36	4/9/03	
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 the initial public offering	SB-2/A-3	333-100568	10.37	4/9/03	
10.38	Agreement between Dr. Jeffrey D. Hillman and ourselves under which Dr. Hillman has agreed not to seek repayment of certain loans from the proceeds of the initial public offering	SB-2/A-3	333-100568	10.38	4/9/03	
10.39	Promissory Note with principal amount of \$100,000 payable to Cornet Capital Corp.	SB-2/A-3	333-100568	10.39	4/9/03	
10.40	Second Amendment to Escrow Agreement	SB-2/A-3	333-100568	10.40	4/9/03	
10.41	Promissory Note with principal amount of \$75,000 payable to Cornet Capital Corp.	SB-2/A-5	333-100568	10.41	5/5/03	
10.42	Employment agreement of Mento Sponis	10-KSB	000-50614	10.42	3/17/04	
10.43	Employment agreement of Jeffrey D. Hillman	10-KSB	000-50614	10.43	3/17/04	
10.44	Employment agreement of Paul Hassie	10-KSB	000-50614	10.44	3/17/04	
10.45	Consultancy Agreement between us and Health Decisions, Inc.	10-KSB	000-50614	10.45	3/17/04	
10.46	Memorandum of Agreement - License agreement between iviGene Corporation and Oragenics, Inc.	10-QSB	000-50614	10.1	8/11/04	
10.47	Amendment No. 1 to 2002 Stock Option and Incentive Plan.	10-QSB	000-50614	10.2	8/11/04	
23.1	Consent of Ernst & Young LLP					X

23.2	Consent of Shumaker, Loop & Kendrick, LLP				X
24.	Power of Attorney	SB-2	333-100568	N/A	10/16/02

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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.

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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 amendment on Form S-3 to its Form SB-2 Registration Statement and has duly caused this amendment to be signed on its behalf by the undersigned, thereunto duly authorized, in Alachua, Florida, on this 15th day of October, 2004

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

Pursuant to the requirements of the Securities Act of 1933, this amendment on Form S-3 to the Form SB-2 Registration Statement has been signed by the following persons in the capacities and on the dates indicated:

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SIGNATURE	TITLE	DATE
-----	-----	----
<S>	<C>	<C>
/s/ Mento A. Soponis ----- Mento A. Soponis	President, Principal Executive Officer and a Member of the Board of Directors	October 15, 2004
/s/ Paul A. Hassie * ----- Paul A. Hassie	Principal Accounting Officer and Chief Financial Officer	October 15, 2004
/s/ Robert Zahradnik * ----- Robert Zahradnik	Member of the Board of Directors	October 15, 2004
/s/ Jeffery D. Hillman * ----- Jeffrey D. Hillman	Member of the Board of Directors	October 15, 2004
----- Brian Anderson	Member of the Board of Directors	October 15, 2004
----- David J. Gury	Member of the Board of Directors	October 15, 2004
*/s/ Mento A. Soponis ----- Mento A. Soponis, As Attorney-in-fact		October 15, 2004

</TABLE>

EXHIBIT 5.1

SHUMAKER, LOOP & KENDRICK, LLP
ATTORNEYS AT LAW
BANK OF AMERICA PLAZA, SUITE 2800
101 EAST KENNEDY BOULEVARD
TAMPA, FLORIDA 33602
(813) 229-7600
FAX (813) 229-1660

MAILING ADDRESS:
POST OFFICE BOX 172609
TAMPA, FLORIDA 33672-0609
October 15, 2004

Oragenics, Inc.
12085 Research Drive
Alachua, Florida 32615

Re: Post-Effective Amendment to
Form SB-2 Registration Statement (SEC No. 333-100568)

Ladies and Gentlemen:

We have acted as counsel to Oragenics, Inc., a Florida corporation (the "Company"), in connection with the filing of a Post-Effective Amendment on Form SB-2 (the "Registration Statement") filed with the Securities and Exchange Commission (the "Commission") pursuant to the Securities Act of 1933, as amended (the "Act"), for the registration of resale of shares of common stock, par value \$.001 per share (the "Securities") by selling stockholders which securities will be issued upon the exercise of certain warrants held by the selling stockholders (the "Warrants").

We have participated in the preparation of the Registration Statement and have reviewed the originals or copies certified or otherwise identified to our satisfaction of all such corporate records of the Company and such other instruments and other certificates of public officials, officers and representatives of the Company and such other persons, and we have made such investigations of law, as we have deemed appropriate as a basis for the opinions expressed below.

In arriving at the opinions expressed below, we have assumed the authenticity of all documents submitted to us as originals and the conformity to the originals of all documents submitted to us as copies. In addition, we have assumed and have not verified the accuracy as to factual matters of each document we have reviewed.

Based on the foregoing, and subject to the further assumptions and qualifications set forth below, it is our opinion that the Securities have been duly authorized and, when issued, paid for and upon exercise of the Warrants by the selling stockholders in accordance with terms of the Warrants will be validly issued, fully paid, and non-assessable.

The foregoing opinion is limited to the Business Corporation Act of the State of Florida

We hereby consent to the filing of this opinion as an exhibit to the Registration Statement and to the reference to this firm under the heading "Legal Matters" in the Registration Statement and the related prospectus included in the Registration Statement. In giving such consent, we do not thereby admit that we are "experts" within the meaning of the Act or the rules and regulations of the Commission issued thereunder with respect to any part of the Registration Statement, including this exhibit.

Very truly yours,

/s/ Shumaker, Loop & Kendrick, LLP

EXHIBIT 23.1

CONSENT OF INDEPENDENT REGISTERED CERTIFIED PUBLIC ACCOUNTING FIRM

We consent to the reference to our firm under the captions "Experts" and "Selected Financial Data" in the Post Effective Amendment No. 1 on Form S-3 to the Registration Statement on Form SB-2 (No. 333-100568) and related Prospectus of Oragenics, Inc. for the registration of 297,724 shares of its common stock issuable upon exercise of warrants and to the incorporation by reference therein of our report dated January 30, 2004, with respect to the financial statements of Oragenics, Inc. included in its Annual Report (Form 10-KSB) for the year ended December 31, 2003, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

Tampa, Florida
October 15, 2004