Zacks Small-Cap Research

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OXIS International, Inc. (OXIS-OTC)

OXIS: Waiting For ErgoFlex To Take Off…

FULL REPORT

We are intrigued by the potential sales opportunity ERGO represents. Our research has shown that, in the past, first-mover or sole-source advantage in a new consumer health product has the potential to be very profitable. Products like Ester-C and Emergen-C, which offer fewer antioxidants and health benefits than ErgoFlex, both generate sales over $100 million. And products such as JuicePlus+ and MonaVie clearly demonstrate the power of direct marketing and an enormous desire by U.S. consumers to seek-out health supplements and antioxidant products. JuicePlus+ and MovaVie combined generate annual revenues over $1 billion. If ErgoFlex can capture just 5% of this market, it would generate sales over $50 million. Oxis International's current market capitalization is just $13 million.

Current Recommendation	**Neutral**
Prior Recommendation	N/A
Date of Last Change	01/24/2011
Current Price (06/21/11)	$0.09
Target Price	**$0.20**

SUMMARY DATA

52-Week High	**$0.19**
52-Week Low	**$0.08**
One-Year Return (%)	**-37.46**
Beta	**0.88**
Average Daily Volume (sh)	**161,923**
Shares Outstanding (mil)	**191**
Market Capitalization ($mil)	**$16**
Short Interest Ratio (days)	**0.08**
Institutional Ownership (%)	**0**
Insider Ownership (%)	**58**
Annual Cash Dividend	**$0.00**
Dividend Yield (%)	**0.00**
5-Yr. Historical Growth Rates	
Sales (%)	**N/A**
Earnings Per Share (%)	**N/A**
Dividend (%)	**N/A**
P/E using TTM EPS	**N/A**
P/E using 2010 Estimate	**N/A**
P/E using 2011 Estimate	**N/A**
Zacks Rank	**N/A**

Risk Level	**Above Average**
Type of Stock	**Small-Growth**
Industry	**Med-Biomed/Gene**

ZACKS ESTIMATES

Revenue
(In millions of $)

	Q1 (Mar)	Q2 (Jun)	Q3 (Sep)	Q4 (Dec)	Year (Dec)
2010	0 A	0 A	0 A	0.0 A	0.0 A
2011	0.0 A	0.1 E	0.4 E	0.6 E	1.1 E
2012					6.3 E
2013					10.6 E

Earnings per Share
(EPS is operating earnings before non-recurring items)

	Q1 (Mar)	Q2 (Jun)	Q3 (Sep)	Q4 (Dec)	Year (Dec)
2010	-$0.03 A	$0.00 A	-$0.01 A	-$0.00 E	-$0.03 E
2011	-$0.01 A	-$0.00 E	-$0.00 E	-$0.00 E	-$0.02 E
2012					$0.01 E
2013					$0.02 E

Zacks Projected EPS Growth Rate - Next 4 Years % **N/A**

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WHAT'S NEW

Investment Thesis - OXIS International

We are intrigued by the potential opportunity ERGO represents. Our research has shown that, in the past, first-mover or sole-source advantage in a new consumer health product has the potential to be very profitable. Products like Ester-C and Emergen-C, which offer fewer antioxidants and health benefits than ErgoFlex, both generate sales over $100 million. And products such as JuicePlus+ and MonaVie clearly demonstrate the power of direct marketing and an enormous desire by U.S. consumers to seek-out health supplements and antioxidant products. JuicePlus+ and MovaVie combined generate annual revenues over $1 billion. If ErgoFlex can capture just 5% of this market, it would generate sales over $50 million. Oxis International's current market capitalization is just $13 million.

…What Makes Oxis a Buy…

We're big fans of the Oxis International business model. The company is engaging a low-cost, direct sales model with enormous upside. As the sole provider to a potentially breakthrough "super-antioxidant" product, the revenue potential from ErgoFlex and next-generation ERGO products is significant. But before we recommend the shares, two things need to happen.

Firstly, we need to get more comfortable with the sales trajectory. Oxis just launched ErgoFlex in December 2010; and ErgoFlex is just the first in a series of commercial products planned by Oxis International. But sales in the first quarter were only $20,000, with cost of sales of $25,000. Management noted an impressive response rate from the 70k direct mailings sent out in the first quarter, but we are waiting for that to turn into reported sales. We have yet to hear about plans for an additional mailing in the second quarter. Cash is tight, but Oxis needs to market ErgoFlex if sales are to pick up. Right now our financial model assumes things improve in the second half of the year, with an estimated 500k direct mailings to go out starting in the third quarter. This should generate revenues of around $1 million in 2011. With help from engage:BDR, we think this forecast is achievable, but we'd like a few more data points before we started to really get aggressive with our model. Secondly, we need to get more comfortable with the cash position. Oxis held only $1k in cash as of March 31, 2011. Management is currently working off a $750k line of credit. With an estimated burn rate in 2011 of $1.5 million, the company must find a way to secure long-term funding beyond the existing line of credit. Before we recommended the shares, we need to see a financing strategy in place to fund operations until cash flow positive.

…Target is $0.20…

We have employed three separate valuation models in our analysis: Price-to-Sales, Price-to-Earnings, and Discounted Cash Flow. All three metrics show the stock under-valued. today, with a low of $0.17 (P/S) to a high of $0.23 (DCF). The average of these three targets is roughly $0.20.

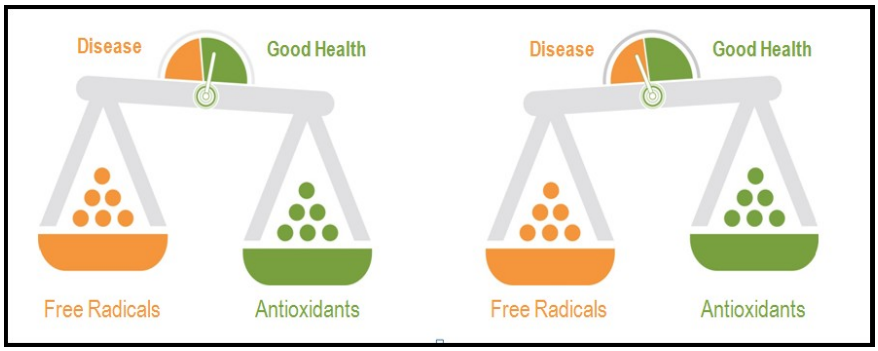
OVERVIEW

OXIS International, Inc. is developing multiple proprietary, natural substance products to treat and prevent diseases of oxidative stress and inflammation that are associated with damage from free radicals and reactive oxygen species (ROS). The Company's product portfolio includes dietary supplements, functional foods and beverages, skin care and other personal care products, and animal health products. Specifically, Oxis is emphasizing the unique properties of L-Ergothioneine (ERGO), a highly potent, patent-protected and versatile antioxidant. OXIS recently signed a $1 million strategic financing agreement with its primary product development and manufacturing partner, Gemini Pharmaceuticals, and launched its first product, ErgoFlex, for joint pain relief and overall joint health and announced a joint venture with engage:BDR, a global leader in online sales and marketing.



Oxidative Stress

Oxidative stress represents an imbalance between production and manifestation of reactive oxygen species (ROS), and the body's inability to detoxify (remove) these potentially harmful reactive intermediates (free radicals) that cause damage to our cells, proteins, lipids, and DNA. Quite simply, oxidative stress occurs when antioxidants, produced naturally or ingested, can no longer control the presents of free radicals. This imbalance can further inhibit the body's ability to repair itself in the presents of increased production of oxidizing species or significant decrease in the capability of antioxidant defenses. The effects of oxidative stress depend upon the magnitude of the imbalance, with a cells typically being able to overcome small perturbations. However, in more severe oxidative stress cases, cell apoptosis and necrosis can occur.



- Reactive Oxygen Species: ROS, also known as oxygen radicals, are molecules or ions containing oxygen with unpaired valence shell electrons that cause them to be highly chemically-reactive. ROS molecules can include singlet oxygen, superoxides, and peroxides.

  → Single Oxygen: Single (unpaired) oxygen ion = $O_{\cdot}$
  → Superoxides: One-electron reduction state of O_2 = $O_{2\cdot}$
  → Peroxides: Two-electron reduction state = H_2O_2

...Internal Production…

Free radicals are a natural byproduct of the normal metabolism of oxygen. A source of reactive oxygen species under normal conditions in humans is the leakage of activated oxygen from mitochondria during oxidative phosphorylation. Enzyme activity also contributes meaningfully to oxidant production. Enzymes capable of producing superoxide are xanthine oxidase, NADPH oxidases and cytochromes P450. Hydrogen peroxide is produced by a wide variety of enzymes including several oxidases. The body keeps the relative level of ROS concentration intact by producing antioxidants. Enzymes that produce antioxidants are superoxide dismutase (SOD), catalase, glutathione peroxidase, paraoxonase, and aldehyde dehydrogenases.

ROS play an important role in cellular signaling and apoptosis (programmed cell death). Free radicals can also play a positive role in host defense against invading pathogens such as bacteria and viruses, as well as in ion transport systems. The immune system uses the lethal effects of oxidants by making production of oxidizing species a central part of its mechanism of killing pathogens; with activated phagocytes producing both ROS and reactive nitrogen species (RNS). Although the use of these highly reactive compounds causes damage to host tissues, this "carpet bombing" effect prevents a pathogen from escaping this initial form of an immune response.

Platelets involved in wound repair and blood homeostasis release ROS to recruit additional platelets to sites of injury. These also provide a link to the adaptive immune system via the recruitment of leukocytes. Reactive oxygen species are also implicated in cellular activity to a variety of inflammatory responses and ischaemic injury. As noted above, these internal sources of ROS are kept in balance by complex cellular signaling.

...Why The Imbalance Occurs…

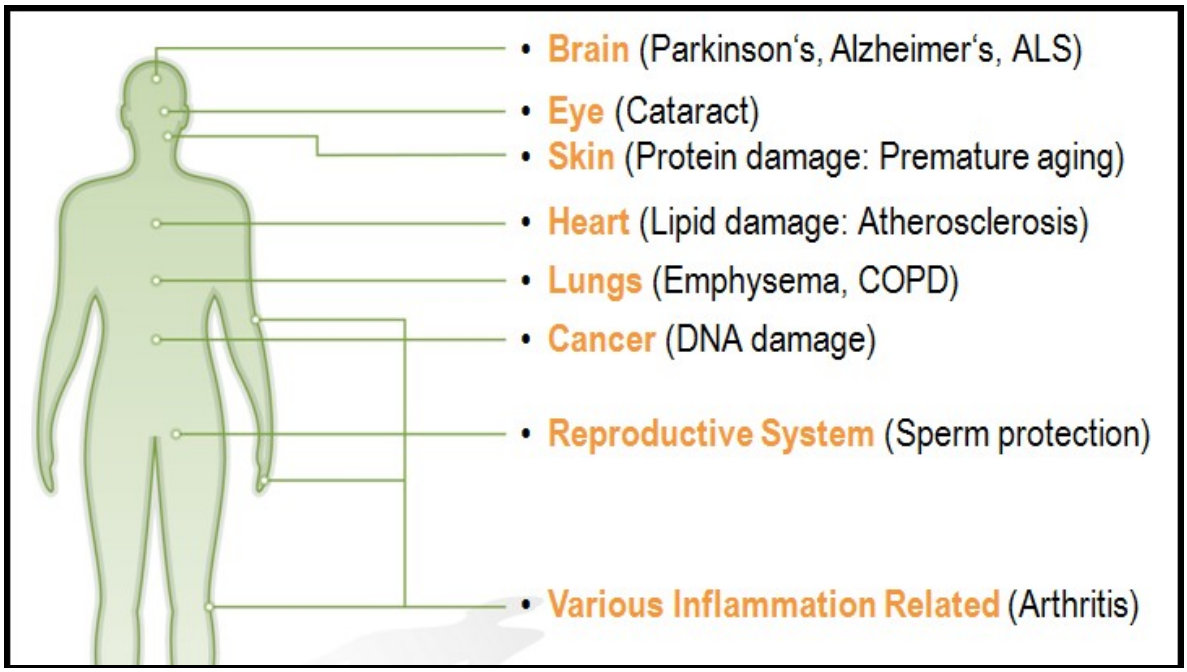
The danger to free radicals in the body occurs when the balance becomes out of whack, and the number of ROS outweighs the antioxidants designed to keep them under control. This imbalance can occur from both internal and external forces that cause an overproduction of free radicals. It also increases with age. In short, the older we get, the more free radicals we produce.

Over-production of free radicals in the body is produced by increased stress. Things like smoking tobacco, drinking alcohol, over exposure to direct sunlight (UV radiation), smog, and pollution are significant contributors to increased stress on the body. Poor diet is a major contributor to high levels of oxidative stress. This includes eating foods high in fats and sugar, as well as dehydration and malnutrition. Exposure to chemicals like pesticides, herbicides, and insecticides may also contribute to high free radical production. Metal toxicity can compound the effects of the imbalance. Metals such as iron, copper, chromium, and cobalt are capable of redox cycling in which a single electron may be accepted or donated. This action catalyzes reactions that produce reactive radicals and can produce ROS.

…The Potential Damage…

Oxidative damage initiated by reactive oxygen species is a major contributor to the functional decline that is characteristic of aging. The free-radical theory of aging (FRTA) states that organisms age because cells accumulate free radical damage over time. High levels of free radicals can damage DNA, RNA, and proteins inside the body. This can lead to things such as cancer, inflammatory diseases, and infertility. These reactive molecules contribute to tissue damage following injury and inflammation. Free radicals can interfere in the cell signaling process and potential lead to disease such as arthritis and metabolic disorders.

Oxidative stress is also suspected to play a key role in the development of neurodegenerative diseases including Lou Gehrig's disease (ALS), Parkinson's disease, Alzheimer's disease, and Huntington's disease. Oxidative stress is thought to be linked to certain cardiovascular disease, since oxidation of LDL in the vascular endothelium is a precursor to plaque formation. Oxidative stress also plays a role in the ischemic cascade due to oxygen reperfusion injury following hypoxia. This cascade includes both strokes and heart attacks. Oxidative stress has also been implicated in chronic fatigue syndrome by causing adenosine triphosphate (ATP) depletion syndrome.



Antioxidants To The Rescue

Antioxidants are molecules that keep free radicals and other ROS in check. An antioxidant is capable of inhibiting the oxidation (transfer of electrons) of other molecules, or blocking the free radical chain reaction that causes damage to DNA, RNA, and proteins. Antioxidants terminate these damaging cascades by removing free radical intermediates, and inhibit oxidation reactions by being oxidized themselves (becoming a reducing agent). Generally speaking, we are in good health when antioxidants out-number free radicals. Antioxidants may be synthesized in the body or obtained from the food or dietary supplements. Antioxidants are classified into two broad divisions, depending on whether they are soluble in water (hydrophilic) or in lipids (hydrophobic). In general, water-soluble antioxidants react with oxidants in the cell cytosol and the blood plasma, while lipid-soluble antioxidants protect cell membranes from lipid peroxidation.

The most common antioxidants produced in the body or supplemented through diet are ascorbic acid (vitamin C), uric acid, glutathione, melatonin, carotenes, and α-tocopherol (vitamin E).

- Ascorbic acid: Also known as vitamin C, ascorbic acid is a monosaccharide oxidation-reduction (redox) catalyst found in both animals and plants. It is redox catalyst which can reduce, and thereby neutralize, reactive oxygen species such as hydrogen peroxide. Humans lack the enzyme necessary to produce ascorbic acid, and therefore must obtain it from diet or supplements. In addition to its direct antioxidant effects, ascorbic acid is also a substrate for the redox enzyme ascorbate peroxidase, which is important in stress resistance in plants.

- Uric acid: Uric acid is produced when the body breaks down purine nucleotides, and provides about half of the total antioxidant capacity of human serum. However, an overabundance of uric acid in the body causes gout. The effects of uric acid in conditions such as stroke and heart attacks are still not well understood, with some studies linking higher levels of uric acid with increased mortality. In humans, about 70% of daily uric acid disposal occurs via the kidneys. Impaired renal excretion can lead to hyperuricemia

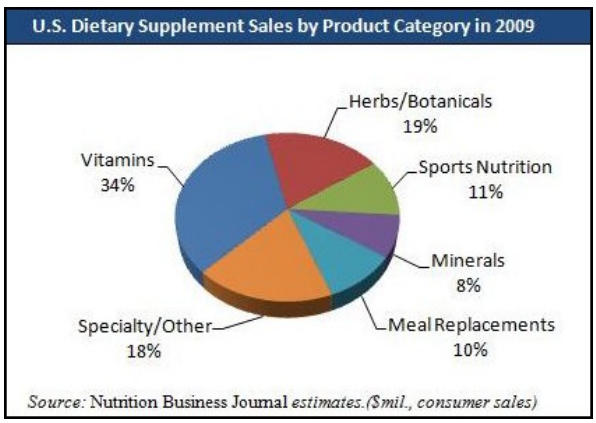
- Glutathione: Glutathione is cysteine-containing peptide found in most aerobic organisms. Humans can synthesize glutathione from amino acids. The antioxidant properties stem from the reducing and oxidizing ability of its cysteine moiety. Because of this central role in maintaining the cell's redox state, glutathione is one of the most important cellular antioxidants.

- Melatonin: Unlike conventional antioxidants such as vitamins C and E and glutathione, Melatonin is both produced in the human body and is acquired through diet. It is a powerful antioxidant that easily crosses cell membranes and the blood-brain barrier. Plus, melatonin does not undergo redox cycling (repeated reduction and oxidation). It is referred to as a terminal (or suicidal) antioxidant, because it forms several stable end-products upon reacting with free radicals. Thus, melatonin does not act as a potential pro-oxidant.

- Vitamin E: Vitamin E is the collective name for a set of eight related tocopherols and tocotrienols, each with varying bioavailability. These are fat-soluble vitamins with antioxidant properties; among the most important of which is α-tocopherol due to its role in protecting lipid membranes from oxidation and in cell signaling. The functions of the other forms of vitamin E are less understood, although γ-tocopherol is a nucleophile that may react with electrophilic mutagens, and tocotrienols may be important in protecting neurons from damage.

…Supplements…

Dietary supplements are a multi-billion dollar industry. According to the Nutrition Business Journal, sales of dietary supplements totaled $27 billion in the U.S. in 2010. It is a rapidly growing market driven by an aging U.S. population, growing acceptance of alternative medicines and nutraceutical products, and clinical studies documenting the positive benefits of certain supplements. The market is highly fragmented however, with over 2,500 vitamins and related products available, and no company controlling over 10% market share. Globally, we estimate the dietary supplements market had sales of $45 billion in 2010.

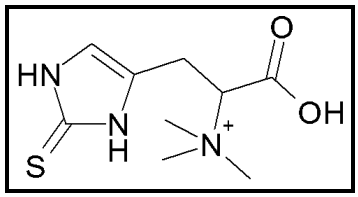


These sales include vitamins, minerals, herbs/botanicals, fibers, fatty-acids, and meal and sports-related nutrition products. Supplements containing vitamins or dietary minerals are highly regulated, and included as a category of food in the Codex Alimentarius, a collection of internationally recognized standards, codes of practice, guidelines and recommendations relating to foods, food production and food safety. These texts are drawn up by an independent organization, and sponsored by the Food and Agriculture Organization of the United Nations (FAO) and the World Health Organization (WHO). The U.S. Food and Drug Administration (FDA) regulates dietary supplement products under the Dietary Supplement Health and Education Act of 1994.

Pure antioxidant supplements are an estimated $2 billion market in the U.S. Globally this is a $5+ billion market. Consumers seek-out antioxidant claims in vitamins, minerals, enzymes, and herbs, and products such as grape seed, pine bark, ginkgo biloba, selenium, zinc, copper, and many others. These products are generally recognized as safe (GRAS).

ERGO – The Super Antioxidant

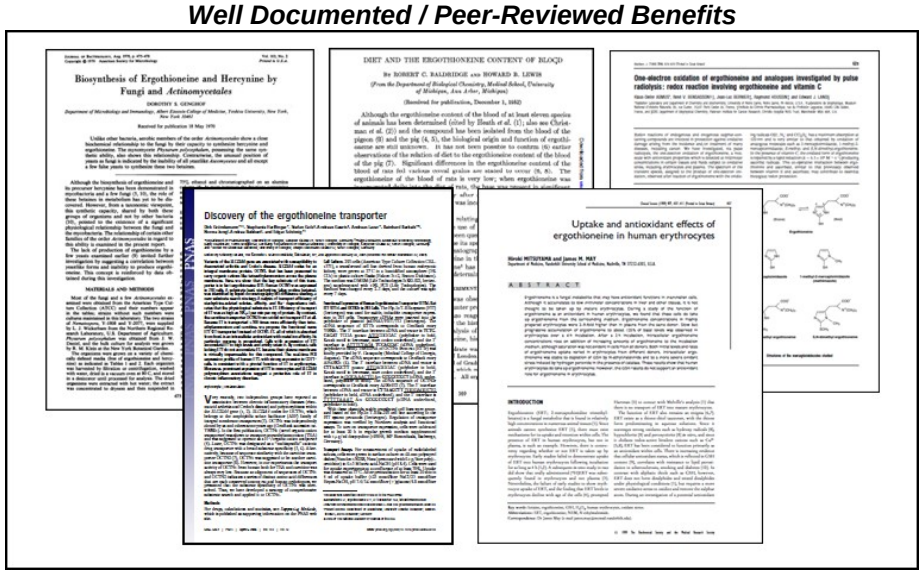
Ergothioneine (ERGO) is a highly potent, naturally occurring amino-acid, multifaceted antioxidant produced by microbes, most notably actinobacteria and filamentous fungi. It is water-soluble and most commonly found in various species of mushrooms and grapes, as well as in oat bran, certain meats, black beans, and dairy products.



ERGO cannot be made internally by human cells, although humans do possess the ability to concentrate and store ERGO in specific locations for when oxidative stress is elevated. ERGO is highly absorbed from ingestion, taken up from the gut and concentrated in tissues by a specific transporter called ETT (ergothioneine transporter, SLC22A4). In the human body, the largest amounts of ergothioneine are found in erythrocytes, eye lens and semen, and it is also present in the skin.

Our research turned up significant scientific research supporting the benefits of ERGO. In fact, our search on the U.S. National Library of Medicine website, a division of the U.S. National Institutes of Health, turned up 335 articles citing ergothioneine and its potential clinical and medical benefits.

Well Documented / Peer-Reviewed Benefits



Some of these well-documented benefits include:

- ✓ Conserves other antioxidants, including Vitamin C, Vitamin E and Glutathione (GSH)
- ✓ Increases respiration and oxidation of fat
- ✓ Protects against damage from ultraviolet radiation
- ✓ Protects mitochondrial DNA from free radical damage
- ✓ Directly scavenges certain oxygen and nitrogen free radicals and pro-oxidants
- ✓ Protects against damage from neuro-toxins that may be associated with cognitive decline
- ✓ Protects red blood cells – study underway to further demonstrate beneficial effects

Foods rich in ergothioneine include liver, kidney, black beans, red beans and oat bran, with the highest levels in bolete and oyster mushrooms. Levels can be variable, even within species and some tissues can contain much more than others. However, the concentrations found in these founds is far too low to make it possible to ingest therapeutic levels of ERGO. It is also not commercially practical to extract ERGO from natural sources such as actinobacteria or fungi because the concentrations are too low.

Oxis Opportunity

Oxis has developed a process to synthesize commercial quantities of ERGO in a highly soluble form suitable for use in combination with other therapeutics and botanicals, and in a wide variety of food, beverages, lotions and creams. The company has struck a multi-year relationship with a manufacturer, Gemini Pharmaceuticals, producing ERGO according to a patented, proprietary process. The intellectual property includes three patents and two patent pending applications that cover the synthesis of pure ERGO and the protective effect of ERGO on mitochondria and other critical body structures and functions. As part of the alliance, Gemini purchased 1.67 million shares of Oxis and offered $750k credit facility. Oxis holds 12 U.S. patents with 7 additional patents pending; these address the protective effect of ergothioneine on mitochondria, ERGO manufacturing processes, and neuroprotectant methods and composition of ERGO. The company also recently (September 2010) resolved a patent dispute with the Estée Lauder that provided Oxis with full title to two patents (USPTO No. 6,103,746 & 6,479,533). Oxis also recently acquired rights to a patent relating to use of ERGO as a primary preservative for cell and tissue cultures.

Oxis is currently conducting its own safety and efficacy studies on ERGO, and is also preparing a self-affirmation petition to obtain the FDA's designation of ERGO as Generally Recognized as Safe (GRAS). We expect this filing to take place in April 2011. In August 2010, the company announced that an Oxis sponsored 12-patient safety study of ergothioneine was published online by the prestigious peer reviewed journal, Toxicology. Ames test data from the study, conducted by researchers from the American Institute of Biomedical Research (Puyallup, WA) and Toxi-Coop Zrt. (Budapest, Hungary), demonstrated the absence of any mutagenic effect associated with ergothioneine. The study will be in published shortly in a special nutraceutical issue of the journal. We expect the FDA to respond with a "no objection" letter to the GRAS approval later this summer.

Oxis plans to conduct larger, randomized, double-blind, safety and efficacy studies in human subjects later this year. We note that these sorts of clinical studies are not required for marketing supplements or obtaining GRAS approval. However, this type of clinical data that Oxis plans to generate will turn into a huge marketing advantage for the company once published. As noted above, supplements containing vitamins or dietary minerals are highly regulated industry from a safety standpoint, but the majority of these supplements lack real clinical data to support the efficacy claims. Oxis can leapfrog to the head of the pack with ERGO by generating real clinical data to back up its marketing message.

ErgoFlex



In December 2010, Oxis International launched ErgoFlex, a unique dietary supplement for the relief of joint pain. ErgoFlex is the first in a series of commercial products planned by Oxis International. ErgoFlex is the only joint health complex containing ergothioneine (ERGO). The product is specifically formulated to help the body fight the pain of joint inflammation and maintain optimal joint health. More than 60 million Americans suffer from osteoarthritis and joint pain. The majority of these suffers are taking traditional pain medications that do little to solve the underlying problem of the pain and discomfort. ErgoFlex offers an easy-to-swallow, natural nutraceutical option to maintain joint health and treat the underlying cause of the joint pain and inflammation.

Besides ergothioneine, the patented ErgoFlex formula includes turmeric, cat's claw, acai berry, white willow bark, hyaluronic acid, type II collagen, glucosamine, vitamin C, and BioPerine.

- Turmeric has been used in traditional Chinese medicine for thousands of years to relieve joint pain. It complements ergothioneine by reducing the body's production of cytokines (inflammation producing proteins that form as a result of oxidative stress).
- Cat's claw (quinovic acid glycoside) is another traditional natural compound used to reduce inflammation.
- Acai berry is a powerful antioxidant shown in clinical studies to reduce the formation of free radicals.
- White willow bark (Salix alba var) has been used for thousands of years throughout China and Europe to reduce inflammation and fever. The active extract of white willow bark is salicin. Salicylic acid (aspirin) is a chemical derivative of salicin.
- Glucosamine sulfate is a building block of cartilage.
- Vitamin C is a powerful antioxidant critical for the production of collagen and synovial fluid.
- BioPerine is a proprietary black pepper extract shown to increase the bioavailability of nutritional compounds.

The proprietary formula is directed at optimizing mitochondrial function and improving overall energy, supporting brain health and maintaining normal vision. ErgoFlex is designed to target and relieve the causes of oxidative stress, which often times is the underlying cause of joint ailments.

As the sole-source provider of commercial ergothioneine, Oxis is well-positioned to take advantage of a growing nutraceutical and cosmeceutical industry. Oxis has filed a patent application titled "Methods and Compositions Using Ergothioneine to Treat a Variety of Health Related Factors" with the U.S. Patent and Trademark Office (USPTO). Specifically, the application relates to the use of ergothioneine compositions containing one or more additional nutraceutical compounds to improve a variety of health related factors, including, but not limited to, brain health, joint health, eye health, mitochondrial optimization / improvement and to reduce inflammation and pain. The application also includes information and data from several clinical and animal studies examining ergothioneine's safety profile and benefits relating to health issues associated with oxidative stress.

In the future, we expect Oxis to expand the intellectual property filings around ergothioneine to include new combinations, as well as new formulations into foods, beverages, creams and lotions. We see a huge marketing opportunity for the company as the sole-source provider of commercial grade ergothioneine.

…Favorable Data…

In January 2011, Oxis announced highly favorable final results from an initial clinical study to assess the beneficial effects of its patent-pending ErgoFlex joint health formula. The study included 12 subjects taking **ErgoFlex** at the recommended dose of two capsules per-day for six weeks, followed by a six-week washout period. At study start, the participants exhibited mild-to-moderate chronic pain affecting range of motion in several areas, including neck, shoulders, arms, lower back, hips and knees. The participants also had not consumed other joint relief supplements or juices with high antioxidant content for a period of two months prior to study intake.

Subjects were examined in the lab at study start (day 0) and at weeks one, six and 12; in addition, questionnaires were conducted weekly via phone to monitor health changes. Each subject was evaluated using 27 distinct range-of-motion measurements conducted on the major areas of discomfort. The assessments were performed by Dr. David Ager, DC at Cascade Spine and Rehabilitation clinic, using the J-Tech dual digital inclinometry. Specifically, the study found that reduction of pain was statistically significant after as little as one week of ErgoFlex use. Similar improvements were seen with improved and/or pain-free range of motion. Benefits continued during the six weeks subjects took ErgoFlex, and for some the benefits persisted during the subsequent six-week washout period. All 12 subjects completed the 12-week study.

Based on the results from this initial trial, Oxis plans to design and implement a placebo-controlled, randomized clinical trial with ErgoFlex. We believe this data, along with the above patent application, will help supports the recent launch of ErgoFlex.

…Smart Marketing…

ErgoFlex initially is being marketed through a highly targeted direct mail campaign, a channel with proven success for generating sales of dietary supplements. So far the response has been outstanding. The company sent out roughly 70k mailings in the first tranche of the campaign in December 2010. The response rate was impressive at 5%, including several multi-month orders and subsequent re-orders, but much of this was deferred recognition. We are still waiting to see if the requests placed from the first direct mailing actual turn into confirmed orders. Typical response rates to direct mail campaigns are around 1-2%. Oxis plans a second tranche with a target of 200k mailings in the next few months. For all of 2011, we expect Oxis to send out over 500k mailings.

In March 2011, Oxis announced it has formed a joint venture (JV) with leading online marketer engage:BDR to promote, market and sell a number of Oxis planned health and nutrition products, with an initial focus on ErgoFlex. We expect that engage:BDR will provide a full range of “turnkey” online marketing services to the joint venture, including developing brand strategy, the design of all digital media and interfaces, online media planning and buying, leveraging and integrating social media, and customer analysis. Engage:BDR offers both premium (placement-specific) marketing solutions and the ability to distribute campaigns through its own display platforms and channels. Oxis contributed $1.5 million to form the JV with engage:BDR. The company received 100% of the payout from the JV until the $1.5 million has been recouped, then splits the products 65/35 in the future. We see engage:BDR as an ideal JV partner for the development and execution of a direct-to-consumer marketing strategy for Oxis. This should help drive uptake for ErgoFlex in the coming months.

Oxis plans to add other direct-to-consumer channels such as Internet sales, TV and radio infomercials, and multi-level marketing as ErgoFlex and future products under the Oxis ERGO brand are established and demand grows. ErgoFlex is already available online through two “infomercial-like” websites: www.helpyourjointsnow.com and www.getergonow.com. Compared with traditional retail channels, direct-to-consumer sales offer significantly higher margins and a potentially more rapid entry into the $110 billion anti-aging market. ErgoFlex is available in 60-capsule (1-month supply) containers at a retail price of $39.95. The price compares favorability to teir-2 co-pays for drugs like Celebrex and Vimovo for joint-pain / arthritis. We think ErgoFlex could post sales of $1 million in 2011, with the potential to achieve sales of $15 million by 2015.



…Continue To Highlight ERGO…

Oxis market strategy includes developing proprietary foods, beverages, lotions and creams, as well as engaging joint venture partners and licensees for additional products and markets around the ERGO franchise. GRAS approval should open the door to use of ERGO in nutritional and wellness products, including dietary supplements, bars, powders, energy drinks, and shots. Personal care products include potential anti-aging or sun protection lotions, or skin care creams for use following surgery or pregnancy. In time, we expect management may seek to expand its reach with direct-to-physician products and retail outlets.

To accomplish this goal, management must continue to build the brand awareness around ERGO. On July 15h, 2011, Oxis plans to host the First World Congress on Ergothioneine, to be held at the University of California Los Angeles (UCLA) in conjunction with the Gerontology Research Group. Management expects this first ever gathering of world experts in the fields of oxidative stress, healthy aging and chronic disease prevention and management will feature presentations by members of Oxis' "Blue Ribbon" Science Advisory Board (SAB) that will focus on the unique properties and potential benefits of Ergothioneine as they relate to their specific areas of expertise. In total, more than two dozen presentations will be made by leading researchers and clinicians in the fields of nutrition, age management and oxidative stress.

- Dr. Okezie Aruoma, President of the Oxis SAB and founding faculty member of the Tuoro School of Pharmacy, will present the latest research on the biochemistry of Ergothioneine and its relationship to key chronic disease states, including diabetes, cardiovascular disease, cancer and arthritis.

- Dr. John Repine, Director of the Webb-Waring Institute at the University of Colorado, a leading center for the study of oxidative stress related conditions, will present the latest clinical research regarding the use of powerful new antioxidants, including Ergothioneine, in developing novel approaches to prevention and treatment.

- Dr. Steven Coles, MD, PhD, a world authority on healthy aging and extreme longevity will present the latest related findings in these increasingly important areas of research. Dr. Coles is currently with the UCLA David Geffen School of Medicine. Hs is the author of more than 150 scientific papers and holds 2 patents.

- Dr. Bruce N. Ames. Professor of Biochemistry and Molecular Biology, University of California, Berkeley, and a Senior Scientist at Children's Hospital Oakland Research Institute (CHORI).

- The keynote speak of the event is Dr. Steven G. Clarke, Ph.D., Professor of Biochemistry at UCLA and Director, UCLA Molecular Biology Institute. Dr. Clarke is a leader in the research on aging and rejuvenation, and will provide excellent background and context to the event's discussions of ERGP and oxidative stress.

The more Oxis can do to build brand awareness around ERGO the bigger the revenue opportunity will be for the company. We expect that Oxis will follow the traditional business expansion model where the initial focus will be on ErgoFlex, and then follow-up with next-generation products to expand market share and increase the revenue potential. ErgoFlex itself is a second-generation product. In 2009, the company sold and promoted ErgoPlex. ErgoFlex is an improved patent-pending formulation focused on joint health. Oxis plans to re-introduce ErgoPlexat some point in 2011 or 2012. The new formulation of ErgoPlex will be marketed as an anti-aging, cellular rejuvenation product designed to restore a healthy young feeling.

In 2012, we expect two more ERGO-based products to come to market. These include and “Ergo-Vision” product designed to improve visual acuity and eye health, and “Ergo-Brain” designed to improve memory and mental function. Oxis is also working on a topical ERGO formulation for fine lines, wrinkles, and skin tone repair to launch in 2012 or 2013. The product will focus on promoting healthy looking skin damaged from the Sun and old age. It’s a potential multi-hundred million dollar product. Sales of anti-cellulite / anti-aging cosmeceutical products totaled $3 billion worldwide in 2010.

In time, management’s goal is to expand into health foods, nutrition bars, cosmetics, beverages, and even animal health. There are all enormous revenue opportunities. As noted above, the dietary supplements market is currently around $27 billion in size. This includes vitamins, minerals and other supplements. The functional foods market is an estimated $40 billion market. Expanding into personal care products is another $10 billion opportunity. However, the ultimate market is in cosmeceutical. The global anti-aging market is estimated at $120 billion. Management’s long-term goal is to expand the ERGO product into creams and lotions for anti-aging applications. We expect to learn more about these new revenue opportunities in the coming quarters.

The Next Big Thing?

We see a significant opportunity for Oxis with Ergothioneine. Being the only available source of a potential exciting new consumer health product has proven to be highly profitable in the past. In the mid 1980's, the health food market took off with the introduction of Oat Bran. A small specialty foods company named Health Valley Foods introduced the product and cornered the market. The company aggressively promoted Oat Bran and eventually turned the perceived health benefits into a $100 million commercial market.

Fads in the health food market come quickly, and can persist for several years. In mid 1990's the term "Fat Free" was introduced by Health Valley Foods. Until then, foods were labeled as "Low Fat" or "98% Fat Free". The actual term "Fat Free" doesn't mean zero fat, it means less than 0.5g of fat per serving. Health Valley turned their first-move advantage of the "Fat Free" term into a $250 million commercial market. Health food consumers and trend dieters avoid fats at all cost. That is, until 2001 when Dr. Robert C. Atkins published a book entitled, "New Diet Revolution", which spawned a low-carbohydrate wave for the next several years. The Atkin's diet not only changed the perception on how to eat, it change marketing campaigns at consumer product companies and the products of the shelves in grocery stores. Sales of pasta and rice declined by 8.2% and 4.6%, respectively, in 2003 thanks to the "no-carb" craze. Sales of diet cola surged in 2002 and 2003. Coke and Pepsi introduced C2 and Pepsi Edge to make up for slowing sales of the regular, full sugar drinks, Coke and Pepsi. Both products supplemented sugar with artificial sweeteners, such as aspartame. It truly was a dietary revolution between 2001 and 2005. Consumers returned to fat and shunned carbohydrates.

Today, the word "Organic" dominates consumer product labeling. Similar to "Fat Free", a product that is "Organic" doesn't necessarily have to be 100% organic. An "Organic" product must consist of at least 95% organic material. The designation "100% Organic" requires that all ingredients be derived organically, but "Made with Organic Ingredients" only requires that 70% come from an organic derivation.

Oxis has the potential to turn ERGO into the next great wave of the health food and dietary supplement craze. Health conscious consumers will pay hundreds of millions of dollars on these types of products. Below we highly four products that offer investors a glimpse into the potential for ErgoFlex and other ERGO-based products:

- Emergen-C: Emergen-C is a dietary supplement drink mix which is sold as a vitamin C energy booster. The product is manufactured by Alacer Corp. Emergen-C contains roughly 1600% of the USDA recommended daily allowance of vitamin-C, 416% of the recommended daily allowance of vitamin B_{12}, and 500% of the recommended daily allowance of vitamin $B_{6.}$ Following its successful launch in 1978, the company has since branched out to offer new products that included calcium and lycopene, a specialty formula that offers additional vitamins, an immune support formulation, and a Super Gram formulation that includes essential minerals and bioflavonoids. Emergen-C comes in nearly a dozen different flavors, including two fountain drink formulations for restaurants. Emergen-C is a $100 million, and growing, commercial product.

- Ester-C: Ester-C is a unique form of high-dose vitamin C designed for rapid absorption and retention designed to provide advanced active immune support. The product is available in 500mg and 1000mg tablets, as well as new 500mg gummies. Ester-C also contains calcium and natural flavors. The raw material is manufactured by Alacer Corporation, and sold by Zila Nutraceuticals. The product makes claims that Ester-C benefits your heart, joints, skin, hair, and nails, very little of which is backed up by clinical studies. However, thanks to celebrity endorsements, most notably Larry King, Ester-C is a $200 million retail business.

- Juice Plus+: Juice Plus+ claims it is the "next best thing to fruits and vegetables." Juice Plus+ is not a vitamin supplement, it is a whole food juice powder made from 17 fruits, vegetables and grains. The product claims that by including the whole fruit or vegetable food, it contains important nutrients in their natural source and concentration, which is superior to artificially created multivitamins. Juice Plus+ was introduced in 1993 by NSA International. It is perhaps the most research and tested OTC supplemental healthcare product, having conducted several randomized, control trials. NSA utilizes a peer-to-peer network marketing similar to Mary-Kay or Pampered Chef. Juice Plus+ generates $300 million in revenues per year.

- MonaVie: MonaVie is a product line that includes bottled juices and gel packs sold as an energy drink. The original MonaVie juice is a blend of 19 fruit juices in unpublicized proportions, including white grape, apple, acerola, aronia, purple grape, cranberry, passion fruit, prune, kiwifruit, blueberry, wolfberry, camu-camu, pomegranate, lychee fruit, pear, banana, cupuaçu, bilberry and açai. Since first launched in 2005, MonaVie has expanded dramatically, ranking eighteenth on Inc. Magazine's "Fastest Growing Private Companies" in 2009, including being #1 in Food & Beverage. Estimated revenue is $900 million, far out-pacing Juice Plus+ despite heavy criticism by consumer advocacy groups and the U.S. FDA for false and misleading claims on the products health benefits, and a significant lack of clinical evidence to support otherwise. MonaVie utilizes a multi-level / network marketing similar to Juice Plus+.

Palosein

Palosein (orgotein sodium chloride) is a U.S. FDA approved drug for the treatment of arthritic inflammation in veterinarian market. Palosein is a form of superoxide dismutase (SOD) that is derived from bovine liver. The drug is commonly use in horses with aseptic arthritis of a traumatic origin. Oxis is currently in the process of re-certifying its manufacturing process and is actively seeking partnerships with distributors to sell Palosein into the veterinary channel. Oxis will provide additional information on Palosein as further progress is achieved

PIPELINE

Oxis has several therapeutic compounds in clinical development. Management's goal is to seek commercial partners for these compounds or out-license them for cash and potential royalties and milestones. These compounds include anti-inflammatory and therapeutic antioxidant mimics with potential applications in the treatment of neurodegenerative (Alzheimer's and Parkinson's), cardiovascular and metabolic diseases.

...BXT-51072…

BXT 51072 is a low molecular weight, orally active, organoselenium catalytic mimic of one of the major cellular protective antioxidant enzyme, glutathione peroxidase (GPx) which uses glutathione as substrate. In addition to its direct hydrogen peroxide (a highly reactive ROS) neutralizing capabilities, BXT-51072 also regulates secondary inflammatory processes by preventing the activation and release of inflammatory mediators such as cytokines, adhesion molecules, and inflammatory enzymes. There is also evidence that BXT-51072 may function by inhibiting fundamental nuclear transcription mechanisms that govern and regulate inflammation and other significant processes. BXT-51072 was initially developed for use in the treatment of inflammatory bowel diseases (IBD), and has demonstrated efficacy and safety in a preliminary phase II study for ulcerative colitis (UC).

…LSA…

The company's Lipid Soluble Antioxidant (LSA) molecules are designed to mimic the activity of the body's natural cell membrane-protecting antioxidant, Vitamin E. LSA molecules are 20-40 times more potent than natural Vitamin E, and move into cell membranes much more quickly, giving them the opportunity to be effective in areas not necessarily penetrated by the normal Vitamin E. The primary disease targets for this series of molecules will include neurodegenerative diseases such as Alzheimer's and Parkinson's disease, and cardiovascular diseases in additional to other possibilities in metabolic disorders.

…SOD…

Superoxide Dismutase (SOD) is a naturally occurring enzyme found in essentially all living organisms. SOD catalyzes the destruction of the "superoxide" molecule. This enzyme has been used in Europe (most notably Spain) for many years in the treatment of chronic inflammatory joint diseases and in the prevention of radiation fibrosis and scarring in patients with colorectal carcinoma undergoing radiation treatment. Oxis has several patents related to SOD uses and is working to enhance its IP portfolio with additional SOD related technologies.

MANAGEMENT

Anthony J. Cataldo – Chairman & CEO
Mr. Cataldo served as CEO of the Board of VoIP, Inc., a public company and provider of Voice over Internet Protocol (VoIP) communications from September 2006 through April 2008. Mr. Cataldo currently is also the CEO and Chairman of the Board of Green St. Energy, Inc., a public company that intends to enter the alternative energy business. From October 2003 through August 2006, Mr. Cataldo has served as non-executive Chairman of the Board of Directors of BrandPartners Group, Inc., a public company provider of integrated products and services dedicated to providing financial services and traditional retail clients with turn-key environmental solutions. Mr. Cataldo also served as non-executive Co-Chairman of the board of MultiCell Technologies, Inc., a public company supplier of functional, non-tumorigenic immortalized human hepatocytes, from February 2005 through July 2006. Mr. Cataldo has also served as Executive Chairman of Calypte Biomedical Corporation, a publicly traded biotechnology company, involved in the development and sale of urine based HIV-1 screening tests from May 2002 through November 2004.

Bernard Landes – President
Mr. Landes has over 30 years of experience in the nutraceutical and functional foods industry. Since January 2000, Mr. Landes has been the President of the Nutritional Products Consulting Group, a company that provides consulting services to a global client base in the areas of scientific, regulatory, product commercialization, and mergers and acquisitions. Among his lead clients are, MonaVie LLC, a large developer and marketer of scientifically formulated antioxidant nutritional beverages. Mr. Landes currently serves as a member of MonaVie's Science Advisory Board. Mr. Landes was the CEO of Paracelsian, Inc., a herbal nutritional supplements company, from January 1998 to December 1999. Prior to that, he was a General Manager at Alacer Corporation, a nutritional supplement and water company. Mr. Landes served for 10 years as director of Marketing, Strategic Planning, Product Development, Nutritional Science and Regulatory Affairs for Health Valley Foods. Mr. Landes also served as General Manager of Zila Nutraceuticals where he managed the Ester-C brand of enhanced Vitamin C from January 2006 until November 2006.

Michael Handelman - CFO
Mr. Handelman has over 28 years of financial management experience and has provided services as a financial management consultant to OXIS since August 2009. Before joining OXIS, he served from November 2004 to July 2009 as CFO and COO TechnoConcepts, Inc., a developing technology and manufacturing company. Prior to that responsibility, Mr. Handelman served from October 2002 to October 2004 as Chief Financial Officer of Interglobal Waste Management, Inc., a California start-up manufacturing company, and from July 1999 to September 2002 as Vice President and CFO of Janex International, a children's toy manufacturer.

Sandep Rahi – Chief Strategist
Sandep Rahi is SVP and Group Creative Director at Dentsu America, where he has led creative teams to develop advertising cross-media campaigns across all media for clients including American Licorice, Bandai, Chandon, Chapman University, Famima!! Hass Avocado Board, Kissui, Major League Soccer, Nissin Foods and Union Bank. Rahi has extensive experience overseeing strategic creative development and implementation for several global brands while maintaining close collaborative relationships with their key stakeholders. He has led creative teams on several promotion and branding projects for networks such as NBC, ABC, CBS, FOX, FX Networks and ESPN.

Anshuman Dube – Director
Mr. Dube co-founded and is the managing director of Theorem Capital, LLC, a Los Angeles based private equity firm specializing in consumer brands, since its inception in early 2005. Mr. Dube was an active angel investor in various companies including PayPal (sold to eBay), WebEx (NASD: WEBX), and Dollar Networks (sold to Centerpoint). Mr. Dube holds a B.S. degree in Computer Engineering from the University of Southern California.

Thomas W. Hoog – Director
Mr. Hoog has served as special counsel to the global chairman of Hill & Knowlton., a public relations firm since 2005. Mr. Hoog previously served as President and CEO of Hill & Knowlton, from 1996 through 2001. His responsibilities included managing the firm's 13 US offices, leading its acquisition strategy, developing client strategies, overseeing the firm's profit-and-loss centers, and redefining the company's corporate culture. Before he became President and CEO of Hill & Knowlton, Mr. Hoog served as Chairman of its Public Affairs practice and as General Manager of its New York and Washington offices.

VALUATION & RECOMMENDATION

Our Thesis

We are intrigued by the potential sales opportunity ERGO represents. Our research has shown that, in the past, first-mover or sole-source advantage in a new consumer health product has the potential to be very profitable. Products like Ester-C and Emergen-C, which offer fewer antioxidants and health benefits than ErgoFlex, both generate sales over $100 million. And products such as JuicePlus+ and MonaVie clearly demonstrate the power of direct marketing and an enormous desire by U.S. consumers to seek-out health supplements and antioxidant products. JuicePlus+ and MovaVie combined generate annual revenues over $1 billion. If ErgoFlex can capture just 10% of this market, it would generate sales over $100 million. Oxis International's current market capitalization is just $13 million. Our current rating is 'Neutral' while we wait for visibility to improve.

…Building The Business…

- ✓ Intellectual Property: Oxis holds 12 U.S. patents with 7 additional patents pending on L-ergothioneine. These address the protective effect of ergothioneine on mitochondria, ERGO manufacturing processes, and neuroprotectant methods and composition of ERGO. In September 2010, Oxis resolved a patent dispute with the Estée Lauder that provided Oxis with full title to two patents (USPTO No. 6,103,746 & 6,479,533). Oxis also recently acquired rights to a patent relating to use of ERGO as a primary preservative for cell and tissue cultures.

- ✓ Generating Data: Oxis is currently conducting its own safety and efficacy studies on ERGO, and is also preparing a self-affirmation petition to obtain the FDA's designation of ERGO as Generally Recognized as Safe (GRAS). We expect this filing to take place in the second quarter 2011. In August 2010, the company announced that an Oxis sponsored 12-patient safety study of ergothioneine was published online by the prestigious peer reviewed journal, Toxicology. We expect the FDA to respond with a "no objection" letter to the GRAS approval later this summer. Oxis plans to conduct larger, randomized, double-blind, safety and efficacy studies in human subjects later this year.

- ✓ Financing: In November 2010, Oxis International secured an equity investment of $250,000 from Gemini Pharmaceuticals. Under terms of the agreement, Gemini purchased 1.67 million convertible preferred shares at $0.15 per share. Gemini also provided a $750,000 line of credit at a rate of prime plus 2% per year. Gemini is Oxis' primary product development and manufacturing partner, and the potential $1 million in funds provides some validation to model. The deal with Gemini provides cGMP manufacturing and logistic support, as well as expertise in marketing and promoting both over-the-counter (OTC) drugs and vitamin / nutritional supplements. Gemini has been active in the private label manufacturing of OTC dietary supplements, herbs and nutritional products for almost 30 years.

- ✓ Marketing: In March 2011, Oxis announced it has formed a joint venture (JV) with leading online marketer engage:BDR to promote, market and sell a number of Oxis planned health and nutrition products, with an initial focus on ErgoFlex. We expect that engage:BDR will provide a full range of "turnkey" online marketing services to the joint venture, including developing brand strategy, the design of all digital media and interfaces, online media planning and buying, leveraging and integrating social media, and customer analysis. Engage:BDR offers both premium (placement-specific) marketing solutions and the ability to distribute campaigns through its own display platforms and channels. This should help drive uptake for ErgoFlex in the coming months.

…An Enormous Market…

Dietary supplements are a multi-billion dollar industry. According to the Nutrition Business Journal, sales of dietary supplements totaled $27 billion in the U.S. in 2010. It is a rapidly growing market driven by an aging U.S. population, growing acceptance of alternative medicines and nutraceutical products, and clinical studies documenting the positive benefits of certain supplements. These sales include vitamins, minerals, herbs/botanicals, fibers, fatty-acids, and meal and sports-related nutrition products. Pure antioxidant supplements are an estimated $2 billion market in the U.S. Globally this is a $5+ billion market. Consumers seek-out antioxidant claims in vitamins, minerals, enzymes, and herbs, and products such as grape seed, pine bark, ginkgo biloba, selenium, zinc, copper, and many others. These products are generally recognized as safe (GRAS). ERGO, one of the world's most powerful antioxidants, has the potential to be a new major player in this $2 billion U.S. market.

What We Need To See

We're big fans of the Oxis International business model. The company is engaging a low-cost, direct sales model with enormous upside. As the sole provider to a potentially breakthrough "super-antioxidant" product, the revenue potential from ErgoFlex and next-generation ERGO products is significant. But before we recommend the shares, two things need to happen. We need to:

…Get more comfortable with the sales trajectory…

Oxis just launched ErgoFlex in December 2010; and ErgoFlex is just the first in a series of commercial products planned by Oxis International. But we have yet to see sales. Management has noted an impressive response rate from the 70k direct mailings sent out in the first quarter. Typical response rates to direct mail campaigns are around 1-2%. Oxis plans a second tranche with a target of 200k mailings in the coming months. Oxis plans to send out over 500k million mailings in 2011. If Oxis can achieve a 3% response rate for all of 2011, or 30,000 orders, we are looking at revenues of $1.1 million. With help from engage:BDR, we think this forecast is achievable, but we'd like a few more data points before we started to really get aggressive with our model.

…Get more comfortable with the cash position…

As noted above, the company secured $250,000 in equity and $750,000 in credit from Gemini in November 2011. However, the cash position at the end of the first quarter 2011 was only $1,000. Oxis burned $1.5 million from operations in 2010, including $377k in the fourth quarter. Burn in the first quarter was $147k. Oxis is tapping into the $750k line of credit with Gemini now. We estimate cash burn for 2011 will be roughly another $1.5 million. Based on the ErgoFlex trajectory (see issued #1), Oxis can achieve positive cash flow from operations in 2013. But, before we recommended the shares, we need to see a long-term financial strategy in place to fund operations until cash flow positive. As of now, we cannot recommend investing in a company that has a cash position so dangerously low.

Valuation

Price / Sales: Oxis is trading with a market capitalization of only $13 million. Based on our estimated sales trajectory for ErgoFlex and other next-generation ERGO-based products, we think Oxis can deliver sales in 2014 of around $15 million. The average price / sales multiple for a packaged food consumer product company (PEP, KO, K, GIS, KFT) is around 1.8X. For the pharmaceutical industry (MRK, PFE, JNJ, LLY, BMY), the average price / sales multiple is higher, at around 2.7X. The biotechnology industry (AMGN, GILD, BIIB, GENZ, CELG) is even higher still, at around 4.7X. Oxis currently has a hybrid business model. We consider ErgoFlex a pharmaceutical product. But Oxis is a small company with a low-cost business model. The potential leverage to the upside is far more biotech-like in terms of operating margins and profits. Therefore, we have chosen a hybrid price to sales multiple of 3.5X for Oxis based on 2014 revenues of $15 million. This equates to a market capitalization of $53 million in 2014. If we discount this back to present day at an aggressive rate of 20%, we arrive at a market capitalization of $37 million, or $0.17 per share.

Price / Earnings: In 2014, on revenues of approximately $15 million, we are forecasting net income of $5.8 million, or $0.02 in EPS. If we apply an industry average P/E of 15x 2014 EPS of $0.04, and discount back to present day at 20%, we arrive at target of $0.18 per share.

DCF: We have conducted a 10-year discounted cash flow analysis from 2011 to 2021 based on our projections for sales of all ERGO-based products at Oxis. We have included the following assumptions in our DCF model: discount rate = 20%, peak sales = $25 million, terminal growth rate = 0%, operating margin = 40%. We arrive at a total firm value of $34 million, or $0.23 per share.

Price / Sales Target:	**$0.17**
Price / Earnings Target:	**$0.18**
Discounted Cash Flow Target:	**$0.23**
Average Calculated Target:	**$0.20**

PROJECTED FINANCIALS

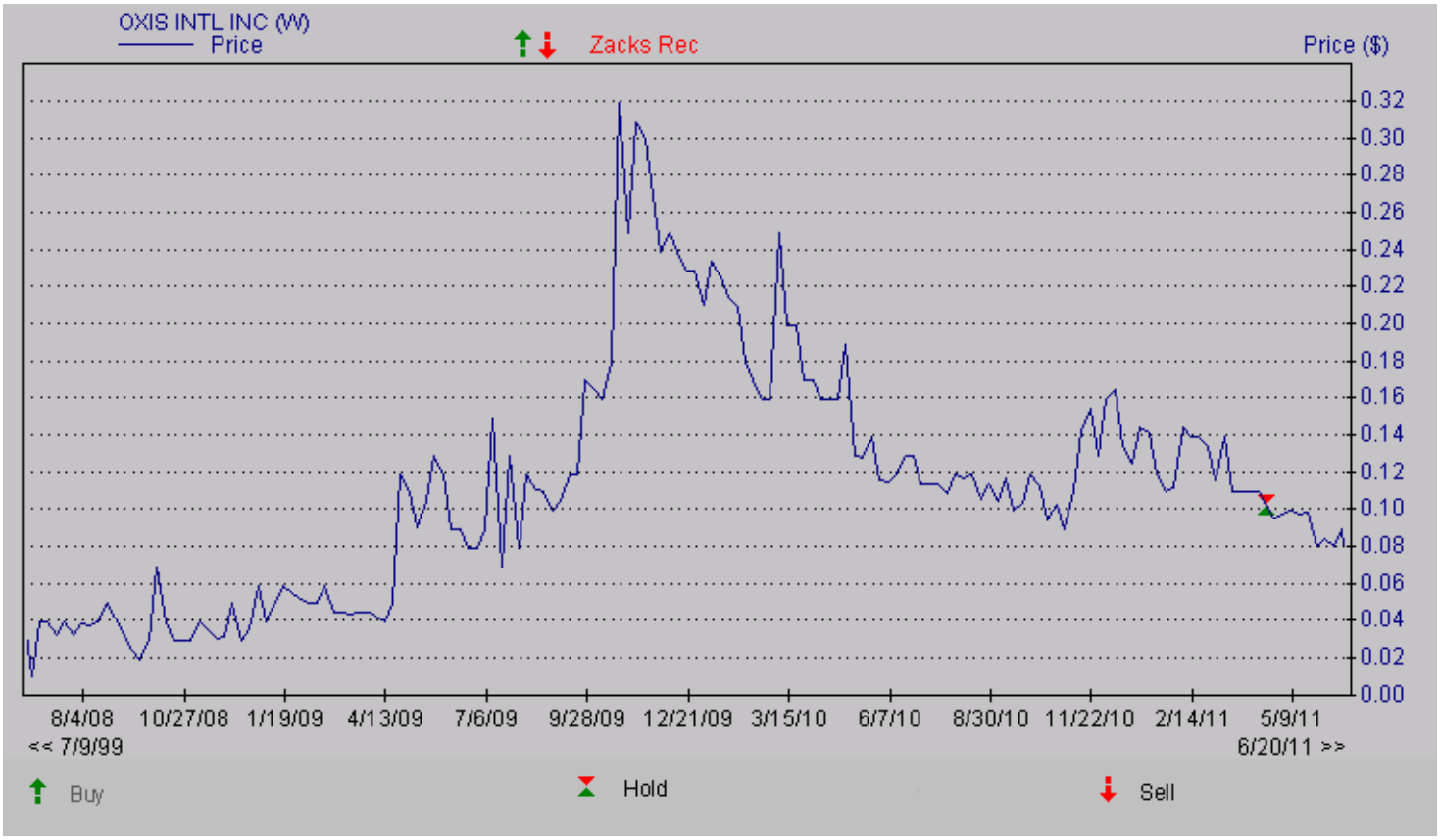
OXIS International, Inc.
Income Statement

OXIS International	2009 A	2010 E	Q1 A	Q2 E	Q3 E	Q4 E	2011 E	2012 E	2013 E	2014 E
Nutraceutical Products	$0.048	$0.011	$0.0	$0.1	$0.4	$0.6	$1.1	$6.3	$10.6	$14.8
YOY Growth	-	-	-	-	-	-	-	*461.3%*	*68.0%*	*40.5%*
Other	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
YOY Growth	-	-	-	-	-	-	-	-	-	-
Product Sales	**$0**	**$0.011**	**$0.0**	**$0.1**	**$0.4**	**$0.6**	**$1.1**	**$6.3**	**$10.6**	**$14.8**
YOY Growth	-	-	-	-	-	-	-	-	-	-
Licensing & Collaborative	**$0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**	**$0.0**
YOY Growth	-	-	-	-	-	-	-	-	-	-
Total Revenues	**$0.048**	**$0.011**	**$0.0**	**$0.1**	**$0.4**	**$0.6**	**$1.1**	**$6.3**	**$10.6**	**$14.8**
YOY Growth	-	-	-	-	-	-	*100.0%*	*461.3%*	*68.0%*	*40.5%*
CoGS	$0.050	$0.065	$0.0	$0.0	$0.1	$0.1	$0.2	$0.9	$1.4	$1.8
Product Gross Margin	*0%*	*0.0%*	*-25.0%*	*85.0%*	*85.0%*	*85.0%*	*85.0%*	*86.0%*	*87.0%*	*88.0%*
R&D	$0	$0.179	$0.0	$0.0	$0.1	$0.1	$0.2	$0.2	$0.2	$0.2
% R&D	-	-	-	-	-	-	-	*3.2%*	*1.9%*	*1.3%*
SG&A	$1.154	$2.264	$1.8	$0.7	$0.8	$0.9	$4.2	$3.4	$3.8	$4.5
% SG&A	-	-	-	-	-	-	*373.4%*	*54.1%*	*36.0%*	*30.3%*
Operating Income	($1.156)	($2.497)	($1.9)	($0.6)	($0.5)	($0.4)	($3.4)	$1.8	$5.2	$8.4
Operating Margin	*0%*	*0.0%*	-	-	-	-	*-303.1%*	*28.7%*	*49.1%*	*56.3%*
Total Other Income	($1.090)	($0.498)	($0.07)	($0.05)	($0.05)	($0.05)	($0.22)	($0.15)	($0.10)	($0.10)
Pre-Tax Income	($2.246)	($2.995)	($1.9)	($0.6)	($0.6)	($0.5)	($3.6)	$1.7	$5.1	$8.3
Taxes & Other	$0	$0	$0	$0	$0	$0	$0	$0.1	$0.8	$2.5
Tax Rate	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*0%*	*5%*	*15%*	*30%*
Net Income	($2.246)	($3.000)	($1.9)	($0.7)	($0.6)	($0.5)	($3.6)	$1.6	$4.3	$5.8
Net Margin	*0%*	*0.0%*	-	-	-	-	*-324.1%*	*25.0%*	*41.0%*	*39.0%*
Reported EPS	**($0.05)**	**($0.03)**	**($0.01)**	**($0.00)**	**($0.00)**	**($0.00)**	**($0.02)**	**$0.01**	**$0.02**	**$0.02**
YOY Growth	-	*-40.6%*	-	-	-	-	*-20.1%*	*-135.9%*	*150.0%*	*17.6%*
Shares Outstanding	48.6	109.4	152.6	165.0	170.0	175.0	165.6	200.0	220.0	250.0

Source: Zacks Investment Research, Inc. *Jason Napodano, CFA*

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