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Findings of research into the history of ASEA

Note: None of the statements in this document have been reviewed or endorsed by ASEA Corporate, and are solely based on findings in publicly available information: Press releases, SEC filings, and Industry analyst publications.

SUMMARY

The Asea product was previously known as MDI-P, which was developed and initially patented in the early 1990s by a development-stage Bio-Tech Company, Medical Discoveries, Inc., a publicly traded company, which was closely watched and thought of as promising by industry analysts.

MDI-P was initially discovered and used as an anti-bacterial for dental instruments outside the human body. Because of its effectiveness in treating certain viruses, bacteria and fungi without levels of toxicity, it was initially targeted at treating HIV in humans. The vision of the company was to provide the world a cure for AIDS.

The company was granted multiple patents for not only the product MDI-P, but the manufacturing process of creating the electrolyzed solution, which also had to be proven to satisfy and comply with all associated FDA regulations.

The company proceeded for several years with the FDA process for an IND (Investigational New Drug) application, and proceeded accordingly. The process is well-known, documented, and required extensive pre-clinical testing for efficacy and toxicity, with several million dollars being spent on the clinical research.

Pre-clinical results are well-documented, providing evidence that MDI-P was effective in lab tests, and animal tests for an even wider array of health-related issues, blood disorders and diseases - HIV, Cystic Fibrosis, Heart Disease, Asthma, and other blood-related disorders, to name a few.

SEC filings assert the company's belief that MDI-P had much broader applicability. (See below for some examples of publicly available information.)

Results of the company's efforts to satisfy FDA requirements to provide LD50 data, which is required for all New Drug applications, demonstrated that MDI-P could not be proven to be harmful in testing to the point of a "Lethal Dose". Some believe that this is the point at which the company realized that MDI-P would not be classified as a drug at all, and ceased the path for a New Drug application.

Note: The path for FDA approval requires a lot of time and funding. The financial impact of the process appears to have affected the ability of the company to satisfy FDA requirements as well as the financial viability of the company. The financial decline of the company is also well documented in SEC filings.

The company was sold to Global Clean Energy Holdings, Inc.

Asea executives tell the rest of the story.

Verdis Norton was on the Board of Medical Discoveries, Inc , and learned enough about MDI-P to invest in the assets, to first pursue the “pharmaceutical path” and subsequently make the investment to found the Asea company.

Dana-Farber Cancer Institute To Investigate Mechanism Of AIDS Treatment

January 5, 1999

Medical Discoveries, Inc. and the Dana-Farber Cancer Institute (DFCI), a teaching affiliate of Harvard Medical School (HMS) and an NIH-approved AIDS Research Laboratory, have signed a "Research Support Agreement" to confirm and extend the anti-HIV activity of the novel drug therapy, MDI-P.

Preliminary studies of Medical Discoveries' MDI-P treatment have demonstrated a decrease in the production of HIV-1. The Research Plan will further investigate the mechanism by which MDI-P inactivates the virus, and will define its cellular and viral specificity. Importantly, the DFCI will be testing the activity of MDI-P against resistant strains of HIV and against fresh samples of HIV taken from the patient.

All research under this agreement will be conducted under the direction of Dr. Robert Finberg, the principal investigator of the study, a professor of Medicine at HMS and chief of Infectious Disease at the DFCI.

Dr. William J. Novick, vice president and chief technical officer of Medical Discoveries says the MDI-P research is important because the treatment works on mechanisms which are different from those targeted by currently approved anti-retroviral agents. "We can categorically say that this drug is not an enzyme inhibitor," Novick says. "I feel very strongly that the potential of this drug against the resistant strains of HIV is every bit as good as against the normal wild strains."

For more information: Dr. William J. Novick, vice president and chief technical officer, **Medical Discoveries, Inc.**, telephone: (801)-771-0523

PHARMACEUTICAL DRUG DISCOVERY AND DEVELOPMENT ACTIVITIES

MDI has completed a series of validation testing at the Dana-Faber Cancer Institute, a Harvard Medical School teaching Affiliate and National Institute of Health (NIH) approved HIV/AIDS Testing Laboratory.

These tests confirmed and extended previous research and testing which demonstrated that MDI-P is shown to be capable of killing HIV in cell cultures without mortality to the cells.

A six-month Research Grant with the Dana-Faber Cancer Institute to further extend and confirm the anti -HIV/AIDS activity of MDI-P is in progress. In this Research, MDI-P is being analyzed for effectiveness in killing laboratory strains of HIV-1; clinical specimens of HIV; and resistant strains of HIV-1. These test results continue to support the effectiveness of MDI-P in killing the HIV Virus.

During its current research testing, the Company has become aware of the need to address certain technical issues regarding the electrolysis equipment used to produce MDI-P during initial manufacture.

MDI has temporarily suspended validation testing at the Dana-Faber Cancer Institute of its novel drug "MDI-P" targeted at the HIV/AIDS disease due to certain technical issues. Although the testing performed during the last quarter, which demonstrated MDI-P to be capable of killing HIV in cell cultures without mortality to the cells, remains valid, the Company has decided to temporarily suspend further investigation until such time as these technical issues are resolved. Work is already in progress to develop a permanent solution to these minor technical issues.

Toxicology studies initiated in October of 1998 were completed during the first quarter. A final report will be available upon completion by the Company of final payments to the testing Laboratory. MDI has also initiated microbiology studies during the first quarter; however, these studies have been suspended pending availability of appropriate levels of funding.

Progress of the Company's plan for submission to the FDA of an IND Application has been delayed, and continuation depends on the ability of the Company to successfully address certain technical issues, and the ability of the Company to obtain sufficient funding enabling the completion of the toxicity, microbiology, and chemical characterization studies in various stages of progress. See "Additional Funding is Required" section below. While results to date continue to show promise, the Company can provide no assurance the technology will eventually be proven.

Excerpt from Edgar On-Line for Medical Discoveries Inc.

Item 1. Description of Business

OVERVIEW

We are a development-stage bio-pharmaceutical company engaged in the research, validation, development and ultimate commercialization of a patented anti-infective technology. Our electrolyzed solution of free radicals represents a novel approach to treating our initial target indication, HIV. We plan in the near future to conclude our pre-clinical work and enter the clinic in our initial target indication. If our HIV clinical trials are successful, we plan to develop this therapy for additional target indications.

Our product, called MDI-P, appears to have the ability to destroy certain viruses, bacteria and fungi without any associated toxicity both in animals and in cell-based assays. We are committed to the development of MDI-P as an anti-infective therapeutic product for in-vitro and in-vivo applications. Our highest priority is to develop and commercialize MDI-P as a pharmaceutical for the treatment of HIV. We are in the process of completing pre-clinical development and plan to file an Investigative New Drug application (IND) with the Food and Drug Administration (FDA) for MDI-P as an HIV treatment. If the FDA approves the IND, we will begin a Phase I clinical test at the Harvard School of Medicine using a protocol designed by Dr. Bruce Dezube. We expect to add additional indications for the use of MDI-P in the future as we complete our pre-clinical development.

To date, we have not generated significant revenues from operations or realized a profit. Through December 31, 2003, we had incurred a cumulative net loss since inception of \$14,141,763. We are currently attempting to secure capital commitments to finance the completion of our pre-clinical analysis, file our IND for MDI-P as an HIV therapeutic, determine additional potential indications for MDI-P, and to otherwise continue research and testing of our technologies in order to secure required approvals to bring products to market. In that we are a development stage company, we will increasingly require additional funding to continue the development of our technology and to finance submittal of our testing and trials to the appropriate regulatory agencies in order to secure approvals for product development and sales.

RECENT DEVELOPMENTS

Sepsis Study Reaffirms Anti-Infective Strength and Low Toxicity of MDI-P.

In March, 2004, we received a study on sepsis that reaffirms the anti-infective strength and low toxicity profile in pre-clinical mouse models of MDI-P. In the MDI-sponsored study, the goal was to test the efficacy of MDI-P in inhibiting inflammatory responses in mice, induced by bacteria that cause sepsis, a severe illness caused by infection of the bloodstream by toxin-producing bacteria. The study used 25%, 50% and 100% MDI-P solutions to inhibit inflammatory processes that generally lead to septic shock. MDI-P was evaluated against both a saline control group of mice and a positive control group that had been given Gentamicin, an established antibiotic treatment for sepsis. The study confirmed that 100% dose strength of MDI-P offered substantial benefit to the mice when compared to both the placebo and to Gentamicin, but without the apparent toxicity profile that Gentamicin exhibits.

While HIV is our initial target indication, this report is significant.

In the US, sepsis is the leading cause of death in non-coronary ICU patients, and recent 1998 data from the Centers for Disease Control show that it is the 11th leading cause of death overall. Despite enormous investments in intensive care, sepsis has been associated with mortality rates ranging from 28% to 50%. It is estimated that more than 700,000 cases of severe sepsis occur in the US each year, resulting in more than 200,000 deaths. Extrapolated to a global population, this represents several million cases of severe sepsis annually worldwide with a mortality of up to 1 million cases. This research is one of several studies on pre-clinical models of infectious diseases that mimic human disease, being conducted by Dr. Emil Chi, Director of the University of Washington Medical School's Department of Histopathology. This and Dr. Chi's other studies will help support our IND for HIV.

Asthma (Press Release by Medical Discoveries, Inc)

2004 MAY 20 - ([NewsRx.com](#) & [NewsRx.net](#)) -- Medical Discoveries, Inc., (MLSC) (MDI) announced the receipt of its second in a series of preclinical reports from Dr. Emil Chi, chairman of the department of histopathology at the University of [Washington](#) Medical School.

This trial, one of several studies on models of disease which mimic human disease, focused on MDI-P as a potential therapeutic agent for the treatment of the symptoms of asthma.

In the late 1990s, Chi developed a now-standard mouse model to assess asthma therapeutic agents for efficacy and toxicity. This model is believed to have at least an 80% predictive value of results in humans.

In the study, 36 female mice were examined in a [chronic asthma](#) model, using various doses of MDI-P as a therapeutic agent as measured against saline control. Samples of bronchial lavage lung fluid and tissue were taken from all mice, with assays performed in airway mucus build-up and eosinophil infiltration, a prime blood cell measure of asthmatic attacks.

More than 70% of the MDI-P-treated mice exhibited no increase in mucus secretions, comparable with saline control animals, with a marked reduction in eosinophil infiltration. Untreated asthmatic mice, in contrast, had more than a 9-fold increase in mucus build-up as compared with saline controls. Further, no toxicity was found in the MDI-P treated mice.

MDI President and CEO Judy Robinett commented: "To the best of our knowledge of other published studies in clearing mucus plugs in the same mouse model, there is no product on the market or soon to be released from pharmaceutical pipelines which accomplishes a similar clearing of mucus plugs in the majority of treated chronic asthmatic mice. From this test, we speculate that MDI-P may prove to be a very beneficial agent exhibiting minimal toxicity for addressing [asthma attacks](#)."


Robinett continued: "This study and the other preclinical studies of MDI-P are required for filing our investigational new drug (IND) application later this year

with the FDA [U.S. Food and Drug Administration] for our primary target use for MDI-P, which is treating humans with [HIV](#).

"These studies test MDI-P on animal models of diseases which mimic those of humans. There is not an animal test relevant to HIV/AIDS in humans, so we are testing MDI-P on other standard animal/mimicking human models, such as our recently reported sepsis results, in order to determine if there is any potentially significant toxicity to humans related to usage of MDI-P. This report, in addition to other preclinical reports and our CMC [chemistry, manufacturing, and controls]/CGMP [current good manufacturing practices] data, will allow us to file an IND with the FDA for our initial target indication, HIV, and enter clinical trials sometime late in 2004 or early in 2005, continuing the path to commercialization."

Formed in 1991, Medical Discoveries, Inc., is a publicly traded, development-stage biopharmaceutical research company. This article was prepared by [Women's Health Weekly](#) editors from staff and other reports. Copyright 2004, Women's Health Weekly via [NewsRx.com](#) & [NewsRx.net](#).

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Press Release by Medical Discoveries 2004

Good News for Medical Discoveries, Inc. From Latest Toxicological Research; Pre-IND Tests Reveal No Systemic Adverse Effects From MDI-P

SALT LAKE CITY, Jan. 9 /PRNewswire/ -- Medical Discoveries Inc. (OTC Bulletin Board: MLSC) announces that test results from WIL Research Laboratories have indicated that **MDI-P, the company's proprietary AIDS drug, produced no systemic toxicity in laboratory animal tests** used to assess potential problems for human application.

"Demonstrating a lack of systemic toxic effects is another accomplishment in our continuing effort to obtain regulatory approvals for MDI-P," said Judy Robinett, MDI President and Chief Executive Officer.

"These data have helped establish that our product, MDI-P, is reasonably safe for human Phase I/II clinical trials. Medical Discoveries, Inc. will continue to sponsor research activities that will lead to a successful IND (Investigative New Drug) application, which is required by the FDA prior to any actual testing in humans in the United States."

According to Dr. William Novick, MDI board member who coordinated the research project: "These studies were conducted following FDA

guidelines and demonstrated that MDI-P was free of systemic toxicity in two animal species, using repeated drug administration at dose levels which were several magnitudes above the expected dose in humans. The only adverse effect noted was a local irritation at the injection site. This will be carefully monitored in any future human trials. The conclusion of these studies marks a major step forward in the development of MDI-P for human use."

Formed in 1992, Medical Discoveries, Inc. is a publicly traded (OTC Bulletin Board: MLSC) biopharmaceutical research company (as defined in SFAS No. 7) engaged in the research, development and validation of a new class of drugs, based upon the company's patented and proprietary electrolysis technologies. MDI is developing active anti-viral (HIV/AIDS), anti-bacterial and anti-fungal agents for a variety of applications.

Excerpt Regarding UCLA Studies

UCLA Test Results Support MDI-P As An Effective Anti-Bacterial Agent

Tapping first into the sterilization and veterinary treatment industries, Medical Discoveries intends to generate cash flow in the near term to fund the commercialization of MDI-P as a broad-spectrum anti-bacterial agent. "There is an urgent need to find new anti-bacterial agents that are effective against multiple drug-resistant bacteria and against new, emerging infections," states P.B. Fernandes, Vice President of biomolecular screening and drug discovery at Bristol-Myers Squibb Pharmaceutical Research Institute. According to Fernandes, the antibacterial market is significant with yearly global sales estimated at over \$20 billion.

A series of preliminary studies were completed in April evaluating MDI-P as a potential broad-spectrum anti-bacterial agent. Conducted at the UCLA (University of California, Los Angeles) Clinical Microbiology Laboratory, the studies successfully demonstrated the ability of MDI-P to eliminate in vitro (outside the human body) several types of antibiotic resistant bacteria, including Staphylococcus aureus, E. coli, and Enterococcus faecalis, the three most common causes of hospital-acquired bacterial infections. The next step for MDI is to complete in vivo testing per FDA-recommended criteria, enabling the company to market its product within the United States.

"The results of the UCLA studies have helped to materially enhance the potential of MDI-P as a revolutionary antibacterial agent for many emerging bacterial juggernauts," says Zidell. "We look forward to completing the testing phase for MDI-P as a bactericide and intend to translate the significance of these results into bottom-line success over the long term." He also indicates that the results of the studies also form a basis for understanding the mechanistic action of MDI-P and will be included in the company's IND (Investigational New Drug) submission to the Food and Drug Administration for MDI-P's application as an HIV/AIDS therapy.