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## **Nutra Pharma Reports Further Validation of Infectech's Identikit Technology**

**Boynton Beach, FL. – November 3, 2004 - Nutra Pharma Corp., (OTCBB: NPHC)** a biotechnology holding company that owns rights to intellectual property related to the development of drugs for HIV and Multiple Sclerosis has announced that its holding, Infectech, Inc. (Pink Sheets: IFEC) has received further verification of its technology by Dr. Paul Hyman of Ohio State University. Dr. Hyman has achieved the identification of Mycobacteria Avium Complex (MAC) using DNA amplification in a much shorter time than can be accomplished with current methodology.

“*M. avium* could be detected significantly sooner than expected for normal culture techniques,” stated Paul Hyman, Ph.D. Dr. Hyman is the primary investigator in Infectech’s ongoing validation studies. “Sufficient DNA for PCR (gene amplification) could be extracted from paraffin that had no visible colonies on it,” he continued.

*Mycobacterium avium* and *Mycobacterium intracellulare* are very similar bacteria which are usually grouped together. In America, they are usually described as Mycobacterium avium complex, or MAC. They belong to the same family as the organism which causes tuberculosis (*Mycobacterium tuberculosis*). MAC is the primary bacterial infection associated with "wasting syndrome" of HIV/AIDS patients and is the leading cause of death among these patients worldwide. MAC are routinely resistant to anti-tuberculosis drugs and there has been no standardized method for determining antibiotic sensitivity. In HIV/AIDS patients, MAC is usually diagnosed after symptoms appear. The diagnostic screen utilizes a blood test. At this time, mortality is very high and time to death is estimated at four months.

It has been estimated by world health authorities that more than 70 percent of AIDS patients harbor an MAC infection. The bacteria affect the bone marrow, spleen, liver and lungs. It also compromises the lymph nodes, thereby further destroying the patient's immune system. This may cause high fevers, severe anemia, night sweats, chills, weight loss, loss of appetite and weakness. If the gut is involved, symptoms can include chronic diarrhea with malabsorption of nutrients, and abdominal pain due to ulcers in the gut. It has been shown that MAC also causes opportunistic infections among non-HIV infected pediatric and elderly persons. Infectech’s technology allows for the rapid culturing and identification of MAC. It will also provide viable treatment options by testing the particular strain’s antibiotic sensitivity. By using saliva or stool samples, this process could identify an infection as much as 10 months before the bacterium could be found in blood samples and well before symptoms begin.

"Dr. Hyman's validation of Infectech's patented technology clearly shows that we can identify a costly disease in a fraction of the time," commented Dr. Mitchell Felder, Chief Executive Officer for Infectech. "These results may also have enormous implications in the treatment of AIDS sufferers, as antibiotic-sensitivity test can now be performed early enough to make a difference in these patients," he added.

Infected owns 29 issued patents related to the rapid isolation, growth, identification and antibiotic sensitivity of disease-causing bacteria that includes *Mycobacterium avium*. Infected's researchers discovered that certain grades of paraffin wax, when used in conjunction with a microscope slide, and combined with a nutrient broth, provides for the rapid isolation, growth and identification of various disease-causing bacteria. Infected has developed a diagnostic test kit based on this technology. The basic test kit consists of a glass slide coated with paraffin, which is used as a carbon (food) source by certain pathogenic bacterial species such as TB. The slides are incubated in a sample of almost any bodily fluid (a non-invasive sample of saliva is preferred) within a nutrient broth. This creates a semi-solid growth medium for the bacteria, which imitates its natural environment within a human or animal host. The bacteria collect on the paraffin slide in 4-8 days. Testing can then be done to identify the species of bacteria. This testing can be done via acid-fast staining or through PCR gene amplification. Additionally, the bacteria can be cultured with antibiotics to test for specific sensitivities. Through the choice of different nutrient broths, each kit can be tailored to encourage the growth of a specific bacterium. The test kits are being designed to work on a class of bacteria that includes TB, MAC, Para-tuberculosis, Pseudomonas and Nocardia.

"We are very excited about the progress that has been made by Dr. Hyman and Ohio State University," said Rik J Deitsch, Nutra Pharma's Chief Executive Officer. "They have already validated Infected's Identikit with two very important strains of mycobacterium, MAC and Para-tuberculosis. After some further validation of additional strains, Infected will seek to gain regulatory approval from the FDA, allowing for the marketing and distribution of the Identikits," he concluded.

#### **About Nutra Pharma Corp.**

Nutra Pharma Corporation is a biotechnology holding company and incubator. The Company's minority-owned subsidiary, ReceptoPharm, Inc, is developing technologies for the development of drugs for HIV and Multiple Sclerosis ("MS"). The Company's other holding Infected, Inc., is engaged in the research and development of diagnostic test kits designed to be used for the rapid identification of infectious diseases such as Tuberculosis (TB) and *Mycobacterium avium-intracellulare* (MAI). Nutra Pharma continues to identify and acquire intellectual property and companies in the biotechnology arena.

<http://www.nutrpharma.com>

#### **About Infected, Inc.**

Infected, Inc. is a biotechnology/genomics company that specializes in the research, development and production of laboratory kits used in the rapid identification and antibiotic sensitivity testing of disease-causing pathogens. The company's patents span the identification and antibiotic sensitivity testing of a family of disease-causing bacteria that includes: Tuberculosis, Para-tuberculosis, Pseudomonas, *M. avium* and Nocardia. These bacteria are cited as a prominent cause of death in patients with cancer, cystic fibrosis, and AIDS, as well as in patients undergoing surgery. Infected's other patents include technology designed for use in the bioremediation of contaminated soil and water. Additionally, Infected also owns a patent for the nontoxic induction of apoptosis in cancer cells utilizing hydrophobic hydrocarbons. Apoptosis is a method for inducing a genetically based induction of "cell suicide" in cells. It therefore serves as the foundation for cancer therapy.

<http://www.infected.com>

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*and uncertainties including but not limited to risks associated with the uncertainty of future financial results, regulatory approval processes, the impact of competitive products or pricing, technological changes, the effect of economic conditions and other uncertainties as may be detailed in the Company's filings with the Securities and Exchange Commission. Nothing in this press release shall be construed as an offer to buy or sell any securities herein.*

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