

## Nuvilex to Use Proprietary Cell-in-a-Box Technology to Develop Marijuana-Based Cancer Treatments



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SILVER SPRING, Md., Feb. 3, 2014 (GLOBE NEWSWIRE) — PharmaCyte Biotech, Inc. (NVLX), an international biotechnology company providing cell and gene therapy solutions for the treatment of deadly diseases, announced today that its subsidiary, Medical Marijuana Sciences, Inc., plans to use the unique and proprietary cellulose-based live-cell encapsulation technology known as Cell-in-a-Box(TM) to develop treatments for serious and deadly forms of cancer. The revolutionary treatments will deliver cancer-fighting agents based on constituents of Cannabis (marijuana) that are known as cannabinoids.

In developing cancer treatments utilizing the Cell-in-a-Box(TM) live-cell encapsulation technology, living cells that are capable of converting anti-cancer prodrugs into their cancer-killing forms are enclosed in protective cellulose-based, pin-head-sized capsules that are implanted in or near a cancer tumor. Following implantation of the Cell-in-a-Box(TM) capsules, the anticancer prodrugs are then administered. The combination of the Cell-in-a-Box(TM) technology with the anti-cancer prodrug ifosfamide has been shown in Phase 1/2 trials conducted in the early 2000s to be extremely effective in treating patients with advanced inoperable pancreatic cancer (see [www.nuvilex.com/pancreatic-cancer](http://www.nuvilex.com/pancreatic-cancer)). When the data from those trials were compared with historical data for Gemzar(R) (the only drug approved to date by the FDA as a single agent for the treatment of advanced pancreatic cancer), the median survival time was increased to 11 months (from 5.7 months for Gemzar(R)) using PharmaCyte Biotech's treatment and the one-year survival rate with PharmaCyte Biotech's treatment (36%) was double that seen with Gemzar(R) (18%). Tumor sizes were also reduced from 25-50% in 4 out of 14 patients and no serious treatment-related side-effects were experienced by any of the patients using the Cell-in-a-Box(TM) plus ifosfamide combination. This is because only one-third the dose of ifosfamide normally employed in treating other forms of cancer was used in the trials due to the unique nature of the Cell-in-a-Box delivery system.

In 2013, PharmaCyte Biotech acquired exclusive worldwide and patented rights to use this cellulose-based encapsulation technology for the development of treatments for all forms of cancer. Medical Marijuana Sciences intends to take advantage of the opportunity to employ the Cell-in-a-Box(TM) encapsulation technology together with constituents of Cannabis for the development of treatments for some of the deadliest and most difficult-to-treat forms of cancer, such as gliomas (a type of brain cancer) and pancreatic cancer. The type of cells encapsulated using the Cell-in-a-Box(TM) live-cell encapsulation technology will be those that optimize the effectiveness and safety of naturally-occurring cannabinoids against such cancers in the same way that the technology was used in developing a unique treatment for pancreatic cancer.

Dr. Mark L. Rabe, Chairman of Medical Marijuana Sciences' Scientific Advisory Board commented, "Reputable scientific journals contain numerous reports that confirm the anti-cancer properties of cannabinoids. Initial trials have also documented the effectiveness of treating pancreatic cancer using the Cell-in-a-Box(TM) live-cell encapsulation technology. When taken along with the fact that Medical Marijuana Sciences' parent company, PharmaCyte Biotech, owns the exclusive worldwide rights to utilize this technology in developing cancer treatments, we believe that Medical Marijuana Sciences is in a unique position to develop cannabinoid-based treatments for cancer that will set it far apart from others in the medical marijuana arena."

### About PharmaCyte Biotech:

PharmaCyte Biotech is a biotechnology company focused on developing and preparing to commercialize treatments for cancer and diabetes based upon a proprietary cellulose-based live-cell encapsulation technology, called Cell-in-a-Box(TM). This unique technology will be used as a platform upon which treatments for several types of cancer, including advanced, inoperable pancreatic cancer, and diabetes are being built. The Company's treatment for pancreatic cancer involves the use of the widely used anticancer prodrug, ifosfamide, together with encapsulated live cells that convert ifosfamide into its active or "cancer-killing" form. PharmaCyte Biotech's subsidiary, Medical Marijuana Sciences, Inc., is dedicated to the development of cancer treatments based upon chemical constituents of marijuana known as cannabinoids. To do so, it will examine ways to exploit the benefits of Cell-in-a-Box(TM) technology in optimizing the anticancer effectiveness of cannabinoids against cancers while minimizing or outright eliminating the debilitating side effects usually associated with cancer treatments. This provides Medical Marijuana Sciences a unique opportunity to develop "green" approaches to fighting deadly cancers, such as those of the pancreas, brain, breast and prostate, that affect hundreds of thousands of individuals worldwide every year.

### Safe Harbor:

This press release may contain forward-looking statements regarding PharmaCyte Biotech and its future events and results that are subject to the safe harbors created under the Securities Act of 1933, as amended, and the Securities Exchange Act of 1934, as amended. All statements, other than statements of historical facts, included in this press release regarding PharmaCyte Biotech's financial position, business strategy, plans and objectives of management for future operations and business conditions are forward-looking statements.

Forward-looking statements involve inherent risks and uncertainties. Important factors, many of which are beyond the control of PharmaCyte Biotech, that could cause actual results to differ materially from those set forth in the forward-looking statements include general economic or

business conditions, changes in legislation or regulatory requirements, conditions of the securities markets, PharmaCyte Biotech's ability to raise capital, changes in accounting principles, policies or guidelines, financial or political instability and other economic, competitive, governmental, regulatory and technical factors affecting the plans, operations, products and services of PharmaCyte Biotech and its subsidiaries.

PharmaCyte Biotech has based these forward-looking statements on its current expectations and assumptions about future events. While management considers these expectations and assumptions to be reasonable, they are inherently subject to significant business, economic, competitive, regulatory and other risks, contingencies and uncertainties, most of which are difficult to predict and many of which are beyond the control of PharmaCyte Biotech. PharmaCyte Biotech does not assume any obligations to update any of these forward-looking statements.

More information about PharmaCyte Biotech and Medical Marijuana Sciences can be found at [www.nuvilex.com](http://www.nuvilex.com) and [www.medicalmarijuanasciences.com](http://www.medicalmarijuanasciences.com). It can also be obtained by contacting Investor Relations.

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