



PRESS RELEASE

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## **KIYATEC Awarded National Cancer Institute Contract to Establish Predictive 3D Breast Cancer Model**

*Contract awarded under the Small Business Innovative Research ("SBIR") Program to establish patient-derived, 3D micro-tumors designed to be used to screen anticancer drugs during development and to test patient-derived samples in real time to assist clinical decision making*

GREENVILLE, South Carolina, Oct 24, 2013 -- Kiyatec Inc. ([www.kiyatec.com](http://www.kiyatec.com)) today announced that the National Cancer Institute (NCI), one of the 27 institutes and centers that comprise the National Institutes of Health (NIH), awarded the company an approximately \$295,000 Phase I SBIR (Small Business Innovation Research) contract to establish 3D breast cancer models using living cells obtained directly from breast cancer patients. Accurate modeling of the response of a patient's cancer to a drug will help them in two ways – to reduce failures of anticancer drugs during clinical trials because of earlier, more relevant information on drug effectiveness, and to test patient-derived samples in real time for clinical decision making specific to that individual.

The goal of this contract, titled "3D Human Tumor Co-Culture System for Accurate Prediction of Clinical Efficacy", is to create living cell-based models of the breast cancer microenvironment. Cells grown or "cultured" in environments that mimic the conditions inside the human body have been shown to better predict the treatment outcomes that are seen in patients. Importantly, these models are designed to be monitored and evaluated for response (for example cell death resulting from a drug) using non-destructive imaging and other means. Current techniques of measuring the effect of a drug can require analysis methods that are destructive to the cells in the models. The models will progress from using cell lines to using cells obtained directly from patients. Ultimately, the "micro-tumors" using patient-derived breast cancer cells of selected sub-types will be treated with approved cancer drugs known to be clinically effective for those sub-types, enabling a measure of the model's predictivity of the clinical outcomes seen in patients.

"We are very grateful for this award from the National Cancer Institute through the SBIR program to advance Kiyatec's development of predictive 3D cell-based cancer models, and are proud to be collaborating on an initiative that can potentially bring benefit to the millions of American women who have or will be diagnosed with breast cancer." said Dr. Matt Gevaert, Kiyatec's CEO. "This contract's focus on breast cancer builds on our existing body of work across multiple solid tumor types, including ovarian cancer. Demonstrating this breadth of applicability is important as we engage pharmaceutical and biotechnology companies to leverage Kiyatec's assays to help them better predict human patient response before, during and after clinical trials. This contract will aid us in doing so and we expect it will catalyze further exciting and meaningful *ex vivo* cancer assay development."



The contract is being funded in whole or in part with Federal funds from the National Cancer Institute, National Institutes of Health, Department of Health and Human Services, under Contract No. HHSN261201300043C.

About KIYATEC Inc.:

KIYATEC specializes in providing advanced, 3D cell-based assays and diagnostics with superior physiologic relevance for more accurate *ex vivo* prediction of patient response to drugs. KIYATEC's Greenville, South Carolina offices and labs are co-located with the Institute for Translational Oncology Research (ITOR) Clinical Research Unit on the main campus of the Greenville Health System, the 13<sup>th</sup> largest public hospital system in the United States. We utilize primary sourced cells and tissues, immunoassays, imaging and other analytical capabilities to provide valuable data and insight to meet the needs of the pharmaceutical, biotechnology and healthcare industries. KIYATEC is also developing robust phenotypic cell-based cancer diagnostics using viable tumor biopsies to assess patient-specific response to available therapeutic agents.

By leveraging KIYATEC's specialized expertise and clinical connectivity, we add significant value to our clients' preclinical, adaptive or co-clinical trials, and post-approval small molecule and biologic programs. Our technologies and methods provide more accurate simulation of phenomenon inherent within the living systems of the human body. Accurate modeling of these dynamic conditions creates opportunity for enhanced diagnostics and advanced medical treatments that will benefit society through the resulting improvements in healthcare and its associated costs.

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