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## **Moffitt Cancer Center & Cvergenx Partner to Personalize Radiation Therapy**

*The research project will study using a patient's radiosensitivity and genetics to determine optimal radiation dosage.*

**TAMPA, Fla. (August 9, 2017)** – [Moffitt Cancer Center](#) and [Cvergenx](#) announced a new research partnership that aims to revolutionize radiation therapy. The goal of the Future of Radiation Therapy (FORT) project is to create a framework for using a patient's genetic information to provide a personalized radiation treatment plan.

Moffitt's Radiation Oncology Department will utilize Cvergenx's Genomic-Adjusted Radiation Dose (GARD) model. GARD is the first validated model that can predict the therapeutic effects of radiotherapy and guide dosage based on an individual patient's radiosensitivity. It works by combining two algorithms – the linear-quadratic (LQ) model, which helps identify dosing strategies, and the radiosensitivity index (RSI), which evaluates expression levels of 10 different genes that have been found to predict tumor radiosensitivity. The RSI was developed by [Javier Torres-Roca](#), M.D., associate member of Moffitt's Radiation Oncology Department.

Together, the LQ model and RSI data result in GARD scoring. Patients with high GARD values have the likelihood of a positive therapeutic response to radiation therapy. Lower GARD values indicate resistance to radiation.

“Utilizing radiosensitivity and genomic-adjusted dosage will reduce unnecessary radiation treatment, as well as fine tune more effective treatment for those cancer patients who stand to benefit,” said [Louis B. Harrison](#), M.D., FASTRO, chair of the Department of Radiation Oncology at Moffitt. “Genomics is an essential ingredient of our multi-faceted strategy to personalize radiation therapy. By taking a more tailored approach to the treatment of each individual patient, we will be able to improve oncologic outcomes and reduce health care costs.”

“Our strategic collaboration with Moffitt represents a pivotal moment in the development and use of precision genomic radiation planning and therapy,” said Raymond F. Vennare CEO of Cvergenx, Inc. “The ability to introduce an enabling technology like ours into a clinical environment like Moffitt, not only shifts the paradigm in radiation planning and treatment, but has the potential to create an entirely new paradigm in radiation oncology as well.”

GARD has already been proven in preliminary study. An article, recently published in *The Lancet Oncology*, confirmed that the GARD model could predict the clinical outcomes of 263 breast cancer patients who were treated with radiation therapy and

surgery. It could also predict the outcomes of additional sets of patients, including glioblastoma, lung, and pancreatic cancer patients.

### **About Moffitt Cancer Center**

*Moffitt is dedicated to one lifesaving mission: to contribute to the prevention and cure of cancer. The Tampa-based facility is one of only 48 [National Cancer Institute-designated Comprehensive Cancer Centers](#), a distinction that recognizes Moffitt's excellence in research, clinical trials, prevention and cancer control. Moffitt is the No. 6 cancer hospital in the nation and has been listed in [U.S. News & World Report](#) as one of the "Best Hospitals" for cancer care since 1999. Moffitt devotes more than 2.5 million square feet to research and patient care. Moffitt's expert nursing staff is recognized by the American Nurses Credentialing Center with Magnet<sup>®</sup> status, its highest distinction. With more than 5,200 team members, Moffitt has an economic impact in the state of \$2.1 billion. For more information, call 1-888-MOFFITT (1-888-663-3488), visit [MOFFITT.org](#), and follow the momentum on [Facebook](#), [Twitter](#) and [YouTube](#).*

### **About Cvergenx**

*Cvergenx, Inc. is a genomic informatics company that provides decision-support to radiation oncologists. The company's Precision Genomic Radiation Therapy platform (pGRT™) takes a mathematical, rather than empirical, approach to the integration of genomics into radiation treatment planning. Developed in collaboration with the Moffitt Cancer Center, the company's patented Radiosensitivity Index (RSI) and Genomic Adjusted Radiation Dose (GARD) provide the first opportunity to adapt radiation treatment and dose to improve outcomes on a patient-by-patient basis. For more information, please contact us at: [www.cvergenx.com](http://www.cvergenx.com).*

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