New Treatment ‘a Game Changer’ for Cancer Patients With Neuroendocrine Tumors

Helen F. Graham Cancer Center & Research Institute is among the first in the nation to offer peptide receptor radionuclide therapy (PRRT)

Wilmington, Delaware, Jan. 30, 2019 – Christiana Care Health System’s Helen F. Graham Cancer Center & Research Institute is one of the first sites in the country approved to offer a new treatment called peptide receptor radionuclide therapy (PRRT) using the drug Lutathera for adults with advanced, cancerous neuroendocrine tumors that develop in the pancreas and gastrointestinal tract.

Nearly one out of 27,000 people are diagnosed with neuroendocrine carcinoid tumors each year. African-Americans and women between ages 40 and 50 are at highest risk.

The first of 10 patients at the Graham Cancer Center has now completed PRRT with Lutathera, the only approved PRRT medicine to treat these rare cancers.

“PRRT with Lutathera is a game changer for our patients with metastasized or inoperable neuroendocrine tumors,” said Nuclear Medicine physician Hung Q. Dam, M.D. “Previously, there were limited effective options for treatment once the initial standard therapy had failed to stop the cancer from growing.”

PRRT is a form of targeted therapy, tailored to a person’s individual molecular makeup. PRRT targets tumor cells with limited radiation exposure to surrounding healthy tissues and generally has milder side effects than chemotherapy.

Yttrium 90 and Lutetium 177 are the most commonly used radioactive drugs with PRRT. This is the first time Lutathera (Lutetium 177 DOTATATE) is approved to treat gastroenteropancreatic neuroendocrine tumors.

PRRT with Lutathera works against pancreatic and gastrointestinal carcinoid tumors that have cell surface proteins called somatostatin receptors. After locating and binding to the receptor, the drug enters the cell allowing radiation to cause damage to the tumor cells, but limiting radiation to surrounding healthy tissues and organs.
Rosalind McGrady, a retired registered nurse from Townsend, Delaware, was the first patient to complete the full PRRT regimen at Christiana Care.

“It means everything to be able to have my treatments here,” McGrady said. “It is a blessing to be close to home, and everyone on my treatment team has been so wonderful and caring.”

Since her diagnosis in 2011, McGrady has been on monthly injections of a drug called octreotide to slow the growth of her low-grade GI tract tumors and to control hormone-related symptoms, but her disease had spread. Her Medical Oncologist Dhaval Shah, M.D., recommended a visit with the Hepatobiliary Pancreatic multidisciplinary team at the Helen F. Graham Cancer Center & Research Institute to explore further treatment options. Subsequent PET/CT imaging with Gallium 68 DOTATATE, revealed she would be a good candidate for PRRT.

PRRT with Lutathera is given by IV infusion every eight weeks for a total of four doses. Treatment takes place in the hospital under the direction of the Nuclear Medicine team. Each treatment lasts about five hours. In addition to anti-nausea medicines, patients receive an IV infusion of amino acids to protect their kidneys from radiation.

McGrady credits Dr. Shah and his team for going the extra mile so that she could have PRRT close to home.

“We worked proactively to obtain insurance approval for Mrs. McGrady to have what is potentially a life-extending treatment for her as soon as it became available here at Christiana Care,” Dr. Shah said.

“I have lived with this cancer for more than seven years,” McGrady said. “I have faith that this new treatment will give me even more years with my family.”

**Bringing a powerful new tool quickly to cancer treatment in Delaware**

“Our ability to offer PRRT on the heels of FDA approval last year is the result of imagination, planning and teamwork among our Oncology and Nuclear Medicine teams who are committed to bringing the latest, personalized, targeted cancer therapies to our patients in their own communities,” said Nicholas Petrelli, M.D., Bank of America endowed medical director of the Helen F. Graham Cancer Center & Research Institute. “As a National Cancer Institute Community Oncology Research Program, this is a primary mission.”

Clinical trial results among 229 patients showed that close to 80 percent of patients receiving Lutathera survived for much longer periods of time without tumor growth (progression-free survival) compared to patients receiving the standard of care. Additionally, 13 percent of patients on Lutathera experienced complete or partial tumor shrinkage.
Recently, Nuclear Medicine at Christiana Care introduced a powerful new imaging tool to help in diagnosing and evaluating treatment effectiveness in patients with neuroendocrine tumors. By pairing Lutathera DOTATATE with a diagnostic isotope called Gallium 68 that binds to the receptors and highlights the tumor on PET/CT imaging, clinicians can better visualize the presence and distribution of these tumors, select appropriate patients for Lutathera and monitor the effects of therapy.

“The field of theranostics where we use the same agent for both targeted imaging and therapy is relatively new, but growing rapidly, allowing us to personalize our treatments to the biology of the patient,” said Dr. Dam. “This means potentially safer, more effective therapy and ultimately, better outcomes.”

**Downloadable photos of Rosalind McGrady and Nuclear Medicine team.**

**About the Helen F. Graham Cancer Center & Research Institute**
The Helen F. Graham Cancer Center & Research Institute, a National Cancer Institute Community Oncology Research Program, is part of the Christiana Care Health System, one of the country’s most dynamic health systems, ranking as the 24th leading hospital in the nation in terms of patient admissions. With more than 223,104 patient visits last year, the Graham Cancer Center is recognized as a national model for multidisciplinary cancer care and a top enrollee in U.S. clinical research trials. In conjunction with the Center for Translational Cancer Research, the Tissue Procurement Center, Gene Editing Institute, statewide High-Risk Family Cancer Registry and collaborations with world-renowned scientists at facilities such as The Wistar Institute in Philadelphia, scientists are opening new avenues to more quickly translate cancer science into cancer medicine. For more information, visit [www.christianacare.org/cancer](http://www.christianacare.org/cancer).