Peptide Receptor Radionuclide Therapy in the United States

TO THE EDITOR: We read with great interest the article by Drs. Graham and Menda titled “Radiopeptide Imaging and Therapy in the United States” published in the recent supplement to The Journal of Nuclear Medicine (1). We would like to take this opportunity to describe 2 ongoing Food and Drug Administration–approved projects on peptide receptor radionuclide therapy at the Excel Diagnostics and Nuclear Oncology Center.

In August 2010, the Food and Drug Administration approved an investigational new drug (IND) clinical trial (IND 78,256) using 177Lu-octreotate for patients with neuroendocrine cancers. Excel Diagnostics and Nuclear Oncology Center is the first facility in the United States to receive authorization to initiate this therapy. Dr. Ebrahim S. Delpassand is the principle investigator, and the project is in collaboration with St. Luke’s Episcopal Hospital, Baylor College of Medicine, the Radio-Isotope Therapy of America Foundation, Biosynthema Inc., and Advanced Accelerator Application (2,3). So far, we have enrolled and treated 34 patients with 177Lu-octreotate.

Our second active peptide receptor radionuclide therapy project under the Food and Drug Administration (IND 72,037) is for treatment of neuroendocrine cancer patients with high-dose 111In-octreotide (4). So far, we have treated more than 110 patients with inoperable metastatic neuroendocrine cancer under this protocol. The results of our treating the first 32 patients with at least 2 cycles of 18,500-MBq (500-mCi) 111In-octreotide were very promising and were published in 2008 (5). A manuscript describing our experience in a larger population is under review for publication.

Peptide receptor radionuclide therapy for metastatic neuroendocrine cancer using β-emitters (such as 177Lu or 90Y) is very promising and needs to be brought to routine clinical practice in the United States, just like in Europe (6).

REFERENCES


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