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Gallium Ga 68-DOTATATE

National Cancer Institute

Source

National Cancer Institute. *Gallium Ga 68-DOTATATE*. NCI Thesaurus. Code C97661.

A radioconjugate consisting of the somatostatin analogue tyrosine-3-octreotate (Tyr3-octreotate or TATE) labeled with the positron emission tomography (PET) tracer gallium Ga 68 via the macrocyclic chelating agent dodecanetetraacetic acid (DOTA), which may be used as a somatostatin receptor (SSTR) imaging agent in conjunction with PET to image neuroendocrine tumors (NETs). Gallium Ga 68-DOTATATE binds to SSTRs, with a much higher affinity for type 2 SSTR, present on the cell membranes of many types of NETs. This allows for visualization of SSTR-positive cells upon imaging. SSTR subtypes have been shown to be present in large numbers on NETs and their metastases, while most other normal tissues express low levels of SSTR subtypes.