

Vantage Radiology is pleased to be offering Dotatate for PET/CT localization of somatostatin receptor-positive neuroendocrine tumors (NETs) in adults and children.

Quick Facts about Dotatate GA-68 Injection :

- Dotatate with gallium GA 68 is a radioactive diagnostic agent indicated for PET/CT localization of somatostatin receptor-positive neuroendocrine tumors (NETs) in adults and children. ¹
- Positive uptake on a 68Ga-Dotatate PET/CT can guide available therapy options. ¹
- PET Imaging has the potential to improve disease localization compared to standard imaging, thus enhancing therapeutic decision-making. (With an appropriate tracer and combined with CT or MRI.) ^{3,4}
- FDA approved
- CMS reimbursed

Patient prep:

- The patient will need to drink 20 oz of water to hydrate prior to the exam.
 - Please advise the patient to come well-hydrated. Dehydration may affect the results of imaging.
- If the patient is prescribed somatostatin analogs:
 - Short-acting – Can be used up to 24 hours before imaging.
 - Long-acting – Discontinue using analogs for 3-4 weeks before the scheduled imaging day.

Important things to note:

- The patient will need to hold still for the entire scan time on the table which can vary but is approximately 40 minutes.
- Patients should drink water and void frequently during the first hours following the exam.
- Lactating women should interrupt breastfeeding to pump and discard breast milk for 12 hours after Dotatate injection.

How to order in Epic: Search - Pet/CT Neuro endocrine; IMG3452 (No spaces in study type off the facilities list.)

Dotatate Efficacy:

- Dotatate PET/CT overall specificity has been reported equal to 90.6% with 95% confidence interval of 77.8 to 96.1%. ⁵
- Dotatate PET/CT overall sensitivity has been reported as 87.1% and 90.9%, respectively. ⁵
- Multiple studies have demonstrated that 68Ga-DOTA-peptide PET/CT has a higher detection rate for NET lesions as well as involved organs when compared to octreotide scans. ¹



1. Raj, N., & Reidy-Lagunes, D. (2019, January 1). The role of 68ga-dotatate positron emission tomography/computed tomography in well-differentiated neuroendocrine tumors: A case-based approach illustrates potential benefits and challenges. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5729934/>

2. American College of Radiology. (n.d.). ACR-ACNM-SNMMI PRACTICE PARAMETER FOR THE PERFORMANCE OF GALLIUM-68 AND COPPER-64 DOTATATE PET/CT IMAGING FOR NEUROENDOCRINE TUMORS. ACR-ACNM-SNMMI PRACTICE PARAMETER FOR THE PERFORMANCE OF GALLIUM-68 AND COPPER-64 DOTATATE PET/CT IMAGING FOR NEUROENDOCRINE TUMORS. https://www.acr.org/-/media/ACR/Files/Practice-Parameters/DOTATATE_PET_CT.pdf

3. MS, A. R. A. (n.d.). Guiding management of therapy in prostate cancer: Time to switch from conventional imaging to PSMA Pet?. Therapeutic advances in medical oncology. <https://pubmed.ncbi.nlm.nih.gov/31565073/>

4. Pienta KJ, Gorin MA, Rowe SP, et al. A phase 2/3 prospective multicenter study of the diagnostic accuracy of prostate specific membrane antigen PET/CT with 18F-DCFPYL in prostate cancer patients (OSPREY) [published online ahead of print, February 26, 2021]. J. Urol. doi: 10.1097/JU.0000000000001698

5. Fallahi, B., Manafi-Farid, R., Eftekhari, M., Fard-Esfahani, A., Emami-Ardekani, A., Geramifar, P., Akhlaghi, M., Hashemi Taheri, A. P., & Beiki, D. (2019). Diagnostic Efficiency of 68Ga-DOTATATE PET/CT as Compared to 99mTc-Octreotide SPECT/CT and Conventional Morphologic Modalities in Neuroendocrine Tumors. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6661311/>