Lutathera Policy

Purpose

To describe the CVS Radiation Oncology External Policy for Lutathera.

Scope

The scope of this document applies to CVS Health clients who have signed up for the CVS Radiation Oncology program under CVS Health Solutions. This document includes the external policy details for the Lutathera policy.

Policy

Lutetium Lu 177 Dotatate (Lutathera)

Criteria for Initial Approval

CVS Health considers lutetium Lu 177 dotatate (Lutathera) medically necessary for members with the following indications:

A. Neuroendocrine tumors (NETs)

1. Tumors of the gastrointestinal (GI) tract (carcinoid tumor) - four doses total for treatment of somatostatin receptor-positive NETs of the gastrointestinal tract when the member has recurrent, locoregional advanced disease and/or distant metastases and *one* of the following criteria is met:

a. Member has clinically significant tumor burden; *or*

b. Member experienced disease progression on octreotide or lanreotide;

2. Tumors of the pancreas - four doses total for treatment of somatostatin receptor-positive NETs of the pancreas when *both* of the following criteria are met:

a. Member has symptomatic disease, clinically significant tumor burden, or progressive recurrent, locoregional advanced disease and/or distant metastases; *and*

b. Member experienced disease progression on octreotide or lanreotide;

3. Neuroendocrine tumors (NETs) of the lung and thymus (carcinoid tumors) - four doses total for treatment of somatostatin receptor-positive NETs of the lung and thymus when *one* of the following criteria is met:

a. Member has recurrent or locoregional unresectable disease and has progressed on octreotide or lanreotide; *or*

b. Member has distant metastatic disease, has experienced progression on octreotide or lanreotide, and meets *one* of the following criteria:

1. Clinically significant tumor burden and low grade (typical carcinoid) histology; *or*
2. Evidence of disease progression; *or*
3. Intermediate grade (atypical carcinoid) histology; *or*
4. Symptomatic disease;

4. Well-differentiated grade 3 NETs with favorable biology - four doses total for treatment of well-differentiated grade 3 unresectable locally advanced or metastatic NETs with favorable biology (e.g., relatively low Ki-67 [less than 55%], positive somatostatin receptor [SSTR]-based PET imaging) when member meets *one* of the following criteria:

a. Clinically significant tumor burden; *or*

b. Evidence of disease progression;

B. Carcinoid Syndrome

Four doses total for treatment of poorly controlled carcinoid syndrome when *all* of the following criteria are met:

1. Member has somatostatin receptor-positive neuroendocrine tumor of the gastrointestinal tract, lung or thymus; *and*

2. Member experienced progression on octreotide or lanreotide; *and*

3. The requested medication will be used in combination with *either:*

4. octreotide LAR or lanreotide for persistent symptoms (i.e., flushing, diarrhea) *or*

5. telotristat for persistent diarrhea in combination with octreotide LAR or lanreotide;

C. Pheochromocytoma/paraganglioma

Four doses total for treatment of somatostatin receptor-positive pheochromocytoma/paraganglioma when the member meets *one* of the following criteria:

1. Member has locally unresectable disease; *or*

2. Member has distant metastases.

CVS Health considers lutetium Lu 177 dotatate (Lutathera) experimental and investigational for all other indications.

Procedure

Dosage and Administration

Lutetium Lu 177 dotatate is available as Lutathera for injection as 370 MBq/mL (10 mCi/mL) in single-dose vial for intravenous use.

Somatostatin receptor-positive gastroenteropancreatic neuroendocrine tumors (GEP-NETs), including foregut, midgut, and hindgut neuroendocrine tumors in adults:

The recommended dose is 7.4 GBq (200 mCi) every 8 weeks (± 1 week) for a total of 4 doses. Administer premedications and concomitant medicatiions as recommended.

Source: Advanced Accelerator Applications USA, 2023

Experimental and Investigational

CVS Health considers lutetium Lu 177 dotatate (Lutathera) experimental and investigational for the treatment of:

- Medullary thyroid carcinoma
- Meningioma.

References

The Lutathera policy is based on the following references:

1. Advanced Accelerator Applications USA, Inc. Lutathera (lutetium Lu 177 dotatate) injection, for intravenous use. Prescribing Information. Millburn, NJ: Advanced Accelerator Applications USA; revised March 2023.
2. Dadgar H, Jafari E, Ahmadzadehfar H, et al. Feasibility and therapeutic potential of the 68Ga/177Lu-Dotatate theranostic pair in patients with metastatic medullary thyroid carcinoma. Ann Endocrinol (Paris). 2023;84(1):45-51.
3. Naik M, Al-Nahhas A, Khan SR. Treatment of neuroendocrine neoplasms with radiolabeled peptides -- Where are we now. Cancers (Basel). 2022;14(3):761.
4. National Comprehensive Cancer Network (NCCN). Lutetium lu 177 dotatate. NCCN Drugs & Biologics Compendium. Plymouth Meeting, PA: NCCN; January 2023.
5. National Comprehensive Cancer Network (NCCN). Neuroendocrine and adrenal tumors. NCCN Clinical Practice Guidelines in Oncology, Version 1.2023. Plymouth Meeting, PA: NCCN; August 2023.
6. Nemati R, Shooli H, Rekabpour SJ, et al. Feasibility and therapeutic potential of peptide receptor radionuclide therapy for high-grade gliomas. Clin Nucl Med. 2021;46(5):389-395.
7. Nicolini S, Bodei L, Bongiovanni A, et al. Combined use of 177Lu-DOTATATE and metronomic capecitabine (Lu-X) in FDG-positive gastro-entero-pancreatic neuroendocrine tumors. Eur J Nucl Med Mol Imaging. 2021;48(10):3260-3267.
8. Parghane RV, Naik C, Talole S, et al. Clinical utility of 177 Lu-Dotatate PRRT in somatostatin receptor-positive metastatic medullary carcinoma of thyroid patients with assessment of efficacy, survival analysis, prognostic variables, and toxicity. Head Neck. 2020;42(3):401-416.
9. Pirisino R, Filippi L, D'Agostini A, Bagni O. Management of a patient with metastatic gastrointestinal neuroendocrine tumor and meningioma submitted to peptide receptor radionuclide therapy with 177 Lu-DOTATATE. Clin Nucl Med. 2022;47(11):e692-e695.
10. Romiani A, Spetz J, Shubbar E, et al. Neuroblastoma xenograft models demonstrate the therapeutic potential of 177 Lu-octreotate. BMC Cancer. 2021;21(1):950.
11. Sartor O, de Bono J, Chi KN, et al. Lutetium-177-PSMA-617 for metastatic castration-resistant prostate Cancer. N Engl J Med. 2021;385(12):1091-1103.
12. Satapathy S, Mittal BR, Sood A, et al. 177 Lu- Dotatate plus radiosensitizing capecitabine versus octreotide long-acting release as first-line systemic therapy in advanced grade 1 or 2 gastroenteropancreatic neuroendocrine tumors: A single-institution experience. JCO Glob Oncol. 2021;7:1167-1175.
13. Strosberg J, El-Haddad G, Wolin E, et al.; NETTER-1 Trial Investigators. Phase 3 trial of (177)Lu-Dotatate for midgut neuroendocrine tumors. N Engl J Med. 2017;376(2):125-135.
14. Strosberg JR, Caplin ME, Kunz PL, et al; NETTER-1 investigators. 177 Lu-Dotatate plus long-acting octreotide versus highdose long-acting octreotide in patients with midgut neuroendocrine tumours (NETTER-1): Final overall survival and long-term

safety results from an open-label, randomised, controlled, phase 3 trial. Lancet Oncol. 2021;22(12):1752-1763.
15. U.S. Food and Drug Administration (FDA). FDA approves new treatment for certain digestive tract cancers. FDA News. Silver Spring, MD: FDA; January 26, 2018.
16. Wrange EKM, Harders SMW. A rare case of metastatic atypical meningioma that highlights the shortcomings of treatment options at present. Acta Radiol Open. 2022;11(7): 20584601221109919.
17. Zahid A, Johnson DR, Kizilbash SH. Efficacy of 177Lu-dotatate therapy in the treatment of recurrent meningioma. Mayo Clin Proc Innov Qual Outcomes. 2021;5(1):236-240.