

Sandostatin® LAR (octreotide suspension)

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I. Length of Authorization

Coverage is provided for 6 months and may be renewed.

II. Dosing Limits

A. Quantity Limit (max daily dose) [NDC Unit]:

- Sandostatin LAR Depot 10 mg single-use kit: 1 per 28 days
- Sandostatin LAR Depot 20 mg single-use kit: 2 per 28 days
- Sandostatin LAR Depot 30 mg single-use kit: 1 per 28 days

B. Max Units (per dose and over time) [HCPCS Unit]:

- Acromegaly: 40 billable units every 28 days
- Carcinoid Tumors, Neuroendocrine Tumors, and VIPomas: 30 billable units every 28 days
- Thymomas: 20 billable units every 14 days

III. Initial Approval Criteria ^{1,12,13}

Coverage is provided in the following conditions:

- Patient is at least 18 years of age; **AND**

Carcinoid Tumors/Neuroendocrine Tumors (e.g., Gastrointestinal Tract, Lung, Thymus, Pancreas, Adrenal) † ^{1,4,6,9}

- Patient has severe diarrhea/flushing episodes (carcinoid syndrome) † **Φ**; **OR**
- Used as primary treatment for symptom and/or tumor control of unresected primary gastrinoma; **OR**
- Used for symptom and/or tumor control of bronchopulmonary or thymic disease; **AND**
 - Used for somatostatin receptor positive disease and/or hormonal symptoms; **AND**
 - Used in one of the following treatment settings:
 - Used as primary therapy; **OR**

- Used as subsequent therapy (as alternate primary therapy) if progression on primary therapy; **OR**
 - Patient has disease progression with functional tumors and will be continuing treatment with octreotide LAR; **AND**
- Patient has one of the following:
 - Recurrent and/or locoregional unresectable disease; **OR**
 - Recurrent and/or distant metastatic disease; **AND**
 - Patient is asymptomatic with low tumor burden and low grade (typical histology (****Note: Only applies to use as primary therapy**); **OR**
 - Patient has clinically significant tumor burden and low grade (typical carcinoid) histology; **OR**
 - Patient has evidence of disease progression; **OR**
 - Patient has intermediate grade (atypical carcinoid) histology; **OR**
 - Patient has symptomatic disease; **OR**
- Used for symptom and/or tumor control of multiple lung nodules or tumorlets and evidence of diffuse idiopathic pulmonary neuroendocrine cell hyperplasia (DIPNECH); **AND**
 - Used as primary therapy for somatostatin receptor positive disease and/or chronic cough/dyspnea that is not responsive to inhalers; **OR**
- Used for symptom and/or tumor control of recurrent, locoregional advanced and/or distant metastatic disease of the gastrointestinal tract; **AND**
 - Used as single agent if patient is asymptomatic with a low tumor burden; **OR**
 - Used as a single agent or in combination with alternative front-line therapy if patient has a clinically significant tumor burden; **OR**
 - Used as a single agent for disease progression if not already receiving octreotide LAR; **OR**
 - Patient has disease progression with functional tumors and will be continuing treatment with octreotide LAR; **OR**
- Used for symptom and/or tumor control of somatostatin-receptor positive neuroendocrine tumors of the pancreas (well differentiated grade 1/2); **AND**
 - Patient has locoregional gastrinoma, insulinoma, glucagonoma, or VIPoma (****Note: Somatostatin-receptor positive disease ONLY applies to insulinoma**); **OR**
 - Patient has recurrent or locoregional advanced and/or distant metastatic disease; **AND**
 - Used as a single agent if patient is asymptomatic with a low tumor burden and stable disease; **OR**
 - Patient is symptomatic; **OR**
 - Patient has a clinically significant tumor burden; **OR**

- Patient has clinically significant progression and is not already receiving octreotide LAR; **OR**
 - Patient has disease progression with functional tumors and will be continuing treatment with octreotide LAR; **OR**
- Patient has pheochromocytoma or paraganglioma; **AND**
 - Used as primary treatment for secreting tumors for symptom and/or tumor control; **AND**
 - Patient has locally unresectable or distant metastatic disease; **OR**
- Patient has well-differentiated grade 3 neuroendocrine tumors; **AND**
 - Used for treatment of symptoms and/or tumor control for somatostatin receptor positive disease and/or hormonal symptoms; **AND**
 - Patient has unresectable locally advanced or metastatic disease with favorable biology (e.g., relatively low Ki-67 [$<55\%$], positive SSTR-based PET imaging)

Diarrhea associated with Vasoactive Intestinal Peptide tumors (VIPomas) † Φ¹

- Patient has profuse watery diarrhea

Acromegaly † Φ^{1,3,5,10}

- Patient diagnosis confirmed by elevated (age-adjusted) or equivocal serum IGF-1 as well as inadequate suppression of GH after a glucose load; **AND**
- Patient has documented inadequate response to surgery and/or radiotherapy or it is not an option for the patient; **AND**
- Used as long-term maintenance therapy; **AND**
- Patient's tumor has been visualized on imaging studies (i.e., MRI or CT-scan); **AND**
- Baseline growth hormone (GH) and IGF-1 blood levels (renewal will require reporting of current levels)

Thymomas ‡^{4,8}

- Used with or without prednisone therapy; **AND**
 - Used for patients who are unable to tolerate first-line combination regimens; **AND**
 - Used as first line therapy; **OR**
 - Used as postoperative treatment after R2 resection; **OR**
 - Used as second-line therapy for unresectable or metastatic disease

† FDA Approved Indication(s); ‡ Compendia Recommended Indication(s); Φ Orphan Drug

IV. Renewal Criteria^{1,4-9}

Coverage can be renewed based on the following criteria:

- Patient continues to meet indication-specific relevant criteria such as concomitant therapy requirements (not including prerequisite therapy), performance status, etc. identified in section III; **AND**
- Absence of unacceptable toxicity from the drug. Examples of unacceptable toxicity include: cholelithiasis and complications of cholelithiasis (i.e. cholecystitis, cholangitis, pancreatitis), hyperglycemia, hypoglycemia, hypothyroidism, sinus bradycardia, cardiac arrhythmias, cardiac conduction abnormalities, depressed vitamin B₁₂ levels, etc.; **AND**
- Disease response with improvement in patient's symptoms including reduction in symptomatic episodes (such as diarrhea, rapid gastric dumping, flushing, bleeding, etc.) and/or stabilization of glucose levels and/or decrease in size of tumor or tumor spread; **AND**
 - **Acromegaly ONLY:** Disease response as indicated by an improvement in signs and symptoms compared to baseline; **AND**
 - Reduction of growth hormone (GH) from pre-treatment baseline; **OR**
 - Age-adjusted normalization of serum IGF-1
 - **Neuroendocrine tumors (gastrointestinal tract, bronchopulmonary, thymus, or pancreas) ONLY:** Patient has had disease progression and therapy will be continued in patients with functional tumors.

V. Dosage/Administration ^{1,7}

Indication	Dose
Acromegaly	<p>20 mg intramuscularly§ every 4 weeks for 3 months</p> <ul style="list-style-type: none"> • After 3 months of therapy, doses may be adjusted as follows (not to exceed 40 mg every 4 weeks): <ul style="list-style-type: none"> ○ GH \leq 2.5 ng/mL, IGF-1 normal, and clinical symptoms controlled: maintain SANDOSTATIN LAR DEPOT dosage at 20 mg every 4 weeks; OR ○ GH > 2.5 ng/mL, IGF-1 elevated, and/or clinical symptoms uncontrolled, increase SANDOSTATIN LAR DEPOT dosage to 30 mg every 4 weeks; OR ○ GH \leq 1 ng/mL, IGF-1 normal, and clinical symptoms controlled, reduce SANDOSTATIN LAR DEPOT dosage to 10 mg every 4 weeks; OR ○ If GH, IGF-1, or symptoms are not adequately controlled at a dose of 30 mg, the dose may be increased to 40 mg every 4 weeks
Carcinoid Tumors, Neuroendocrine Tumors, and VIPomas	<p>20 mg intramuscularly§ every 4 weeks for 2 months</p> <ul style="list-style-type: none"> • After 2 months of therapy, doses may be adjusted as follows (not to exceed 30 mg every 4 weeks): <ul style="list-style-type: none"> ○ If symptoms are not adequately controlled, increase the dose to 30 mg every 4 weeks; OR

	<ul style="list-style-type: none"> ○ If good control has been achieved on a 20 mg dose, the dose may be lowered to 10 mg for a trial period; if symptoms recur, increase the dose to 20 mg every 4 weeks
Thymomas	20 mg intramuscularly every 14 days
<p><i>*Renal impairment (patients on dialysis) and hepatic impairment (patients with cirrhosis): starting dose of 10mg every 4 weeks</i></p> <p><i>§ SANDOSTATIN LAR DEPOT should never be administered intravenously or subcutaneously</i></p>	

VI. Billing Code/Availability Information

HCPCS Code:

- J2353 – Injection, octreotide, depot form for intramuscular injection, 1 mg: 1 mg = 1 billable unit

NDC:

- Sandostatin LAR Depot 10 mg single-use kit: 00078-0811-XX
- Sandostatin LAR Depot 20 mg single-use kit: 00078-0818-XX
- Sandostatin LAR Depot 30 mg single-use kit: 00078-0825-XX

VII. References

1. Sandostatin LAR [package insert]. East Hanover, NJ; Novartis Pharmaceuticals Corporation; March 2021. Accessed July 2023.
2. Giustina A, Chanson P, Kleinberg D, et al. Expert consensus document: A consensus on the medical treatment of acromegaly. *Nat Rev Endocrinol*. 2014 Apr; 10(4):243-8. doi: 10.1038/nrendo.2014.21. Epub 2014 Feb 25.
3. Katznelson L, Laws ER Jr, Melmed S, et al. Acromegaly: an endocrine society clinical practice guideline. *J Clin Endocrinol Metab*. 2014 Nov; 99(11):3933-51. doi: 10.1210/jc.2014-2700. Epub 2014 Oct 30.
4. Referenced with permission from the NCCN Drugs & Biologics Compendium (NCCN Compendium®) for Octreotide acetate (LAR). National Comprehensive Cancer Network, 2023. The NCCN Compendium® is a derivative work of the NCCN Guidelines®. NATIONAL COMPREHENSIVE CANCER NETWORK®, NCCN®, and NCCN GUIDELINES® are trademarks owned by the National Comprehensive Cancer Network, Inc. To view the most recent and complete version of the Compendium, go online to NCCN.org. Accessed March 2023.
5. Lancranjan I, Atkinson AB & Sandostatin® LAR® Group#. Results of a European Multicentre Study with Sandostatin® LAR® in Acromegalic Patients. *Pituitary* 1, 105–114; Published: June 1999. <https://doi.org/10.1023/A:1009980404404>.
6. Rubin J, Ajani J, Schirmer W, et al. Octreotide Acetate Long-Acting Formulation Versus Open-Label Subcutaneous Octreotide Acetate in Malignant Carcinoid Syndrome. *J Clin Oncol*, 17 (2), 600-6; Feb 1999. PMID: 10080605. DOI: [10.1200/JCO.1999.17.2.600](https://doi.org/10.1200/JCO.1999.17.2.600).

7. Longo F, De Filippis L, Zivi A, et al. Efficacy and Tolerability of Long-Acting Octreotide in the Treatment of Thymic Tumors: Results of a Pilot Trial. *Am J Clin Oncol*, 35 (2), 105-9; April 2012. PMID: 21325939. DOI: [10.1097/COC.0b013e318209a8f8](https://doi.org/10.1097/COC.0b013e318209a8f8).
8. Referenced with permission from the NCCN Drugs & Biologics Compendium (NCCN Compendium®) Thymomas and Thymic Carcinomas. Version 1.2023. National Comprehensive Cancer Network, 2023. The NCCN Compendium® is a derivative work of the NCCN Guidelines®. NATIONAL COMPREHENSIVE CANCER NETWORK®, NCCN®, and NCCN GUIDELINES® are trademarks owned by the National Comprehensive Cancer Network, Inc. To view the most recent and complete version of the Compendium, go online to NCCN.org. Accessed July 2023.
9. Referenced with permission from the NCCN Drugs & Biologics Compendium (NCCN Compendium®) Neuroendocrine and Adrenal Tumors. Version 2.2022. National Comprehensive Cancer Network, 2022. The NCCN Compendium® is a derivative work of the NCCN Guidelines®. NATIONAL COMPREHENSIVE CANCER NETWORK®, NCCN®, and NCCN GUIDELINES® are trademarks owned by the National Comprehensive Cancer Network, Inc. To view the most recent and complete version of the Compendium, go online to NCCN.org. Accessed July 2023.
10. Fleseriu M, Biller BMK, Freda PU, et al. A Pituitary Society update to acromegaly management guidelines. *Pituitary*. 2021 Feb;24(1):1-13. doi: 10.1007/s11102-020-01091-7.
11. Palmetto GBA. Local Coverage Article: Billing and Coding: Octreotide Acetate for Injectable Suspension (Sandostatin LAR® depot) (A56531). Centers for Medicare & Medicaid Services, Inc. Updated on 05/19/2022 with effective date 05/26/2022. Accessed March 2023.
12. Chan JA, Kulke M, Clancy TE (Nov 2022). Metastatic well-differentiated pancreatic neuroendocrine tumors: Systemic therapy options to control tumor growth and symptoms of hormone hypersecretion. In Goldberg, RM, Shah, S (Eds.). *UpToDate*. Accessed July 07, 2023. Available from: <https://www.uptodate.com/contents/uremic>
https://www.uptodate.com/contents/metastatic-well-differentiated-pancreatic-neuroendocrine-tumors-systemic-therapy-options-to-control-tumor-growth-and-symptoms-of-hormone-hypersecretion?search=octreotide%20acetate&source=search_result&selectedTitle=10~148&usage_type=default&display_rank=9
13. Melmed S, Katznelson L (Apr 2023). Treatment of acromegaly. In Snyder PJ, Martin KA (Eds.) *UpToDate*. Accessed July 07, 2023. Available from: https://www.uptodate.com/contents/treatment-of-acromegaly?search=Acromegaly&source=search_result&selectedTitle=3~88&usage_type=default&display_rank=3#H3315970343

Appendix 1 – Covered Diagnosis Codes

ICD-10	ICD-10 Description
C25.4	Malignant neoplasm of endocrine pancreas
C37	Malignant neoplasm of thymus

ICD-10	ICD-10 Description
C74.10	Malignant neoplasm of medulla of unspecified adrenal gland
C74.11	Malignant neoplasm of medulla of right adrenal gland
C74.12	Malignant neoplasm of medulla of left adrenal gland
C74.90	Malignant neoplasm of unspecified part of unspecified adrenal gland
C74.91	Malignant neoplasm of unspecified part of right adrenal gland
C74.92	Malignant neoplasm of unspecified part of left adrenal gland
C75.5	Malignant neoplasm of aortic body and other paraganglia
C7A.00	Malignant carcinoid tumor of unspecified site
C7A.010	Malignant carcinoid tumor of the duodenum
C7A.011	Malignant carcinoid tumor of the jejunum
C7A.012	Malignant carcinoid tumor of the ileum
C7A.019	Malignant carcinoid tumor of the small intestine, unspecified portion
C7A.020	Malignant carcinoid tumor of the appendix
C7A.021	Malignant carcinoid tumor of the cecum
C7A.022	Malignant carcinoid tumor of the ascending colon
C7A.023	Malignant carcinoid tumor of the transverse colon
C7A.024	Malignant carcinoid tumor of the descending colon
C7A.025	Malignant carcinoid tumor of the sigmoid colon
C7A.026	Malignant carcinoid tumor of the rectum
C7A.029	Malignant carcinoid tumor of the large intestine, unspecified portion
C7A.090	Malignant carcinoid tumor of the bronchus and lung
C7A.091	Malignant carcinoid tumor of the thymus
C7A.092	Malignant carcinoid tumor of the stomach
C7A.093	Malignant carcinoid tumor of the kidney
C7A.094	Malignant carcinoid tumor of the foregut, unspecified
C7A.095	Malignant carcinoid tumor of the midgut, unspecified
C7A.096	Malignant carcinoid tumor of the hindgut, unspecified
C7A.098	Malignant carcinoid tumors of other sites
C7A.1	Malignant poorly differentiated neuroendocrine tumors
C7A.8	Other malignant neuroendocrine tumors
C7B.00	Secondary carcinoid tumors, unspecified site
C7B.01	Secondary carcinoid tumors of distant lymph nodes
C7B.02	Secondary carcinoid tumors of liver
C7B.03	Secondary carcinoid tumors of bone
C7B.04	Secondary carcinoid tumors of peritoneum
C7B.09	Secondary carcinoid tumors of other sites
C7B.8	Other secondary neuroendocrine tumors
D15.0	Benign neoplasm of thymus
D38.4	Neoplasm of uncertain behavior of thymus

ICD-10	ICD-10 Description
D3A.00	Benign carcinoid tumor of unspecified site
D3A.010	Benign carcinoid tumor of the duodenum
D3A.011	Benign carcinoid tumor of the jejunum
D3A.012	Benign carcinoid tumor of the ileum
D3A.019	Benign carcinoid tumor of the small intestine, unspecified portion
D3A.020	Benign carcinoid tumor of the appendix
D3A.021	Benign carcinoid tumor of the cecum
D3A.022	Benign carcinoid tumor of the ascending colon
D3A.023	Benign carcinoid tumor of the transverse colon
D3A.024	Benign carcinoid tumor of the descending colon
D3A.025	Benign carcinoid tumor of the sigmoid tumor
D3A.026	Benign carcinoid tumor of the rectum
D3A.029	Benign carcinoid tumor of the large intestine, unspecified portion
D3A.090	Benign carcinoid tumor of the bronchus and lung
D3A.091	Benign carcinoid tumor of the thymus
D3A.092	Benign carcinoid tumor of the stomach
D3A.094	Benign carcinoid tumor of the foregut, unspecified
D3A.095	Benign carcinoid tumor of the midgut, unspecified
D3A.096	Benign carcinoid tumor of the hindgut, unspecified
D3A.098	Benign carcinoid tumors of other sites
E16.1	Other hypoglycemia
E16.3	Increased secretion of glucagon
E16.4	Increased secretion of gastrin
E16.8	Other specified disorders of pancreatic internal secretion
E22.0	Acromegaly and pituitary gigantism
E34.0	Carcinoid syndrome
Z85.020	Personal history of malignant carcinoid tumor of stomach
Z85.030	Personal history of malignant carcinoid tumor of large intestine
Z85.040	Personal history of malignant carcinoid tumor of rectum
Z85.060	Personal history of malignant carcinoid tumor of small intestine
Z85.07	Personal history of malignant neoplasm of pancreas
Z85.110	Personal history of malignant carcinoid tumor of bronchus and lung
Z85.230	Personal history of malignant carcinoid tumor of thymus
Z85.238	Personal history of other malignant neoplasm of thymus
Z85.858	Personal history of malignant neoplasm of other endocrine glands

Appendix 2 – Centers for Medicare and Medicaid Services (CMS)

Medicare coverage for outpatient (Part B) drugs is outlined in the Medicare Benefit Policy Manual (Pub. 100-2), Chapter 15, §50 Drugs and Biologicals. In addition, National Coverage Determination (NCD), Local Coverage Determinations (LCDs), and Local Coverage Articles (LCAs) may exist and compliance with these policies is required where applicable. They can be found at:

<https://www.cms.gov/medicare-coverage-database/search.aspx>. Additional indications may be covered at the discretion of the health plan.

Medicare Part B Covered Diagnosis Codes (applicable to existing NCD/LCD/LCA):

Jurisdiction(s): J, M	NCD/LCD Document (s): A56531
https://www.cms.gov/medicare-coverage-database/new-search/search-results.aspx?keyword=a56531&areaId=all&docType=NCA%2CCAL%2CNCD%2CMEDCAC%2CTA%2CMD%2C6%2C3%2C5%2C1%2CF%2CP	

Medicare Part B Administrative Contractor (MAC) Jurisdictions		
Jurisdiction	Applicable State/US Territory	Contractor
E (1)	CA, HI, NV, AS, GU, CNMI	Noridian Healthcare Solutions, LLC
F (2 & 3)	AK, WA, OR, ID, ND, SD, MT, WY, UT, AZ	Noridian Healthcare Solutions, LLC
5	KS, NE, IA, MO	Wisconsin Physicians Service Insurance Corp (WPS)
6	MN, WI, IL	National Government Services, Inc. (NGS)
H (4 & 7)	LA, AR, MS, TX, OK, CO, NM	Novitas Solutions, Inc.
8	MI, IN	Wisconsin Physicians Service Insurance Corp (WPS)
N (9)	FL, PR, VI	First Coast Service Options, Inc.
J (10)	TN, GA, AL	Palmetto GBA, LLC
M (11)	NC, SC, WV, VA (excluding below)	Palmetto GBA, LLC
L (12)	DE, MD, PA, NJ, DC (includes Arlington & Fairfax counties and the city of Alexandria in VA)	Novitas Solutions, Inc.
K (13 & 14)	NY, CT, MA, RI, VT, ME, NH	National Government Services, Inc. (NGS)
15	KY, OH	CGS Administrators, LLC