Neighborhood Health Plan OF RHODE ISLAND™
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# Lantidra™ (donislecel-jujn)
## (Intravenous)

**Effective Date: 01/01/2024**
**Review Date: 12/21/2023, 01/10/2024**

**Scope: Medicaid, Commercial, Medicare-Medicaid Plan (MMP)**

## I. Length of Authorization

Coverage will be provided for 1 dose (infusion) and may be renewed twice for up to 3 doses per lifetime following the specified timeframes in the renewal criteria below.

## II. Dosing Limits

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

a. Lantidra up to a maximum of 1 x $10^6$ EIN per bag: 1 infusion bag x 3 doses total

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

- 1 infusion up to a maximum of 1 x $10^6$ EIN per bag per x 3 doses total

## III. Summary of Evidence

Lantidra (donislecel-jujn) is indicated for the treatment of adults with type 1 diabetes who are unable to approach target HbA1c because of current repeated episodes of severe hypoglycemia despite intensive diabetes management and education. The prospective, open-label, single-arm clinical studies for Lantidra included 30 participants and targeted a primary endpoint of HbA1c level of <6.5% and absence of severe hypoglycemic events through one year after a patient's last transplant. Patients were able to receive up to three total transfusions with a length of time no greater than 12 months between transfusions. Of the 30 participants: 5 did not reach insulin independence; 4 achieved <1 year of insulin independence; 12 achieved 1-5 years of insulin independence; and 9 achieved >5 years of insulin independence.

## IV. Initial Approval Criteria [1]

Coverage is provided in the following conditions:

- Patient at least 18 – 75 years of age; **AND**
- Patient is up to date with all vaccinations, in accordance with current vaccination guidelines, prior to initiating therapy; **AND**
- Lantidra is prescribed by, or in consultation with, an endocrinologist; **AND**

- Lantidra will be given at the University of Illinois Hospital, or a manufacturer approved transplant center of excellence; **AND**
- For Medicaid requests ONLY, Lantidra is actively enrolled in the CMS Medicaid Drug Rebate Program; **AND**

**Universal Criteria** [1]

MMP members who have previously received this medication within the past 365 days are not subject to Step Therapy Requirements.

- Patient does not have an active infection, including clinically important localized infections; **AND**
- Patient will not receive live vaccines during treatment with immunosuppression; **AND**
- Patient will be clinically monitored for malignancy, including skin cancer, during treatment; **AND**
- Patient does not have a history of a prior portal vein thrombosis *(Note: Excludes thrombosis limited to second- or third-order portal vein branches)*; **AND**
- Patient does not have a history of liver disease or renal failure and has not been the recipient of a renal transplant; **AND**
- Patient does not have a concomitant disease or condition *(including pregnancy)* that contraindicates the procedure for infusion or immunosuppression*****; **AND**
- Due to increased risks of adverse reactions or lack of efficacy seen during the clinical trial experience, the following populations will not be approved for treatment:
    - Advanced cardiac disease: myocardial infarction, heart failure, etc.; **OR**
    - BMI >27 kg/m$^2$; **OR**
    - C-peptide response to glucagon stimulation, any C-peptide >0.3 ng/mL (undetectable or very low levels of C-peptide); **OR**
    - Insulin requirement of >0.7 IU/kg/day; **OR**
    - HbA1c >12%; **OR**
    - Psychiatric disorder: schizophrenia, bipolar disorder, or major depression that is unstable on medication; **AND**

**Diabetes Mellitus (Type 1) †** [1-3]

- Patient is unable to approach target HbA1c because of current repeated episodes of severe hypoglycemia despite intensive diabetes management and education^ including:
    - Adjusting frequencies and amounts of insulin injected; **AND**
    - Taking multiple blood glucose measurements daily; **AND**
    - Modifying diet and exercise; **AND**
    - Monitoring HbA1c levels; **AND**

  ^ *(Note: There is no evidence to show a benefit of administration of LANTIDRA in patients whose diabetes is well-controlled with insulin therapy or patients with hypoglycemic unawareness who are able to prevent current repeated severe hypoglycemic events using intensive diabetes management)*
- Patient will receive concomitant immunosuppression***** *(i.e., non-depleting monoclonal anti-interleukin-2 receptor antibody [or T-cell-depleting antibody if not a candidate], calcineurin inhibitor, mTOR inhibitor, TNF-blocker)*; **AND**
- Patient is T- and B-cell crossmatch assay negative; **AND**

- Patient has a confirmed diagnosis of Type 1 diabetes mellitus for more than 5 years which is complicated by BOTH of the following severe metabolic and potentially life-threatening complications that persist despite intensive insulin management efforts:
    - At least one episode of severe hypoglycemia in the past 3 years defined as an event with symptoms compatible with hypoglycemia in which the subject required the assistance of another person, and which was associated with either a blood glucose level < 50 mg/dL (2.8 mmol/L) or prompt recovery after oral carbohydrate, intravenous glucose, or glucagon administration; **AND**
    - Reduced awareness of hypoglycemia, as defined by the absence of adequate autonomic symptoms at capillary glucose levels of < 54 mg/dL (3 mmol/L)

| *** Considerations for discontinuation of immunosuppression therapy include the following:** [1] |
|---|
| – If a patient develops a life-threatening infection or cancer and treatment requires discontinuation of immunosuppression. |
| – If a patient has been dependent on exogenous insulin for two years after their last infusion, then immunosuppression should be discontinued. However, the treatment team may consider continuation of immunosuppression if they determine that the patient has achieved target HbA1c without recurrent severe hypoglycemia in the presence of clinically relevant C-peptide, that provides a potential ongoing benefit that outweighs the risks of severe and potentially life-threatening effects of immunosuppression. |
| – If a patient becomes pregnant. |

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

## V. Renewal Criteria

Coverage can be renewed based upon the following criteria:

- Patient continues to meet the universal and other indication-specific relevant criteria identified in section III; **AND**
- Patient continues to be adherent and tolerant to concomitant immunosuppression; **AND**
- Absence of unacceptable toxicity from the drug. Examples of unacceptable toxicity include: severe infections, portal vein thrombosis, portal hypertension, islet graft rejection, etc.; **AND**
    - A second infusion may be performed due to failure to achieve independence from exogenous insulin within one year of infusion (or within one year after losing independence from exogenous insulin after a previous infusion); **OR**
    - A third infusion may be performed using the same criteria as stated above for a second infusion *(Note: there is no data regarding the effectiveness or safety for patients receiving more than three infusions)*

## VI. Dosage/Administration [1]

| Indication | Dose |
|---|---|
| T1DM | The recommended minimum dose is 5,000 equivalent islet number (EIN) per kg patient body weight for initial infusion (transplant) and 4,500 EIN/kg for subsequent infusions (same recipient):<br>• Administer cells through the hepatic portal vein.<br>• The maximum dose per infusion should not exceed 10 cc per transplant infusion or 1 x $10^6$ EIN per bag.<br>• Pre-procedural immunosuppression must be provided.<br>• Periprocedural antibiotic prophylaxis is recommended.<br>• Monitoring during infusion must include portal pressure, blood glucose, and portal vein thrombosis. |

| | |
|---|---|
| | • Hospitalization is required for a minimum of 24 hours post-infusion. |
| – Do not irradiate.<br>– Do not use leukodepleting filters.<br>– Do not use if product time exceeds 6-hours post product release or if temperature is not maintained between 15 and 25° C.<br>– Interventional radiologists and surgeons with expertise in islet cell infusion may administer treatment in an interventional radiology suite or operating suite under controlled aseptic conditions. | |

## VII. Billing Code/Availability Information

HCPCS code:

- J3590 – Unclassified biologics

NDC:

- Lantidra is contained in one 1000 mL infusion bag filled with a supplied volume of 400 mL, containing not more than 10 cc of estimated packed islet tissue and not more than 1 x $10^6$ EIN: 73539-0001-xx

## VIII. References


1. Lantidra [package insert]. Chicago, IL; CellTrans, Inc.; June 2023. Accessed June 2023.
2. Luu QF, Villareal CJ, Fritschi C, et al. Concerns and hopes of patients with type 1 diabetes prior to islet cell transplantation: A content analysis. J Diabetes Complications. 2018 Jul;32(7):677-681. doi: 10.1016/j.jdiacomp.2018.04.002. Epub 2018 Apr 17. PMID: 29779835; PMCID: PMC6015784.
3. Qi M, Kinzer K, Danielson KK, et al. Five-year follow-up of patients with type 1 diabetes transplanted with allogeneic islets: the UIC experience. Acta Diabetol. 2014 Oct;51(5):833-43. doi: 10.1007/s00592-014-0627-6. Epub 2014 Jul 18. PMID: 25034311; PMCID: PMC4801517.
4. Williams J, Jacus N, Kavalackal K, et al. Over ten-year insulin independence following single allogeneic islet transplant without T-cell depleting antibody induction. Islets. 2018;10(4):168-174. doi: 10.1080/19382014.2018.1451281. Epub 2018 Jul 19. PMID: 30024826; PMCID: PMC6281363..


## Appendix 1 – Covered Diagnosis Codes

| ICD-10 | ICD-10 Description |
|---|---|
| E10.8 | Type 1 diabetes mellitus with unspecified complications |
| E10.9 | Type 1 diabetes mellitus without complications |

## 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 Articles (LCAs) and Local Coverage Determinations (LCDs) 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/LCA/LCD): N/A

| 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 |

| Medicare Part B Administrative Contractor (MAC) Jurisdictions | | |
|---|---|---|
| **Jurisdiction** | **Applicable State/US Territory** | **Contractor** |
| 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 |

**Policy Rationale:**

Lantrida was reviewed by the Neighborhood Health Plan of Rhode Island Pharmacy & Therapeutics (P&T) Committee. Neighborhood adopted the following clinical coverage criteria to ensure that its members use Lantrida according to Food and Drug Administration (FDA) approved labeling and/or relevant clinical literature. Neighborhood worked with network prescribers and pharmacists to draft these criteria. These criteria will help ensure its members are using this drug for a medically accepted indication, while minimizing the risk for adverse effects and ensuring more cost-effective options are used first, if applicable and appropriate. For INTEGRITY (Medicare-Medicaid Plan) members, these coverage criteria will only apply in the absence of National Coverage Determination (NCD) or Local Coverage Determination (LCD) criteria. Neighborhood will give individual consideration to each request it reviews based on the information submitted by the prescriber and other information available to the plan.