# Clinical Policy: Lutetium Lu 177 vipivotide tetraxetan (Pluvicto)

Reference Number: LA.PHAR.582
Effective Date: 09.29.23
Last Review Date: 03.25.24 ~~05.01.23~~ Coding Implications
Line of Business: Medicaid Revision Log

**See Important Reminder at the end of this policy for important regulatory and legal information.**

**Please note: This policy is for medical benefit**

**Description**
Lutetium Lu 177 vipivotide tetraxetan (Pluvicto™) is a radioligand therapeutic agent.

~~***For Health Insurance Marketplace (HIM),** if request is through pharmacy benefit, [drug name(s)] is non-formulary and should not be approved using these criteria; refer to the formulary exception policy, HIM.PA.103.~~

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**FDA Approved Indication(s)**
Pluvicto is indicated for the treatment of adult patients with prostate-specific membrane antigen (PSMA)-positive metastatic castration-resistant prostate cancer (mCRPC) who have been treated with androgen receptor (AR) pathway inhibition and taxane-based chemotherapy.

**Policy/Criteria**
*Provider must submit documentation (such as office chart notes, lab results or other clinical information) supporting that member has met all approval criteria.*

It is the policy of Louisiana Healthcare Connections® that Pluvicto is **medically necessary** when the following criteria are met:

**I. Initial Approval Criteria**

**A. Metastatic Castration-resistant Prostate Cancer** (must meet all)**:**

1. Diagnosis of metastatic CRPC;
2. Documentation of disease progression despite bilateral orchiectomy or other androgen deprivation therapy (ADT) (see *Appendix D*);
3. Documentation of PSMA-positive ~~mCRPC~~disease confirmed on a GA-PSMA-11 or piflufolastat F-18 positive emission tomography (PET) or computed tomography (CT) scan;
4. Prescribed by or in consultation with an oncologist or urologist;
5. Age ≥ 18 years;
6. Member will use a gondatropin-releasing hormone (GnRH) analog concurrently or has had a bilateral orchiectomy;
7. Failure of both of the following, unless contraindicated or clinically significant adverse effects are experienced or all are contraindicated (a and b):
   a. A taxane-based regimen (e.g. docetaxel, cabazitaxel);*
      **Prior authorization may be required for docetaxel and cabazitaxel*
   b. Abiraterone (Zytiga®), unless member has previously failed Yonsa® (abiraterone) or Xtandi® (enzalutamide);*

**Prior authorization may be required for Zytiga, Yonsa, and Xtandi*

8. Pluvicto is not prescribed concurrently with cytotoxic chemotherapy, immunotherapy, radioligand therapy, or investigational therapy;

9. Request meets one of the following (a or b):*
   a. Dose does not exceed 7.4 GBq (200 mCi) every 6 weeks for up to 6 doses;
   b. Dose is supported by practice guidelines or peer-reviewed literature for the relevant off-label use (*prescriber must submit supporting evidence*).

   **Prescribed regimen must be FDA-approved or recommended by NCCN*

**Approval duration: 6 months (up to a total of 6 doses)**

**B. Other diagnoses/indications** (must meet 1 or 2)**:**
1. If this drug has recently (within the last 6 months) undergone a label change (e.g., newly approved indication, age expansion, new dosing regimen) that is not yet reflected in this policy, refer to LA.PMN.255
2. If the requested use (e.g., diagnosis, age, dosing regimen) is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized) AND criterion 1 above does not apply, refer to the off-label use policy for the relevant line of business: LA.PMN.53 for Medicaid.

**II. Continued Therapy**

**A. Metastatic Castration-resistant Prostate Cancer** (must meet all)**:**
1. Currently receiving medication via Louisiana Healthcare Connections benefit, or documentation supports that member is currently receiving Pluvicto for a covered indication and has received this medication for at least 30 days;
2. Member is responding positively to therapy;
3. Member has not received ≥ 6 doses (infusions) of Pluvicto;
~~3.~~4. If request is for a dose increase, request meets one of the following (a or b):*
   a. New dose does not exceed 7.4 GBq (200 mCi) every 6 weeks for up to 6 doses;
   b. New dose is supported by practice guidelines or peer-reviewed literature for the relevant off-label use (*prescriber must submit supporting evidence*).

   **Prescribed regimen must be FDA-approved or recommended by NCCN*

**Approval duration: ~~12~~6 months (up to a total of 6 doses)**

**B. Other diagnoses/indications** (must meet 1 or 2)**:**
1. If this drug has recently (within the last 6 months) undergone a label change (e.g., newly approved indication, age expansion, new dosing regimen) that is not yet reflected in this policy, refer to LA.PMN.255
2. If the requested use (e.g., diagnosis, age, dosing regimen) is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized) AND criterion 1 above does not apply, refer to the off-label use policy for the relevant line of business: LA.PMN.53 for Medicaid.

**Approval duration: Duration of request or 6 months (whichever is less)**

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**III. Diagnoses/Indications for which coverage is NOT authorized:**

**A.** Non-FDA approved indications, which are not addressed in this policy, unless there is sufficient documentation of efficacy and safety according to the off label use policies – LA.PMN.53 for Medicaid or evidence of coverage documents.

**IV. Appendices/General Information**

*Appendix A: Abbreviation/Acronym Key*

ADT: androgen deprivation therapy
AR: androgen receptor
BSoC: best standard of care
CRPC: castration- resistant prostate cancer
CT: computed tomography
FDA: Food and Drug Administration
GnRH: gondatropin-releasing hormone
LHRH: luteinizing hormone-releasing hormone
NCCN: National Comprehensive Cancer Network
PET: positive emission tomography
PSMA: prostate- specific membrane antigen

*Appendix B: Therapeutic Alternatives*

*This table provides a listing of preferred alternative therapy recommended in the approval criteria. The drugs listed here may not be a formulary agent for all relevant lines of business and may require prior authorization.*

| Drug Name | Dosing Regimen | Dose Limit/ Maximum Dose |
|---|---|---|
| abiraterone (Zytiga®) | 1,000 mg PO QD (given in combination with prednisone) | 1,000 mg/day; 2,000 mg/day if taking a strong CYP3A4 inducer |
| docetaxel | Androgen-deprivation therapy with docetaxel 75 mg/m$^2$ for 6 cycles | Varies |
| Jevtana® (cabazitaxel) | 20 mg/m$^2$ IV every 3 weeks | 25 mg/m$^2$ once every 3 weeks |

*Therapeutic alternatives are listed as Brand name® (generic) when the drug is available by brand name only and generic (Brand name®) when the drug is available by both brand and generic.*

*Appendix C: Contraindications/Boxed Warnings*

None reported

*Appendix D: General Information*

- Castration-resistant prostate cancer is prostate cancer that progresses clinically, radiographically, or biochemically despite castrate levels of serum testosterone (< 50 ng/dL).
- Per the NCCN ~~prostate cancer guidelines version 3.2022~~, androgen deprivation therapy (ADT) should be continued in patients with metastatic CRPC while additional therapies, including secondary hormone therapies, chemotherapies, immunotherapies, radiopharmaceuticals, and/or targeted therapies are applied.

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- Examples of ADT include:
  - Bilateral orchiectomy (surgical castration)
  - Luteinizing hormone-releasing hormone (LHRH) agonist given with or without an anti-androgen:
    - LHRH agonists: Zoladex® (goserelin), ~~Vantas® (histrelin),~~ leuprolide (Lupron Depot®, Eligard®), and Trelstar® (triptorelin)
    - Anti-androgens: bicalutamide (Casodex®), flutamide~~,~~ (Eulexin®), nilutamide (Nilandron®), Xtandi® (enzalutamide), Erleada® (apalutamide), Nubeqa® (darolutamide)
  - LHRH antagonist: Firmagon® (degarelix), Orgovyx® (relugolix)
- ~~Pluvicto meets a need in the third-line setting for mCRPC, providing a new mechanism of action that can be used in patients with prostate-specific membrane antigen (PSMA) + metastatic CRPC. Considering that PSMA is expressed in > 80% of men with prostate cancer, Pluvicto is likely to be highly utilized in this late-stage prostate cancer population.~~

**V. Dosage and Administration**

| Indication | Dosing Regimen | Maximum Dose |
|---|---|---|
| Metastatic CRPC | 7.4 GBq (200 mCi) IV every 6 weeks for up to 6 doses | ~~7.4 GBq (200 mCi) every 6 weeks for up to 6 doses~~See dosing regimen |

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**VI. Product Availability**

~~-~~Injection, single-dose vial: 1,000 MBq/mL (27 mCi/mL) ~~of lutetium Lu 177 vipivotide tetraxetan~~

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**VII. References**

1. Pluvicto Prescribing Information. Millburn, NJ: Novartis AG.; ~~March~~October 2022. Available at ~~https://www.accessdata.fda.gov/drugsatfda_docs/label/2022/215833s000lbl.pdf.~~https://www.novartis.com/us-en/sites/novartis_us/files/pluvicto.pdf. Accessed ~~April 15, 2022~~January 6, 2023.
2. National Comprehensive Cancer Network. Prostate Cancer Version ~~3.2022~~1.2023. Available at ~~https://www.nccn.org/professionals/physician_gls/pdf/prostate.pdf.~~https://www.nccn.org/professionals/physician_gls/pdf/prostate.pdf. Accessed ~~April 14, 2022~~January 11, 2023.
3. ClinicalTrials.gov. Study of 177Lu-PSMA-617 in Metastatic Castrate-Resistant Prostate Cancer (VISION). Available at ~~https://clinicaltrials.gov/ct2/show/NCT03511664.~~https://clinicaltrials.gov/ct2/show/NCT03511664. Accessed April 15, 2022.
4. IPD Analytics. NOC Code Guide: Pluvicto (lutetium Lu 177 vipivotide tetraxetan) injection, for intravenous use by Advanced Accelerator Applications USA, Inc. Published April 2022.

5. IPD Analytics. New Drug Review: Pluvicto (lutetium Lu 177 vipivotide tetraxetan). Published April 6, 2022.
6. Virgo KS, Rumble B, de Wit R, et al. Initial Management of Non-Castrate Advanced, Recurrent or Metastatic Prostate Cancer. American Society of Clinical Oncology (ASCO). Published ahead of print January 26, 2021, DOI: 10.1200/JCO.20.03256. ~~Available at: https://www.asco.org/practice-patients/guidelines/genitourinary-cancer#/9521. Accessed April 17, 2022~~Available at: https://www.asco.org/practice-patients/guidelines/genitourinary-cancer#/9521. Accessed January 11, 2023.
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8. Garje R, Rumble B, Parikh RA. Systemic Therapy Update on 177Lutetium-PSMA-617 for Metastatic Castration-Resistant Prostate Cancer: ASCO Rapid Recommendation. Journal of Clinical Oncology 2022. 40(31): 3664-3666. Available at: https://www.asco.org/practice-patients/guidelines/genitourinary-cancer#/9496.
9. Sartor O, de Bono J, Chi KN, et al. Lutetium-177-PSMA-617 for Metastatic Castration-Resistant Prostate Cancer. N Engl J Med. 2021 Sep 16; 385(12): 1091-1103.

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**Coding Implications**

Codes referenced in this clinical policy are for informational purposes only. Inclusion or exclusion of any codes does not guarantee coverage. Providers should reference the most up-to-date sources of professional coding guidance prior to the submission of claims for reimbursement of covered services.

| HCPCS Codes | Description |
|---|---|
| A9607 | Lutetium Lu 177 vipivotide tetraxetan, therapeutic, 1 mCi |
| ~~A9699~~ | ~~Lutetium Lu 177 vipivotide tetraxetan~~ |

| Reviews, Revisions, and Approvals | Date | LDH Approval Date |
|---|---|---|
| Policy created | 05.01.23 | 08.28.23 |

## CLINICAL POLICY
Lutetium Lu 177 vipivotide tetraxetan

| Reviews, Revisions, and Approvals | Date | LDH Approval Date |
|---|---|---|
| Annual review: added clarification to approval duration is for up to a total of 6 doses; revised continued therapy approval duration from 12 to 6 months; for continued therapy added requirement that member has not received ≥ 6 doses (infusions) of Pluvicto; added piflufolastat F-18 as an additional radioactive diagnostic agent for identification of PSMA-positive disease; updated *Appendix D* examples of androgen deprivation therapy per NCCN; removed inactive HCPCS code A9699; references reviewed and updated. | 03.25.24 | |

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**Important Reminder**

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This clinical policy has been developed by appropriately experienced and licensed health care professionals based on a review and consideration of currently available generally accepted standards of medical practice; peer-reviewed medical literature; government agency/program approval status; evidence-based guidelines and positions of leading national health professional organizations; views of physicians practicing in relevant clinical areas affected by this clinical policy; and other available clinical information. LHCC makes no representations and accepts no liability with respect to the content of any external information used or relied upon in developing this clinical policy. This clinical policy is consistent with standards of medical practice current at the time that this clinical policy was approved.

The purpose of this clinical policy is to provide a guide to medical necessity, which is a component of the guidelines used to assist in making coverage decisions and administering benefits. It does not constitute a contract or guarantee regarding payment or results. Coverage decisions and the administration of benefits are subject to all terms, conditions, exclusions, and limitations of the coverage documents (e.g., evidence of coverage, certificate of coverage, policy, contract of insurance, etc.), as well as to state and federal requirements and applicable LHCC administrative policies and procedures.

This clinical policy is effective as of the date determined by LHCC. The date of posting may not be the effective date of this clinical policy. This clinical policy may be subject to applicable legal and regulatory requirements relating to provider notification. If there is a discrepancy between the effective date of this clinical policy and any applicable legal or regulatory requirement, the requirements of law and regulation shall govern. LHCC retains the right to change, amend or withdraw this clinical policy, and additional clinical policies may be developed and adopted as needed, at any time.

This clinical policy does not constitute medical advice, medical treatment, or medical care. It is not intended to dictate to providers how to practice medicine. Providers are expected to exercise professional medical judgment in providing the most appropriate care and are solely responsible

for the medical advice and treatment of members. This clinical policy is not intended to recommend treatment for members. Members should consult with their treating physician in connection with diagnosis and treatment decisions.

Providers referred to in this clinical policy are independent contractors who exercise independent judgment and over whom LHCC has no control or right of control. Providers are not agents or employees of LHCC.

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