STATE OF IOWA DEPARTMENT OF
Health AND Human
SERVICES

Pluvicto (lutetium Lu 177 vipivotide tetraxetan)
PAM-051

Iowa Medicaid Program:	Prior Authorization	**Effective Date:**	10/01/2022
Revision Number:	2	**Last Rev Date:**	04/19/2024
Reviewed By:	Medicaid Medical Director	**Next Rev Date:**	01/17/2025
Approved By:	Medicaid Clinical Advisory Committee	**Approved Date:**	04/21/2023

Overview

Medication:[1]	lutetium Lu 177 vipivotide tetraxetan
Brand Name:	Pluvicto®
Pharmacologic Category:	Radiopharmaceutical; radioligand therapeutic agent
FDA-Approved Indication(s):	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 ► Select patients for treatment using LOCAMETZ® or an approved PSMA-11 imaging agent based on PSMA expression in tumors
How Supplied:	30 mL single-dose vial containing 7.4 GBq (200 mCi) ± 10% of lutetium Lu 177 vipivotide tetraxetan at the date and time of administration
Dosage and Administration:	7.4 GBq (200 mCi) intravenously every 6 weeks for up to 6 doses, or until disease progression, or unacceptable toxicity
Benefit Category:	Medical

Descriptive Narrative

Prostate cancer is among the most common cancers in males worldwide. In the U.S., 11 percent of males are diagnosed with prostate cancer over their lifetime, with the incidence generally rising with age.[2] In the state of Iowa in 2024, there are estimated to be 3,200 new cases of prostate cancer and 300 deaths.[3]

Androgen deprivation therapy (ADT) is the usual first-line option for males with advanced prostate cancer. Males with advanced prostate cancer who have evidence of disease progression (e.g., an increase in serum prostate-specific antigen, new metastases, or progression of existing metastases) while being managed with ADT and who have castrate levels of serum testosterone (<50 ng/dL) are considered to have castrate-resistant prostate cancer (CRPC). ADT is generally continued in most males with CRPC in conjunction with secondary therapies after progression on the initial ADT treatment.[4]

Prostate Specific Membrane Antigen

Prostate specific membrane antigen (PSMA), also known as folate hydrolase or glutamate carboxypeptidase II, is a cell membrane protein that is highly expressed on the surface of prostate cancer cells[5] (expressed by more than 80 percent of patients with prostate cancer and 90 percent of patients with metastatic prostate cancer).

PSMA positive emission tomography (PET) is essential to identify patients with metastatic castration-resistant prostate cancer (mCRPC) who will benefit from PSMA-targeted radioligand therapy. There are currently three FDA-approved PSMA PET radiopharmaceuticals:

- ^{68}Ga PSMA-11 (Ga 68 gozezotide, Illuccix®, Locametz®)
- ^{18}F DCFPyL (Piflufolastat F 18, Pylarify®)
- ^{18}F-rhPSMA-7.3 (Flotufolastat F 18, Posluma®).

The FDA-approved prescribing information for Pluvicto® specifies that ^{68}Ga PSMA-11 (Illuccix®, Locametz®) must be used to confirm the presence of PSMA-positive disease when identifying patients eligible for treatment. However, version 3.2024 of the NCCN Guidelines® for Prostate Cancer states that PET imaging with either of the above three radiopharmaceuticals may be used to determine eligibility for Pluvicto therapy® due to multiple reports describing the equivalency of these imaging agents. [6]

Definitions

Phenotype – the total characteristics displayed by the tumor.

Radioisotope – a radioactive form of an element or isotope.

Radionuclide – an unstable form of a chemical element that releases radiation as it breaks down and becomes more stable. Radionuclides may occur in nature or be made in a laboratory. In medicine, they are used in imaging tests and in treatment; also referred to as radioisotopes.

Radiotherapy – systemic radiotherapy uses a radioactive substance, such as a radiolabeled monoclonal antibody, that travels in the blood to tissues throughout the body.

Guidelines

As new and emerging therapies are rapidly coming to market, oncology treatment recommendations and guidelines are constantly changing. To keep up with these changes, the National Comprehensive Cancer Network (NCCN) publishes guidelines which are developed and updated by 60 individual panels, comprising over 1,660 clinicians and oncology researchers from the 31 NCCN Member Institutions.[7]

The NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®) are a work in progress that may be refined as often as new significant data becomes available. To view the most recent and complete version of the guideline, go online to NCCN.org. NCCN makes no

warranties of any kind whatsoever regarding their content, use or application and disclaims any responsibility for their application or use in any way.

The information referenced at the time of this policy writing/revision is from:

- NCCN Guidelines® for Prostate Cancer (Version 3.2024 – March 8, 2024)[8]

NCCN Guidelines® recommendation(s) for lutetium Lu 177 vipivotide tetraxetan (Pluvicto®) in prostate cancer
(1) M1 CRPC: Adenocarcinoma [a, b, c] A. Progression on prior docetaxel and a novel hormone therapy [d] i. Lutetium Lu 177 vipivotide tetraxetan (Lu-177-PSMA-617) for PSMA-positive metastases [e]: Category 1, "useful in certain circumstances"

[a] Document castrate levels of testosterone if progression occurs on ADT. Workup for progression should include chest CT, bone imaging, and abdominal/pelvic CT with contrast or abdominal/pelvic MRI with and without contrast. Consider metastatic lesion biopsy.

[b] Visceral metastases refers to liver, lung, adrenal, peritoneal, and brain metastases. Soft tissue/lymph node sites are not considered visceral metastases.

[c] Patients can continue through all treatment options listed. Best supportive care, which can include androgen-directed therapy or steroid, is always an appropriate option.

[d] Novel hormone therapies include abiraterone, enzalutamide, darolutamide, or apalutamide. Abiraterone given as part of neoadjuvant/ concomitant/ adjuvant ADT with EBRT is not considered prior novel hormonal therapy.

[e] Lu-177–PSMA-617 is a treatment option for patients with ≥1 PSMA-positive lesion and/or metastatic disease that is predominately PSMA-positive and with no dominant PSMA-negative metastatic lesions who have been treated previously with androgen receptor-directed therapy and a taxane-based chemotherapy. Sartor et al. N Engl J Med 2021; 385:1091-1103.

NCCN Categories of Evidence and Consensus (all recommendations are category 2A unless otherwise indicated)	
Category 1	Based upon high-level evidence, there is uniform NCCN consensus that the intervention is appropriate.
Category 2A	Based upon lower-level evidence, there is uniform NCCN consensus that the intervention is appropriate.
Category 2B	Based upon lower-level evidence, there is NCCN consensus that the intervention is appropriate.
Category 3	Based upon any level of evidence, there is major NCCN disagreement that the intervention is appropriate.

NCCN Categories of Preference (all recommendations are considered appropriate)	
Preferred intervention	Interventions that are based on superior efficacy, safety, and evidence; and, when appropriate, affordability.
Other recommended intervention	Other interventions that may be somewhat less efficacious, more toxic, or based on less mature data; or significantly less affordable for similar outcomes.
Useful in certain circumstances	Other interventions that may be used for select patient populations (defined with recommendation).

Eastern Cooperative Oncology Group (ECOG) Performance Status Scale[9]

Developed by the Eastern Cooperative Oncology Group (ECOG), now part of the ECOG-ACRIN Cancer Research Group, and published in 1982, the ECOG Performance Status Scale describes a patient's level of functioning in terms of their ability to care for themself, daily activity, and physical ability (walking, working, etc.). It is used by doctors and researchers to assess how a patient's disease is progressing, how the disease affects the daily living abilities of the patient and determine appropriate treatment and prognosis.

EASTERN COOPERATIVE ONCOLOGY GROUP (ECOG) PERFORMANCE STATUS SCALE	
GRADE	ECOG PERFORMANCE STATUS [Synonyms: WHO/Zubrod score]
0	Fully active, able to carry on all pre-disease performance without restriction.
1	Restricted in physically strenuous activity but ambulatory and able to carry out work of a light or sedentary nature, e.g., light house work, office work.
2	Ambulatory and capable of all self-care but unable to carry out any work activities; up and about more than 50% of waking hours.
3	Capable of only limited self-care; confined to bed or chair more than 50% of waking hours.
4	Completely disabled; cannot carry on any self-care; totally confined to bed or chair.
5	Dead.

Criteria

Prior authorization is required.

Pluvicto® is considered medically necessary when **ALL** of the following are met:

1. Diagnosis of metastatic castration-resistant prostate cancer (mCRPC); **AND**
2. Disease is prostate-specific membrane antigen (PSMA)-positive, as confirmed on positive emission tomography (PET) or computed tomography (CT) scan; **AND**
3. Member is 18 years of age or older; **AND**
4. Member meets **ALL** of the following:
    a. Previous treatment with at least one androgen receptor-directed therapy, e.g., abiraterone (Zytiga®), enzalutamide (Xtandi®); **AND**
    b. Previous treatment with at least 1, but no more than 2, previous taxane regimens, e.g., docetaxel, cabazitaxel (Jevtana®); **AND**
    c. Will receive gonadotropin-releasing hormone (GnRH) analog therapy concurrently with Pluvicto® (or has had a bilateral orchiectomy); **AND**
5. Member has a current Eastern Cooperative Oncology Group (ECOG) performance status of 0 to 2; **AND**
6. Prescribed by, or in consultation with, an oncologist or urologist; **AND**
7. Member will not receive any concurrent cytotoxic chemotherapy, immunotherapy, radioligand therapy, or investigational therapy; **AND**
8. Member does not have severe renal impairment (CrCl 29 mL/min or less) or end-stage renal disease (ESRD); **AND**
9. Request meets one of the following (a or b):
    a. Regimen prescribed does not exceed 7.4 GBq (200 mCi) every 6 weeks for up to 6 doses; or
    b. Regimen is supported by clinical practice guidelines (i.e., must be recommended in NCCN Guidelines®). Supporting clinical documentation must be provided with any request for which regimen prescribed does not align with FDA-approved labeling.

Pluvicto® is considered medically necessary for continuation of therapy* when **ALL** of the following are met:

1. Member is currently receiving medication through the Iowa Medicaid benefit or has previously met initial approval criteria; **AND**
2. Documentation of positive clinical response to therapy, as demonstrated by tumor response or lack of disease progression, and an acceptable toxicity profile; **AND**
3. Member has received less than six (6) total doses of Pluvicto®; **AND**
4. Prescribed by, or in consultation with, an oncologist or urologist; **AND**
5. Member does not have severe renal impairment (CrCl 29 mL/min or less) or end-stage renal disease (ESRD); **AND**
6. Request meets one of the following (a or b):
    a. Regimen prescribed meets **BOTH** of the following (i and ii):
        i. Prescribed dose does not exceed 7.4 GBq (200 mCi) every 6 weeks; **AND**
        ii. Member has not received a total of six (6) doses of Pluvicto®; or*
    b. Regimen is supported by clinical practice guidelines (i.e., must be recommended in NCCN Guidelines®). Supporting clinical documentation must be provided with any request for which regimen prescribed does not align with FDA-approved labeling.

* If continuation criteria are met, approval may only be for the number of doses remaining so member receives the maximum of 6 doses (e.g., if member has received 4 doses, the authorization for continuation of therapy would only be for 2 doses).

Approval Duration and Quantity Limits

	Initial Authorization	Subsequent Authorization(s)
Approval Duration	9 months (maximum 6 doses)	If member has not received a total of 6 doses, may authorize enough doses to reach the maximum of 6
Quantity Limits	7.4 GBq (200 mCi) every 6 weeks (maximum of 6 doses total for therapy)	

Coding and Product Information

The following list(s) of codes and product information are provided for reference purposes only and may not be all inclusive. The inclusion of a code does not imply any right to reimbursement or guarantee claim payment, nor does the exclusion of a code imply that its association to the HCPCS code is inappropriate.

HCPCS	Description
A9607	Lutetium Lu 177 vipivotide tetraxetan, therapeutic, 1 mCi
A9594 ‡	Gallium Ga-68 PSMA-11, diagnostic, (UCLA), 1 mCi [Ga 68 gozezotide, Illuccix®, Locametz®]
A9595 ‡	Piflufolastat f-18, diagnostic, 1 mCi [Pylarify®]
A9608 ‡	Flotufolastat F18, diagnostic, 1 mCi [Posluma®]

‡ A9594, A9595, and A9608 are listed as informational only. These three codes do not require prior authorization.

ICD-10	Description
C61	Malignant neoplasm of prostate

NDC	Labeler	Dosage	Pkg Size	Pkg Qty	Units/Pkg
69488-0010-61	Advanced Accelerator Applications USA, Inc.	1 mCi	1	EA	200

Compliance

1. Should conflict exist between this policy and applicable statute, the applicable statute shall supersede.
2. Federal and State law, as well as contract language, including definitions and specific contract provisions or exclusions, take precedence over medical policy and must be considered first in determining eligibility for coverage.
3. Medical technology is constantly evolving, and Iowa Medicaid reserves the right to review and update medical policy on an annual or as-needed basis.

Medical necessity guidelines have been developed for determining coverage for member benefits and are published to provide a better understanding of the basis upon which coverage decisions are made. Medical necessity guidelines are developed for selected physician administered medications found to be safe and proven to be effective in a limited, defined population or clinical circumstances. They include concise clinical coverage criteria based on current literature review, consultation with practicing physicians in the service area who are medical experts in the particular field, FDA and other government agency policies, and standards adopted by national accreditation organizations. Criteria are revised and updated annually, or more frequently if new evidence becomes available that suggests needed revisions.

References

[1] Pluvicto prescribing information (10/2022). Advanced Accelerator Applications USA, Inc.: Millburn, NJ. Available online at www.pluvicto-hcp.com. Accessed March 11, 2024.

[2] Taplin ME, Smith JA. Clinical presentation and diagnosis of prostate cancer. Savarese DM and Givens J, ed. UpToDate. Waltham, MA: UpToDate Inc. www.uptodate.com. Accessed March 11, 2024.

[3] 2024 Cancer Statistics Center – State of Iowa. American Cancer Society. Available online at https://cancerstatisticscenter.cancer.org/#!/state/Iowa. Accessed March 11, 2024.

[4] Dawson NA, Leger P. Overview of the treatment of castration-resistant prostate cancer (CRPC). Savarese DM, ed. UpToDate. Waltham, MA: UpToDate Inc. www.uptodate.com. Accessed March 11, 2024.

[5] VISION: An International, Prospective, Open Label, Multicenter, Randomized Phase 3 Study of 177Lu-PSMA-617 in the Treatment of Patients With Progressive PSMA-positive Metastatic Castration-resistant Prostate Cancer (mCRPC). ClinicalTrials.gov identifier: NCT03511664. Updated January 31, 2024. clinicaltrials.gov/study/NCT03511664. Accessed March 11, 2024.

[6] Referenced from the NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Prostate Cancer (v.3.2024 – March 8, 2024). Accessed March 11, 2024. The NCCN Guidelines® are a work in progress that may be refined as often as new significant data becomes available. To view the most recent and complete version of the guideline, go online to NCCN.org.

[7] National Comprehensive Cancer Network (NCCN). Development and Update of Guidelines. Available online at www.nccn.org. Accessed October 11, 2023.

[8] Referenced from the NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®) for Prostate Cancer (v.3.2024 – March 8, 2024). Accessed March 11, 2024. The NCCN Guidelines® are a work in progress that may be refined as often as new significant data becomes available. To view the most recent and complete version of the guideline, go online to NCCN.org.

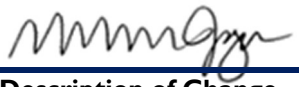
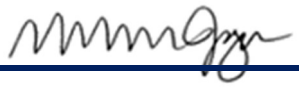
[9] Oken M, Creech R, Tormey D, et al. Toxicity and response criteria of the Eastern Cooperative Oncology Group. Am J Clin Oncol. 1982;5:649-655.

Development of utilization management criteria may also involve research into other state Medicaid programs, other payer policies, consultation with experts and review by the Medicaid Clinical Advisory Committee (CAC). These sources may not be referenced individually unless they are specifically published and are otherwise applicable to the criteria at issue.

Criteria Change History

Change Date	Changed By	Description of Change	Version
[mm/dd/yyyy]	CAC		
Signature			

Change Date	Changed By	Description of Change	Version
[mm/dd/yyyy]	CAC		
Signature			

Change Date	Changed By	Description of Change	Version
04/19/2024	CAC	Annual review. Changed future review cycle to January to align with review of A9513 (Lutathera®). Added ^{18}F-rhPSMA-7.3 [flotufolastat F 18 (Posluma®)] to list of FDA-approved PSMA PET radiopharmaceuticals and added HCPCS code A9608 to Billing and Coding Section. Updated NCCN Guidelines® and references.	2
Signature William (Bill) Jagiello, DO			
Change Date	**Changed By**	**Description of Change**	**Version**
04/21/2023	CAC	Criteria implementation.	1
Signature William (Bill) Jagiello, DO			

CAC = Medicaid Clinical Advisory Committee