

09-J1000-01

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Reviewed: 02/12/25

Revised: 07/01/25

Subject: Pemetrexed (Alimta®, Axtle™, Pemfexy™, Pemrydi RTU®) IV

THIS MEDICAL COVERAGE GUIDELINE IS NOT AN AUTHORIZATION, CERTIFICATION, EXPLANATION OF BENEFITS, OR A GUARANTEE OF PAYMENT, NOR DOES IT SUBSTITUTE FOR OR CONSTITUTE MEDICAL ADVICE. ALL MEDICAL DECISIONS ARE SOLELY THE RESPONSIBILITY OF THE PATIENT AND PHYSICIAN. BENEFITS ARE DETERMINED BY THE GROUP CONTRACT, MEMBER BENEFIT BOOKLET, AND/OR INDIVIDUAL SUBSCRIBER CERTIFICATE IN EFFECT AT THE TIME SERVICES WERE RENDERED. THIS MEDICAL COVERAGE GUIDELINE APPLIES TO ALL LINES OF BUSINESS UNLESS OTHERWISE NOTED IN THE PROGRAM EXCEPTIONS SECTION.

Dosage/ Administration	Position Statement	Billing/Coding	Reimbursement	Program Exceptions	Definitions
Related Guidelines	Other	References	Updates		

DESCRIPTION:

Pemetrexed (Alimta) was initially approved by the U.S. Food and Drug Administration (FDA) in February 2004 for use in combination with cisplatin for the treatment of malignant pleural mesothelioma in adults whose disease is unresectable or who are not otherwise candidates for curative surgery. The FDA has since approved pemetrexed as single agent therapy in locally advanced or metastatic non-small cell lung cancer following prior chemotherapy, for use in combination with cisplatin for first-line therapy in locally advanced or metastatic non-squamous non-small cell lung cancer, and for maintenance treatment of advanced or metastatic nonsquamous non-small cell lung cancer after first-line treatment with platinum-based chemotherapy. The agent received orphan drug status from the FDA for the malignant pleural mesothelioma. Pemetrexed acts as a multi-targeted antifolate compound that disrupts folate-dependent metabolic processes that are essential for cell replication. Multiple pemetrexed products are available that have been approved via the 505(b)(2) New Drug Application (NDA) process. They have different HCPCS codes and are not considered interchangeable.

National Comprehensive Cancer Network (NCCN) Guidelines for Malignant Pleural Mesothelioma (Version 1.2022), Non-Small Cell Lung Cancer (Version 1.2022), Ovarian Cancer (Version 3.2021), Thymomas and Thymic Carcinomas (Version 1.2022), and Central Nervous System Cancers (Version 2.2021) include recommendations for use of pemetrexed.

POSITION STATEMENT:

Initiation of pemetrexed (Alimta, Axtle, Pemfexy, Pemrydi RTU) **meets the definition of medical necessity** for members diagnosed with **ANY** of the following conditions when **ALL** associated criteria are met:

1. Malignant Pleural Mesothelioma

- a. Member meets one of the following:
 - i. Pemetrexed is used alone
 - ii. Pemetrexed is used in combination with cisplatin or carboplatin
 - iii. Pemetrexed is used in combination with bevacizumab and cisplatin
 - iv. Pemetrexed is used in combination with bevacizumab and carboplatin
 - v. Pemetrexed is used in combination with bevacizumab for maintenance therapy
- b. Pemetrexed dose does not exceed 500 mg/m² every 21 days
- c. Axtle, Pemfexy, Pemrydi RTU only: Pemetrexed (Alimta) is unavailable due to national drug shortage

Note: To verify non-availability, the status of pemetrexed must be listed as “Currently in Shortage” on the FDA Drug Shortages webpage

<http://www.accessdata.fda.gov/scripts/drugshortages/>) AND all listed manufactures must have all strengths unavailable.

2. Non-Small Cell Lung Cancer

- a. Member meets one of the following:
 - i. Pemetrexed is used alone
 - ii. Pemetrexed is used in combination with cisplatin or carboplatin
 - iii. Pemetrexed is used in combination with bevacizumab
 - iv. Pemetrexed is used in combination with pembrolizumab for maintenance therapy
 - v. Pemetrexed is used in combination with bevacizumab and either cisplatin or carboplatin
 - vi. Pemetrexed is used in combination with pembrolizumab and either cisplatin or carboplatin
- b. Pemetrexed dose does not exceed 500 mg/m² every 21 days
- c. Axtle, Pemfexy, Pemrydi RTU only: Pemetrexed (Alimta) is unavailable due to national drug shortage

Note: To verify non-availability, the status of pemetrexed must be listed as “Currently in Shortage” on the FDA Drug Shortages webpage

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3. Ovarian Cancer (including Fallopian Tube Cancer and Primary Peritoneal Cancer)

- a. Member is diagnosed with persistent or recurrent disease
- b. Pemetrexed is used alone
- c. Pemetrexed dose does not exceed 500 mg/m² every 21 days

- d. Axtle, Pemfexy, Pemrydi RTU only: Pemetrexed (Alimta) is unavailable due to national drug shortage

Note: To verify non-availability, the status of pemetrexed must be listed as “Currently in Shortage” on the FDA Drug Shortages webpage

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4. Thymoma or Thymic Carcinoma

- a. Pemetrexed is used as second-line therapy or as first-line therapy in members who cannot tolerate first-line combination regimens
- b. Pemetrexed is used alone
- c. Pemetrexed dose does not exceed 500 mg/m² every 21 days
- d. Axtle, Pemfexy, Pemrydi RTU only: Pemetrexed (Alimta) is unavailable due to national drug shortage

Note: To verify non-availability, the status of pemetrexed must be listed as “Currently in Shortage” on the FDA Drug Shortages webpage

<http://www.accessdata.fda.gov/scripts/drugshortages/>) AND all listed manufactures must have all strengths unavailable.

5. Primary Central Nervous System Lymphoma

- a. Member is diagnosed with relapsed or refractory disease or pemetrexed is used as an induction therapy if member is unsuitable for or intolerant to high-dose methotrexate
- b. Pemetrexed is used alone
- c. Pemetrexed dose does not exceed 500 mg/m² every 21 days
- d. Axtle, Pemfexy, Pemrydi RTU only: Pemetrexed (Alimta) is unavailable due to national drug shortage

Note: To verify non-availability, the status of pemetrexed must be listed as “Currently in Shortage” on the FDA Drug Shortages webpage

<http://www.accessdata.fda.gov/scripts/drugshortages/>) AND all listed manufactures must have all strengths unavailable.

6. Other FDA-approved or NCCN supported diagnosis (not previously listed above)

- a. Member meets one of the following:
 - i. Member is diagnosed with a condition that is consistent with an indication listed in the product’s FDA-approved prescribing information (or package insert) AND member meets any additional requirements listed in the “Indications and Usage” section of the FDA-approved prescribing information (or package insert)
 - ii. Indication **AND** usage is recognized in NCCN Drugs and Biologics Compendium as a Category 1 or 2A recommendation
- b. Pemetrexed dose does not exceed 500 mg/m² every 21 days

- c. Axtle, Pemfexy, Pemrydi RTU only: Pemetrexed (Alimta) is unavailable due to national drug shortage

Note: To verify non-availability, the status of pemetrexed must be listed as “Currently in Shortage” on the FDA Drug Shortages webpage

<http://www.accessdata.fda.gov/scripts/drugshortages/>) AND all listed manufactures must have all strengths unavailable.

Approval duration: 1 year

Continuation of pemetrexed (Alimta, Axtle, Pemfexy, Pemrydi) **meets the definition of medical necessity** when **ALL** of the following criteria are met:

1. Authorization/reauthorization for pemetrexed has been previously approved by Florida Blue or another health plan in the past two years for the treatment of bladder cancer, malignant pleural mesothelioma, non-small cell lung cancer, ovarian cancer, thymoma or thymic carcinoma, or primary central nervous system lymphoma or other FDA-approved or NCCN supported diagnosis; OR the member currently meets all indication-specific initiation criteria
2. Member’s disease has not progressed during treatment with pemetrexed
3. Pemetrexed dose does not exceed 500 mg/m² every 21 days
4. Axtle, Pemfexy, Pemrydi RTU only: Pemetrexed (Alimta) is unavailable due to national drug shortage

Note: To verify non-availability, the status of pemetrexed must be listed as “Currently in Shortage” on the FDA Drug Shortages website at <http://www.accessdata.fda.gov/scripts/drugshortages/> AND all listed manufactures must have all strengths unavailable.

Approval duration: 1 year

DOSAGE/ADMINISTRATION:

THIS INFORMATION IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY AND SHOULD NOT BE USED AS A SOURCE FOR MAKING PRESCRIBING OR OTHER MEDICAL DETERMINATIONS. PROVIDERS SHOULD REFER TO THE MANUFACTURER’S FULL PRESCRIBING INFORMATION FOR DOSAGE GUIDELINES AND OTHER INFORMATION RELATED TO THIS MEDICATION BEFORE MAKING ANY CLINICAL DECISIONS REGARDING ITS USAGE.

FDA-approved

- 500 mg/m² IV on Day 1 of each 21-day cycle

Dose Adjustments

Renal impairment

- CrCl < 45 mL/min: Not recommended

Drug Availability

- Alimta, generic pemetrexed: 100 mg or 500 mg lyophilized powder in single-dose vial
- Pemfexy: 500 mg/20 mL (25 mg/mL) in a single-dose vial

Usual Dosage: Pemetrexed disodium is administered 500mg/m² every 21 days.

PRECAUTIONS:

Precautions/Warnings

- Premedication regimen: Prior to treatment with ALIMTA, initiate supplementation with oral folic acid and intramuscular vitamin B12 to reduce the severity of hematologic and gastrointestinal toxicity
- Bone marrow suppression: Reduce doses for subsequent cycles based on hematologic and nonhematologic toxicities
- Do not administer when CrCl <45 mL/min
- Do not initiate a cycle unless ANC ≥1500 cells/mm³, platelets ≥100,000 cells/mm³, and CrCl ≥45 mL/min
- Fetal harm can occur when administered to a pregnant woman

BILLING/CODING INFORMATION:

HCPCS Coding:

J9292	Injection, pemetrexed dipotassium, 10 mg
J9294	Injection, pemetrexed (hospira), not therapeutically equivalent to J9305, 10 mg
J9296	Injection, pemetrexed (accord), not therapeutically equivalent to J9305, 10 mg
J9297	Injection, pemetrexed (sandoz), not therapeutically equivalent to J9305, 10 mg
J9304	Injection, pemetrexed (pemfexy), 10 mg
J9305	Injection, pemetrexed, not otherwise specified, 10 mg
J9314	Injection, pemetrexed (teva), not therapeutically equivalent to J9305, 10 mg
J9322	Injection, pemetrexed (bluepoint), not therapeutically equivalent to J9305, 10 mg
J9323	Injection, pemetrexed ditromethamine, 10 mg
J9324	Injection, pemetrexed (pemrydi rtu), 10 mg

ICD-10 Diagnosis Codes That Support Medical Necessity:

C33	Malignant neoplasm of trachea
C34.00	Malignant neoplasm of main bronchus, unspecified side
C34.01	Malignant neoplasm of right main bronchus
C34.02	Malignant neoplasm of left main bronchus
C34.10	Malignant neoplasm of upper lobe, bronchus or lung, unspecified side
C34.11	Malignant neoplasm of upper lobe, right bronchus or lung
C34.12	Malignant neoplasm of upper lobe, left bronchus or lung
C34.2	Malignant neoplasm of middle lobe, right bronchus or lung
C34.30	Malignant neoplasm of lower lobe, bronchus or lung, unspecified side
C34.31	Malignant neoplasm of lower lobe, right bronchus or lung
C34.32	Malignant neoplasm of lower lobe, left bronchus or lung
C34.80	Malignant neoplasm of overlapping sites of bronchus and lung, unspecified side

C34.81	Malignant neoplasm of overlapping sites of right bronchus and lung
C34.82	Malignant neoplasm of overlapping sites of left bronchus and lung
C34.90	Malignant neoplasm of bronchus or lung, unspecified, unspecified side
C34.91	Malignant neoplasm of unspecified part of right bronchus or lung
C34.92	Malignant neoplasm of unspecified part of left bronchus or lung
C37	Malignant neoplasm of thymus
C38.4	Malignant neoplasm of pleura
C45.0	Mesothelioma of pleura
C45.1	Mesothelioma of peritoneum
C45.2	Mesothelioma of pericardium
C45.7	Mesothelioma of other sites
C47.9	Malignant neoplasm of peripheral nerves and autonomic nervous system, unspecified
C48.1	Malignant neoplasm of specified parts of peritoneum
C48.2	Malignant neoplasm of peritoneum, unspecified
C48.8	Malignant neoplasm of overlapping sites of retroperitoneum and peritoneum
C53.0	Malignant neoplasm of endocervix
C53.1	Malignant neoplasm of exocervix
C53.8	Malignant neoplasm of overlapping sites of cervix uteri
C53.9	Malignant neoplasm of cervix uteri, unspecified
C56.1	Malignant neoplasm of right ovary
C56.2	Malignant neoplasm of left ovary
C56.3	Malignant neoplasm of bilateral ovaries
C56.9	Malignant neoplasm of ovary, unspecified side
C57.00	Malignant neoplasm of fallopian tube, unspecified side
C57.01	Malignant neoplasm of right fallopian tube
C57.02	Malignant neoplasm of left fallopian tube
C57.10	Malignant neoplasm of broad ligament, unspecified side
C57.11	Malignant neoplasm of right broad ligament
C57.12	Malignant neoplasm of left broad ligament
C57.20	Malignant neoplasm of round ligament, unspecified side
C57.21	Malignant neoplasm of right round ligament
C57.22	Malignant neoplasm of left round ligament
C57.3	Malignant neoplasm of parametrium
C57.4	Malignant neoplasm of uterine adnexa, unspecified
C57.7	Malignant neoplasm of other specified female genital organs
C57.8	Malignant neoplasm of overlapping sites of female genital organs
C57.9	Malignant neoplasm of female genital organ, unspecified
C61	Malignant neoplasm of prostate
C65.1	Malignant neoplasm of right renal pelvis
C65.2	Malignant neoplasm of left renal pelvis
C65.9	Malignant neoplasm of renal pelvis, unspecified side
C66.1	Malignant neoplasm of right ureter
C66.2	Malignant neoplasm of left ureter

C66.9	Malignant neoplasm of ureter, unspecified side
C67.0	Malignant neoplasm of trigone of bladder
C67.1	Malignant neoplasm of dome of bladder
C67.2	Malignant neoplasm of lateral wall of bladder
C67.3	Malignant neoplasm of anterior wall of bladder
C67.4	Malignant neoplasm of posterior wall of bladder
C67.5	Malignant neoplasm of bladder neck
C67.6	Malignant neoplasm of ureteric orifice
C67.7	Malignant neoplasm of urachus
C67.8	Malignant neoplasm of overlapping sites of bladder
C67.9	Malignant neoplasm of bladder, unspecified
C68.0	Malignant neoplasm of urethra
C83.30	Diffuse large B-cell lymphoma, unspecified site
C83.31	Diffuse large B-cell lymphoma, lymph nodes of head, face, and neck
C83.390	Primary central nervous system lymphoma
C83.398	Diffuse large B-cell lymphoma of other extranodal and solid organ sites
C83.80	Other non-follicular lymphoma, unspecified site
C83.81	Other non-follicular lymphoma, lymph nodes of head, face, and neck
C83.89	Other non-follicular lymphoma, extranodal and solid organ sites
C85.89	Other specified types of non-Hodgkin lymphoma, extranodal and solid organ sites
C85.99	Non-Hodgkin lymphoma, unspecified, extranodal and solid organ sites
D09.0	Carcinoma in situ of bladder
D15.0	Benign neoplasm of thymus

REIMBURSEMENT INFORMATION:

Refer to section entitled [POSITION STATEMENT](#).

PROGRAM EXCEPTIONS:

Federal Employee Program (FEP): Follow FEP guidelines.

State Account Organization (SAO): Follow SAO guidelines.

Medicare Advantage: No Local Coverage Determination (LCD) or National Coverage Determination (NCD) were found at the time of the last guideline revised date.

If this Medical Coverage Guideline contains a step therapy requirement, in compliance with Florida law 627.42393, members or providers may request a step therapy protocol exemption to this requirement if based on medical necessity. The process for requesting a protocol exemption can be found at [Coverage Protocol Exemption Request](#).

DEFINITIONS:

No guideline specific definitions apply.

RELATED GUIDELINES:

[Carboplatin \(Paraplatin®\) IV, 09-J0000-93](#)

[Docetaxel \(Taxotere®\) IV, 09-J0000-95](#)

[Gemcitabine \(Gemzar®\), 09-J0000-96](#)

[Irinotecan HCl \(Camptosar®\) IV, 09-J0000-99](#)

[Vitamin B-12 Injections, 09-J0000-10](#)

OTHER:

None applicable.

REFERENCES:

1. Central nervous system treatment guidelines [Internet]. Version 2.2021. Fort Washington (PA): National Comprehensive Cancer Network; 2022 [cited 1/1/22]. Available from: http://www.nccn.org/professionals/physician_gls/f_guidelines.asp/.
2. Clinical Pharmacology [Internet]. Tampa (FL): Gold Standard, Inc.; 2022 [cited 1/1/22]. Available from: <http://www.clinicalpharmacology.com/>.
3. ClinicalTrials.gov [Internet]. Bethesda (MD): National Library of Medicine; 2000 Feb 29 - [cited 1/1/22]. Available from: <http://clinicaltrials.gov/>.
4. DRUGDEX® System [Internet]. Greenwood Village (CO): Thomson Micromedex; Updated periodically [cited 1/1/22].
5. Eagle Pharms. Pemfexy (pemetrexed disodium) injection. 2020 [cited 5/1/20]. In: DailyMed [Internet]. Bethesda (MD): National Library of Medicine. Available from: https://www.accessdata.fda.gov/drugsatfda_docs/label/2020/209472s000lbl.pdf.
6. Eli Lilly and Company. Alimta (pemetrexed disodium) injection. 2019 [cited 1/1/20]. In: DailyMed [Internet]. Bethesda (MD): National Library of Medicine. Available from: <http://dailymed.nlm.nih.gov/dailymed/lookup.cfm?setid=f5a860f3-37ec-429c-ae04-9c88d7c55c08/>.
7. Malignant Pleural Mesothelioma treatment guidelines [Internet]. Version 1.2022. Fort Washington (PA): National Comprehensive Cancer Network; 2022 [cited 1/1/22]. Available from: http://www.nccn.org/professionals/physician_gls/f_guidelines.asp/.
8. NCCN Drugs & Biologics Compendium [Internet]. Fort Washington (PA): National Comprehensive Cancer Network; 2022 [cited 1/1/22]. Available from: http://www.nccn.org/professionals/drug_compendium/content/contents.asp/.
9. Non-small cell lung cancer treatment guidelines [Internet]. Version 1.2022. Fort Washington (PA): National Comprehensive Cancer Network; 2022 [cited 1/1/22]. Available from: http://www.nccn.org/professionals/physician_gls/f_guidelines.asp/.
10. Orphan Drug Designations and Approval [Internet]. Silver Spring (MD): US Food and Drug Administration; 2019 [cited 1/1/20]. Available from: <http://www.accessdata.fda.gov/scripts/opdlisting/ood/index.cfm/>.
11. Ovarian cancer treatment guidelines [Internet]. Version 3.2021. Fort Washington (PA): National Comprehensive Cancer Network; 2019 [cited 1/1/20]. Available from: http://www.nccn.org/professionals/physician_gls/f_guidelines.asp/.

12. Thymomas and thymic carcinomas treatment guidelines [Internet]. Version 1.2022. Fort Washington (PA): National Comprehensive Cancer Network; 2019 [cited 1/1/20]. Available from: http://www.nccn.org/professionals/physician_gls/f_guidelines.asp/.

COMMITTEE APPROVAL:

This Medical Coverage Guideline (MCG) was approved by the Florida Blue Pharmacy Policy Committee on 02/12/25.

GUIDELINE UPDATE INFORMATION:

05/15/09	New Medical Coverage Guideline.
10/15/09	Revision; consisting of clarifying dosage.
01/15/10	Revision; consisting of update to codes.
08/01/10	Revision; consisting of update to codes.
11/15/10	Review and revision; consisting of updating coding and references.
11/15/11	Review and revision to guideline; consisting of updating position statement and references.
10/15/12	Review and revision to guideline; consisting of removing cervical cancer indication, reformatting position statement, updating dosage and administration, exceptions, coding and references.
11/15/13	Review and revision to guideline; consisting of revision and reformatting description, position statement, dosage/administration, precautions, references.
11/15/14	Review and revision to guideline; consisting of description, position statement, coding, references.
09/15/15	Revision to guideline; consisting of updating coding.
11/01/15	Revision: ICD-9 Codes deleted.
11/15/15	Review and revision to guideline; consisting of updating position statement, references
11/15/16	Review and revision to guideline; consisting of updating position statement, coding, references.
12/15/17	Review and revision to guideline; consisting of updating position statement, references, and coding.
08/15/18	Revision to guideline; updated description and position statement.
02/15/19	Review and revision to guideline; consisting of updating description, position statement, references.
02/15/20	Revision to guideline; updated description and references.
06/15/20	Revision to guideline; added Pemfexy to position statement
10/01/20	Revision: Added HCPCS code J9304 (for Pemfexy) and revised description for code J9305.
02/15/21	Revision to guideline; updated description and references.
10/01/21	ICD10 update.
02/15/22	Review and revision to guideline; updated description, position statement, coding, references.
01/01/23	Revision: Added HCPCS code J9314.
04/01/23	Revision: Added HCPCS codes J9294, J9296, and J9297.
04/01/23	Revision: Added HCPCS codes J9322 and J9323.

12/15/23	Revision to position statement.
01/01/24	Revision: Added HCPCS code J9324.
07/01/24	Revision: Grammatical revision to HCPCS codes.
03/15/25	Review and revision to guideline; updated position statement, coding, references.
07/01/25	Revision: Revised description of HCPCS code J9292.