I. Medication Description

Alimta is a folate analog metabolic inhibitor that exerts its action by disrupting folate-dependent metabolic processes essential for cell replication. In vitro studies have shown that pemetrexed inhibits thymidylate synthase (TS), dihydrofolate reductase (DHFR), and glycinamide ribonucleotide formyltransferase (GARFT), which are folate-dependent enzymes involved in the de novo biosynthesis of thymidine and purine nucleotides. Pemetrexed is taken into cells by membrane carriers such as the reduced folate carrier and membrane folate binding protein transport systems. Once in the cell, pemetrexed is converted to polyglutamate forms by the enzyme folylpolyglutamate synthetase. The polyglutamate forms are retained in cells and are inhibitors of TS and GARFT. Polyglutamation is a time- and concentration-dependent process that occurs in tumor cells and, is thought to occur to a lesser extent, in normal tissues. Polyglutamated metabolites are thought to have an increased intracellular half-life resulting in prolonged drug action in malignant cells.

II. Position Statement

Coverage is determined through a prior authorization process with supporting clinical documentation for every request.

III. Policy

Coverage of Alimta is provided when prescribed by an oncologist for the following indications:

- Bladder cancer: Single agent second-line therapy for metastatic disease or for recurrence post cystectomy
- CNS cancer/Primary CNS Lymphoma: Single agent for progressive or recurrent disease
- Malignant pleural mesothelioma:
  - As induction therapy in combination with cisplatin for medically inoperable stage I-III disease
  - As a single agent or in combination with cisplatin or carboplatin as
    - Treatment of unresectable or medically inoperable clinical stage I-III disease and tumors of epithelial or mixed histology
    - Treatment of resected clinical stage I-III disease in patients not treated with induction chemotherapy
    - Treatment of clinical stage IV disease or tumors of sarcomatoid histology
  - In combination with Avastin and cisplatin as
    - Treatment of medically inoperable clinical stage I-III disease and tumors of epithelial or mixed histology
    - Treatment of clinical stage IV disease and sarcomatoid histology
Second-line treatment as a single agent if not administered first line, or if administered first line as rechallenge if good sustained response at the time initial chemotherapy was interrupted

- Non-Small Cell Lung Cancer (adenocarcinoma or large cell carcinoma): As preoperative, induction, or recurrent/metastatic treatment
- Ovarian cancer: as a single agent for persistent disease or recurrence of epithelial, fallopian tube, or primary peritoneal cancer
- Thymomas and Thymic Carcinomas: as a single agent for second-line therapy

IV. **Quantity Limitations**

Coverage is available for acceptable dosing regimens, dependent upon body surface area as well as diagnosis.

V. **Coverage Duration**

Coverage is approved for up to 6 months and may be renewed.

VI. **Coverage Renewal Criteria**

Coverage can be renewed based upon the following criteria:

- Stabilization of disease or in absence of disease progression **AND**
- Absence of unacceptable toxicity from the drug

VII. **Billing/Coding Information**

- J9305 – 1 billable unit is 10mg
- Pertinent indications:
  - Bladder cancer: C61, C65.1, C65.2, C65.9, C66.1, C66.2, C66.9, C67.0-C67.9, C68.0, D09.0, Z85.51, Z85.59
  - CNS cancer: C83.80, C83.81, C83.89
  - Mesothelioma: C38.4, C45.0, C45.1
  - NSCLC: C33, C34.00-C34.02, C34.10-C34.12, C34.2, C34.30-C34.32, C34.80-C34.82, C34.90-C34.92, Z85.118
  - Ovarian cancer: C48.1, C48.2, C48.8, C56.1, C56.2, C56.9, C57.00-C57.02, C57.10-C57.12, C57.20-C57.22, C57.3, C57.4, Z85.43
  - Thymomas and Thymic Carcinomas: C37, D15.0

VIII. **Summary of Policy Changes**

- 1/1/16: new policy
- 3/15/16: no policy changes
- 4/5/17: no policy changes
IX. **References**


The Plan fully expects that only appropriate and medically necessary services will be rendered. The Plan reserves the right to conduct pre-payment and post-payment reviews to assess the medical appropriateness of the above-referenced therapies.

Drug therapy initiated with samples will not be considered as meeting medical necessity for coverage for non-preferred or prior authorized medications.

The preceding policy applies only to members for whom the above named pharmacy benefit medications are included on their covered formulary. Members with closed formulary benefits are subject to trying all appropriate formulary alternatives before a coverage exception for a non-formulary agent will be considered.

The preceding policy is a guideline to allow for coverage of the pertinent medication/product, and is not meant to serve as a clinical practice guideline.