

**Systemic Chemotherapy**  
**Onivyde (irinotecan liposome)**  
**Pemfexy (pemetrexed)**  
**Vyxeos (daunorubicine/cytarabine)**  
**Effective 01/01/2026**

Plan	<input checked="" type="checkbox"/> MassHealth UPPL <input type="checkbox"/> Commercial/Exchange		Program Type	<input checked="" type="checkbox"/> Prior Authorization
Benefit	<input type="checkbox"/> Pharmacy Benefit <input checked="" type="checkbox"/> Medical Benefit			<input type="checkbox"/> Quantity Limit <input type="checkbox"/> Step Therapy
Specialty Limitations	N/A			
Contact Information	Medical Benefit Pharmacy Benefit	Phone: 833-895-2611 Phone: 800-711-4555	Fax: 888-656-6671 Fax: 844-403-1029	
Exceptions	N/A			

### Overview

**Pemfexy** (pemetrexed) is a folate analog metabolic inhibitor designed to block DNA replication and cell division. It is indicated:

- in combination with pembrolizumab and platinum chemotherapy, for the initial treatment of patients with metastatic non-squamous non-small cell lung cancer (NSCLC), with no EGFR or ALK genomic tumor aberrations.
- in combination with cisplatin for the initial treatment of patients with locally advanced or metastatic, non-squamous NSCLC.
- as a single agent for the maintenance treatment of patients with locally advanced or metastatic non-squamous NSCLC whose disease has not progressed after four cycles of platinum-based first-line chemotherapy.
- as a single agent for the treatment of patients with recurrent, metastatic non-squamous NSCLC after prior chemotherapy.

**Onivyde** (irinotecan liposome) is indicated in combination with fluorouracil and leucovorin for the treatment of patients with metastatic adenocarcinoma of the pancreas after disease progression following gemcitabine-based therapy, and was more recently approved in combination with oxaliplatin, fluorouracil and leucovorin, for the first-line treatment of adult patients with metastatic pancreatic adenocarcinoma.

**Vyxeos** (daunorubicin/cytarabine liposome) is a liposomal combination of daunorubicin, an anthracycline topoisomerase inhibitor, and cytarabine, a nucleoside metabolic inhibitor, in a 1:5 molar ratio that is indicated for the treatment of adults with newly-diagnosed therapy-related acute myeloid leukemia (t-AML) or AML with myelodysplasia-related changes (AML-MRC) in pediatric patients one year and older.

### Coverage Guidelines

Authorization may be reviewed on a case by case basis for members who are new to the plan currently receiving treatment with requested medication excluding when the product is obtained as samples or via manufacturer's patient assistance programs.

## OR

Authorization may be granted for members when all the following criteria are met, and documentation is provided:

### **Onivyde** (irinotecan liposome)

1. Diagnosis of metastatic adenocarcinoma of the pancreas
2. Prescriber is a hematologist or oncologist
3. Appropriate dosing
4. Member  $\geq 18$  years of age
5. **ONE** of the following:
  - a. Requested agent will be used in combination with fluorouracil and leucovorin
  - b. **BOTH** of the following:
    - i. Requested agent will be used in combination with fluorouracil and leucovorin
    - ii. Physician attestation of inadequate response or adverse reaction to **ONE** or contraindication to **BOTH** of the following (see appendix for gemcitabine- and fluoropyrimidine-based chemotherapy regimens):
      1. gemcitabine-based chemotherapy regimen
      2. fluoropyrimidine-based chemotherapy regimen

### **Pemfexy** (pemetrexed)

1. Diagnosis of malignant pleural mesothelioma or non-small cell lung cancer (NSCLC)
2. Prescriber is a hematologist or oncologist
3. Appropriate dosing
4. Physician attestation of inadequate response, adverse reaction, or contraindication to a pemetrexed product available without prior authorization

### **Vyxeos** (daunorubicin/cytarabine)

1. Diagnosis of newly-diagnosed therapy-related acute myeloid leukemia (t-AML) or AML with myelodysplasia-related changes (AML-MRC) or MDS/CMML
2. Prescriber is a hematologist or oncologist
3. Appropriate dosing
4. Member  $\geq 1$  year of age
5. Physician attestation of inadequate response, adverse reaction or contraindication to use of separate daunorubicin and cytarabine chemotherapy agents

### **Continuation of Therapy**

Reauthorization by physician will infer a positive response to therapy.

### **Limitations**

1. Initial approvals will be granted 3 months
2. Reauthorizations will be granted for 6 months

### **References**

1. Etopophos [package insert on the internet] Montgomery (AL): H2-Pharma, LLC.; 2021 Dec. Available from: <https://dailymed.nlm.nih.gov/dailymed/index.cfm>.
2. Etoposide: drug information. In: Basow DS (Ed). UpToDate [database on the Internet]. Waltham (MA): UpToDate; 2021 [cited 2021 Dec 29]. Available from: <http://www.uptodate.com/uptd/index.do>.



3. Sun Pharma Launches Ready-to-Infuse INFUGEM in the U.S. [press release on the internet]. BioSpace; 2019 Apr 8 [cited 2019 Nov 27]. Available from: <https://www.biospace.com/article/releases/sun-pharma-launches-ready-to-infuse-infugem-in-the-u-s-/>.
4. Larson RA. Induction therapy for Philadelphia chromosome negative acute lymphoblastic leukemia in adults. In Basow DS (Ed). UpToDate [database on the Internet]. Waltham (MA): UpToDate; 2019 [cited 2019 Oct 21]. Available from: <http://www.utdol.com/utd/index.do>.
5. Harrison RS, Lyseng-Williamson KA. Vincristine Sulfate Liposome Injection. A Guide to its Use in Refractory or Relapsed Acute Lymphoblastic Leukemia. *BioDrugs*. 2013;27:69-74.
6. Liesveld J, Asselin B. It's ALL in the Liposomes: Vincristine Gets A New Package. *J Clin Oncol*. 2013 Feb;31(6):676-83.
7. Davis T, Farag SS. Treating relapsed or refractory Philadelphia chromosome-negative acute lymphoblastic leukemia: liposome-encapsulated vincristine. *International Journal of Nanomedicine*. 2013;8:3479-88.
8. Silverman JA, Deitcher SR. Marqibo (vincristine sulfate liposome injection) improves the pharmacokinetics and pharmacodynamics of vincristine. *Cancer Chemother Pharmacol*. 2013;71:555-564.
9. O'Brien S, Schiller G, Lister J, Damon L, Goldberg S, Aulitzky W, et al. High-Dose Vincristine Sulfate Liposome Injection for Advanced, Relapsed, and Refractory Adult Philadelphia Chromosome-Negative Acute Lymphoblastic Leukemia. *J Clin Oncol*. 2013 Feb;31(6):676-83.
10. NCCN Practice Guidelines in Oncology. Acute Lymphoblastic Leukemia Version 3.2021 [guideline on the Internet]. 2021 Dec 16 [cited 2021 Dec 29]. Available from: [http://www.nccn.org/professionals/physician\\_gls/pdf/all.pdf](http://www.nccn.org/professionals/physician_gls/pdf/all.pdf)
11. Onivyde [package insert]. Cambridge (MA): Merrimack Pharmaceuticals, Inc.; 2020 Dec. Available from: <https://dailymed.nlm.nih.gov/dailymed/index.cfm>.
12. FDA approves new treatment for advanced pancreatic cancer [press release on the Internet]. Rockville (MD): Food and Drug Administration (US); 2015 Oct 22 [cited 2017 Nov 14]. Available at: <https://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm468654.htm>.
13. Wang-Gillam A, Li CP, Bodoky G, Dean A, Shan YS, Jameson G et al. Nanoliposomal irinotecan with fluorouracil and folinic acid in metastatic pancreatic cancer after previous gemcitabine-based therapy (NAPOLI-1): a global, randomised, open-label, phase 3 trial. *Lancet*. 2015 Nov 20.
14. National Comprehensive Cancer Network (NCCN). Pancreatic Adenocarcinoma Version 3.2019. [Guideline on the Internet]. 2021 Feb 25 [Cited 2021 Dec 29]. Available from: [https://www.nccn.org/professionals/physician\\_gls/pdf/pancreatic.pdf](https://www.nccn.org/professionals/physician_gls/pdf/pancreatic.pdf).
15. Vyxeos [prescribing information]. Palo Alto (CA): Jazz Pharmaceuticals; 2021 Apr. Available from: <https://dailymed.nlm.nih.gov/dailymed/index.cfm>.
16. National Comprehensive Cancer Network. NCCN Clinical Practice Guidelines in Oncology Acute Myeloid Leukemia. Version 1.2022. [Guideline on the Internet]. 2021 Dec 2 [cited 2021 Dec 29]. Available from: [https://www.nccn.org/professionals/physician\\_gls/pdf/aml.pdf](https://www.nccn.org/professionals/physician_gls/pdf/aml.pdf).
17. Weiss MA, Aliff TB, Tallman MS, Frankel SR, Kalaycio ME, Maslak PG, et al. A Single, High Dose of Idarubicin, Combined with Cytarabine as Induction Therapy for Adult Patients with Recurrent or Refractory Acute Lymphoblastic Leukemia. *Cancer*. 2002 Aug;95(3):581-5.
18. Larson RA. Treatment of relapsed or refractory acute lymphoblastic leukemia in adults. In Basow DS (Ed). UpToDate [database on the Internet]. Waltham (MA): UpToDate; 2021 [cited 2021 Dec 29]. Available from: <http://www.utdol.com/utd/index.do>.
19. Kantarjian H, Gandhi V, Cortes J, Verstovsek S, Du M, Garcia-Manero G, et al. Phase 2 clinical and pharmacological study of clofarabine in patients with refractory or relapsed acute leukemia. *Blood*. 2003 Oct;102(7):2379-86.



20. ClinicalTrials.gov [Internet]. Bethesda (MD): National Library of Medicine (US). 2000- [cited 2019 Oct 21]. Available from: <http://clinicaltrials.gov>.

### **Review History**

02/08/2023 - Reviewed and created for Feb P&T; Matched MH UPPL criteria to be in compliance with Masshealth unified formulary requirements. Effective 4/1/23.

04/12/23 – Reviewed and updated for Apr P&T. Added Alimta and pemetrexed to Overview table under no PA. No clinical changes. Effective 5/1/23.

05/10/23 – Reviewed and updated for P&T. Vyxeos was added to MB management for consistency with the rest of the class. Effective 6/5/23

06/14/23 – Reviewed and updated for P&T. Etopophos (etoposide phosphate) will be managed under MB no PA. Effective 7/31/23.

09/11/24 – Reviewed and updated for P&T. Removed Marqibo due to no longer FDA approved and obsolete. Added expanded indication for Onivyde as a first-line treatment option in combination with oxaliplatin, fluorouracil and leucovorin for adults with metastatic pancreatic adenocarcinoma. Effective 10/1/24.

07/09/25 – Reviewed and updated for P&T. Removed appendix as this info can be found on NCCN. Updated the Overview section to include indications of impacted drugs. Effective 9/1/25

11/12/25 – Reviewed and updated for P&T. Removed Infugem due to product being withdrawn. Effective 1/1/26

