Mass General Brigham
Health Plan

Mylotarg (gemtuzumab ozogamicin)
Effective 05/06/2024

Plan	☒ MassHealth ☐Commercial/Exchange	**Program Type**	☒ Prior Authorization ☐ Quantity Limit ☐ Step Therapy
Benefit	☐ Pharmacy Benefit ☒ Medical Benefit		
Specialty Limitations	N/A		
Contact Information	**Medical and Specialty Medications** All Plans | Phone: 877-519-1908 | Fax: 855-540-3693 **Non-Specialty Medications** All Plans | Phone: 800-711-4555 | Fax: 844-403-1029		
Exceptions	N/A		

Overview
Mylotarg (gemtuzumab ozogamicin) is a CD33-directed antibody-drug conjugate (ADC) indicated for the treatment of newly-diagnosed CD33-positive acute myeloid leukemia (AML) in adults and pediatric patients one month and older (as combination therapy and as monotherapy) and the treatment of relapsed or refractory CD33-positive AML in adults and in pediatric patients two years and older (as monotherapy).

No PA	Drugs that require PA
Cytarabine	Mylotarg (gemtuzumab ozogamicin)[MB]
Daunorubicin	
Please refer to the NCCN guidelines for the treatment of AML for complete treatment regimens.	

AML=acute myeloid leukemia, NCCN=National Comprehensive Cancer Network
MB – Medical Benefit. This drug is available through the health care professional who administers the drug or in an outpatient or inpatient hospital setting.

Coverage Guidelines
Authorization may be granted for members who are currently receiving treatment with Mylotarg, 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:

<u>Newly-diagnosed CD33-positive AML in adults and pediatric patients 1 month and older</u>

1. Indication of newly diagnosed CD33-positive AML
2. Prescriber is an oncologist or hematologist or consult notes from an oncologist or hematologist are provided
3. Member ≥1 month of age
4. Appropriate dosing

5. **ONE** of the following:
    a. Therequested agent will be used in combination with cytarabine and daunorubicin or fludarabine
    b. **ONE** of the following:
        i. Clinical rationale why combination therapy with cytarabine and daunorubicin or fludarabine is not appropriate
        ii. Member is ≥ 60 years of age

Relapsed or refractory CD33-positive AML in adults and in pediatric patients two years and older

1. Diagnosis of relapsed or refractory CD33-positive AML
6. Prescriber is an oncologist or hematologist or consult notes from an oncologist or hematologist are provided
2. Appropriate dosing
3. Member ≥2 years of age
4. **ONE** of the following:
    a. Relapsed or refractory AML
    b. Prior therapy for the treatment of AML with one systemic therapy *(refer to Appendix for common AML treatment regimens)*

Limitations

1. Initial approvals:
    a. Newly-diagnosed CD33-positive AML in adults and pediatric patients 1 month and older: **Three cycles**
    b. Relapsed or refractory CD33-positive AML in adults and in pediatric patients two years and older: **One treatment cycle**
2. Reauthorizations for newly-diagnosed CD33-positive AML in adults and pediatric patients 1 month and older for monotherapy: maximum of one cycle of induction and eight cycles of continuation.
3. Dosing

Drug	Dosing
Mylotarg (gemtuzumab ozogamicin) Vial: 4.5 mg	Newly-diagnosed de novo CD33-positive AML in adults (combination regimen): *A treatment course consists of one induction cycle and two consolidation cycles.* • Induction cycle: 3 mg/m^2 (up to one 4.5 mg vial) on days one, four and seven in combination with daunorubicin and cytarabine (for patients requiring a second induction cycle, do NOT administer gemtuzumab ozogamicin during the second induction cycle) • Consolidation cycle: 3 mg/m^2 on day one (up to one 4.5 mg vial) Newly-diagnosed de novo CD33-positive AML in pediatric patients one month and older (combination regimen): • 3 mg/m^2 for patients with BSA greater than or equal to 0.6 m^2 • 0.1 mg/kg for patients with BSA less than 0.6 m^2 • For Induction 1, given once in combination with standard chemotherapy. No dose is given in the second induction cycle

	• No dose is given in the first or third intensification cycles. For Intensification 2, dose is given once in combination with standard chemotherapy. • Consider the risks and potential benefits before giving the agent during Intensification 2 <u>Newly-diagnosed CD33-positive AML (single-agent regimen)</u>: *A treatment course consists of one cycle of induction and up to eight cycles of continuation therapy.* • Induction cycle: 6 mg/m^2 (not limited to one 4.5 mg vial) on day one and 3 mg/m^2 (not limited to one 4.5 mg vial) on day eight • Continuation cycle: 2 mg/m^2 (not limited to one 4.5 mg vial) on day one every four weeks <u>R/R CD33-positive AML (single-agent regimen):</u> *Maximum one treatment course.* 3 mg/m^2 (up to one 4.5 mg vial) on days 1, 4, and 7

Appendix

Common AML Treatment Regimens

<u>Examples of Treatment Induction Regimens</u>

- Patients <60 Years of Age
  - Cytarabine 1.5 to 3 g/m_2 every 12 hours X6 days
  - Standard-dose cytarabine with idarubicin or daunorubicin
  - Standard-dose cytarabine with daunorubicin or oral midostaurin (FLT3 mutated)
  - Dual drug liposomal encapsulation of cytarabine and daunorubicin
- Patients ≥60 Years of Age
  - Standard-dose cytarabine (100 to 200 mg/m_2 x seven days) with idarubicin 12 mg/m_2 or daunorubicin 60 to 90 mg/m_2 x three days or mitoxantrone 12 mg/m_2 x three days
  - Low-intensity therapies: azacytidine, decitabine
  - Dual-drug liposomal encapsulation of daunorubicin 44 mg/m_2 and cytarabine 100 mg/m2 on days one, three and five for one cycle (category 1)
  - Standard dose cytarabine 200 mg/m_2 x seven days with daunorubicin 60 mg/m_2 x three days and oral midostaurin 50 mg every 12 hours, days 8 to 21 (FLT3-mutated AML)
  - Venetoclax once daily by mouth and decitabine 20 mg/m_2 (days one to five of each 28 day cycle)
  - Venetoclax once daily by mouth and azacytidine 75 mg/m_2 (days one to seven of each 28-day cycle)
  - Venetoclax once daily by mouth and low-dose cytarabine 20 mg/m_2/day (days 1 to 10 of each 28-day cycle)
  - Standard-dose cytarabine 200 mg/m_2 x seven days with daunorubicin 60 mg/m_2 x three days and a single dose of gemtuzumab ozogamicin 3 mg/m_2 given on day one, or day two, or day three, or day four; alternatively, three total doses may be given on days one, four and seven (CD33-positive)

References

1. Mylotarg® [prescribing information]. Phildelphia (PA): Wyeth Pharmaceticals, Inc (Pfizer); 2020 Jun.

2. FDA approves Mylotarg for treatment of acute myeloid leukemia [press release on the internet]. FDA; 2017 Sept 1 [cited 2021 Aug 31].
3. FDA: Pfizer Voluntarily Withdraws Cancer Treatment Mylotarg from U.S. Market [press release on the internet]. Fierce Pharma; 2010 Jun 21 [cited 2021 Aug 31]. Available from: http://www.fiercepharma.com/pharma/fda-pfizer-voluntarily-withdraws-cancer-treatment-mylotarg-from-u-s-market.
4. SEER Stat Fact Sheets: Acute Myeloid Leukemia (AML). http://seer.cancer.gov/statfacts/html/amyl.html. Accessed September 1, 2021.
5. Amadori S, Suciu S, Selleslag D, Aversa F, Gaidano G, Musso M, et al. Gemtuzumab Ozogamicin Versus Best Supportive Care in Older Patients With Newly Diagnosed Acute Myeloid Leukemia Unsuitable for Intensive Chemotherapy: Results of the Randomized Phase III EORTC-GIMEMA AML-19 Trial. J Clin Oncol. 2016 Mar 20;34(9):972-9. doi: 10.1200/JCO.2015.64.0060. Epub 2016 Jan 25.
6. National Comprehensive Cancer Network. NCCN Clinical Practice Guidelines in Oncology Acute Myeloid Leukemia. Version 3.2021. 2021 Mar 2 [cited 2021 Sep 1]. Available from: https://www.nccn.org/professionals/physician_gls/pdf/aml.pdf.
7. Castaigne S, Pautas C, Terré C, Raffoux E, Bordessoule D, Bastie JN, et al. Effect of gemtuzumab ozogamicin on survival of adult patients with de-novo acute myeloid leukaemia (ALFA-0701): a randomised, open-label, phase 3 study. Lancet. 2012 Apr 21;379(9825):1508-16.
8. Taksin AL, Legrand O, Raffoux E, de Revel T, Thomas X, Contentin N, et al. High efficacy and safety profile of fractionated doses of Mylotarg as induction therapy in patients with relapsed acute myeloblastic leukemia: a prospective study of the alfa group. Leukemia. 2007 Jan;21(1):66-71. Epub 2006 Oct 19.

Review History

5/17/2022 – Created and Reviewed June P&T; matched MH UPPL. Created criteria to be in compliance with Masshealth criteria. Effective 8/1/22.
04/10/24 – Reviewed and updated for P&T. Mylotarg has been removed from pharmacy benefit and will be managed through medical benefit only. Expanded provider specialty to include consult notes. Effective 5/6/24