

Mylotarg[™] (gemtuzumab ozogamicin) (Intravenous)



Last Review Date: 12/07/2023 Date of Origin: 09/03/2019 Dates Reviewed: 09/2019, 12/2019, 11/2020, 12/2021, 12/2022, 12/2023

I. Length of Authorization ^{1,5-8,11}

Newly-Diagnosed AML

- In combination with daunorubicin and cytarabine (adult): Coverage will be provided for 6 months consisting of 3 cycles (1 induction and 2 consolidation) and may NOT be renewed.
- In combination with daunorubicin and cytarabine (pediatric): Coverage will be provided for 6 months consisting of 2 cycles (1 induction and 1 consolidation) and may NOT be renewed.
- Single-agent therapy: Coverage will be provided for 6 months and may be renewed. Coverage is provided for 1 cycle of induction and up to a maximum of 8 cycles of continuation.

Relapsed or Refractory AML

• Coverage will be provided for 6 months consisting of one cycle (3 doses) and may NOT be renewed.

Acute Promyelocytic Leukemia (APL)

- Induction/Consolidation Therapy: Coverage will be provided for 6 months and may be renewed. Coverage is provided for 1 cycle of induction therapy followed by consolidation therapy. [Note: Duration of consolidation therapy is dependent on disease risk severity (see below)]
 - High-risk disease: Coverage for consolidation therapy will be provided for 2 cycles.

II. Dosing Limits

A. Quantity Limit (max daily dose) [NDC Unit]:

- Mylotarg 4.5 mg single-dose vial: 7 vials per initial 28 days; 6 vials per 28 days thereafter
- B. Max Units (per dose and over time) [HCPCS Unit]:



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- AML:
 - Induction: 135 billable units on Day 1, 90 billable units on Day 4, 90 billable units on Day 7 of a 28-day cycle (1 cycle only)
 - Consolidation/Continuation: 225 billable units every 28 days
- APL:
 - Induction: 180 billable units on Day 1
 - Consolidation: 270 billable units every 28 days (2 cycles only)

III. Initial Approval Criteria¹

Coverage is provided in the following conditions:

- Patient is at least 18 years of age (unless otherwise specified); AND
- Patient has not previously received gemtuzumab ozogamicin; AND
- Baseline electrocardiogram (ECG) has been obtained in patients with a history of or predisposition for QTc prolongation; **AND**

Universal Criteria¹

• Patient has CD33-positive disease; AND

Acute Myeloid Leukemia (AML) $\dagger \ddagger \Phi$ 1,6,10

- Patient has newly-diagnosed disease; AND
 - \circ $\;$ Used in combination with daunorubicin and cytarabine $\ensuremath{\textbf{\dagger}};$ AND
 - Patient is at least 1 month of age; **OR**
 - Used as a single agent **†**; **AND**
 - Patient is > 60 years of age; **OR**
- Patient is in first relapse or has refractory diseases; AND
 - Used as a single agent **†**; **AND**
 - Patient is at least 2 years of age; **OR**
- Patient has acute promyelocytic leukemia (APL); AND
 - $\circ~$ Used for high-risk disease (white blood cell count >10 x 10 9 /L); AND
 - Used as induction therapy; AND
 - Used in combination with tretinoin (ATRA) and arsenic trioxide (ATO);
 OR
 - Used as consolidation therapy; AND
 - Used following treatment with tretinoin (ATRA) and arsenic trioxide (ATO)



Preferred therapies and recommendations are determined by review of clinical evidence. NCCN category of recommendation is taken into account as a component of this review. Regimens deemed equally efficacious (i.e., those having the same NCCN categorization) are considered to be therapeutically equivalent.

FDA Approved Indication(s); \ddagger Compendium Recommended Indication(s); Φ Orphan Drug

IV. Renewal Criteria ^{1,6}

Coverage may be renewed based upon the following criteria:

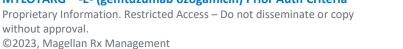
- Patient continues to meet the universal and indication-specific relevant criteria such as concomitant therapy requirements (not including prerequisite therapy), performance status, etc. identified in section III; **AND**
- Disease stabilization or improvement as evidenced by a complete response [CR] (i.e. morphologic, cytogenetic or molecular complete response CR), complete hematologic response or a partial response by CBC, bone marrow cytogenic analysis, QPCR, or FISH; AND
- Absence of unacceptable toxicity from the drug. Examples of unacceptable toxicity include: severe infusion-related reactions (including anaphylaxis), hemorrhage, hepatotoxicity (e.g., veno-occlusive liver disease [VOD], sinusoidal obstruction syndrome [SOS], etc.), QTc interval prolongation, etc.; **AND**
 - Patients receiving single-agent treatment for newly-diagnosed AML have not exceeded the maximum of 8 cycles of continuation (adult only); **OR**
 - Patients receiving consolidation therapy for acute promyelocytic leukemia (APL):
 - High-risk disease: Therapy has not exceeded the maximum of 2 cycles

Note: treatment of newly diagnosed AML in combination with chemotherapy and relapsed or refractory AML may NOT be renewed.

V. Dosage/Administration ^{1,5-8,11}

Indication	Dose		
Acute	Newly Diagnosed AML		
Myeloid	<u>Adult (≥ 18 years old) – Combination regimen:</u>		
Leukemia	• Induction Therapy (1 cycle only):		
	• Administer 3 mg/m^2 (up to one 4.5 mg vial) on Days 1, 4, and 7 in		
	combination with daunorubicin and cytarabine		
	• For patients requiring a second induction cycle, do not administer		
	gemtuzumab ozogamicin during the second induction cycle		
	• Consolidation Therapy (maximum of 2 cycles):		
	\circ Administer 3 mg/m ² (up to one 4.5 mg vial) on Day 1 in combination with		
	daunorubicin and cytarabine		
	<u>Pediatric (1 month to < 18 years old) – Combination regimen:</u>		

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•	Induction Therapy (1 cycle only):		
	0	Administer 3 mg/m ² (BSA ≥ 0.6 m ²) or 0.1 mg/kg (BSA < 0.6 m ²) on Day 6 in	
		combination with daunorubicin and cytarabine	
	0	For patients requiring a second induction cycle, do not administer	
		gemtuzumab ozogamicin during the second induction cycle	
Consolidation/Intensification Therapy (1 cycle only):			
	0	Administer 3 mg/m ² (BSA ≥ 0.6 m ²) or 0.1 mg/kg (BSA < 0.6 m ²) on Day 7 in	
		intensification 2	
Ad	<u>Adult (≥ 18 years old) – Single-agent regimen:</u>		
•	Induct	tion Therapy (1 cycle only):	
	0	Administer 6 mg/m ² as a single agent on Day 1 and 3 mg/m ² on Day 8	
•	Contin	nuation Therapy:	
	0	Administer 2 mg/m ² as a single agent on Day 1 every 4 weeks (maximum of 8	
		cycles); OR	
	0	Administer 6 mg/m ² as a single agent on Day 1 and 3 mg/m ² on Day 8	
Re	elapsed o	or Refractory AML	
•	Admin	ister 3 mg/m ² (up to one 4.5 mg vial) on Days 1, 4, and 7 (1 cycle only)	
Ac	ute Pro	myelocytic Leukemia (APL)	
Hi	gh-Risk	Disease:	
•	• Induction Therapy (1 cycle only):		
	0	Administer 6-9 mg/m ² on Day 1 (or Day 2, Day 3, or Day 4) in combination	
		with ATRA + ATO	
•	Consol	lidation Therapy:	
	0	Administer 9 mg/m ² for 2 cycles	

VI. Billing Code/Availability Information

HCPCS Code:

• J9203 – Injection, gemtuzumab ozogamicin, 0.1 mg: 1 billable unit = 0.1 mg

NDC:

• Mylotarg 4.5 mg single-dose vial: 00008-4510-xx

VII. References (STANDARD)

- 1. Mylotarg [package insert]. Philadelphia, PA; Pfizer Inc., August 2021. Accessed October 2023.
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- 4. Taksin AL, Legrand O, Raffoux E, 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;21:66–71.
- 5. Abaza Y, Kantarjian H, Garcia-Mannero G, et al. Long-term outcome of acute promyelocytic leukemia treated with all-transretinoic acid, arsenic trioxide, and gemtuzumab. Blood 2017;129:1275-1283.
- 6. Referenced with permission from the NCCN Drugs & Biologics Compendium (NCCN Compendium®) Acute Myeloid Leukemia. Version 5.2023. National Comprehensive Cancer Network, 2023. The NCCN Compendium® is a derivative work of the NCCN Guidelines®. NATIONAL COMPREHENSIVE CANCER NETWORK®, NCCN®, and NCCN GUIDELINES® are trademarks owned by the National Comprehensive Cancer Network, Inc. To view the most recent and complete version of the Compendium, go online to NCCN.org. Accessed October 2023.
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- Gamis AS, Alonzo TA, Meshinchi S, et al. Gemtuzumab ozogamicin in children and adolescents with de novo acute myeloid leukemia improves event-free survival by reducing relapse risk: results from the randomized phase III Children's Oncology Group trial AAML0531. J Clin Oncol. 2014;32(27):3021-3032. doi:10.1200/JCO.2014.55.3628.
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- 11. Estey EH, Giles FJ, Beran M, et al. Experience with gemtuzumab ozogamycin ("mylotarg") and all-trans retinoic acid in untreated acute promyelocytic leukemia. Blood. 2002 Jun 1;99(11):4222-4. doi: 10.1182/blood-2001-12-0174. PMID: 12010830.
- 12. Lo-Coco F, Cimino G, Breccia M, et al. Gemtuzumab ozogamicin (Mylotarg) as a single agent for molecularly relapsed acute promyelocytic leukemia. Blood. 2004 Oct 1;104(7):1995-9.

VIII. References (ENHANCED)

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- 5e. Lancet JE, Moseley A, Komrokji RS, et al. ATRA, Arsenic Trioxide (ATO), and Gemtuzumab Ozogamicin (GO) Is Safe and Highly Effective in Patients with Previously Untreated High-Risk Acute Promyelocytic Leukemia (APL): Final Results of the SWOG/Alliance/ECOG S0535 Trial. Blood. 2016;128:896.
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- 9e. Magellan Rx Management. Mylotarg Clinical Literature Review Analysis. Last updated October 2023. Accessed October 2023.

ICD-10	ICD-10 Description		
C92.00	Acute myeloblastic leukemia not having achieved remission		
C92.01	Acute myeloblastic leukemia in remission		
C92.02	Acute myeloblastic leukemia in relapse		
C92.40	Acute promyelocytic leukemia not having achieved remission		
C92.41	Acute promyelocytic leukemia in remission		
C92.50	Acute myelomonocytic leukemia not having achieved remission		
C92.51	Acute myelomonocytic leukemia in remission		
C92.52	Acute myelomonocytic leukemia in relapse		
C92.60	Acute myeloid leukemia with 11q23-abnormality not having achieved remission		

Appendix 1 – Covered Diagnosis Codes

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C92.61	Acute myeloid leukemia with 11q23-abnormality in remission	
C92.62	Acute myeloid leukemia with 11q23-abnormality in relapse	
C92.A0	Acute myeloid leukemia with multilineage dysplasia not having achieved remission	
C92.A1	Acute myeloid leukemia with multilineage dysplasia in remission	
C92.A2	Acute myeloid leukemia with multilineage dysplasia in relapse	
C93.00	Acute monoblastic/monocytic leukemia not having achieved remission	
C93.01	Acute monoblastic/monocytic leukemia in remission	
C93.02	Acute monoblastic/monocytic leukemia in relapse	

Appendix 2 – Centers for Medicare and Medicaid Services (CMS)

Medicare coverage for outpatient (Part B) drugs is outlined in the Medicare Benefit Policy Manual (Pub. 100-2), Chapter 15, §50 Drugs and Biologicals. In addition, National Coverage Determination (NCD), Local Coverage Determinations (LCDs), and Local Coverage Articles (LCAs) may exist and compliance with these policies is required where applicable. They can be found at: <u>https://www.cms.gov/medicare-coverage-database/search.aspx</u>. Additional indications may be covered at the discretion of the health plan.

Medicare Part B Administrative Contractor (MAC) Jurisdictions					
Jurisdiction	Applicable State/US Territory	Contractor			
E (1)	CA, HI, NV, AS, GU, CNMI	Noridian Healthcare Solutions, LLC			
F (2 & 3)	AK, WA, OR, ID, ND, SD, MT, WY, UT, AZ	Noridian Healthcare Solutions, LLC			
5	KS, NE, IA, MO	Wisconsin Physicians Service Insurance Corp (WPS)			
6	MN, WI, IL	National Government Services, Inc. (NGS)			
H (4 & 7)	LA, AR, MS, TX, OK, CO, NM	Novitas Solutions, Inc.			
8	MI, IN	Wisconsin Physicians Service Insurance Corp (WPS)			
N (9)	FL, PR, VI	First Coast Service Options, Inc.			
J (10)	TN, GA, AL	Palmetto GBA, LLC			
M (11)	NC, SC, WV, VA (excluding below)	Palmetto GBA, LLC			
L (12)	DE, MD, PA, NJ, DC (includes Arlington & Fairfax counties and the city of Alexandria in VA)	Novitas Solutions, Inc.			
K (13 & 14)	NY, CT, MA, RI, VT, ME, NH	National Government Services, Inc. (NGS)			
15	KY, OH	CGS Administrators, LLC			

Medicare Part B Covered Diagnosis Codes (applicable to existing NCD/LCD/LCA): N/A



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