Clinical Policy: Gemtuzumab Ozogamicin (Mylotarg)

Reference Number: CP.PHAR.358
Effective Date: 10.03.17
Last Review Date: 11.26
Line of Business: Commercial, HIM/ICHRA, Medicaid

Coding Implications
Revision Log

See Important Reminder at the end of this policy for important regulatory and legal information.

Description

Gemtuzumab ozogamicin (Mylotarg™) is a CD33 directed antibody and cytotoxic drug conjugate.

FDA Approved Indication(s)

Mylotarg is indicated for the treatment of:

- Newly-diagnosed CD33-positive acute myeloid leukemia (AML) in adults and pediatric patients 1 month and older
- Relapsed or refractory CD33-positive AML in adults and in pediatric patients 2 years and older

Policy/Criteria

Provider must submit documentation (such as office chart notes, lab results or other clinical information) supporting that member has met all approval criteria.

It is the policy of health plans affiliated with Centene Corporation® that Mylotarg is **medically necessary** when the following criteria are met:

I. Initial Approval Criteria

A. Acute Myeloid Leukemia (must meet all)**:**

1. Diagnosis of CD33-positive AML;
2. Prescribed by or in consultation with an oncologist or hematologist;
3. Member meets (a or b):
   a. Age ≥ 1 month with newly diagnosed disease;
   b. Age ≥ 2 years with relapsed or refractory disease;
4. Mylotarg is prescribed as one of the following (a, b, c, or d):
   a. As combination with chemotherapy for newly diagnosed disease: up to 5 doses;
   b. As single-agent therapy for newly diagnosed disease: up to 10 doses;
   c. As single-agent therapy for relapsed or refractory disease: up to 3 doses;
   d. As a component of repeating the initial successful induction regimen for relapsed or refractory disease if ≥ 12 months since induction regimen: up to 3 doses;
5. Request meets one of the following (a, b, c, d, or e):*
   a. Age 1 month to < 18 years: Newly diagnosed disease as combination therapy with standard chemotherapy (i and ii):
      i. Induction - 1 cycle (1 vial): dose does not exceed 0.1 mg/kg (body surface area [BSA] < 0.6 m^2) or 3 mg/m^2 (BSA ≥ 0.6 m^2) given once;

ii. Intensification - 1 cycle (1 vial): dose does not exceed 0.1 mg/kg (BSA < 0.6 m^2) or 3 mg/m^2 (BSA ≥ 0.6 m^2) given once;

b. Age ≥ 18 years: Newly diagnosed disease as combination therapy with daunorubicin and cytarabine (i and ii):
   i. Induction - 1 cycle (3 vials): dose does not exceed 3 mg/m^2 on Days 1, 4, and 7;
   ii. Consolidation - 2 cycles (2 vials): dose does not exceed 3 mg/m^2 on Day 1 of each cycle;

c. Age ≥ 18 years: Newly diagnosed disease as single-agent therapy (i and ii):
   i. Induction - 1 cycle: dose does not exceed 6 mg/m^2 on Day 1, and 3 mg/m^2 on Day 8;
   ii. Continuation therapy - 8 cycles: dose does not exceed 2 mg/m^2 on Day 1 of each cycle;

d. Age ≥ 2 years: Relapsed or refractory disease (single-agent regimen): single course: dose does not exceed 3 mg/m^2 on Days 1, 4, and 7 (3 vials);

e. Dose is supported by practice guidelines or peer-reviewed literature for the relevant off-label use (*prescriber must submit supporting evidence*).

**Prescribed regimen must be FDA-approved or recommended by NCCN.*

Approval duration:
Medicaid/HIM/ICHRA – 12 months
Commercial – 6 months or to the member's renewal date, whichever is longer

B. Acute Promyelocytic Leukemia (off-label) (must meet all)**:**

1. Diagnosis of acute promyelocytic leukemia;
2. Prescribed by or in consultation with an oncologist or hematologist;
3. Age ≥ 18 years;
4. Mylotarg is prescribed for no more than 10 doses total;
5. Dose is within FDA maximum limit for any FDA-approved indication or is supported by practice guidelines or peer-reviewed literature for the relevant off-label use (*prescriber must submit supporting evidence*).*

   **Prescribed regimen must be FDA-approved or recommended by NCCN.*

Approval duration:
Medicaid/HIM/ICHRA – 12 months
Commercial – 6 months or to the member's renewal date, whichever is longer

C. Other diagnoses/indications (must meet 1 or 2)**:**

1. If this drug has recently (within the last 6 months) undergone a label change (e.g., newly approved indication, age expansion, new dosing regimen) that is not yet reflected in this policy, refer to one of the following policies (a or b):
   a. For drugs on the formulary (commercial, health insurance marketplace/ICHRA) or PDL (Medicaid), the no coverage criteria policy for the relevant line of business: CP.CPA.190 for commercial, HIM.PA.33 for health insurance marketplace/ICHRA, and CP.PMN.255 for Medicaid; or
   b. For drugs NOT on the formulary (commercial, health insurance marketplace/ICHRA) or PDL (Medicaid), the non-formulary policy for the

relevant line of business: CP.CPA.190 for commercial, HIM.PA.103 for health insurance marketplace/ICHRA, and CP.PMN.16 for Medicaid; or

2. If the requested use (e.g., diagnosis, age, dosing regimen) is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized) AND criterion 1 above does not apply, refer to the off-label use policy for the relevant line of business: CP.CPA.09 for commercial, HIM.PA.154 for health insurance marketplace/ICHRA, and CP.PMN.53 for Medicaid.

II. Continued Therapy

A. All Indications in Section I (must meet all)**:**

1. Currently receiving medication via Centene benefit, or documentation supports that member is currently receiving Mylotarg for a covered indication and has received this medication for at least 30 days;
2. Member is responding positively to therapy;
3. For AML, member has NOT received the maximum recommended doses as described below (a, b, c, or d):
   a. As combination with chemotherapy for newly diagnosed disease: up to 5 doses;
   b. As single-agent therapy for newly diagnosed disease: up to 10 doses;
   c. As single-agent thearpy for relapsed or refractory disease: up to 3 doses;
   d. As a component of repeating the initial successful induction regimen for relapsed or refractory disease if ≥ 12 months since induction regimen: up to 3 doses;
4. For acute promyelocytic leukemia, member has not received ≥ 10 doses;
5. If request is for a dose increase, request meets one of the following (a, b, c, d, or e):*
   a. Age 1 month to < 18 years: Newly diagnosed disease as combination therapy with standard chemotherapy (i and ii):
      i. Induction - 1 cycle (1 vial): dose does not exceed 0.1 mg/kg (body surface area [BSA] < 0.6 m^2) or 3 mg/m^2 (BSA ≥ 0.6 m^2) given once;
      ii. Intensification - 1 cycle (1 vial): dose does not exceed 0.1 mg/kg (BSA < 0.6 m^2) or 3 mg/m^2 (BSA ≥ 0.6 m^2) given once;
   b. Age ≥ 18 years: Newly diagnosed disease as combination therapy with daunorubicin and cytarabine (i and ii):
      i. Induction - 1 cycle (3 vials): dose does not exceed 3 mg/m^2 on Days 1, 4, and 7;
      ii. Consolidation - 2 cycles (2 vials): dose does not exceed 3 mg/m^2 on Day 1 of each cycle;
   c. Age ≥ 18 years: Newly diagnosed disease as single-agent therapy (i and ii):
      i. Induction - 1 cycle: dose does not exceed 6 mg/m^2 on Day 1, and 3 mg/m^2 on Day 8;
      ii. Continuation therapy - 8 cycles: dose does not exceed 2 mg/m^2 on Day 1 of each cycle;
   d. Age ≥ 2 years: Relapsed or refractory disease (single-agent regimen): single course: dose does not exceed 3 mg/m^2 on Days 1, 4, and 7 (3 vials);
   e. Dose is supported by practice guidelines or peer-reviewed literature for the relevant off-label use (*prescriber must submit supporting evidence*).

**Prescribed regimen must be FDA-approved or recommended by NCCN.*

Approval duration:
Medicaid/HIM/ICHRA – 12 months
Commercial – 6 months or to the member's renewal date, whichever is longer

B. Other diagnoses/indications (must meet 1 or 2)**:**
1. If this drug has recently (within the last 6 months) undergone a label change (e.g., newly approved indication, age expansion, new dosing regimen) that is not yet reflected in this policy, refer to one of the following policies (a or b):
   a. For drugs on the formulary (commercial, health insurance marketplace/ICHRA) or PDL (Medicaid), the no coverage criteria policy for the relevant line of business: CP.CPA.190 for commercial, HIM.PA.33 for health insurance marketplace/ICHRA, and CP.PMN.255 for Medicaid; or
   b. For drugs NOT on the formulary (commercial, health insurance marketplace/ICHRA) or PDL (Medicaid), the non-formulary policy for the relevant line of business: CP.CPA.190 for commercial, HIM.PA.103 for health insurance marketplace/ICHRA, and CP.PMN.16 for Medicaid; or
2. If the requested use (e.g., diagnosis, age, dosing regimen) is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized) AND criterion 1 above does not apply, refer to the off-label use policy for the relevant line of business: CP.CPA.09 for commercial, HIM.PA.154 for health insurance marketplace/ICHRA, and CP.PMN.53 for Medicaid.

III. Diagnoses/Indications for which coverage is NOT authorized:

A. Non-FDA approved indications, which are not addressed in this policy, unless there is sufficient documentation of efficacy and safety according to the off label use policies – CP.CPA.09 for commercial, HIM.PA.154 for health insurance marketplace/ICHRA, CP.PMN.53 for Medicaid, or evidence of coverage documents.

IV. Appendices/General Information

Appendix A: Abbreviation/Acronym Key

AML: acute myeloid leukemia
BSA: body surface area
FDA: Food and Drug Administration
NCCN: National Comprehensive Cancer Center

Appendix B: Therapeutic Alternatives

Not applicable

Appendix C: Contraindications/Boxed Warnings

- Contraindication(s): hypersensitivity to Mylotarg or any of its components
- Boxed warning(s): hepatotoxicity

V. Dosage and Administration

Indication	Dosing Regimen	Maximum Dose
AML newly-diagnosed (combination regimen)	Adults: *Induction:* 3 mg/m^2 IV (up to one 4.5 mg vial) on Days 1, 4, and 7 in combination with daunorubicin and cytarabine. If a second induction cycle is required, do NOT administer Mylotarg. *Consolidation:* 3 mg/m^2 IV on Day 1 (up to one 4.5 mg vial) in combination with daunorubicin and cytarabine for 2 cycles. Pediatric patients ≥ 1 month: • BSA ≥ 0.6 m^2: 3 mg/m^2 IV • BSA < 0.6 m^2 : 0.1 mg/kg IV	*Induction:* 4.5 mg/dose (1 cycle) *Consolidation:* 4.5 mg/dose (2 cycles) *Induction pediatric*: 1 cycle *Consolidation pediatric*: 1 cycle
AML newly-diagnosed (single-agent regimen)	Adults: *Induction:* 6 mg/m^2 IV on Day 1 and 3 mg/m^2 on Day 8 for 1 cycle *Continuation:* 2 mg/m^2 IV on Day 1 every 4 weeks for up to 8 cycles	*Induction:* 6 mg/m^2/dose (1 cycle) *Maintenance:* 2 mg/m^2/dose every 4 weeks (8 cycles)
AML relapsed or refractory (single-agent regimen)	Age ≥ 2 years: 3 mg/m^2 IV (up to one 4.5 mg vial) on Days 1, 4, and 7 for 1 cycle	4.5 mg/dose (1 cycle)

VI. Product Availability

Single-dose vial: 4.5 mg

VII. References

1. Mylotarg Prescribing Information. Wyeth Pharmaceuticals Inc.; Philadelphia, PA. August 2021. Available at: https://www.pfizer.com/products/product-detail/mylotarg. Accessed July 7, 2026.
2. National Comprehensive Cancer Network Drugs and Biologics Compendium. Available at: http://www.nccn.org/professionals/drug_compendium. Accessed August 15, 2026.
3. National Comprehensive Cancer Network. Acute Myeloid Leukemia Version 2.2025. Available at: https://www.nccn.org/professionals/physician_gls/pdf/aml.pdf. Accessed August 15, 2026.

Coding Implications

Codes referenced in this clinical policy are for informational purposes only. Inclusion or exclusion of any codes does not guarantee coverage. Providers should reference the most up-to-date sources of professional coding guidance prior to the submission of claims for reimbursement of covered services.

HCPCS Codes	Description
J9203	Injection, gemtuzumab ozogamicin, 0.1 mg

Reviews, Revisions, and Approvals	Date	P&T Approval Date
4Q 2022 annual review: max recommended number of doses removed from approval duration and clarified within section I/II; references reviewed and updated. Template changes applied to other diagnoses/indications.	08.01.22	11.22
4Q 2023 annual review: added combination therapy option for relapsed/refractory AML per NCCN-supported off-label use; references reviewed and updated.	08.07.23	11.23
4Q 2024 annual review: for AML, collapsed combination therapy options for newly diagnosed disease to "combination with chemotherapy" as there are various recommended combinations per NCCN; revised Commercial approval duration to "6 months or to the member's renewal date, whichever is longer" for this injectable drug; references reviewed and updated.	07.11.24	11.24
4Q 2025 annual review: no significant changes; references reviewed and updated.	07.07.25	11.25
4Q 2026 annual review: no significant changes; added ICHRA line of business; references reviewed and updated.	07.07.26	11.26

Important Reminder

This clinical policy has been developed by appropriately experienced and licensed health care professionals based on a review and consideration of currently available generally accepted standards of medical practice; peer-reviewed medical literature; government agency/program approval status; evidence-based guidelines and positions of leading national health professional organizations; views of physicians practicing in relevant clinical areas affected by this clinical policy; and other available clinical information. The Health Plan makes no representations and accepts no liability with respect to the content of any external information used or relied upon in developing this clinical policy. This clinical policy is consistent with standards of medical practice current at the time that this clinical policy was approved. "Health Plan" means a health plan that has adopted this clinical policy and that is operated or administered, in whole or in part, by Centene Management Company, LLC, or any of such health plan's affiliates, as applicable.

The purpose of this clinical policy is to provide a guide to medical necessity, which is a component of the guidelines used to assist in making coverage decisions and administering benefits. It does not constitute a contract or guarantee regarding payment or results. Coverage decisions and the administration of benefits are subject to all terms, conditions, exclusions, and limitations of the coverage documents (e.g., evidence of coverage, certificate of coverage, policy, contract of insurance, etc.), as well as to state and federal requirements and applicable Health Plan-level administrative policies and procedures.

This clinical policy is effective as of the date determined by the Health Plan. The date of posting may not be the effective date of this clinical policy. This clinical policy may be subject to applicable legal and regulatory requirements relating to provider notification. If there is a discrepancy between the effective date of this clinical policy and any applicable legal or regulatory requirement, the requirements of law and regulation shall govern. The Health Plan retains the right to change, amend or withdraw this clinical policy, and additional clinical policies may be developed and adopted as needed, at any time.

This clinical policy does not constitute medical advice, medical treatment, or medical care. It is not intended to dictate to providers how to practice medicine. Providers are expected to exercise professional medical judgment in providing the most appropriate care, and are solely responsible for the medical advice and treatment of members. This clinical policy is not intended to recommend treatment for members. Members should consult with their treating physician in connection with diagnosis and treatment decisions.

Providers referred to in this clinical policy are independent contractors who exercise independent judgment and over whom the Health Plan has no control or right of control. Providers are not agents or employees of the Health Plan.

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Note: For Medicaid members, when state Medicaid coverage provisions conflict with the coverage provisions in this clinical policy, state Medicaid coverage provisions take precedence. Please refer to the state Medicaid manual for any coverage provisions pertaining to this clinical policy.

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