# Clinical Policy: Gemtuzumab Ozogamicin (Mylotarg)

Reference Number: PA.CP.PHAR.358
Effective Date: 10/2017
Last Review Date: 10/2025

**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 (which may include office chart notes and lab results) supporting that member has met all approval criteria*

It is the policy of PA Health & Wellness 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, d, e or f):
   a. As combination with chemotherapy for newly diagnosed disease: up to 5 doses;
   b. As combination therapy with standard chemotherapy (pediatric: 1 month or older) for newly diagnosed disease: up to 2 doses;
   c. As single-agent therapy for newly diagnosed disease: up to 10 doses;
   d. As single-agent therapy for relapsed or refractory disease: up to 3 doses;
   e. 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;
   f. Other category 1, 2A, or 2B NCCN-recommended uses not listed;
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*).

**Approval duration: 12 months**

**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. 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*).

**Approval duration: 12 months**

**C. Other diagnoses/indications**
1. Refer to PA.CP.PHAR.53 if diagnosis is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized).

## II. Continued Therapy

**A. All Indications in Section I** (must meet all)**:**
1. Currently receiving medication via PA Health & Wellness benefit or member has previously met all initial approval criteria or the Continuity of Care Policy (PA.PHARM.01) applies;
2. Member is responding positively to therapy;
3. For AML, member has NOT received the maximum recommended doses as described below (a, b, c, d, e or f):
   a. As combination with chemotherapy for newly diagnosed disease: up to 5 doses;
   b. As combination therapy with standard chemotherapy (pediatric: 1 month or older) for newly diagnosed disease: up to 2 doses;
   c. As single-agent therapy for newly diagnosed disease: up to 10 doses;
   d. As single-agent thearpy for relapsed or refractory disease: up to 3 doses;

e. 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;
f. For other category 1, 2A, or 2B NCCN-recommended uses not listed *(see Appendix D),* 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;

4. For acute promyelcytic leukemia, 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*).
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*).

**Approval duration: 12 months**

**B. Other diagnoses/indications** (must meet 1 or 2)**:**
1. Currently receiving medication via PA Health &Wellness benefit or member has met all initial approval criteria or the Continuity of Care Policy (PA.PHARM.01) applies; **Approval duration: Duration of request or 6 months (whichever is less)**; or
2. Refer to PA.CP.PHAR.53 if diagnosis is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized).

**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 policy – PA.CP.PHAR.53 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: General Information*

Not applicable

*Appendix C: Contraindications/Boxed Warnings*

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

*Appendix D: Acute Myeloid Leukemia NCCN Recommendations*

NCCN recommends Mylotarg in combination with additional agents [e.g., fludarabine, high-dose cytarabine, idarubicin, and granulocyte colony-stimulating factor (G-CSF) OR with high-dose cytarabine for patients age <60 years with NPM1-mutated and FLT3 negative in favorable-risk AML (CBF-AML, NPM1-mutated/FLT3 wild-type AML, in-frame bZIP mutation in CEBPA)].

## V. Dosage and Administration

| Indication | Dosing Regimen | Maximum Dose |
|---|---|---|
| AML newly-diagnosed (combination regimen) | Adults:<br>*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.<br><br>*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.<br><br>Pediatric patients > 1 month:<br>• BSA ≥ 0.6 m$^2$: 3 mg/m$^2$ IV<br>• BSA < 0.6 m$^2$ : 0.1 mg/kg IV | *Induction:* 4.5 mg/dose (1 cycle)<br><br>*Consolidation:* 4.5 mg/dose (2 cycles)<br><br>*Induction pediatric*: 1 cycle<br><br>*Consolidation pedaitric*: 1 cycle |
| AML newly-diagnosed (single-agent regimen) | Adults:<br>*Induction:* 6 mg/m$^2$ IV on Day 1 and 3 mg/m$^2$ on Day 8 for 1 cycle<br><br>*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)<br><br>*Maintenance:* 2 mg/m$^2$/dose every 4 weeks (8 cycles) |

| | | |
|---|---|---|
| AML relapsed or refractory (single-agent regimen) | Age ≥ 2 years:<br>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 athttps://www.pfizer.com/products/product-detail/mylotarg. Accessed July 07, 2025.
2. National Comprehensive Cancer Network Drugs and Biologics Compendium. Available at: http://www.nccn.org/professionals/drug_compendium. Accessed August 27, 2025.
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 27, 2025.

## 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 |
|---|---|
| New policy created | 07/2018 |
| 3Q 2019 annual review: No changes per Statewide PDL implementation 01/01/2020 | 07/2019 |
| 4Q 2019 annual review: No changes per Statewide PDL implementation 01-01-2020 | 10/2019 |
| 4Q 2020 annual review: for acute promyelocytic leukemia, added age limit and removed requirement for use only for relapse as NCCN compendia include use for induction and consolidation; FDA/NCCN dosage limitations added; updated age limit to 1 month from 18 years for new diagnosed AML as per FDA label; references reviewed and updated | 08/2020 |
| 4Q 2021 annual review: updated age limit for acute promyelocytic leukemia as per NCCN; updated section V dosing; references reviewed and updated. | 10/2021 |
| 4Q 2022 annual review: max recommended number of doses removed from approval duration and clarified within section I/II; references reviewed and updated. | 10/2022 |
| 4Q 2023 annual review: added combination therapy option for relapsed/refractory AML per NCCN-supported off-label use; references reviewed and updated. | 10/2023 |

| Reviews, Revisions, and Approvals | Date |
|---|---|
| 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; references reviewed and updated. | 10/2024 |
| 4Q 2025 annual review: no significant changes; references reviewed and updated. | 10/2025 |