

## Clinical Policy: Inotuzumab Ozogamicin (Besponsa)

Reference Number: PA.CP.PHAR.359

Effective Date: 09/2017

Last Review Date: 10/2024

### Description

Inotuzumab ozogamicin (Besponsa™) is a CD22-directed antibody and cytotoxic drug conjugate.

### FDA Approved Indication(s)

Besponsa is indicated for the treatment of relapsed or refractory CD22-positive B-cell precursor acute lymphoblastic leukemia (ALL) in adult and pediatric patients 1 year 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 Besponsa is **medically necessary** when the following criteria are met:

#### I. Initial Approval Criteria

##### A. B-Cell Precursor Acute Lymphoblastic Leukemia (must meet all):

1. Diagnosis of B-cell ALL;
2. Prescribed by or in consultation with an oncologist or hematologist;
3. Age  $\geq$  1 year;
4. B-cell ALL is CD22 positive;
5. Disease meets one of the following (a, b or c):
  - a. Disease is relapsed or refractory;
  - b. If Philadelphia chromosome-negative, age  $\geq$  15 years;
  - c. Other NCCN recommendations listed as category 1, 2A, or 2B;
6. Besponsa is prescribed for no more than 6 cycles total;
7. Request meets one of the following (a or b):
  - a. Dose does not exceed 1.8 mg/m<sup>2</sup> per cycle (0.8 mg/m<sup>2</sup> on Day 1 and 0.5 mg/m<sup>2</sup> on Days 8 and 15);
  - b. Dose is supported by practice guidelines or peer-reviewed literature for the relevant off-label use (*prescriber must submit supporting evidence*).

**Approval duration: 6 months Up to 6 cycles total**

##### B. 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. B-Cell Precursor Acute Lymphoblastic Leukemia (must meet all):

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;

2. Member is responding positively to therapy;
3. Member has not received  $\geq 6$  cycles of Besponsa;
4. If request is for a dose increase, request meets one of the following (a or b):
  - a. New dose does not exceed  $1.8 \text{ mg/m}^2$  per cycle ( $0.8 \text{ mg/m}^2$  on Day 1 and  $0.5 \text{ mg/m}^2$  on Days 8 and 15);
  - b. New dose is supported by practice guidelines or peer-reviewed literature for the relevant off-label use (*prescriber must submit supporting evidence*).

**Approval duration: Up to 6 cycles total**

**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*

ALL: acute lymphoblastic leukemia  
 CR: complete remission  
 CRi: complete remission with incomplete hematologic recovery

FDA: Food and Drug Administration  
 HSCT: hematopoietic stem cell transplant

*Appendix B: Therapeutic Alternatives*

Not Applicable

*Appendix C: Contraindications/Boxed Warnings*

- Contraindication(s): none reported
- Boxed warning(s): hepatotoxicity, including hepatic venoocclusive disease; increased risk of post-HSCT non-relapse mortality

**V. Dosage and Administration**

Indication	Dosing Regimen	Maximum Dose
B-cell ALL	If proceeding to hematopoietic stem cell transplant (HSCT): <ul style="list-style-type: none"> <li>• The recommended duration is 2 cycles. A third cycle may be considered for those patients who do not achieve a complete remission* (CR) or complete remission with incomplete hematologic recovery* (CRi) and minimal residual disease negativity after 2 cycles.</li> </ul> If not proceeding to HSCT:	$1.8 \text{ mg/m}^2$ per cycle $(0.8 \text{ mg/m}^2$ per dose)

Indication	Dosing Regimen	Maximum Dose
	<ul style="list-style-type: none"> <li>• Additional cycles of treatment, up to a maximum of 6 cycles, may be administered.</li> </ul> <p><i>Cycle details: Pre-medication is recommended before each dose.</i></p> <ul style="list-style-type: none"> <li>• For the first cycle: 1.8 mg/m<sup>2</sup> per cycle, administered as 3 divided doses on Day 1 (0.8 mg/m<sup>2</sup>), Day 8 (0.5 mg/m<sup>2</sup>), and Day 15 (0.5 mg/m<sup>2</sup>). Cycle 1 is 3 weeks in duration, but may be extended to 4 weeks if the patient achieves CR or CRi, and/or to allow recovery from toxicity.</li> <li>• For subsequent cycles:               <ul style="list-style-type: none"> <li>○ In patients who achieve a CR or CRi, 1.5 mg/m<sup>2</sup> per cycle, administered as 3 divided doses on Day 1 (0.5 mg/m<sup>2</sup>), Day 8 (0.5 mg/m<sup>2</sup>), and Day 15 (0.5 mg/m<sup>2</sup>). Subsequent cycles are 4 weeks in duration. OR</li> <li>○ In patients who do not achieve a CR or CRi, 1.8 mg/m<sup>2</sup> per cycle given as 3 divided doses on Day 1 (0.8 mg/m<sup>2</sup>), Day 8 (0.5 mg/m<sup>2</sup>), and Day 15 (0.5 mg/m<sup>2</sup>). Subsequent cycles are 4 weeks in duration.</li> <li>○ Patients who do not achieve a CR or CRi within 3 cycles should discontinue treatment.</li> </ul> </li> </ul>	

\*CR (complete remission) is defined as < 5% blasts in the bone marrow and the absence of peripheral blood leukemic blasts, full recovery of peripheral blood counts (platelets  $\geq 100 \times 10^9/L$  and absolute neutrophil counts [ANC]  $\geq 1 \times 10^9/L$ ) and resolution of any extramedullary disease.

\*CRi (complete remission with incomplete hematologic recovery) is defined as < 5% blasts in the bone marrow and the absence of peripheral blood leukemic blasts, incomplete recovery of peripheral blood counts (platelets  $< 100 \times 10^9/L$  and/or ANC  $< 1 \times 10^9/L$ ) and resolution of any extramedullary disease.

## VI. Product Availability

Single-dose vial, powder for reconstitution: 0.9 mg

## VII. References

1. Besponsa Prescribing Information. Philadelphia, PA: Wyeth Pharmaceuticals, Inc.; March 2024. Available at [www.besponsa.com](http://www.besponsa.com). Accessed July 11, 2024.
2. National Comprehensive Cancer Network Drugs and Biologics Compendium. Available at: [http://www.nccn.org/professionals/drug\\_compendium](http://www.nccn.org/professionals/drug_compendium). Accessed August 13, 2024.
3. National Comprehensive Cancer Network. Acute Lymphoblastic Leukemia Version 2.2024. Available at [nccn.org](http://www.nccn.org). Accessed August 13, 2024.
4. National Comprehensive Cancer Network. Pediatric Acute Lymphoblastic Leukemia Version 6.2024. Available at: [https://www.nccn.org/professionals/physician\\_gls/pdf/ped\\_all.pdf](https://www.nccn.org/professionals/physician_gls/pdf/ped_all.pdf). Accessed August 13, 2024.

Reviews, Revisions, and Approvals	Date
New Policy Created	07/2018

Reviews, Revisions, and Approvals	Date
4Q 2019 annual review: No changes per Statewide PDL implementation 01-01-2020	10/2019
4Q 2020 annual review: FDA/NCCN dosing limitation added; age removed to encompass pediatrics per NCCN; references reviewed and updated.	08/2020
4Q 2021 annual review: added additional pathway for use as induction therapy and revised requirement for use as single agent therapy to only apply to pediatric ALL per NCCN; clarified dosing per FDA label; references reviewed and updated.	10/2021
4Q 2022 annual review: for Philadelphia chromosome-positive disease removal of requirement of intolerant or refractory to TKI per NCCN; added to initial criteria Besponsa is prescribed for no more than 6 cycles total; approval duration revised to 6 months (up to 6 cycles total); references reviewed and updated.	10/2022
4Q 2023 annual review: removed monotherapy requirement since Besponsa also indicated as combination therapy for age $\leq 18$ years per NCCN Compendium; corrected “and” to “or” for scenarios of either relapsed/refractory disease or Philadelphia chromosome-negative disease; references reviewed and updated.	10/2023
4Q 2024 annual review: updated criteria to include pediatric expansion for 1 year and older; for disease that is not relapsed or refractory and Philadelphia chromosome-negative, updated age to $\geq 15$ years to reflect “adolescent and young adult” population per NCCN compendium; references reviewed and updated.	10/2024