

**Subject:** Mozobil (plerixafor)

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## Overview

This document addresses the use of Mozobil (plerixafor), a chemokine receptor type 4 inhibitor which impairs binding of hematopoietic stem cells within the bone marrow microenvironment. Mozobil is approved in combination with granulocyte colony stimulating factors (G-CSF) to mobilize hematopoietic stem cells to the peripheral blood for subsequent autologous transplantation in individuals with lymphoma, multiple myeloma, or other conditions as appropriate.

The National Comprehensive Cancer Network (NCCN) guideline on myeloid growth factors states effective mobilization regimens in the autologous setting include growth factor alone, chemotherapy and growth factor combined, and incorporation of Mozobil (plerixafor) with either approach. Mozobil in combination with G-CSF is FDA approved for mobilization of autologous hematopoietic stem cells in individuals with non-Hodgkin lymphoma or multiple myeloma. Current literature supports the use of Mozobil for mobilization prior to autologous transplant in other conditions such as Hodgkin lymphoma (Shaughnessy 2013) and testicular carcinoma (De Blasio 2013).

### Other Uses

The National Comprehensive Cancer Network (NCCN) guideline on hematopoietic cell transplantation (HCT) includes recommendations for Mozobil as stem cell mobilization for autologous donors in combination with filgrastim, pegfilgrastim, or cyclophosphamide with filgrastim or sargramostim. It is also recommended as additional therapy for insufficient collection of stem cells for allogeneic donors. The use of Mozobil in combination with sargramostim or for allogeneic donors has not been thoroughly studied and supporting literature is not included in the guideline currently.

## Clinical Criteria

When a drug is being reviewed for coverage under a member's medical benefit plan or is otherwise subject to clinical review (including prior authorization), the following criteria will be used to determine whether the drug meets any applicable medical necessity requirements for the intended/prescribed purpose.

### Mozobil (plerixafor)

Requests for Mozobil (plerixafor) may be approved if the following criteria are met:

- I. Individual is 18 years of age or older; **AND**
- II. Agent is being used to mobilize autologous hematopoietic stem cells; **AND**
- III. Individual is using in combination with a granulocyte colony stimulating factor (G-CSF) (such as Neupogen, Nivestym, Zarxio, Granix, or their biosimilars [NCCN]); **AND**
- IV. Individual has a diagnosis of (Hodgkin or non-Hodgkin) lymphoma, multiple myeloma, testicular carcinoma, or other diagnosis for which autologous hematopoietic stem cell transplant is indicated (Label, Shaughnessy 2013, De Blasio 2013); **AND**
- V. After stem cell mobilization and collection, a subsequent autologous hematopoietic stem cell transplant is anticipated; **AND**
- VI. The total number of Mozobil (plerixafor) injections has not exceed four doses per cycle for up to two cycles.

Requests for Mozobil (plerixafor) may not be approved for the following:

- I. Individual is using as a mobilizing agent for an allogeneic stem cell donor (~~NCCN~~; ASBMT 2014); **OR**
- II. Individual is using as a mobilizer of leukemic cells; **OR**

- III. Individual is using as a component of a conditioning regimen prior to an allogeneic hematopoietic stem cell transplant; **OR**
- IV. When the above criteria are not met or for all other indications.

## Coding

The following codes for treatments and procedures applicable to this document are included below for informational purposes. Inclusion or exclusion of a procedure, diagnosis or device code(s) does not constitute or imply member coverage or provider reimbursement policy. Please refer to the member's contract benefits in effect at the time of service to determine coverage or non-coverage of these services as it applies to an individual member.

### CPT

**J2562** Injection, plerixafor, 1 mg [Mozobil]

### ICD-10 Diagnosis

|                      |  |
|----------------------|--|
| <b>C62.00-C62.92</b> | Malignant neoplasm of testis                         |
| <b>C81.00-C81.99</b> | Hodgkin lymphoma                                     |
| <b>C82.00-C88.9</b>  | Non-Hodgkin lymphomas                                |
| <b>C90.00-C90.32</b> | Multiple myeloma and malignant plasma cell neoplasms |
| <b>Z52.001</b>       | Unspecified donor, stem cells                        |
| <b>Z52.011</b>       | Autologous donor, stem cells                         |
| <b>Z52.091</b>       | Other blood donor, stem cells                        |
| <b>Z94.81</b>        | Bone marrow transplant status                        |
| <b>Z94.84</b>        | Stem cells transplant status                         |

## Document History

Revised: 02/25/2022

Document History:

- 02/25/2022 – Annual Review: Update references. Coding Reviewed: No changes.
- 02/19/2021 – Annual Review: No changes. Coding Reviewed: No changes.
- 02/21/2020 – Annual Review: Clarify use with G-CSF to include the biosimilars per NCCN. Coding Reviewed: No changes
- 02/22/2019 – Annual Review: Update Mozobil criteria to include all diagnosis for which an autologous hematopoietic stem cell transplant is indicated. Wording and formatting updates for clarity. Coding update: Added ICD-10 codes: Z52.001, Z52.011, Z52.091, Z94.81, Z94.84 as a result of expansion of criteria.

## References

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3. De Blasio A, Rossi L, Zappone E, et al. Plerixafor and autologous stem cell transplantation: impressive result in a chemoresistant testicular cancer patient treated with high-dose chemotherapy. *Anticancer Drugs*. 2013; 24(6):653-657.
4. DrugPoints® System [electronic version]. Truven Health Analytics, Greenwood Village, CO. Updated periodically.
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6. Lexi-Comp ONLINE™ with AHFS™, Hudson, Ohio: Lexi-Comp, Inc.; 2020; Updated periodically.
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8. NCCN Clinical Practice Guidelines in Oncology™. © 2020 National Comprehensive Cancer Network, Inc. For additional information visit the NCCN website: <http://www.nccn.org/index.asp>. Accessed on January 21, 2022.
  - a. Hematopoietic Growth Factors. Version 1.2022. Updated December 22, 2021.
  - b. Hematopoietic Cell Transplantation (HCT): Pre-transplant Recipient Evaluation and Management of Graft-Versus-Host Disease. V5.2021. Updated September 30, 2021.

Federal and state laws or requirements, contract language, and Plan utilization management programs or policies may take precedence over the application of this clinical criteria.

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