



Original Effective Date: 03/07/2024
 Current Effective Date: 03/08/2025
 Last P&T Approval/Version: 01/29/2025
 Next Review Due By: 01/2026
 Policy Number: C27171-A

Aphexda (motixafortide)

PRODUCTS AFFECTED

Aphexda (motixafortide)

COVERAGE POLICY

Coverage for services, procedures, medical devices and drugs are dependent upon benefit eligibility as outlined in the member's specific benefit plan. This Coverage Guideline must be read in its entirety to determine coverage eligibility, if any. This Coverage Guideline provides information related to coverage determinations only and does not imply that a service or treatment is clinically appropriate or inappropriate. The provider and the member are responsible for all decisions regarding the appropriateness of care. Providers should provide Molina Healthcare complete medical rationale when requesting any exceptions to these guidelines.

Documentation Requirements:

Molina Healthcare reserves the right to require that additional documentation be made available as part of its coverage determination; quality improvement; and fraud; waste and abuse prevention processes. Documentation required may include, but is not limited to, patient records, test results and credentials of the provider ordering or performing a drug or service. Molina Healthcare may deny reimbursement or take additional appropriate action if the documentation provided does not support the initial determination that the drugs or services were medically necessary, not investigational or experimental, and otherwise within the scope of benefits afforded to the member, and/or the documentation demonstrates a pattern of billing or other practice that is inappropriate or excessive.

DIAGNOSIS:

Multiple Myeloma

REQUIRED MEDICAL INFORMATION:

This clinical policy is consistent with standards of medical practice current at the time that this clinical policy was approved. If a drug within this policy receives an updated FDA label within the last 180 days, medical necessity for the member will be reviewed using the updated FDA label information along with state and federal requirements, benefit being administered and formulary preferencing. Coverage will be determined on a case-by-case basis until the criteria can be updated through Molina Healthcare, Inc. clinical governance. Additional information may be required on a case-by-case basis to allow for adequate review. When the requested drug product for coverage is dosed by weight, body surface area or other member specific measurement, this data element is required as part of the medical necessity review. The Pharmacy and Therapeutics Committee has determined that the drug benefit shall be a mandatory generic and that generic drugs will be dispensed whenever available.

All transplants require prior authorization from the Corporate Transplant Department. Must document transplant approval prior to approval of Aphexda.

A. PERIPHERAL MOBILIZATION OF STEM CELLS:

1. Documentation of diagnosis of multiple myeloma

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AND

2. Documentation that motixafortide will be used in combination with granulocyte colony stimulating factor (i.e., filgrastim)

CONTINUATION OF THERAPY:

N/A

DURATION OF APPROVAL:

Initial authorization: 3 months, Continuation of Therapy: N/A

PRESCRIBER REQUIREMENTS:

Prescribed by or in consultation with a board-certified hematologist/oncologist, or transplant specialist

AGE RESTRICTIONS:

18 years of age and older

QUANTITY:

1.25 mg/kg 10 to 14 hours prior to apheresis

Maximum Quantity Limits – 2 doses of 1.25 mg/kg with apheresis one and three, if needed, to achieve cell collection goal

PLACE OF ADMINISTRATION:

The recommendation is that injectable medications in this policy will be for pharmacy or medical benefit coverage and the subcutaneous injectable products administered in a place of service that is a non-hospital facility-based location.

DRUG INFORMATION

ROUTE OF ADMINISTRATION:

Subcutaneous

DRUG CLASS:

CXCR4 Receptor Antagonist

FDA-APPROVED USES:

Indicated in combination with filgrastim (G-CSF) to mobilize hematopoietic stem cells to the peripheral blood for collection and subsequent autologous transplantation in patient with multiple myeloma.

COMPENDIAL APPROVED OFF-LABELED USES:

None

APPENDIX

APPENDIX:

GENESIS Trial Protocol

Day 1-4

Filgrastim 10-15 mcg/kg once daily in the morning

Day 4

In the evening, receive 1 dose of Aphexda

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Day 5

DAY OF FIRST APHERESIS – 5th morning dose of Filgrastim

Day 6

Assess cell collection. If collection goal NOT met, give Filgrastim and perform second apheresis. If collection goal NOT met after SECOND apheresis, on the evening of Day 6, give 1 dose of Apherexda.

Day 7

DAY OF THIRD APHERESIS – 7th dose of Filgrastim

Day 8

If collection goal NOT met, give filgrastim and perform a fourth apheresis

BACKGROUND AND OTHER CONSIDERATIONS

BACKGROUND:

Apherexda is a hematopoietic stem cell mobilizer. It is an inhibitor of the C-X-C Motif Chemokine Receptor 4 (CXCR4) and blocks the binding of its cognate ligand, stromal-derived factor-1 α (SDF-1 α)/C-X-C Motif Chemokine Ligand 12 (CXCL12). SDF-1 α and CXCR4 play a role in the trafficking and homing of human hematopoietic stem cells to the marrow compartment. Once in the marrow, stem cell CXCR4 can help anchor these cells to the marrow matrix, either directly via SDF-1 α or through the induction of other adhesion molecules. Treatment with motixafortide resulted in leukocytosis, and elevations in circulating hematopoietic stem and progenitor cells into the peripheral circulation in mice, rats, dogs, and humans. Stem cells mobilized by motixafortide were capable of engraftment with long-term repopulating capacity in a rodent transplantation model.

The safety and efficacy of Apherexda in combination with filgrastim for patients with multiple myeloma was evaluated in the GENESIS trial (NCT 03246529). In this randomized, double-blind, placebo-controlled study, 122 patients were randomized in a 2:1 ratio to receive Apherexda 1.25 mg/kg subcutaneously (N=80) or placebo (N=42). The apheresis cell collection goal for the study was $\geq 6 \times 10^6$ CD34+ cells/kg. The assessment of CD34+ cells was performed by central and local laboratories. Central laboratory assessments were used for the efficacy results. Local laboratory results were used for clinical treatment decisions. Up to four apheresis were performed to reach the cell collection goal.

The efficacy of APHEXDA was based upon the proportion of patients who achieved a cell collection goal of $\geq 6 \times 10^6$ CD34+ cells/kg in up to 2 aphereses after administration of filgrastim and a single administration of Apherexda or placebo. Efficacy results showed that 67.5% of patients in the Apherexda treatment arm versus 9.5% in the placebo arm achieved the cell collection goal of $\geq 6 \times 10^6$ CD34+ cells/kg in up to 2 aphereses after a single administration of Apherexda or placebo, resulting in an adjusted difference between treatment arms of 56.8% ($p < 0.0001$). Multiple factors can influence time to engraftment and graft durability following stem cell transplantation. In the GENESIS study, time to neutrophil and platelet engraftment and graft durability following transplantation were similar across treatment groups.

The safety of Apherexda was evaluated in the GENESIS study based on data from 92 patients with multiple myeloma who received at least one dose of Apherexda 1.25 mg/kg subcutaneously and filgrastim and 42 patients who received placebo and filgrastim for mobilization of hematopoietic stem cells for collection and apheresis. The premedication regimen changed during the conduct of the trial as evidence of hypersensitivity reactions was noted. Of the 92 patients who received at least one dose of Apherexda, 14 patients received the triple-drug premedication regimen and 78 did not receive the triple-drug premedication regimen (either received no premedication or another premedication regimen). Serious adverse reactions occurred in 5.4% of patients receiving Apherexda in combination with filgrastim. Serious adverse reactions

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included vomiting, injection site reaction, hypersensitivity reaction, injection site cellulitis, hypokalemia and hypoxia. One patient did not receive the 5th dose of filgrastim due to an elevated white blood cell count following administration of Aphexda. The most common adverse reactions occurring in GENESIS (>20% and at least 2% higher than the filgrastim + placebo arm) were injection site reactions (pain, erythema and pruritus), pruritus, flushing, and back pain.

CONTRAINDICATIONS/EXCLUSIONS/DISCONTINUATION:

All other uses of Aphexda (motixafortide) are considered experimental/investigational and therefore, will follow Molina's Off- Label policy. Contraindications to Aphexda (motixafortide) include: history of serious hypersensitivity reaction to Aphexda.

For hematopoietic stem cell (HSC) mobilization, Aphexda may cause mobilization of leukemic cells and subsequent contamination of the apheresis product. Therefore, Aphexda is not intended for HSC mobilization and harvest in patients with leukemia.

OTHER SPECIAL CONSIDERATIONS:

None

CODING/BILLING INFORMATION

CODING DISCLAIMER. Codes listed in this policy are for reference purposes only and may not be all-inclusive or applicable for every state or line of business. Deleted codes and codes which are not effective at the time the service is rendered may not be eligible for reimbursement. Listing of a service or device code in this policy does not guarantee coverage. Coverage is determined by the benefit document. Molina adheres to Current Procedural Terminology (CPT®), a registered trademark of the American Medical Association (AMA). All CPT codes and descriptions are copyrighted by the AMA; this information is included for informational purposes only. Providers and facilities are expected to utilize industry-standard coding practices for all submissions. Molina has the right to reject/deny the claim and recover claim payment(s) if it is determined it is not billed appropriately or not a covered benefit. Molina reserves the right to revise this policy as needed.

HCPCS CODE	DESCRIPTION
J2277	Injection, motixafortide, 0.25 mg

AVAILABLE DOSAGE FORMS:

Aphexda SOLR 62MG single-dose vial

REFERENCES

1. Aphexda (motixafortide) for injection, for subcutaneous use [prescribing information]. Waltham, MA: BioLineRx USA Inc; September 2023.
2. National Comprehensive Cancer Network. 2023. Hematopoietic Cell Transplantation (HCT) (Version 3.2023). [online] Available at: < [hct.pdf \(nccn.org\)](https://www.nccn.org/hct.pdf) > [Accessed 8 December 2023].
3. National Comprehensive Cancer Network. 2025. Hematopoietic Cell Transplantation (HCT) (Version 2.2024). [online] Available at: < [hct.pdf \(nccn.org\)](https://www.nccn.org/hct.pdf) > [Accessed 6 January 2025].

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SUMMARY OF REVIEW/REVISIONS	DATE
REVISION- Notable revisions: New Criteria	Q1 2025
NEW CRITERIA CREATION	Q1 2024