

Levoleucovorin (Fusilev®)

Levoleucovorin (various manufacturers)

Place of Service

Office Administration

HCPCS: J0641 per 0.5 mg

Condition(s) listed in policy (see criteria for details)

- [In combination with 5FU for Colorectal cancer, metastatic and for other NCCN supported oncology uses](#)
- [Reduction of toxicity due to impaired elimination or inadvertent overdose with folic acid antagonists](#)
- [Rescue after high-dose methotrexate therapy in osteosarcoma, and for other NCCN supported oncology uses](#)

AHFS therapeutic class: Antidote/chemotherapy rescue

Mechanism of action: L-isomer of leucovorin, is a folate analog

(1) Special Instructions and Pertinent Information

Covered under the Medical Benefit, please submit clinical information for prior authorization review.

(2) Prior Authorization/Medical Review is required for the following condition(s)

All requests for Fusilev® (levoleucovorin) must be sent for clinical review and receive authorization prior to drug administration or claim payment.

In combination with 5FU for colorectal cancer, metastatic and for other NCCN supported oncology uses

1. One of the following NCCN-supported cancer types: Ampullary adenocarcinoma, Anal cancer, Appendiceal adenocarcinoma, Biliary tract cancers (cholangiocarcinoma, gallbladder cancer), Bladder cancer, Cervical cancer, Colon cancer, Esophageal and Esophagogastric junction cancers, Gastric cancer, Neuroendocrine tumors, Occult primary cancer, Ovarian cancer (including fallopian, primary peritoneal cancer), Pancreatic cancer, Rectal cancer, Small bowel adenocarcinoma, or Thymoma/Thymic carcinoma, **AND**
2. Used in combination with 5-fluorouracil, **AND**
3. Patient has had intolerable side effects to the use of leucovorin that would not also be expected with levoleucovorin.

Covered Doses

Up to 250 mg/m² IV injection per dose

Coverage Period

Cover for number of chemotherapy cycles requested

ICD-10:

Ampullary adenocarcinoma: C24.1, Z85.09

Anal cancer: C21.0, C21.1, C21.2, C21.8

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Appendiceal adenocarcinoma: C18.1, Z85.038
 Biliary Tract cancers - cholangiocarcinoma, gallbladder: C22.1, C24.8, C24.9, C24.0, C24.8, C24.9
 Bladder cancer: C67.0-C67.9, D09.0, Z85.51
 Cervical cancer: C53.0, C53.1, C53.8, C53.9
 Colon cancer: C18.0, C18.2-C18.9, C78.00-C78.02, C78.6, C78.7, Z85.038
 Esophageal and Esophagogastric junction cancers: C15.3-C15.5, C15.8, C15.9, C16.0, D37.8, D37.9, Z85.00, Z85.01
 Gastric cancer: C16.0-C16.6, C16.8, C16.9, D37.1, Z85.00, Z85.028
 Neuroendocrine tumors: C7A.1, C7A.8, C7A.098, C7B.00-C7B.04, C7B.09, C7B.8, E16.1, E16.3, E16.8, Z85.07, Z85.858
 Occult primary cancer: C80.0, C80.1
 Ovarian cancer/Fallopian cancer/Primary peritoneal cancer: C48.1, C48.2, C48.8, C56.1, C56.2, C56.3, C56.9, C57.00-C57.02, C57.10-C57.12, C57.20-C57.22, C57.3, C57.4, C57.7-C57.9, Z85.43
 Pancreatic cancer: C25.0-C25.3, C25.7-C25.9, Z85.07
 Rectal cancer: C19, C20, C21.8, C78.00-C78.02, C78.7
 Small bowel adenocarcinoma: C17.0, C17.1, C17.2, C17.3, C17.8, C17.9, Z85.068
 Thymoma/Thymic carcinoma: C37, D15.0, D38.4, Z85.238

Impaired methotrexate elimination or inadvertent overdose

1. Patient has had intolerable side effects to the use of leucovorin that would not also be expected with levoleucovorin.

Covered Doses

Up to 50 mg/m² IV every 3 hours until the methotrexate level is less than 1 micromolar
 Fusilev dose may need to be adjusted

Coverage Period

Cover for number of chemotherapy cycles requested

ICD-10:

T45.1X1

Rescue after high-dose methotrexate therapy in osteosarcoma, and for other NCCN supported oncology uses

1. One of the following NCCN-supported cancer types: Acute lymphoblastic leukemia, Acute myeloid leukemia, B-cell Lymphomas (Mantle Cell, DLBCL, High Grade B-cell, Burkitt, HIV-related, Post-transplant lymphoproliferative disorders, Bone cancer (osteosarcoma), Central nervous system cancers (brain metastases, leptomeningeal metastases), Chronic lymphocytic leukemia, Gestational trophoblastic neoplasia, Pediatric Aggressive Mature B-Cell Lymphomas (Burkitts Lymphoma, DLBCL, Primary Mediastinal Large B-cell Lymphoma), Primary CNS lymphoma, Small lymphocytic lymphoma, T-Cell lymphoma, or Waldenstrom Macroglobulinemia/ Lymphoplasmacytic Lymphoma, **AND**
2. For rescue after high-dose methotrexate therapy, **AND**
3. Patient has had intolerable side effects to the use of leucovorin that would not also be expected with levoleucovorin

Covered Doses

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Levoleucovorin (Fusilev®)

Up to 75 mg IV every 3 hours until methotrexate level is < 0.05 micromolar

Coverage Period

Cover for number of chemotherapy cycles requested

ICD-10:

ALL: C83.50-C83.59, C91.00-C91.02

AML: C86.4

B-cell Lymphomas: B20, C83.10-C83.19, C83.30-C83.39, C83.70-C83.79, C83.80-C83.99, C85.10-C85.29, C85.80-C85.89, D47.Z1

Bone cancer - osteosarcoma: C40.00-C40.02, C40.10-C40.12, C40.20-C40.22, C40.30-C40.32, C40.80-C40.82, C40.90-C40.92, C41.0-C41.4, C41.9, Z85.830

Central nervous system cancers: C79.31, C79.32

CLL/SLL: C83.00-C83.09, C91.10, C91.12

Gestational trophoblastic neoplasia: D39.2, C58, O01.9

Pediatric Aggressive Mature B-Cell Lymphomas: C85.20-C85.29, C83.30-C83.39, C83.70-C83.79

Primary CNS lymphoma: C83.30, C83.39, C83.80, C83.89, C85.89, C85.99

T-Cell lymphoma: C84.40-C84.49, C84.60-C84.69, C84.70-C84.79, C84.90-C84.99, C84.Z0-C84.Z9, C86.0, C86.1, C86.2, C86.5, C91.50, C91.51, C91.52

WM/LL: C88.0

(3) The following condition(s) **DO NOT** require Prior Authorization/Preservice

All requests for Fusilev® (levoleucovorin) must be sent for clinical review and receive authorization prior to drug administration or claim payment.

(4) This Medication is NOT medically necessary for the following condition(s)

Coverage for a Non-FDA approved indication, requires that criteria outlined in Health and Safety Code § 1367.21, including objective evidence of efficacy and safety are met for the proposed indication.

Please refer to the Provider Manual and User Guide for more information.

(5) Additional Information

How supplied:

50 mg, 175 mg, 250 mg (single-use vials)

Generic

50 mg, 175 mg (Intravenous Powder for Solution)

250 mg (Intravenous Solution)

Brand Fusilev

Intravenous Powder for Solution: 50 mg

Fusilev Rescue After High-Dose Methotrexate Therapy

Clinical Situation	Laboratory Findings	Fusilev Dosage and Duration
Normal Methotrexate Elimination	Serum methotrexate level approximately 10 micromolar at 24 hours after administration, 1 micromolar at 48 hours, and less than 0.2 micromolar at 72 hours	7.5 mg IV q 6 hours for 60 hours (10 doses starting at 24 hours after start of methotrexate infusion).

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Delayed Late Methotrexate Elimination	Serum methotrexate level remaining above 0.2 micromolar at 72 hours, and more than 0.05 micromolar at 96 hours after administration.	Continue 7.5 mg IV q 6 hours, until methotrexate level is less than 0.05 micromolar.
Delayed Early Methotrexate Elimination and/or Evidence of Acute Renal Injury	Serum methotrexate level of 50 micromolar or more at 24 hours, or 5 micromolar or more at 48 hours after administration, OR; a 100% or greater increase in serum creatinine level at 24 hours after methotrexate administration (e.g., an increase from 0.5 mg/dL to a level of 1 mg/dL or more).	75 mg IV q 3 hours until methotrexate level is less than 1 micromolar; then 7.5 mg IV q 3 hours until methotrexate level is less than 0.05 micromolar.

Fusilev (levoleucovorin) [Prescribing information]. Irvine, CA: Spectrum Pharmaceuticals, Inc.; 4/2011.

(6) References

- AHFS®. Available by subscription at <http://www.lexi.com>
- DrugDex®. Available by subscription at <http://www.micromedexsolutions.com>
- Fusilev (levoleucovorin) [Prescribing information]. Irvine, CA: Spectrum Pharmaceuticals, Inc.; 4/2011.
- National Comprehensive Cancer Network Drugs and Biologics Compendium. Fusilev (2024). Available at www.nccn.org.

(7) Policy Update

Date of last review: 2Q2024

Date of next review: 2Q2025

Changes from previous policy version:

- No clinical change to policy following routine annual review.

*BSC Drug Coverage Criteria to Determine Medical Necessity
Reviewed by P&T Committee*