

2025 Myelodysplastic Syndrome

Medical Oncology

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Myelodysplastic Syndrome

Myelodysplastic Syndrome Guideline

Chemotherapy to treat myelodysplastic syndrome is considered medically appropriate when the documentation demonstrates **ALL** of the following: [4] [3] [2] [1] [6] [5]

1. Associated-cancer chemotherapy medication regimens per the *National Comprehensive Cancer Network (NCCN) Guidelines*, approved by the United States (US) Food and Drug Administration (FDA), clinically prescribed and as authorized by the payor.
2. Physical ability and clinical status of **ANY** of the following:
 - A. Eastern Cooperative Oncology Group (ECOG) Performance Status grade of 2 or less
 - B. Karnofsky Performance Status (KPS) grade of 70 or more
3. Treatment is for **ANY** of the following:
 - a. International Prognostic Scoring System (IPSS) is low/intermediate
 - b. IPSS is high/intermediate



LCD 34648

See also, **LCD 34648**: Bisphosphonate Drug Therapy at <https://www.cms.gov/medicare-coverage-database/search.aspx> if applicable to individual's healthplan membership.



LCD 35026

See also, **LCD 35026**: Rituximab at <https://www.cms.gov/medicare-coverage-database/search.aspx> if applicable to individual's healthplan membership.



LCD 37205

See also, **LCD 37205**: Chemotherapy and their Adjuncts at <https://www.cms.gov/medicare-coverage-database/search.aspx> if applicable to individual's healthplan membership.

Myelodysplastic Syndrome Procedure Codes

Table 1. Myelodysplastic Syndrome Associated Procedure Codes

CODE	DESCRIPTION
A9543	YTTRIUM Y-90 IBRITUMOMAB TIUXETAN, THERAPEUTIC, PER TREATMENT DOSE, UP TO 40 MILLICURIES
J0640	INJECTION, LEUCOVORIN CALCIUM, PER 50 MG
J0894	INJECTION, DECITABINE, 1 MG
J1094	INJECTION, DEXAMETHASONE ACETATE, 1 MG
J1100	INJECTION, DEXAMETHASONE SODIUM PHOSPHATE, 1 MG
J2930	INJECTION, METHYLPREDNISOLONE SODIUM SUCCINATE, UP TO 125 MG
J3485	INJECTION, ZIDOVUDINE, 10 MG
J3489	INJECTION, ZOLEDRONIC ACID, 1 MG
J7527	EVEROLIMUS, ORAL, 0.25 MG
J8530	CYCLOPHOSPHAMIDE; ORAL, 25 MG
J8540	DEXAMETHASONE, ORAL, 0.25 MG
J8560	ETOPOSIDE; ORAL, 50 MG
J8562	FLUDARABINE PHOSPHATE, ORAL, 10 MG
J8600	MELPHALAN; ORAL, 2 MG
J8610	METHOTREXATE; ORAL, 2.5 MG
J8999	PRESCRIPTION DRUG, ORAL, CHEMOTHERAPEUTIC, NOS
J9000	INJECTION, DOXORUBICIN HYDROCHLORIDE, 10 MG
J9025	INJECTION, AZACITIDINE, 1 MG
J9027	INJECTION, CLOFARABINE, 1 MG
J9033	INJECTION, BENDAMUSTINE HCL, 1 MG
J9034	INJECTION, BENDAMUSTINE HCL (BENDEKA), 1 MG
J9036	INJECTION, BENDAMUSTINE HYDROCHLORIDE, (BELRAPZO), 1 MG
J9040	INJECTION, BLEOMYCIN SULFATE, 15 UNITS
J9041	INJECTION, BORTEZOMIB (VELCADE), 0.1 MG
J9042	INJECTION, BRENTUXIMAB VEDOTIN, 1 MG
J9045	INJECTION, CARBOPLATIN, 50 MG
J9047	INJECTION, CARFILZOMIB, 1 MG
J9050	INJECTION, CARMUSTINE, 100 MG
J9057	INJECTION, COPANLISIB, 1 MG
J9060	INJECTION, CISPLATIN, POWDER OR SOLUTION, 10 MG
J9065	INJECTION, CLADRIBINE, PER 1 MG
J9098	INJECTION, CYTARABINE LIPOSOME, 10 MG
J9100	INJECTION, CYTARABINE, 100 MG
J9130	DACARBAZINE, 100 MG

CODE	DESCRIPTION
J9145	INJECTION, DARATUMUMAB, 10 MG
J9150	INJECTION, DAUNORUBICIN, 10 MG
J9176	INJECTION, ELOTUZUMAB, 1 MG
J9181	INJECTION, ETOPOSIDE, 10 MG
J9185	INJECTION, FLUDARABINE PHOSPHATE, 50 MG
J9201	INJECTION, GEMCITABINE HYDROCHLORIDE, NOT OTHERWISE SPECIFIED, 200 MG
J9208	INJECTION, IFOSFAMIDE, 1 GRAM
J9209	INJECTION, MESNA, 200 MG
J9211	INJECTION, IDARUBICIN HYDROCHLORIDE, 5 MG
J9212	INJECTION, INTERFERON ALFACON-1, RECOMBINANT, 1 MICROGRAM
J9213	INJECTION, INTERFERON, ALFA-2A, RECOMBINANT, 3 MILLION UNITS
J9214	INJECTION, INTERFERON, ALFA-2B, RECOMBINANT, 1 MILLION UNITS
J9215	INJECTION, INTERFERON, ALFA-N3, (HUMAN LEUKOCYTE DERIVED), 250,000 IU
J9230	INJECTION, MECHLORETHAMINE HYDROCHLORIDE, (NITROGEN MUSTARD), 10 MG
J9245	INJECTION, MELPHALAN HYDROCHLORIDE, 50 MG
J9260	METHOTREXATE SODIUM, 50 MG
J9262	INJECTION, OMACETAXINE MEPESUCCINATE, 0.01 MG
J9263	INJECTION, OXALIPLATIN, 0.5 MG
J9271	INJECTION, PEMBROLIZUMAB, 1 MG
J9293	INJECTION, MITOXANTRONE HYDROCHLORIDE, PER 5 MG
J9299	INJECTION, NIVOLUMAB, 1 MG
J9301	INJECTION, OBINUTUZUMAB, 10 MG
J9311	INJECTION, RITUXIMAB 10 MG AND HYALURONIDASE
J9312	INJECTION, RITUXIMAB, 10 MG
J9351	INJECTION, TOPOTECAN, 0.1 MG
J9360	INJECTION, VINBLASTINE SULFATE, 1 MG
J9370	VINCRIStINE SULFATE, 1 MG
J9390	INJECTION, VINORELBINE TARTRATE, 10 MG
J9999	NOT OTHERWISE CLASSIFIED, ANTINEOPLASTIC DRUGS
S0088	IMATINIB, 100 MG
S0104	ZIDOVUDINE, ORAL, 100 MG
S0172	CHLORAMBUCIL, ORAL, 2MG
S0176	HYDROXYUREA, ORAL, 500MG
S0182	PROCARBAZINE HYDROCHLORIDE, ORAL, 50MG
Q2049	INJECTION, DOXORUBICIN HYDROCHLORIDE, LIPOSOMAL, IMPORTED LIPODOX, 10 MG
Q2050	INJECTION, DOXORUBICIN HYDROCHLORIDE, LIPOSOMAL, NOT OTHERWISE SPECIFIED, 10MG
Q5115	INJECTION, RITUXIMAB-ABBS, BIOSIMILAR, 10 MG

CODE	DESCRIPTION
Q5119	INJECTION, RITUXIMAB-PVVR, BIOSIMILAR, (RUXIENCE), 10 MG

Myelodysplastic Syndrome Summary of Changes

Myelodysplastic Syndrome guideline from 2024 to 2025 had the following change/s:

- Citations updated, evidence review completed with no major change in criteria.
- Removed L33394 (A52371)
- Added L34648, L35026 and L37205.

Myelodysplastic Syndrome Definitions

5q deletion is a rare disorder caused by loss of part of the long arm (q arm) of human chromosome 5. This syndrome affects myeloid (bone marrow) cells, causing treatment-resistant anemia and myelodysplastic syndromes that may lead to acute myelogenous leukemia.

Chemotherapy is a treatment that uses drugs to stop the growth of cancer cells, either by killing the cells or by stopping them from dividing. Chemotherapy may be given by mouth, injection, infusion or on the skin depending on the type and stage of the cancer being treated. It may be given alone or with other treatments, such as surgery, radiation therapy or biologic therapy.

CMML Chronic myelomonocytic leukemia is cancer of the blood. CMML is considered to be one of the myeloproliferative neoplasms (MPNs), a type of chronic blood cancer in which a person's bone marrow does not make blood effectively.

Eastern Cooperative Oncology Group (ECOG) scale describes an individual's level of functioning in terms of the ability to care for one's self, daily activity and physical ability (eg, walking, working).

Table 1. ECOG Performance Status Scale

Grade	ECOG PERFORMANCE STATUS
0	Fully active, able to carry on all pre-disease performance without restriction
1	Restricted in physically strenuous activity but ambulatory and able to carry out work of a light or sedentary nature, e.g., light house work, office work
2	Ambulatory and capable of all selfcare but unable to carry out any work activities; up and about more than 50% of waking hours
3	Capable of only limited selfcare; confined to bed or chair more than 50% of waking hours
4	Completely disabled; cannot carry on any selfcare; totally confined to bed or chair
5	Dead

Source: <https://ecog-acrin.org/resources/ecog-performance-status/>

International Prognostic Scoring System (IPSS) uses three "prognostic indicators" to predict the course of the patient's disease: the percentage of leukemic blast cells in the marrow and the type of chromosomal changes, if any, in the marrow cells (cytogenetics).

Karnofsky performance status (KPS) is an assessment tool for functional impairment. It can be used to compare effectiveness of different therapies and to assess the prognosis in individual patients. In most serious illnesses, the lower the Karnofsky score, the worse the likelihood of survival.

Table 2. KARNOFSKY PERFORMANCE STATUS SCALE

Score	Status
100	Normal, no complaints; no evidence of disease
90	Able to carry on normal activity; minor signs or symptoms of disease
80	Normal activity with effort, some signs or symptoms of disease
70	Cares for self but unable to carry on normal activity or to do active work
60	Requires occasional assistance but is able to care for most of personal needs
50	Requires considerable assistance and frequent medical care
40	Disabled; requires special care and assistance
30	Severely disabled; hospitalization is indicated although death not imminent
20	Very ill; hospitalization and active supportive care necessary
10	Moribund
0	Dead

Source: <https://ecog-acrin.org/resources/ecog-performance-status/>

Myelodysplastic syndrome (MDS) is a type of cancer in which the bone marrow does not make enough healthy blood cells (white blood cells, red blood cells, and platelets) and there are abnormal cells in the blood and/or bone marrow. When there are fewer healthy blood cells, infection, anemia, or bleeding may occur.

Myeloproliferative neoplasm (MPN) cancer that starts in the bone marrow, where blood cells are made. In MPN, the bone marrow makes too many of one or more types of blood cells (red blood cells, white blood cells and/or platelets).

Overlap syndromes are inflammatory rheumatic conditions in which patients have clinical manifestations suggestive of multiple distinct immune diseases.

Myelodysplastic Syndrome References

- [1] Chan, O., Ali, N.A., . . . Komrokji, R. (2022). Therapeutic Outcomes and Prognostic Impact of Gene Mutations Including TP53 and SF3B1 in Patients with Del(5q) Myelodysplastic Syndromes (MDS). *Clinical Lymphoma, Myeloma & Leukemia*, 22(7), e467-e476.

- [2] Greenberg, P.L., Stone, R.M., . . . Thota, S. (2024). Myelodysplastic Syndromes Version 3.2024. *National Comprehensive Cancer Network*. Retrieved: September 2024. https://www.nccn.org/professionals/physician_gls/pdf/mds.pdf
- [3] Meleveedu, K.S. (2024). Myelodysplastic Syndrome. F.F. Ferri (Ed.). *Ferri's Clinical Advisor 2024*, (pp. 930-935.e1). Philadelphia, PA: Elsevier.
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- [5] Tremblay, D. Feld, J., . . . Mascarenhas, J. (2023). Myelodysplastic Syndrome/ Myeloproliferative Neoplasm Overlap Syndromes. R. Hoffman, E.J. Benz, . . . S.A. Abutalib (Eds.). *Hematology: Basic Principles and Practice (8)*, (pp. 1225-1242). Philadelphia: Elsevier.
- [6] Westermann, J. & Bullinger, L. (2021). Precision medicine in myeloid malignancies. *Seminars in Cancer Biology, 84*, 153-169.

Disclaimer section

Purpose

The purpose of the HealthHelp's clinical guidelines is to assist healthcare professionals in selecting the medical service that may be appropriate and supported by evidence to safely improve outcomes. Medical information is constantly evolving, and HealthHelp reserves the right to review and update these clinical guidelines periodically. HealthHelp reserves the right to include in these guidelines the clinical indications as appropriate for the organization's program objectives. Therefore the guidelines are not a list of all the clinical indications for a stated procedure, and associated Procedure Code Tables may not represent all codes available for that state procedure or that are managed by a specific client-organization.

Clinician Review

These clinical guidelines neither preempt clinical judgment of trained professionals nor advise anyone on how to practice medicine. Healthcare professionals using these clinical guidelines are responsible for all clinical decisions based on their assessment. All Clinical Reviewers are instructed to apply clinical indications based on individual patient assessment and documentation, within the scope of their clinical license.

Payment

The use of these clinical guidelines does not provide authorization, certification, explanation of benefits, or guarantee of payment; nor do the guidelines substitute for, or constitute, medical advice. Federal and State law, as well as member benefit contract language (including definitions

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National and Local Coverage Determination (NCD and LCD)



NOTICE

To ensure appropriate review occurs to the most current NCD and/or LCD, always defer to <https://www.cms.gov/medicare-coverage-database/search.aspx>.

Background

National Coverage Determinations (NCD) and Local Coverage Determinations (LCD) are payment policy documents outlined by the Centers for Medicare and Medicaid Services (CMS) and the government's delegated Medicare Audit Contractors (MACs) that operate regionally in jurisdictions.

CMS introduced variation between different jurisdictions/Medicare Audit Contractors (MACs) and their associated covered code lists with the transition to ICD 10. The variation resulted in jurisdictions independently defining how codes are applied for exclusions, limitations, groupings, ranges, etc. for the medical necessity indications outlined in the NCD and LCD. Due to this variation, there is an inconsistent use/application of codes and coverage determinations across the United States between the different MACs.

In addition, **WITHOUT** notice, CMS can change the codes that indicate medical necessity and the format of the coverage determinations/associated documents (eg, Articles). This is an additional challenge for organizations to keep up with ongoing, unplanned changes in covered codes and medical necessity indications.



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Medical Necessity Codes

Due to the variation in code application between jurisdictions/MACs and that updates can happen without notification, HealthHelp is not able to guarantee full accuracy of the codes listed for any Coverage Determination, and advises that prior to use, the associated Coverage Determination Articles are reviewed to ensure applicability to HealthHelp's programs and any associated NCDs and LCDs.

For Internal Use Only:

11248 11249 11253 11282 11325 11328 11333 11349 11350 11351 11352 11354 11355 11356
11358 11359 11360 11361 11362 11365 11366 11367 11368 11369 11370 11374 11375 11394
11395 11396 11565