BROAD MOLECULAR PROFILING PANELS FOR

HEMATOLOGIC MALIGNANCIES AND MYELOID MALIGNANCY PANELS

- I. Broad molecular profiling panels for hematologic malignancies and myeloid malignancy panels in bone marrow or peripheral blood (81450, 81455) are considered **medically necessary** when:
 - A. The member is undergoing evaluation for acute myeloid leukemia (AML), **OR**
 - B. The member has newly diagnosed acute lymphoblastic leukemia (ALL), **OR**
 - C. The member has newly diagnosed myelodysplastic syndrome (MDS), **OR**
 - D. The member has suspected myelodysplastic syndrome (MDS) AND
 - 1. Other causes of cytopenia(s) have been ruled out, **OR**
 - E. The member is suspected to have a myeloproliferative neoplasm (MPN), **AND**
 - This is the member's initial genetic evaluation for suspected MPN,
 OR
 - 2. Previous results of *JAK2*, *CALR*, and *MPL* analysis were negative, **OR**
 - F. The member has a diagnosis of chronic myelogenous leukemia (CML), **AND**
 - 1. There has been progression to accelerated or blast phase, **OR**
 - 2. Results of *BCR-ABL1* kinase domain mutation analysis were negative.
- II. Repeat broad molecular profiling panels for hematologic malignancies and myeloid malignancy panels in bone marrow or peripheral blood (81450, 81455) are considered **medically necessary** when:



Effective: 1/1/2025

Last Revision: 9/9/2024

Effective: 1/1/2025 Last Revision: 9/9/2024 Last Clinical Review: 8/1/2024

- A. The member has myelodysplastic syndrome (MDS), **AND**
 - 1. The member has relapsed after allo-HCT [hematopoietic cell transplant], **OR**
- B. The member has acute lymphoblastic leukemia (ALL), AND
 - The member is showing evidence of symptomatic relapse after maintenance therapy, OR
- C. The member has acute myeloid leukemia (AML), AND
 - The member has relapsed or refractory disease or progression on treatment.
- III. Broad molecular profiling panels for hematologic malignancies and myeloid malignancy panels in bone marrow or peripheral blood (81450, 81455) are considered **investigational** for all other indications.

Note: If a multigene panel is performed, appropriate panel codes should be used. These clinical criteria are not intended to address liquid biopsies.

DEFINITIONS

- 1. **Myeloproliferative Neoplasms:** Rare overlapping blood diseases in which the bone marrow makes too many red blood cells, white blood cells, or platelets. There are seven subcategories of myeloproliferative neoplasms:
 - Chronic myeloid leukemia (CML)
 - Polycythemia vera (PV)
 - Primary myelofibrosis (PMF)
 - Essential thrombocytopenia (ET)
 - Chronic neutrophilic leukemia
 - Chronic eosinophilic leukemia
 - Chronic eosinophilic leukemia-not otherwise specified
 - MPN, unclassifiable (MPN-U)



Effective: 1/1/2025 Last Revision: 9/9/2024 Last Clinical Review: 8/1/2024

- 2. Myelodysplastic Syndromes (MDS): A group of disorders characterized by abnormalities of the bone marrow, leading to low numbers of one or more types of blood cells. The WHO system recognizes 6 main types of MDS:
 - MDS with multilineage dysplasia (MDS-MLD)
 - MDS with single lineage dysplasia (MDS-SLD)
 - MDS with ring sideroblasts (MDS-RS)
 - MDS with excess blasts (MDS-EB)
 - MDS with isolated del(5g)
 - MDS, unclassifiable (MDS-U)

REFERENCES

- 1. National Comprehensive Cancer Network (NCCN). NCCN Clinical Practice Guidelines in Oncology: Myelodysplastic Syndromes. Version 3.2024 https://www.nccn.org/professionals/physician_gls/pdf/mds.pdf
- 2. National Comprehensive Cancer Network (NCCN). NCCN Clinical Practice Guidelines in Oncology: Acute Myeloid Leukemia. Version 3.2024. https://www.nccn.org/professionals/physician_gls/pdf/aml.pdf
- 3. National Comprehensive Cancer Network (NCCN). NCCN Clinical Practice Guidelines in Oncology: Myeloproliferative Neoplasms. Version 1.2024 https://www.nccn.org/professionals/physician_gls/pdf/mpn.pdf
- 4. National Comprehensive Cancer Network (NCCN). NCCN Clinical Practice Guidelines in Chronic Myeloid Leukemia. Version 2.2024. https://www.nccn.org/professionals/physician_gls/pdf/cml.pdf
- 5. National Comprehensive Cancer Network (NCCN). NCCN Clinical Practice Guidelines in Acute Lymphoblastic Leukemia. Version 2.2024. https://www.nccn.org/professionals/physician_gls/pdf/all.pdf

