

## 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 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**
    1. 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 are considered **medically necessary** when:

- 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**
    - 1. The member is showing evidence of symptomatic relapse after maintenance therapy, **OR**
  - C. The member has acute myeloid leukemia (AML), **AND**
    - 1. The member has relapsed or refractory disease after consolidation or progression on treatment.
- III. Broad molecular profiling panels for hematologic malignancies and myeloid malignancy panels in bone marrow or peripheral blood 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. A **Myeloproliferative Neoplasm (MPN)** is a rare blood disease in which the bone marrow makes too many red blood cells, white blood cells, or platelets. There are seven subcategories of myeloproliferative neoplasms:
  - a. Chronic myeloid leukemia (CML)
  - b. Polycythemia vera (PV)
  - c. Primary myelofibrosis (PMF)
  - d. Essential thrombocytopenia (ET)
  - e. Chronic neutrophilic leukemia
  - f. Chronic eosinophilic leukemia
  - g. Chronic eosinophilic leukemia-not otherwise specified
  - h. MPN, unclassifiable (MPN-U)

2. A **Myelodysplastic Syndrome (MDS)** is a disorder 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:
- a. MDS with multilineage dysplasia (MDS-MLD)
  - b. MDS with single lineage dysplasia (MDS-SLD)
  - c. MDS with ring sideroblasts (MDS-RS)
  - d. MDS with excess blasts (MDS-EB)
  - e. MDS with isolated del(5q)
  - f. MDS, unclassifiable (MDS-U)

## REFERENCES

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