

# Polycythemia Vera

## DIAGNOSTIC CRITERIA OF POLYCYTHEMIA VERA ACCORDING TO THE WHO AND ICC CLASSIFICATIONS

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# Diagnostic Criteria of Polycythemia Vera (PV) according to the WHO and ICC Classifications

## WHO Diagnostic Criteria<sup>1</sup>

Diagnosis requires 3 major criteria or first 2 major criteria and minor criterion

### Major criteria

1. Elevated hemoglobin or elevated hematocrit or increased red cell mass<sup>†</sup>
2. Bone marrow biopsy showing hypercellularity for age with trilineage growth (panmyelosis), including prominent erythroid, granulocytic, and megakaryocytic proliferation with pleomorphic, mature megakaryocytes (difference in size)
3. Presence of *JAK2 V617F* or *JAK2* exon 12 mutation

### Minor criterion

- Subnormal serum erythropoietin level

## ICC Diagnostic Criteria<sup>2</sup>

Diagnosis requires 3 major criteria or first 2 major criteria and minor criterion\*

### Major criteria

1. Elevated hemoglobin or elevated hematocrit or increased red blood cell mass<sup>†</sup>
2. Bone marrow biopsy showing age-adjusted hypercellularity with trilineage proliferation (panmyelosis), including prominent erythroid, granulocytic, and increase in pleomorphic, mature megakaryocytes without atypia
3. Presence of *JAK2 V617F* or *JAK2* exon 12 mutation

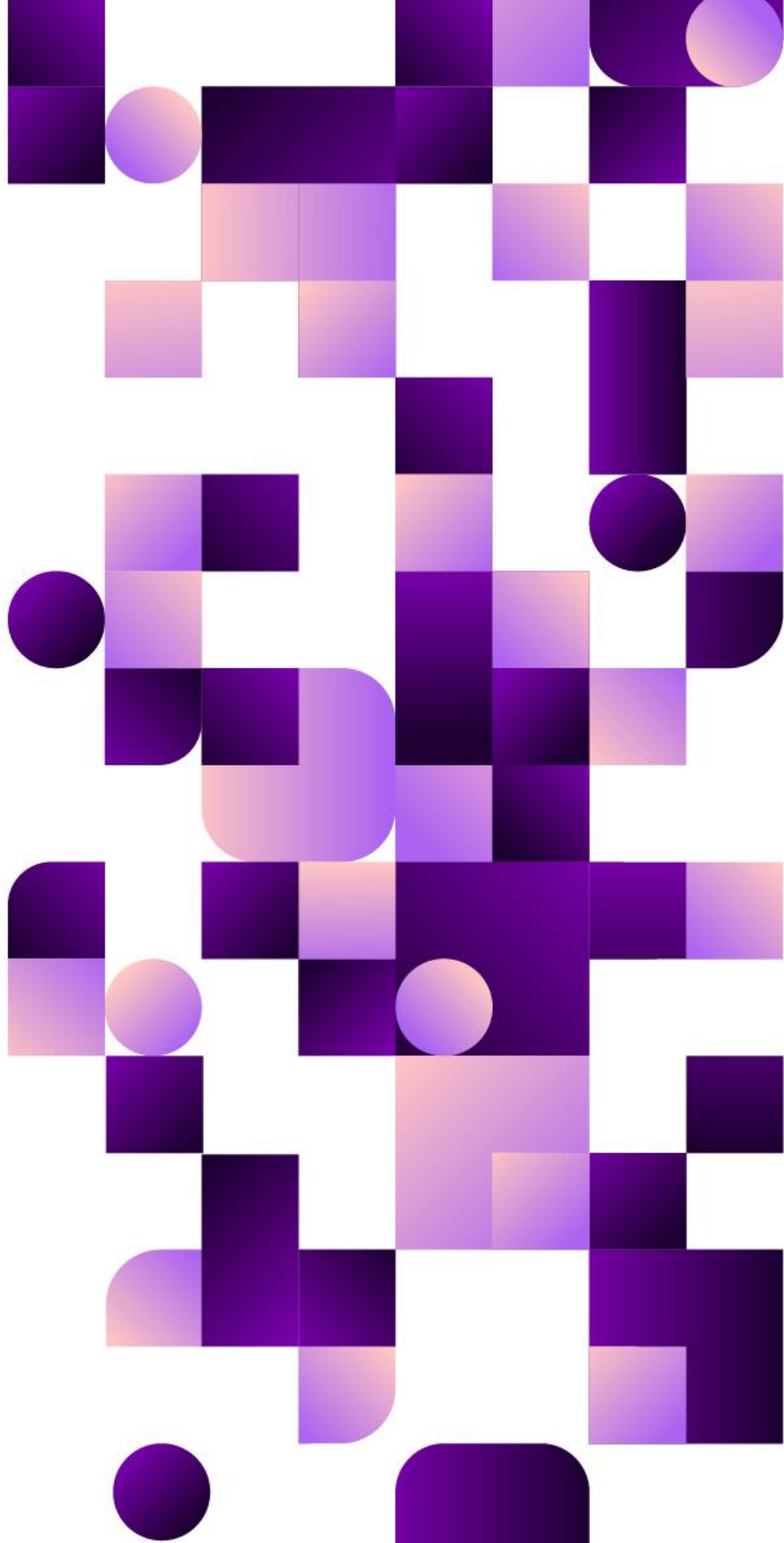
### Minor criterion

- Subnormal serum erythropoietin level

\*ICC Classification: Bone marrow biopsy may not be required in cases with sustained absolute erythrocytosis: hemoglobin >18.5 g/dL in men (hematocrit 55.5%) or >16.5 g/dL in women (hematocrit 49.5%) if major criterion 3 and the minor criterion are present.

<sup>†</sup>Diagnostic thresholds: hemoglobin: >16.5 g/dL in men and >16.0 g/dL in women; hematocrit: >49% in men and >48% in women; red blood cell mass: >25% above mean normal predicted value.





Il presente documento è il prodotto finale del progetto *Clinical Assessment of resistance and Intolerance to Hydroxyurea as Criteria for Second-line Treatment in patients with Polycythemia Vera*, condotto nel corso del 2023 e 2024 dal Working Party GIMEMA sulle Neoplasie Mieloproliferative Croniche.

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Questo progetto è stato realizzato con il supporto non condizionante di **AOP Health**.

