Clinical suspicion of myeloproliferative neoplasm

Peripheral blood testing begins with:
- Complete blood count (CBC)
- EPO / Erythropoietin (EPO), Serum*
- BCRFX / BCR/ABL1, Qualitative, Diagnostic Assay with Reflex to BCR/ABL1 p190 Quantitative Assay or BCR/ABL1 p210 Quantitative Assay OR 922F / BCR/ABL1, Translocation (9;22), FISH

**For BCR/ABL**

POSITIVE

Chronic Myeloid Leukemia Algorithm

NEGATIVE

Suspicious for polycythemia vera (PV)

**NO**

PVJAK / Polycythemia Vera, JAK2 V617F with Reflex to JAK2 Exon 12-15, Sequencing for Erythrocytosis

POSITIVE

PV**

NEGATIVE

Clinical suspicion for myeloproliferative neoplasm (MPN)

**HIGH**

MPNCM / Myeloproliferative Neoplasm (MPN), CALR with Reflex to MPL

**LOW**

REVE / Erythrocytosis Evaluation

**For JAK2 V617F**

POSITIVE

Clinical suspicion for MPN

**HIGH**

Perform bone marrow study

**LOW**

Perform bone marrow study

**STOP**

No further testing**

**For CALR and MPL**

POSITIVE

NEGATIVE

Perform bone marrow study

**STOP**

No further testing**

* *A minor criterion for PV

**In the appropriate clinicopathologic setting

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