Erythrocytosis Evaluation Testing Algorithm

Patient presents with erythrocytosis
- Polycythemia
- Elevated hemoglobin and hematocrit

Collect specimens for both:
- PVJAK / Polycythemia Vera JAK2 V617F with Reflex to JAK2 Exon 12-15, Sequencing for Erythrocytosis
- EPO / Erythropoietin (EPO), Serum*

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

**POSITIVE**

Polycythemia vera/chronic myeloproliferative neoplasm

Order test REVE / Erythrocytosis Evaluation With possible reflex to:
- Alpha Globin Gene Sequencing
- Beta Globin Gene Sequencing
- Hereditary Erythrocytosis Mutations (HIF2a, PHD2, EPOR)
- von Hippel-Lindau (VHL) Gene, Full Gene Analysis
- BPGM Full Gene Sequencing
- Alpha-Globin Gene Analysis
- Gamma Globin Full Gene Sequencing
- Beta Globin Cluster Locus Deletion/Duplication

**NEGATIVE**

Life-long erythrocytosis

Acquired erythrocytosis

* EPO level will be utilized in REVE interpretation