

## Polycythemia Following Remission from Hematologic Malignancies: A Systematic Review of Reported Cases, Molecular Insights, and Clinical Implications

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### Abstract:

**Background:** Polycythemia vera (PV) is a myeloproliferative neoplasm (MPN) driven predominantly by the JAK2V617F mutation, presenting with erythrocytosis and thrombotic risk. While PV is classically diagnosed de novo, emerging evidence has described rare but recurrent cases of PV occurring years after remission from hematologic malignancies such as acute myeloid leukemia (AML), acute lymphoblastic leukemia (ALL), undifferentiated leukemia, and Hodgkin lymphoma. This review investigates the clinical patterns, latency periods, molecular findings, and potential mechanisms behind the development of polycythemia in patients who had previously achieved complete remission from a hematologic malignancy.