Consistently evaluate high-risk patient populations for PNH[12,13]

Evaluation of the following high-risk patient populations is recommended[6,12,13]:

- Coombs-negative hemolytic anemia
- Hemoglobinuria
- AA/RA-MDS
- Unexplained cytopenias
- Unexplained thrombosis (venous or arterial)
- CKD with hemolysis

Rule PNH in or out using high-sensitivity flow cytometry* and comprehensive clinical assessment

- In patient populations at high risk for PNH, some symptoms—abdominal pain, chest pain, dyspnea, dysphagia, anemia, fatigue, and impaired health-related quality of life—are more likely to indicate PNH and should be fully evaluated[10,12,13,15]

High-sensitivity flow cytometry—performed on peripheral blood—is the gold standard diagnostic test for PNH[13]

- Flow cytometry is minimally invasive and relatively inexpensive
- When ordering a PNH flow test, request clone size for each cell lineage, including granulocytes and erythrocytes[13,16]
  - This will give a more accurate reading of true PNH clone proportion after RBC hemolysis or transfusion[13,16]
- Use high-sensitivity flow cytometry (0.01% PNH cell threshold) to ensure patients with smaller PNH clones are not missed[13,16]
- Analysis is best performed within 24 to 48 hours of drawing sample[13,16]
- As PNH clone cells can expand over time, it is important to routinely monitor patients[12]

To learn more, visit www.PNHSource.com or call 1.888.765.4747

*Detects PNH cells down to a 0.01% clone size.

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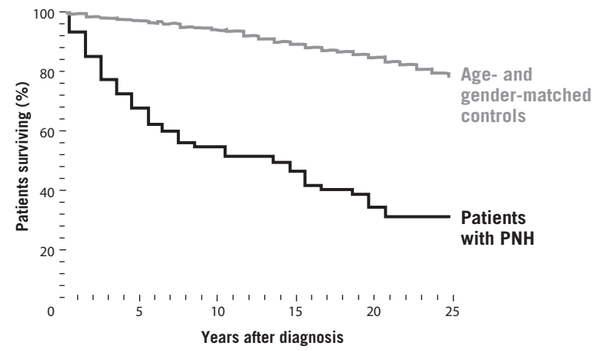
ALEXION

In PNH, chronic complement-mediated hemolysis is the underlying cause of progressive morbidities and mortality[1]

Survival of patients with PNH compared to controls[2]



From Hillmen P et al. *NEJM.* 1995.

Study description: Researchers followed 80 consecutive patients with PNH referred to Hammersmith Hospital. They were treated with supportive measures, such as oral anticoagulant therapy after established thromboses and transfusions.[2]

- 35% of patients with PNH die within 5 years of diagnosis despite historical supportive care, including anticoagulation therapy or transfusion[2]
- In PNH, chronic, complement-mediated hemolysis can lead to thrombosis, end organ damage, impaired renal function, anemia, pulmonary hypertension, and impaired health-related quality of life[3-9]
- Even in the absence of symptoms, chronic hemolysis is ongoing and destructive[10,11]
- Nearly three-fourths of patients with PNH do not present with hemoglobinuria[12]
- Early diagnosis of PNH in high-risk patient types can positively impact long-term outcomes[13,14]

2010 International Clinical Cytometry Society (ICCS) Guidelines identify patient populations at high risk for PNH[13]

Clinical indications for PNH testing[13]

Intravascular hemolysis as evidenced by hemoglobinuria or elevated plasma hemoglobin

- Evidence of unexplained hemolysis with accompanying:
  - Iron deficiency, or
  - Abdominal pain or esophageal spasm, or
  - Thrombosis (see below), or
  - Granulocytopenia and/or thrombocytopenia
- Other acquired Coombs-negative, nonschistocytic, noninfectious hemolytic anemia

Thrombosis with unusual features

- With signs of accompanying hemolytic anemia (see above)
- With unexplained cytopenia
- Unusual sites
  - Hepatic veins (Budd-Chiari syndrome)
  - Other intra-abdominal veins (portal, splenic, splanchnic)
  - Cerebral sinuses
  - Dermal veins

Evidence of bone marrow failure

- Suspected or proven aplastic or hypoplastic anemia
- Refractory cytopenia with unilineage dysplasia
- Other cytopenias of unknown etiology after adequate workup

From Borowitz MJ et al. *Cytometry Part B.* 2010.