

Early diagnosis is essential for improved patient management and prognosis¹

Identify patients with PNH early within these high-risk groups²⁻⁴

Bone marrow dysfunction		Unexplained thrombosis	Hemolysis ↑LDH or ↓haptoglobin or ↑reticulocyte count or ↑bilirubin		
C	A	T	C	H	
Cytopenia	Aplastic anemia	Venous or arterial thrombosis	Coombs-negative hemolytic anemia	Hemoglobinuria	
<i>With any of the following:</i>		<i>With any of the following:</i>			
<ul style="list-style-type: none"> Any subtype[†] with evidence of hemolysis* Non-responsive to therapy Thrombosis 	<ul style="list-style-type: none"> Screen all patients at diagnosis of AA and then at least annually thereafter 	<ul style="list-style-type: none"> Any cytopenia Evidence of hemolysis* Thrombosis despite anticoagulation Unusual sites[‡] or unusual presentation (e.g., in patients aged <50 years) 	<ul style="list-style-type: none"> Screen all patients with otherwise unexplained Coombs-negative hemolytic anemia 	<ul style="list-style-type: none"> Screen all patients with otherwise unexplained hemoglobinuria All patients with hematuria should be tested for hemoglobinuria 	
PNH clone hit rate (GPI-deficient clone ≥0.01)^{5§}					
22.4% (with anemia) 5.1% (without anemia)	44.9%	13.7% (with cytopenia or anemia)	18.6%	47.9%	

Rule out PNH in high-risk patient populations, using high-sensitivity flow cytometry⁵ in peripheral blood, and perform clinical assessment (including testing for LDH levels ≥1.5x ULN) within these patient populations

LDH, lactate dehydrogenase; MDS, myelodysplastic syndrome; ULN, upper limit of normal.

* Defined as ↑LDH or ↓haptoglobin or ↑reticulocyte count or ↑bilirubin.

† Anemia, neutropenia, thrombocytopenia, or pancytopenia.

‡ E.g., splanchnic vein thrombosis (including Budd–Chiari syndrome), cerebral sinuses, retinal and dermal veins.

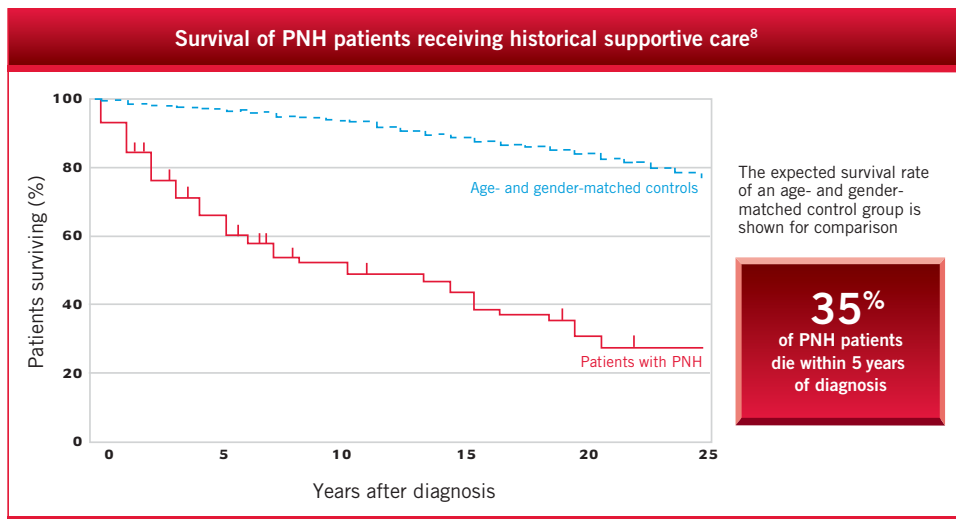
§ 0.01% GPI-deficient cell population threshold.

International Clinical Cytometry Society (ICCS) Guidelines and other expert findings suggest that the clinical presentations outlined above increase the likelihood of PNH.^{2,3,5-7}

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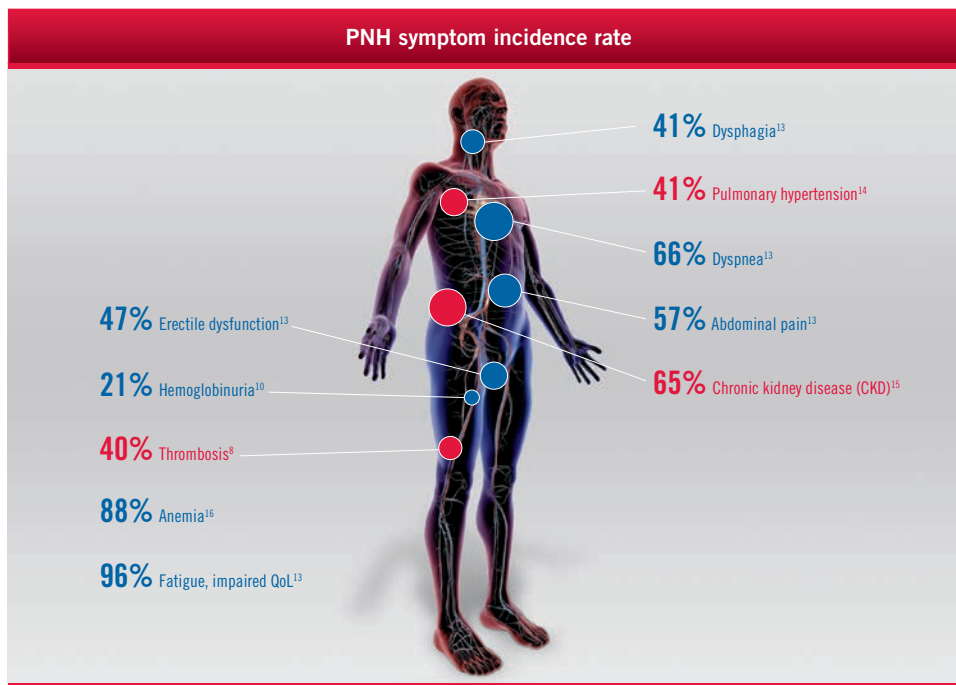
35% of hemolytic PNH patients die within 5 years of diagnosis, despite historical supportive care⁸



- 40–67% of PNH deaths are due to thrombosis⁹
- The diverse and common symptomatology of PNH can delay diagnosis by up to 10 years^{3,10,11}

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.

Chronic complement-mediated hemolysis is the underlying cause of progressive morbidities and mortality in PNH¹²



Early diagnosis of PNH is critical to reduce the devastating effects of hemolysis and to improve patient outcomes¹

Chronic complement-mediated hemolysis leads to devastating consequences^{12,14}

Signs and symptoms of high disease activity in PNH include elevated LDH ($\geq 1.5 \times \text{ULN}$) plus at least one of the following:¹⁷

Fatigue	Anemia (Hb < 100 g/L)
Hemoglobinuria	Major adverse vascular event (including thrombosis)
Abdominal pain	Dysphagia
Dyspnea	Erectile dysfunction