# UNCOVERING HEMOLYSIS

Paroxysmal nocturnal hemoglobinuria (PNH) is a rare and complex blood disease that involves the destruction of red blood cells and can present as anemia, blood clots and/or bone marrow failure. One aspect of PNH is hemolysis, the destruction of red blood cells.

This resource will help you better understand the role hemolysis plays in PNH, inform your care choices, and help you feel more in control of your PNH.

If you have any questions or concerns, be sure to discuss them with your health care provider.





TO LEARN MORE ABOUT PNH, VISIT:

**EXPLOREPNH.COM/HELPFUL-RESOURCES** 

# TAKE A CLOSER LOOK AT PNH



With PNH, some of your red blood cells are missing certain proteins that protect them. Without this protection, they are attacked and destroyed by a part of the immune system called the complement system. **This destruction of red blood cells is called hemolysis.** 

## **HEMOLYSIS CAN OCCUR IN TWO WAYS:**



IVH (intravascular hemolysis)

occurs within blood vessels (like arteries and veins) and can be life-threatening if left untreated.

IVH is like an obvious leak that, if not repaired, can quickly sink a boat.



EVH (extravascular hemolysis) occurs outside of blood vessels (in

the liver and spleen) and can cause ongoing symptoms and anemia.

EVH is like a secondary leak that can damage a boat if left unrepaired.

#### IVH AND EVH ARE LIKE TWO LEAKS IN A BOAT.

BOTH SHOULD BE ADDRESSED.

### BOTH IVH AND EVH SHOULD BE ACCOUNTED FOR IN THE MANAGEMENT OF PNH

C5 inhibitors are the most common PNH treatments available today and are given by infusion. C5 inhibitors only address IVH, not EVH. In some patients, this may be one of the reasons for ongoing hemolysis and lower-than-normal hemoglobin levels.

Additional research is being conducted to study if parts of the complement system other than C5 may impact both IVH and EVH.

LEARN MORE AT **EXPLOREPNH.COM/STAY-ENGAGED** 

### **KEY TERMS**

**PNH:** Paroxysmal nocturnal hemoglobinuria, a rare and complex blood disease that is characterized by hemolysis, blood clots (thrombosis), and bone marrow failure.

**IVH:** Intravascular hemolysis, the destruction of red blood cells within blood vessels (like veins and arteries).

**EVH:** Extravascular hemolysis, the destruction of red blood cells outside of the blood vessels (within the liver and spleen).

**Complement system:** A group of proteins in the immune system that supports (complements) its ability to fight infections.

C5: Complement component 5, a protein in the complement system that plays an important role in IVH.

**C5 inhibitors:** The most common type of PNH treatment available today, which block IVH by inhibiting complement 5 activity.

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