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Patients With Paroxysmal Nocturnal Hemoglobinuria and Clinically Significant Extravascular Hemolysis on Ravulizumab or Eculizumab Showed Hemoglobin Response Superiority With Add-on Danicopan vs Placebo

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PLAIN LANGUAGE SUMMARY

Why did we perform this research?

- In paroxysmal nocturnal hemoglobinuria (also known as PNH), part of the body's defense system called the complement system is overactivated.
- People with PNH have complications such as fatigue, organ damage, and frequent blood clots (also known as thrombosis) that can lead to death.
- Ravulizumab and eculizumab are types of treatment known as 'complement inhibitors.' They work by binding to a protein in the immune system (also known as 'complement component 5') which helps reduce the symptoms of PNH, including blood clots, reduce mortality, and improve patient quality of life.
- Even with these treatments, 10-20% of patients still experience symptoms of tiredness due to lack of red blood cells, called anemia. These patients might need blood transfusions to increase the number of red blood cells in their body.
- A new oral investigational drug called danicopan targets a protein called factor D that is part of the complement system. It may help decrease the number of patients with PNH that still experience anemia even with ravulizumab or eculizumab treatment. It is important to understand danicopan's benefits and risks.

How did we perform this research?

- In this study, individuals who were previously treated for PNH with complement inhibitors eculizumab or ravulizumab were given danicopan or a placebo (a pill with inactive ingredients) for 12 weeks in addition to either ravulizumab or eculizumab. The study looked at the following characteristics after the 12 weeks:
  - Disease markers of anemia (for example, hemoglobin levels, absolute reticulocyte count, and the need for blood transfusions)
  - How tired and weak a person feels, which is also known as fatigue, measured by the FACIT-Fatigue scale
  - Safety as measured by side effects from the drug

What were the findings of this research and what are the implications?

- This study found that people with PNH on either eculizumab or ravulizumab plus danicopan as add-on treatment showed improved outcomes of anemia activity (ie, improved hemoglobin levels, reduction in absolute reticulocyte count, and fewer patients needing transfusions) compared to those treated with placebo as add-on treatment.
- Overall, patients who took add-on danicopan were less tired than those who took add-on placebo.
- They did not experience unexpected or serious side effects.
- These results suggest that the addition of oral danicopan helps improve outcomes in patients who continue to experience symptoms of anemia after treatment with eculizumab or ravulizumab. Danicopan may improve quality of life and reduce the need for transfusions in these patients.
- Currently, danicopan is not approved for PNH treatment.

Where can I access more information?

- More information can be found at ClinicalTrials.gov

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