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Long-term Safety and Efficacy of Repeat Caplacizumab Use Assessed in Post-HERCULES Study

This infographic is intended for researchers and healthcare professionals and reflects the contents of the following article:

Scully, M., de la Rubia, J., Pavenski, K., Metjian, A., Knöbl, P., Peyvandi, F., ... & Lin, J. (2022). Long-term Follow-up of Patients Treated with Caplacizumab and Safety and Efficacy of Repeat Caplacizumab Use: Post-HERCULES Study. *Journal of Thrombosis and Haemostasis*, 20(12), 2810–2822. <u>https://doi.org/10.1111/jth.15892</u>

Overview of immune-mediated thrombotic thrombocytopenic purpura (iTTP) iTTP is a rare, life-threatening haematologic disorder Microthrombi formation Autoantibody-induced Accumulation of deficiency of Severe platelet-adhesive ADAMTS13, thrombocytopenia ultra-large VWF an enzyme that Microangiopathic multimers cleaves VWF haemolytic anaemia Tissue ischaemia ADAMTS13: a disintegrin and metalloproteinase with a thrombospondin type 1 motif, member 13; VWF: von Willebrand factor

Long-term follow-ups suggest that recovery from an iTTP episode may often be incomplete

- 30%–50% risk of relapse
- Persistent deficits in physical and cognitive functioning Impaired quality of life

Higher risk of comorbidities

- Depression
- · Hypertension and stroke
- Chronic renal disease
 Autoimmune diseases



a targeted therapy for iTTP Bivalent, humanized antibody fragment that targets the A1 domain of VWF

Caplacizumab:

Prevents the binding of platelets to ultra-large VWF multimers

Inhibits the formation of microthrombi

Phase 3 HERCULES trial – efficacy and safety of caplacizumab



Patients with iTTP: caplacizumab treatment vs placebo Decreased incidence of composite iTTP-related death, refractory disease, recurrences, and major thrombotic events

Post-HERCULES study: long-term monitoring

Data on long-term outcomes following caplacizumab treatment are lacking

A multic

A multicentre, 3-year prospective follow-up to:

- Evaluate long-term outcomes of patients treated with caplacizumab
- Evaluate the safety and efficacy of repeated caplacizumab use in patients experiencing recurrent iTTP
- Characterize the long-term clinical impact of iTTP

Study populations



Overall intention-to-observe (ITO) population (n = 104): patients who completed HERCULES



Recurrence population (n = 19): patients who experienced ≥1 iTTP recurrence post-HERCULES Repeat-use population (n = 9): patients treated at least twice with caplacizumab

Efficacy ITO population (n = 78):

patients who had not experienced iTTP exacerbation or relapse prior to post-HERCULES

Safety and immunogenicity during repeated caplacizumab use were assessed in this population



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