

Time for newer approach in age-old AIHA: Daratumumab?

Sigbjørn Berentsen^{a,*} and Suvro Sankha Datta^b

^aDepartment of Research and Innovation, Haugesund Hospital, Helse Fonna Hospital Trust, Haugesund, Norway

^bTata Medical Centre, Department of Transfusion Medicine, Kolkata, West Bengal, India

In a recently pre-published letter in *Lancet Regional Health Southeast Asia*,¹ Pallavi Mehta comments on our viewpoint article titled “Management of autoimmune haemolytic anaemia in low-to-middle income countries: current challenges and the way forward.”² We want to thank Dr. Mehta for commenting, as part of the intention of our article was to create discussion, which might contribute to improvement of clinical practice.

However, we disagree with the suggestion of using daratumumab in the second line in warm-antibody autoimmune haemolytic anaemia (wAIHA). In Dr. Mehta’s clinical experience, daratumumab has produced a 100% remission rate even after the first dose; number of patients and response criteria not mentioned.¹ The use of daratumumab in this setting was first reported by Schuetz and colleagues, who described 2 patients with life-threatening wAIHA after stem cell transplantation who were successfully treated with daratumumab and a third patient who suffered a lethal relapse.³ Two case observations have been published on successful daratumumab therapy for refractory cold agglutinin disease (CAD).^{4,5} Also cited by Dr. Mehta, a French retrospective series on daratumumab in autoimmune cytopenias reported response in 1 of 2 patients with wAIHA and Evans’ syndrome.⁶ As single case reports are prone to publication bias, these data hardly give any indication on response rates or frequency of toxicity.

More reliable data can be derived from a recent, multinational retrospective study of 19 patients treated with daratumumab for refractory wAIHA (n = 12) or CAD (n = 7).⁷ In this cohort, 6/12 patients with wAIHA had a response with a modest median response duration at 5.5 months (range, 2–12 months), while 3/7 patients with CAD experienced a sustained response. Furthermore, administering daratumumab on the background of warm autoantibodies could make pre-transfusion

testing even more challenging in resource-constrained settings due to limited access to the mitigation strategies, which may cause delay in transfusion.⁸ Finally, regarding its use in low-to-middle income countries, daratumumab is even more expensive than rituximab.

Based on these results, daratumumab can be considered as an option for rescue therapy in patients with multirefractory wAIHA or CAD, but not as a second-line therapy.

Declaration of interests

S.B. has received consultancy and advisory board honoraria from BeiGene, HillStar Bio, Hummingbird Bioscience, Sanofi, and Sobi, and lecture honoraria from BeiGene, Janssen-Cilag, Sanofi, and Sobi. S.S.D. declares no conflicts of interest.

References

- 1 Mehta P. Time for newer approach in age-old AIHA. *Lancet Reg Health Southeast Asia*. 2024;23:100378. <https://doi.org/10.1016/j.lansea.2024.100378>.
- 2 Datta SS, Berentsen S. Management of autoimmune haemolytic anaemia in low-to-middle income countries: current challenges and the way forward. *Lancet Reg Health Southeast Asia*. 2023;23:100343. <https://doi.org/10.1016/j.lansea.2023.100343>.
- 3 Schuetz C, Hoenig M, Moshous D, et al. Daratumumab in life-threatening autoimmune hemolytic anemia following hematopoietic stem cell transplantation. *Blood Adv*. 2018;2(19):2550–2553.
- 4 Tomkins O, Berentsen S, Arulogun S, Sekhar M, D’Sa S. Daratumumab for disabling cold agglutinin disease refractory to B-cell directed therapy. *Am J Hematol*. 2020;95(10):E293–E295.
- 5 Zaninoni A, Giannotta J, Galli A, et al. The immunomodulatory effect and clinical efficacy of daratumumab in a patient with cold agglutinin disease. *Front Immunol*. 2021;12:649441. <https://doi.org/10.3389/fimmu.2021.649441>.
- 6 Crickx E, Audia S, Robbins A, et al. Daratumumab, an original approach for treating multi-refractory autoimmune cytopenia. *Haematologica*. 2021;106(12):3198–3201.
- 7 Jalink M, Jacobs CF, Khwaja J, et al. Daratumumab monotherapy in refractory warm autoimmune hemolytic anemia and cold agglutinin disease. *Blood Adv*. 2024. <https://doi.org/10.1182/blood-advances.2024012585>. online ahead of print.
- 8 Biswas D, Basu D, Nag A, Kumar J, Datta SS. A brief report on pre-transfusion testing in patients receiving the anti-CD38 monoclonal antibody for hematological disorders in India. *Indian J Hematol Blood Transfus*. 2024. <https://doi.org/10.1007/s12288-024-01763-5>. online ahead of print.



The Lancet Regional Health - Southeast Asia 2024;25: 100410

Published Online xxx
<https://doi.org/10.1016/j.lansea.2024.100410>

DOI of original article: <https://doi.org/10.1016/j.lansea.2024.100378>

*Corresponding author.

E-mail address: sigbjorn.berentsen@haugnett.no (S. Berentsen).

© 2024 The Author(s). Published by Elsevier Ltd. This is an open access article under the CC BY-NC license (<http://creativecommons.org/licenses/by-nc/4.0/>).