A decorative horizontal bar on the left side of the slide, consisting of three stacked rectangles: purple (top), teal (middle), and yellow (bottom).

## Understanding Daratumumab Interference With Blood Compatibility Testing

# To Ensure Timely Transfusions

## REMEMBER

*For a patient who may receive DARZALEX Faspro® (daratumumab and hyaluronidase-fihj) or DARZALEX® (daratumumab) and may require a transfusion:*



Type and screen patients prior to starting daratumumab and inform the blood bank that your patient has been treated with daratumumab



Ensure that your patient's blood sample is identified as treated with daratumumab



Double-check standing orders for transfusions to determine if your patient received daratumumab within the last year



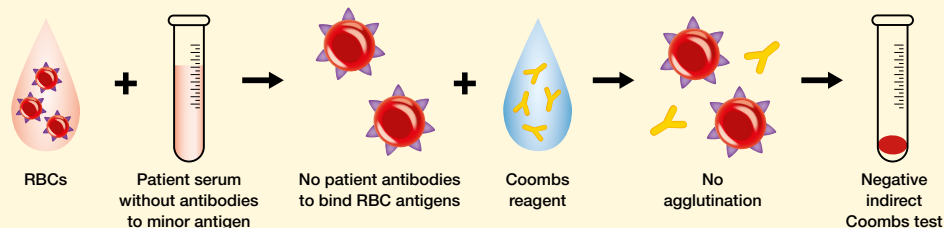
Provide your patient's pre-daratumumab compatibility profile, if available, to the blood bank



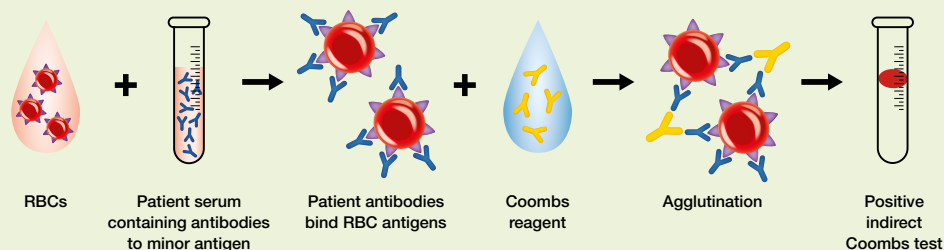
Ask your patient to tell their other healthcare providers that they have received daratumumab, particularly before a transfusion

# Daratumumab Results in a False Positive Indirect Coombs Test

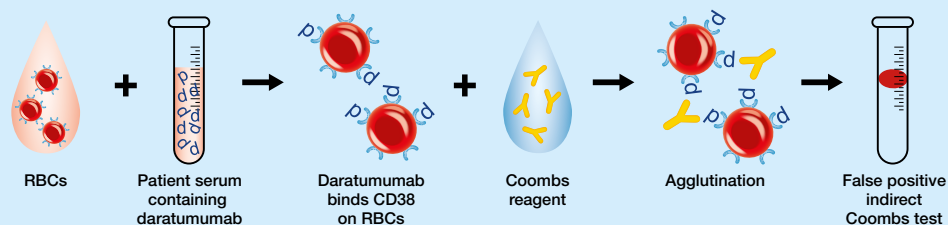
## Typical Negative Indirect Coombs Test



## Typical Positive Indirect Coombs Test



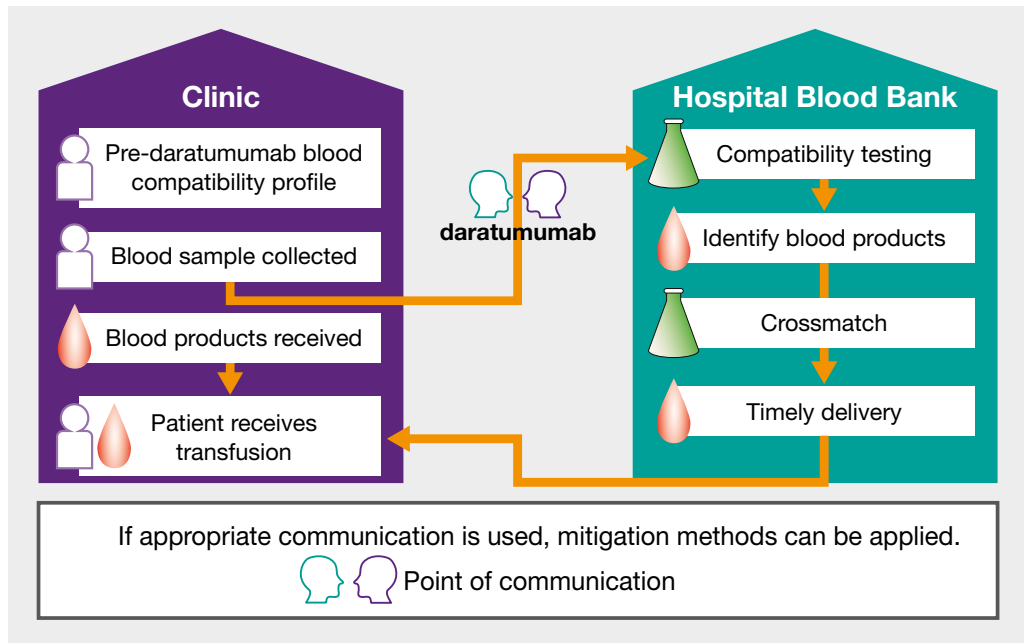
## Typical Indirect Coombs Test From a Patient Treated With Daratumumab



RBCs, red blood cells.

- Daratumumab binds to CD38,<sup>1</sup> a protein that is expressed on red blood cells (RBCs)<sup>2-4</sup>
- Daratumumab binding to RBCs interferes with blood bank compatibility tests, including the antibody screening and crossmatching<sup>1</sup> (both indirect Coombs tests) that are part of a routine pretransfusion workup

# Help Prevent Blood Transfusion Delays



- Blood compatibility testing can still be performed on daratumumab-treated patients
- Blood products for transfusion can be identified for daratumumab-treated patients using protocols available in the literature<sup>1,5</sup> or by using genotyping
- **To ensure that your patient receives a timely transfusion, type and screen patients prior to starting daratumumab and inform the blood bank that they will receive a daratumumab-treated sample**

**Note:** Additional information to share with your blood banks can be found in the Prescribing Information.



## Daratumumab Interference Is Clinically Manageable

- Daratumumab does not interfere with identification of ABO/RhD antigens
- If an emergency transfusion is required, noncrossmatched, ABO/RhD-compatible RBCs can be given, per local blood bank practices<sup>5</sup>
- Once treatment with daratumumab is discontinued, panagglutination may persist; the duration of this effect varies from patient to patient, but may persist for up to 6 months after the last daratumumab infusion<sup>5</sup>



## Additional Resources

**For additional information, please contact Janssen Medical Information by using one of the following methods:**

**Phone:** Call 1-800-JANSSEN (1-800-526-7736)

**Email:** Submit questions via our [askjanssenmedinfo.com](https://askjanssenmedinfo.com) site

**Search:** [www.janssenmd.com](https://www.janssenmd.com)

**Contact your local Medical Science Liaison:** [www.janssenmsl.com](https://www.janssenmsl.com)

## References

1. Chapuy CI, Nicholson RT, Aguad MD, et al. Resolving the daratumumab interference with blood compatibility testing. *Transfusion*. 2015;55(6 Pt 2):1545-1554.
2. Albeniz I, Demir O, Türker-Sener L, Yalcintepe L, Nurten R, Bermek E. Erythrocyte CD38 as a prognostic marker in cancer. *Hematology*. 2007;12(5):409-414.
3. Mehta K, Shahid U, Malavasi F. Human CD38, a cell-surface protein with multiple functions. *FASEB J*. 1996;10(12):1408-1417.
4. Zocchi E, Franco L, Guida L, et al. A single protein immunologically identified as CD38 displays NAD<sup>+</sup> glycohydrolase, ADP-ribosyl cyclase and cyclic ADP-ribose hydrolase activities at the outer surface of human erythrocytes. *Biochem Biophys Res Commun*. 1993;196(3):1459-1465.
5. Oostendorp M, Lammerts van Bueren JJ, Doshi P, et al. When blood transfusion medicine becomes complicated due to interference by monoclonal antibody therapy. *Transfusion*. 2015;55(6 Pt 2):1555-1562.

