

The gap narrows but shifts. Response to Comment on: "Mind the gap: anti-PD-1 salvage before autologous transplantation in classical Hodgkin lymphoma"

by Daniel Noerenberg

Received: May 22, 2026.

Accepted: May 27, 2026.

Citation: Daniel Noerenberg. *The gap narrows but shifts. Response to Comment on: "Mind the gap: anti-PD-1 salvage before autologous transplantation in classical Hodgkin lymphoma"*. *Haematologica*. 2026 June 4. doi: 10.3324/haematol.2026.301293 [Epub ahead of print]

Publisher's Disclaimer.

E-publishing ahead of print is increasingly important for the rapid dissemination of science.

Haematologica is, therefore, E-publishing PDF files of an early version of manuscripts that have completed a regular peer review and have been accepted for publication.

E-publishing of this PDF file has been approved by the authors.

After having E-published Ahead of Print, manuscripts will then undergo technical and English editing, typesetting, proof correction and be presented for the authors' final approval, the final version of the manuscript will then appear in a regular issue of the journal.

All legal disclaimers that apply to the journal also pertain to this production process.

The gap narrows but shifts. Response to Comment on: "Mind the gap: anti-PD-1 salvage before autologous transplantation in classical Hodgkin lymphoma"

Daniel Noerenberg

Charité – Universitätsmedizin Berlin, corporate member of Freie Universität Berlin, Humboldt Universität zu Berlin, and Berlin Institute of Health, Department of Hematology, Oncology, and Cancer Immunology, Berlin, Germany

Correspondence: daniel.noerenberg@charite.de

Conflicts of interest: none related to this article.

Keywords: Hodgkin lymphoma, brentuximab vedotin, nivolumab, anti-PD-1, autologous transplant

Word count: 464 words (text only, excluding references)

Tharmaseelan and von Tresckow provide a valuable update to the discussion around anti-PD-1-based salvage in classical Hodgkin lymphoma (cHL).¹⁻³ The European Commission approval of nivolumab plus brentuximab vedotin (BV) for patients aged 5–30 years with relapsed or refractory cHL after one prior therapy line, based on CheckMate-744, is the first immunotherapy-based salvage regimen licensed in Europe for this setting and directly addresses the regulatory gap identified in both the original analysis and the editorial.⁴

Notably, CheckMate-744 excluded patients with prior exposure to anti-PD-1 antibodies or BV.³ This exclusion has growing practical relevance as frontline regimens increasingly incorporate these agents. In Europe, BrECADD is emerging as a preferred advanced-stage option, particularly in German-speaking countries, replacing escalated BEACOPP and introducing BV into first-line treatment.⁵ In the United States, the recent FDA approval of nivolumab plus AVD based on the SWOG S1826 trial shifts frontline exposure toward anti-PD-1 therapy.⁶ Whether patients relapsing after BV- or anti-PD-1-containing frontline regimens respond to nivolumab plus BV with comparable efficacy is unknown, and such patients may not clearly fall within the scope of the current approval. The practical window in which the CheckMate-744-based indication applies, that is, patients within the age range who relapse after frontline therapy without BV or anti-PD-1 exposure, remains sizable today, particularly after limited-stage treatment with ABVD or AVD, but will narrow as frontline practice continues to evolve.

At the same time, the anti-PD-1 plus chemotherapy combinations that dominate salvage practice in adults beyond the approved age range and that produced CR rates exceeding 85% in phase II studies remain unapproved in the second-line transplant-eligible setting.⁷⁻⁹ The post-

consolidation data from the original multicenter analysis by Tharmaseelan et al. add a useful nuance here: the pre-transplant CR rate was 47.7%, yet 97% of evaluable patients achieved CR after transplant consolidation, including seven of eight patients who had only a partial remission after anti-PD-1 monotherapy.¹ This does not diminish the value of achieving deep remissions before transplant, but it suggests that the post-consolidation outcome, rather than the induction CR rate alone, may be the more appropriate benchmark when comparing salvage regimens. If confirmed in larger cohorts, this perspective could temper cross-trial comparisons of induction CR rates between approaches such as nivolumab plus BV and anti-PD-1 plus multi-agent chemotherapy, provided transplant consolidation remains part of the strategy. For patients in whom transplant is not intended, the CheckMate-744 low-risk cohort offers preliminary evidence that nivolumab plus BV followed by involved-site radiotherapy can achieve durable remissions without high-dose chemotherapy, though the small sample size and the restriction to a younger, lower-risk population limit generalizability.¹⁰

Closing the remaining gap will require randomized trials comparing anti-PD-1-based salvage against standard platinum-based regimens in transplant-eligible adults without age restriction, ideally stratified by prior frontline exposure.

References

1. Tharmaseelan H, Sgonina LM, Bühnen I, et al. Anti-programmed cell death protein 1-based salvage therapy for relapsed and refractory Hodgkin lymphoma: a multicenter real-world analysis. *Haematologica*. xxx
2. Noerenberg D. Mind the gap: anti-PD-1 salvage before autologous transplantation in classical Hodgkin lymphoma. *Haematologica*. xxx
3. Tharmaseelan H, von Tresckow B. On closing the gap: anti-PD-1-based salvage in relapsed/refractory classical Hodgkin lymphoma. Comment on: “Mind the gap: anti-PD-1 salvage before autologous transplantation in classical Hodgkin lymphoma”. *Haematologica*. xxx
4. Harker-Murray P, Mauz-Körholz C, Leblanc TM, et al. Nivolumab, brentuximab vedotin, +/- bendamustine for R/R Hodgkin lymphoma in children, adolescents, and young adults. *Blood*. 2023;141(17):2075-2084.
5. Borchmann P, Ferdinandus J, Kobe C, et al. BrECADD as first-line treatment in advanced-stage Hodgkin lymphoma: the HD21 randomized clinical trial. *JAMA*. 2024;331(22):1921-1932.
6. Herrera AF, LeBlanc M, Castellino SM, et al. Nivolumab+AVD in advanced-stage classic Hodgkin's lymphoma. *N Engl J Med*. 2024;391(15):1379-1389.
7. Moskowitz AJ, Shah G, Schöder H, et al. Phase II trial of pembrolizumab plus gemcitabine, vinorelbine, and liposomal doxorubicin as second-line therapy for relapsed or refractory classical Hodgkin lymphoma. *J Clin Oncol*. 2021;39(28):3109-3117.
8. Bryan LJ, Casulo C, Allen PB, et al. Pembrolizumab added to ifosfamide, carboplatin, and etoposide chemotherapy for relapsed or refractory classic Hodgkin lymphoma. *JAMA Oncol*. 2023;9(5):683-691.
9. Mei MG, Lee HJ, Palmer JM, et al. Response-adapted anti-PD-1-based salvage therapy for Hodgkin lymphoma with nivolumab alone or in combination with ICE. *Blood*. 2022;139(25):3605-3616.

10. Daw S, Cole PD, Hoppe BS, et al. Transplant-free approach in relapsed Hodgkin lymphoma in children, adolescents, and young adults: a nonrandomized clinical trial. *JAMA Oncol.* 2025;11(3):249-257.