

# Bleomycin omission in limited-stage classic Hodgkin lymphoma with negative PET scan after two cycles of ABVD

## Authors

---

Jiayu Yang,<sup>1</sup> Diego Villa,<sup>1,2</sup> Alina S. Gerrie,<sup>1,2</sup> R. Petter Tonseth,<sup>3</sup> Don C. Wilson,<sup>3</sup> François Bénard,<sup>3</sup> Graham W. Slack,<sup>2,4</sup> Christopher P. Venner,<sup>1,2</sup> Andrea C. Lo,<sup>2,5</sup> David W. Scott,<sup>1,2</sup> Laurie H. Sehn<sup>1,2</sup> and Kerry J. Savage<sup>1,2</sup>

<sup>1</sup>Division of Medical Oncology, University of British Columbia;

<sup>2</sup>Center for Lymphoid Cancer, BC Cancer; <sup>3</sup>Department of Radiology, University of British Columbia; <sup>4</sup>Department of Pathology, University of British Columbia and <sup>5</sup>Department of Radiation Oncology, University of British Columbia, Vancouver, British Columbia, Canada

Correspondence:

K. J. SAVAGE - ksavage@bccancer.bc.ca

<https://doi.org/10.3324/haematol.2025.289285>

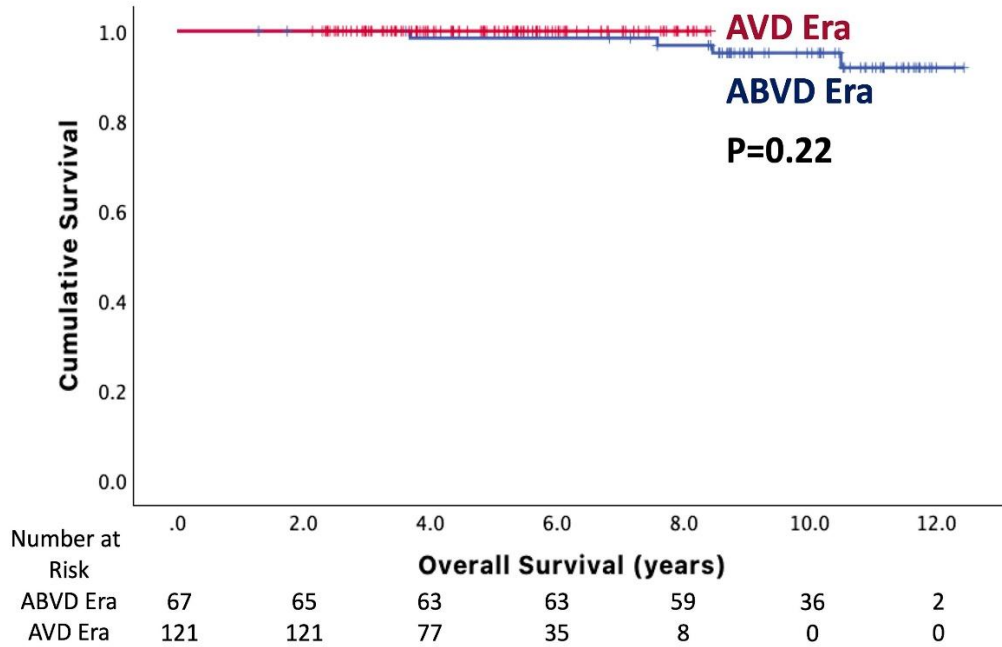
Received: October 17, 2025.

Accepted: January 23, 2026.

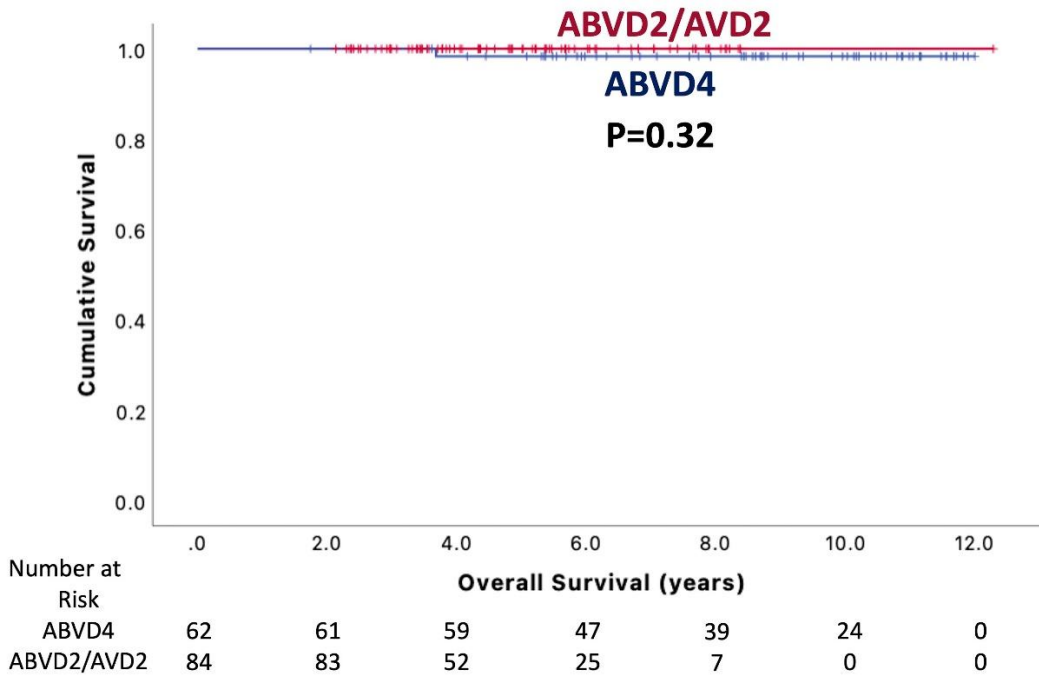
Early view: March 5, 2026.

©2026 Ferrata Storti Foundation

Published under a CC BY-NC license 

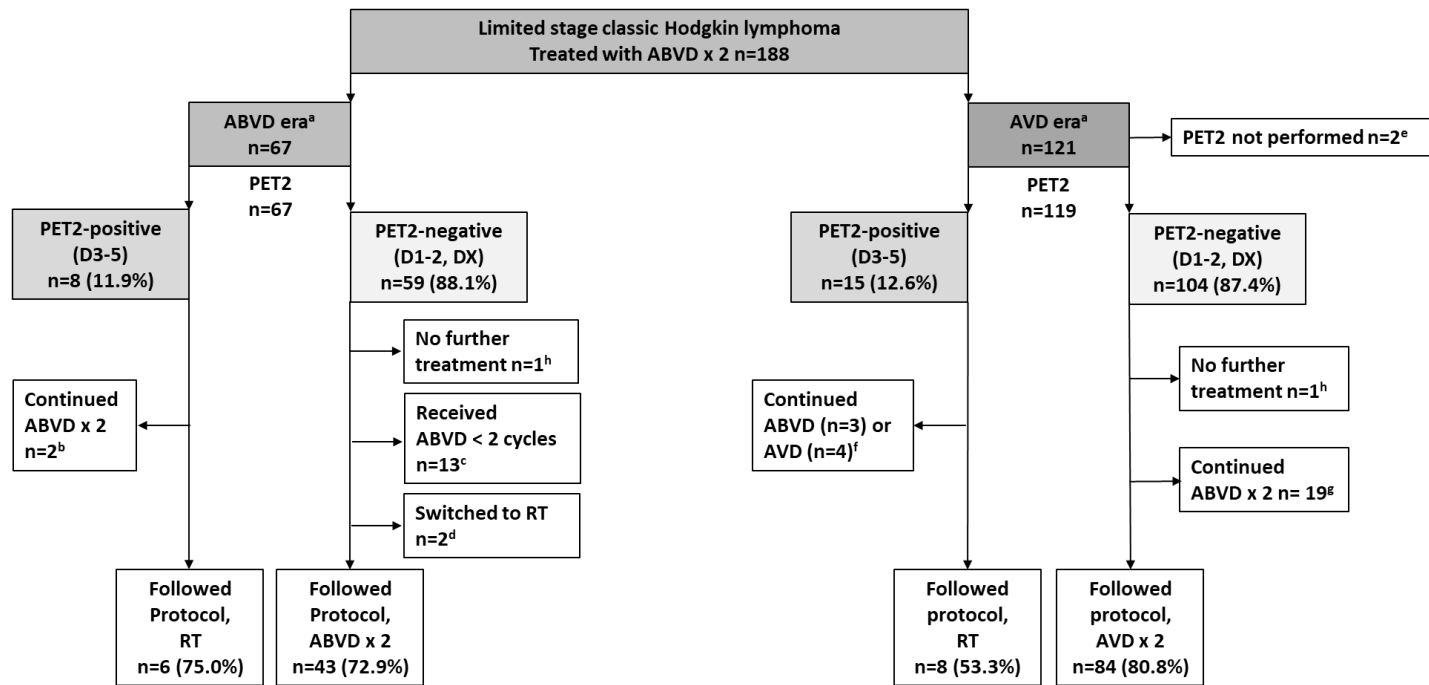


**A.**



**B.**

**Supplemental Figure 1. Overall survival for limited stage classic Hodgkin lymphoma patients (A) All patients (n=188): ABVD era vs. AVD era (B) PET2-negative scan (n=146) following 2 cycles of ABVD treated with subsequent ABVD x 2 vs. AVD x 2**



**Supplemental Figure 2. CONSORT diagram outlining treatment received for all limited stage classic Hodgkin lymphoma patients diagnosed December 2011 to June 2022 by treatment era. ABVD era 2011-Jan 2016; AVD era Jan 2016-2022.**

D=Deauville. RT=radiotherapy

<sup>a</sup> Did not receive full ABVD x 2 pre-PET2 (n=2): ABVD x 1 then AVD (patient decision n=1, ABVD era); ABVD x 1.5 then AVD (suspected bleomycin toxicity not confirmed n=\*1, AVD era see also <sup>f</sup>); one case each had a PET scan after cycle 3 (ABVD era) or after cycle 1 (AVD era) due to scheduling (both PET-negative and included with PET2-negative analyses)

<sup>b</sup>ABVD era PET2-positive (PET2 D3) ABVD continued (MD choice n=2)

<sup>c</sup>ABVD era PET2-negative received ABVD < 2 cycles (n=13): AVD x 1 (bleomycin hypersensitivity post cycle 2B and then poor tolerance n=1); ABVD x 1 (patient decision n=1); ABVD/AVD x total 2 cycles (bleomycin pulmonary toxicity n=1)

<sup>d</sup>ABVD era PET2-negative switched to RT (n=2)(poor tolerance n=1; bleomycin toxicity n=1)

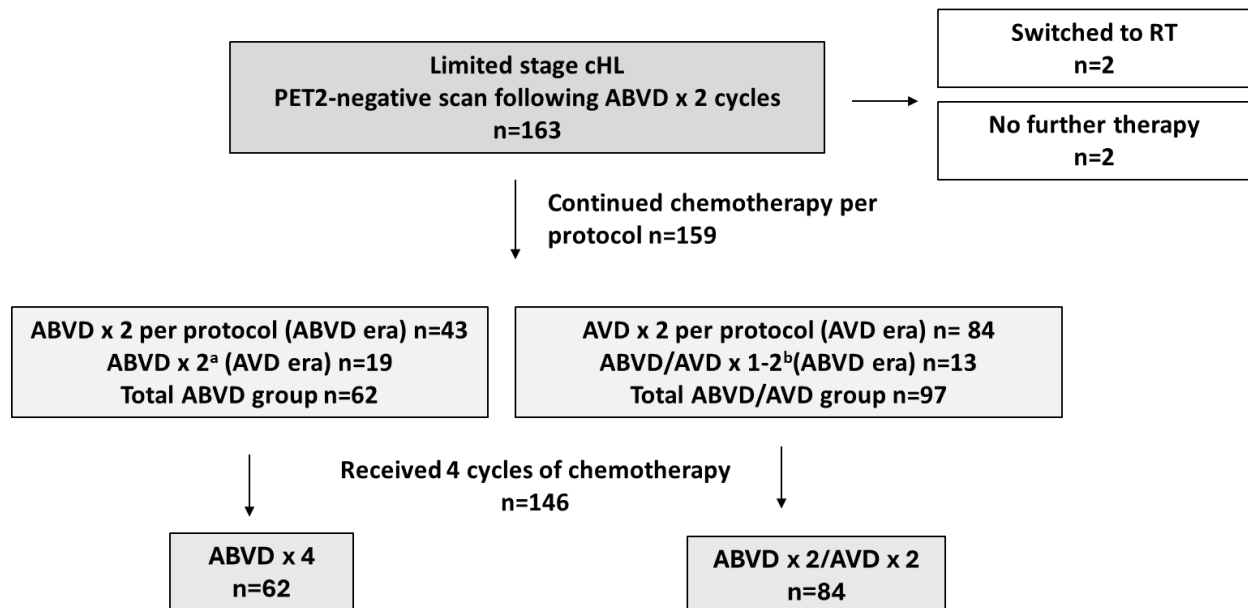
<sup>e</sup>AVD era PET2 not performed (patient decision n=2): Treatment received - ABVD x 2 + RT n=1; ABVD x 4 n=1

<sup>f</sup>AVD era PET2-positive continued ABVD or AVD (n=7): PET2 D4 ABVD x 2 or 4 (MD choice 1 patient each), PET2 D3 AVD x 2 (MD choice n=4); ABVD x 1.5 →?bleomycin toxicity AVD cycle 2B normal PFTs → PET2 D3 → ABVD cycle 3A → AVD cycle 3B/4 (MD choice n=1\*)

<sup>g</sup>AVD era PET2-negative continued ABVD x 2 (MD choice n=19)

<sup>h</sup>Following ABVD x 2, PET2-negative, no further treatment (patient decision n=2 (1 in each era))

\*Same patient



**Supplemental Figure 3. CONSORT diagram of limited stage classic Hodgkin lymphoma PET2-negative cases**

Note: Analyses are in patients who received subsequent chemotherapy alone; 1 case each had PET scan after cycle 3 or cycle 1 and are included in PET2-negative analysis.

<sup>a</sup>ABVD continued in AVD era by MD choice

<sup>b</sup>Received < 2 cycles of ABVD due to bleomycin toxicity or MD choice (see Supplemental Figure 2<sup>c</sup>)