EUROPEAN HEMATOLOGY ASSOCIATION

EHA-MSH Hematology Tutorial

Clinical Case – Session 3: Treatment of Newly Diagnosed Hodgkin Lymphoma

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Learning objectives

During the course of this activity, attendees will:

- Learn about the latest trends in the treatment of newly diagnosed Hodgkin lymphoma
- Explore how we can best treat Hodgkin lymphoma in resource-limited settings

Disclosures

- The information, views, and opinions presented herein are those of the presenter
- Opinions expressed herein are solely those of the presenter and do not express the views or opinions of their employer or institution
- The presenter has no conflicts of interest to disclose as related to companies or products mentioned in this presentation

Clinical history

- Female patient; age 40 years
- Presented with cough, chest pain, and weight loss of 3 months' duration
- CT scan (July 25, 2022) showed large right-anterior mediastinal mass of 10 × 10 × 6.5 cm with multiple nodules seen in the right supraclavicular fossa
  - Largest measured 3.3 × 2.7 × 2.4 cm
  - Right upper-lobe lung nodule measuring 1.2 × 1.0 cm
- HPE of mediastinal mass (August 4, 2022)
  - Classical Hodgkin lymphoma, nodular sclerosing subtype
- Patient was diagnosed with Hodgkin Lymphoma stage IVB (bulky mediastinum, lung involvement)

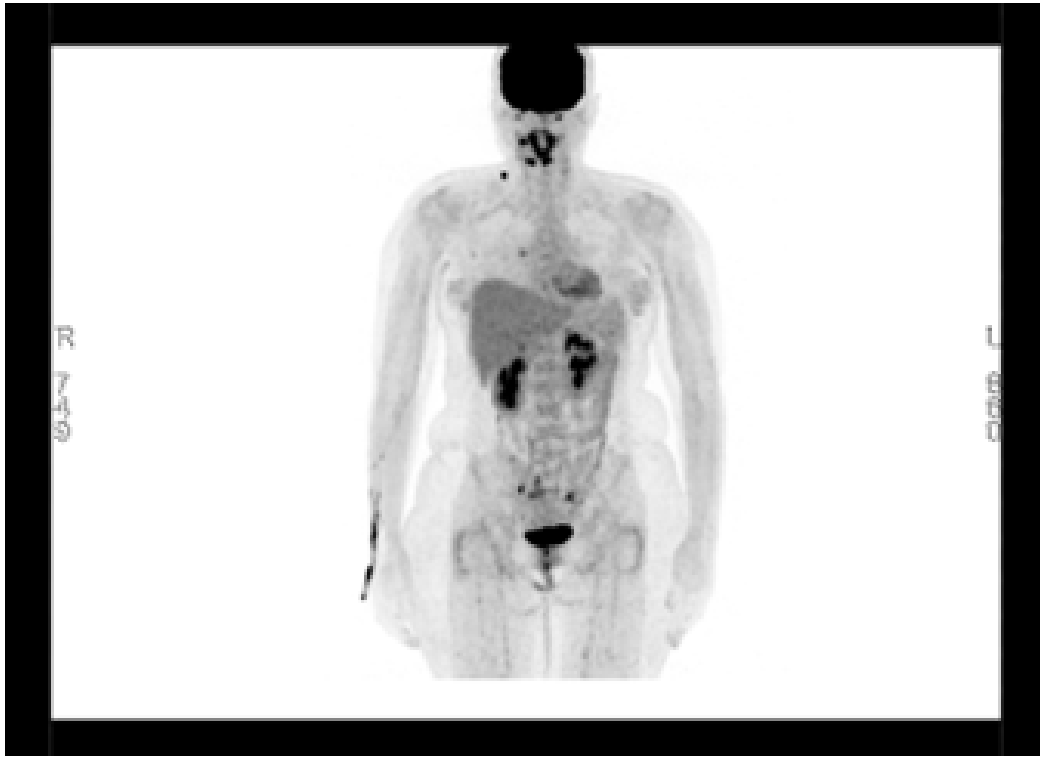
Clinical history

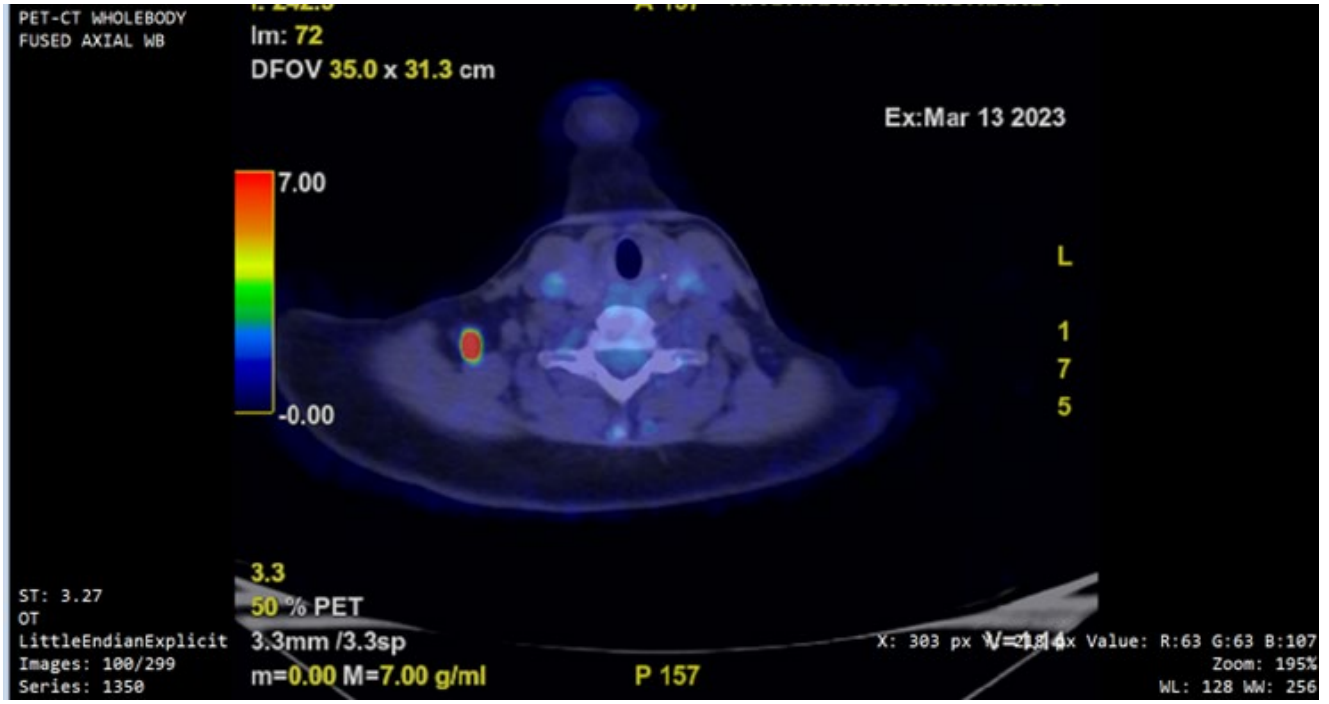
- FBC on presentation
  - WBC: 21.8 × 10^9/L
  - Hb: 113g/L
  - Platelets: 393 × 10^9/L
  - Lymph: 8.5%
- Bone-marrow examination
  - No marrow infiltration

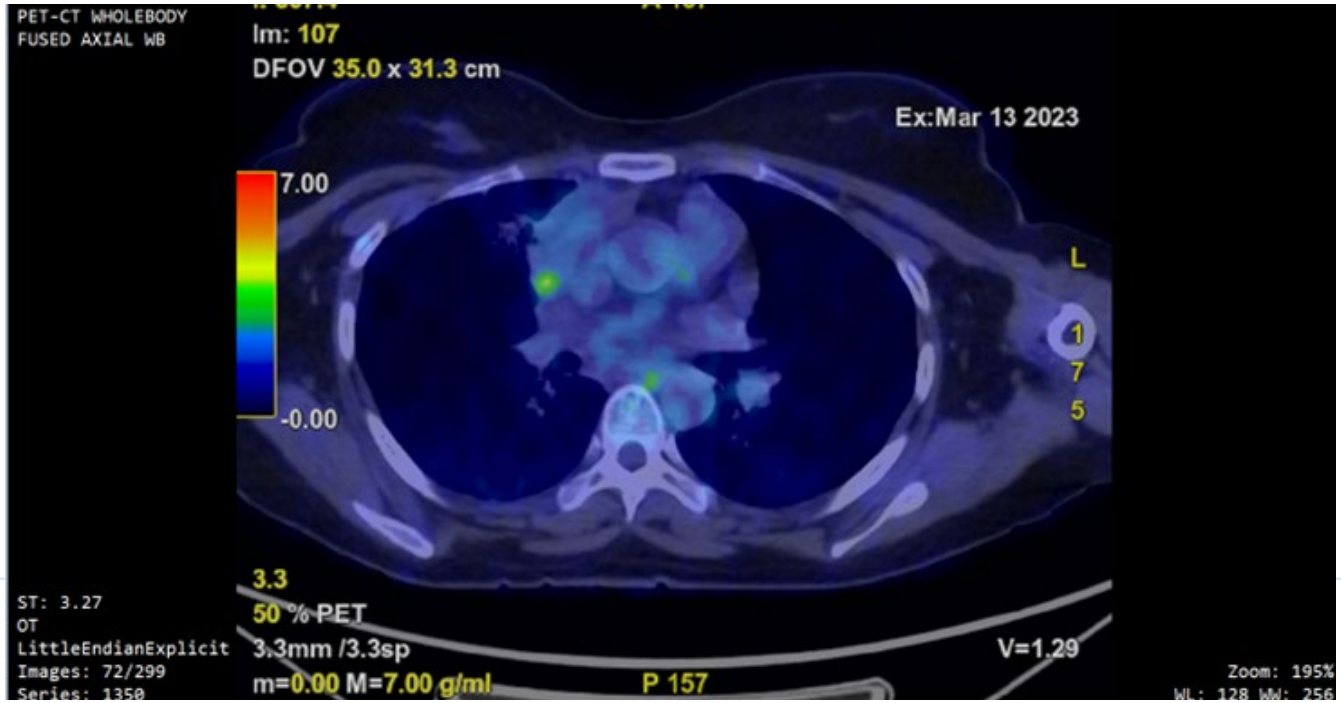
Clinical history

- Patient was treated with 6 cycles of ABVD
  - September 2, 2022 to February 7, 2023
- Interim CT after 4 cycles of ABVD showed smaller right anterior mediastinal mass measuring 5 × 2.2 × 4.9 cm
- PET after 6 cycles of ABVD (March 13, 2023) showed FDG-avid active lymphomatous disease in:
  - Anterior mediastinum (4.8 × 2.2 cm; Deauville score of 4)
  - Right-cervical lymph node (1.4 × 0.7 cm; Deauville score of 5)

PET after 6 cycles of ABVD



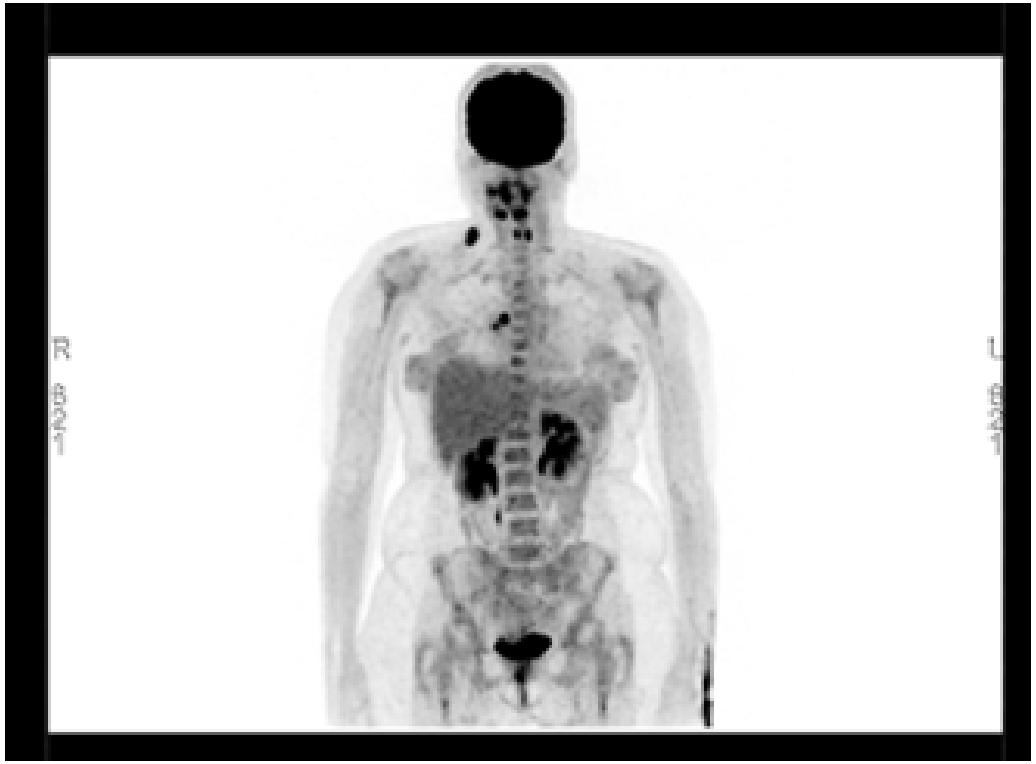


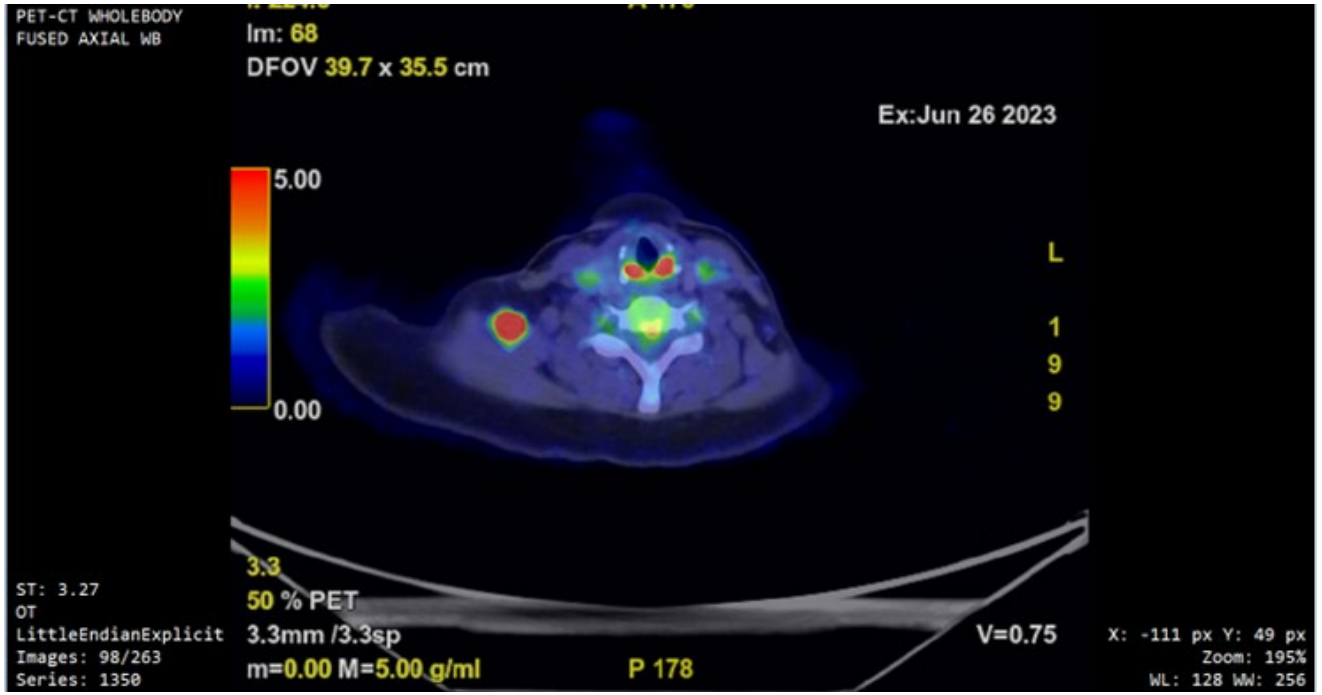


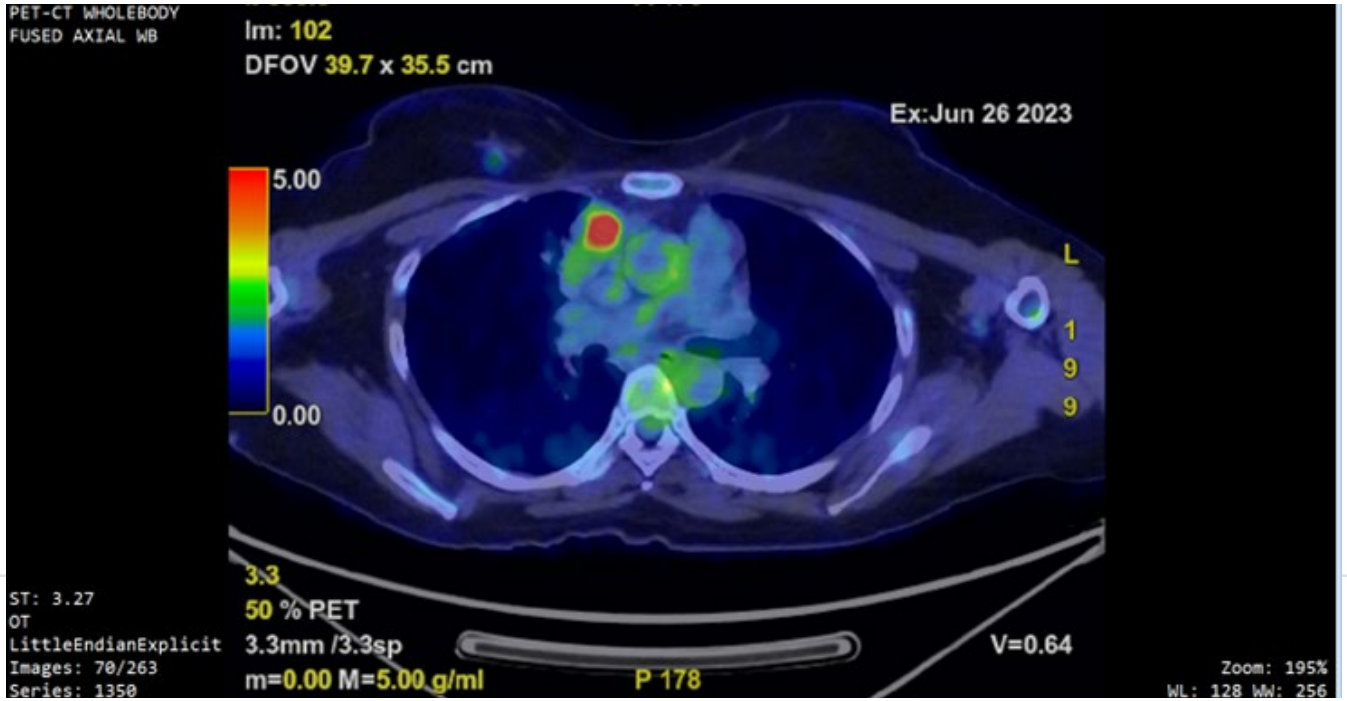
Clinical history

- Patient received 3 cycles of DHAC
  - June 4, 2023 to May 24, 2023
- PET scan (26 June, 2023) after 3 cycles of DHAC showed persistent FDG-avid active lymphomatous disease in:
  - Anterior mediastinum (4.8 × 3 cm; Deauville score of 5)
  - Right-cervical lymph node (2 × 1.4 cm; Deauville score of 5)

PET after 3 cycles of DHAC



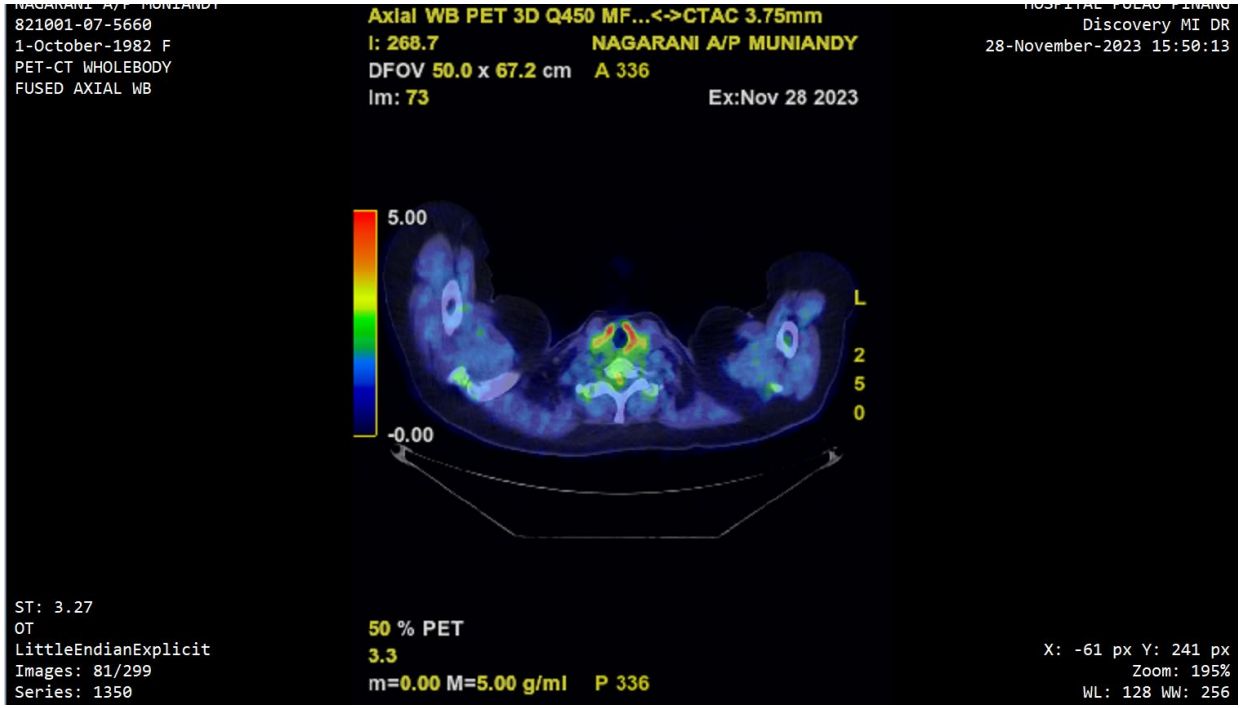


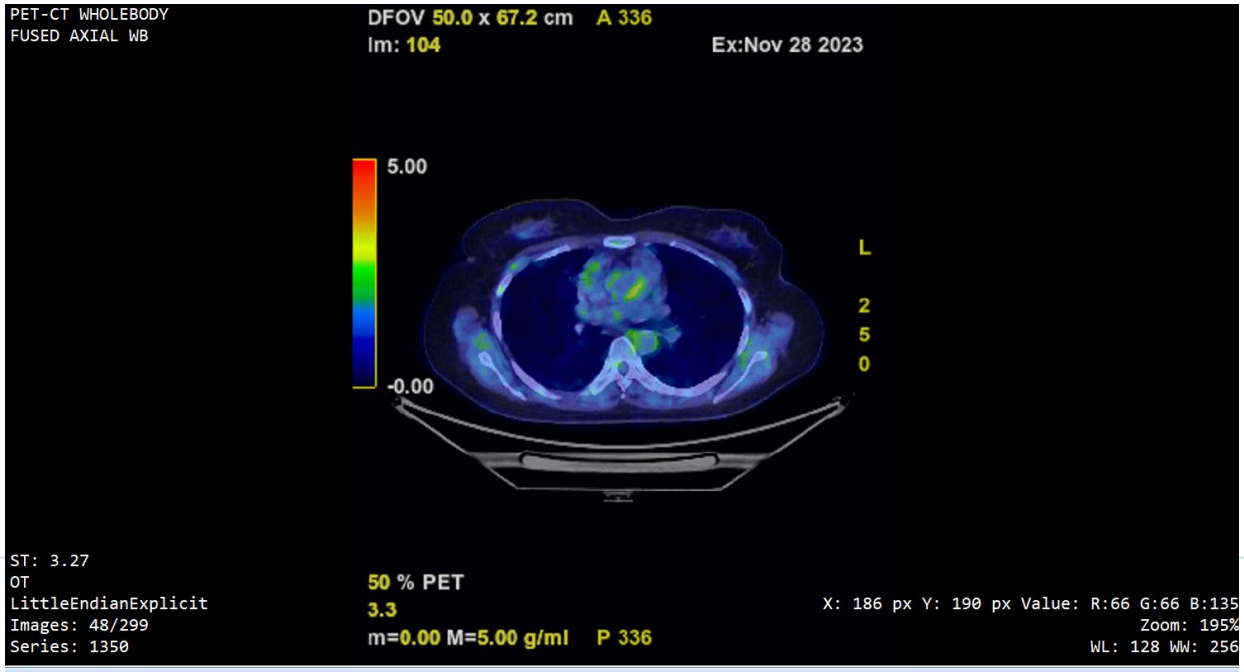


Clinical history

- Patient subsequently received 4 cycles of ICE (July 25, 2023 to November 1, 2023) with Nivolumab 100 mg given 1 day prior to 3rd and 4th cycle of ICE
  - Nivolumab was purchased with limited charity fund, thus given with reduced dose and for just 2 cycles
- Post-treatment PET scan (November 2, 2023) showed:
  - Significant reduction in metabolic activity of anterior mediastinal mass (reduction from Deauville score of 5 to Deauville score of 3)
  - Only the right-cervical (level II) lymph node was FDG-avid (Deauville score of 4; subcentimeter nodule)

PET after 4 cycles of ICE





Clinical history

- Patient underwent autologous hematopoietic stem-cell transplantation on January 23, 2024
  - Uneventful procedure
- Patient is scheduled for a PET scan 3 months post-transplant

Discussion

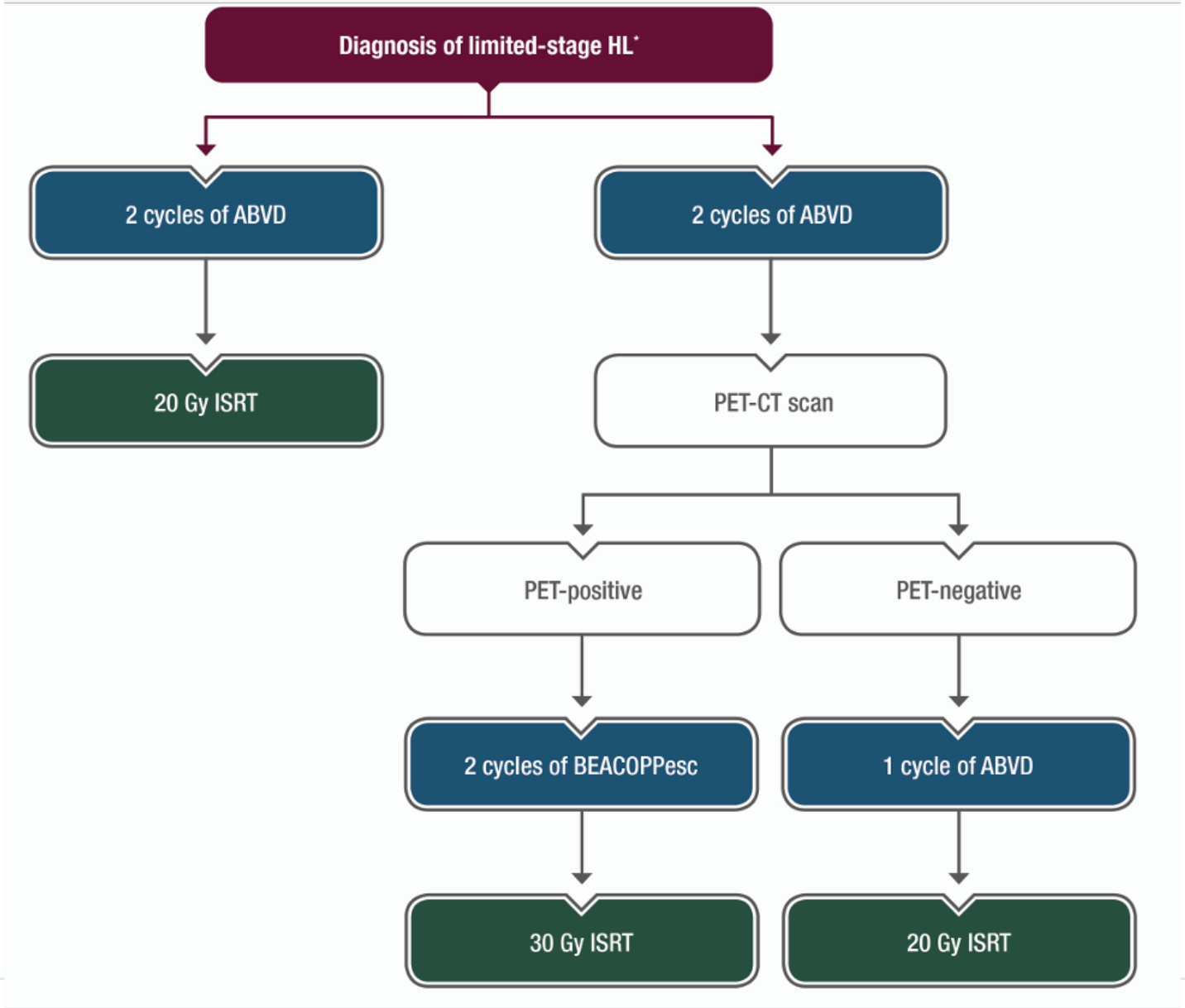
- Stage-based treatment approach

	EORTC/LYSA	GHSG
Treatment group		
Limited stages	CS I–II without risk factors (supradiaphragmatic)	CS I–II without risk factors
Intermediate stages	CS I–II with ≥ 1 risk factors (supradiaphragmatic)	CS I, CS IIA with ≥ 1 risk factors CS IIB with risk factors C and/or D, but not A/B
Advanced stages	CS III–IV	CS IIB with risk factors A and/or B CS III/IV
Risk factors		
	A: Large mediastinal mass* B: Age ≥ 50 years C: Elevated ESR† D: ≥ 4 nodal areas‡	A: Large mediastinal mass* B: Extranodal disease C: Elevated ESR† D: ≥ 3 nodal areas‡

Eichenauer DA, et al. Hodgkin lymphoma: ESMO Clinical Practice Guidelines for diagnosis, treatment and follow-up. Ann Oncol. 2018; 29(Suppl 4): iv19-iv29.

Discussion

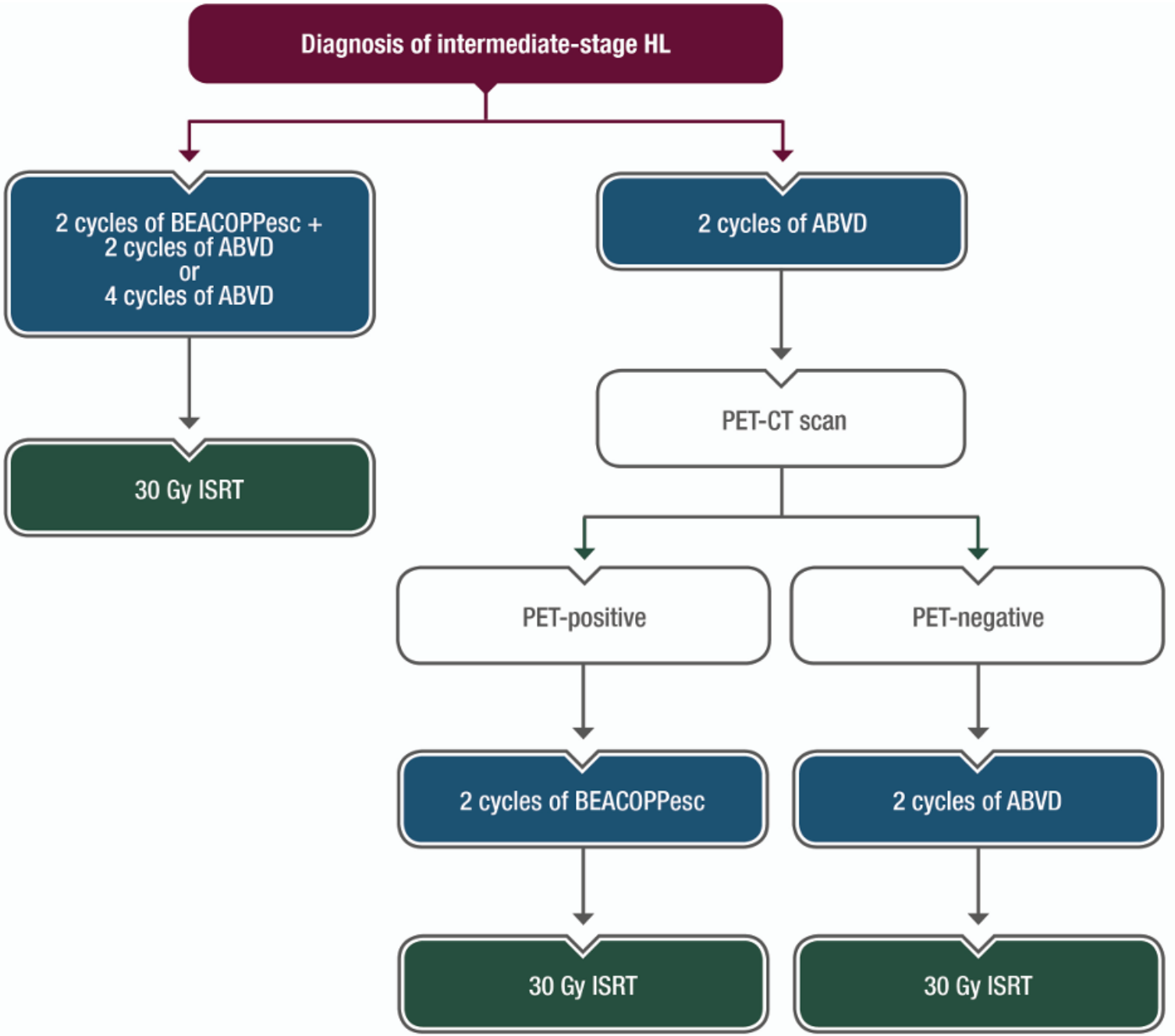
- Treatment algorithm of limited-stage HL



Eichenauer DA, et al. Hodgkin lymphoma: ESMO Clinical Practice Guidelines for diagnosis, treatment and follow-up. Ann Oncol. 2018; 29(Suppl 4): iv19-iv29.

Discussion

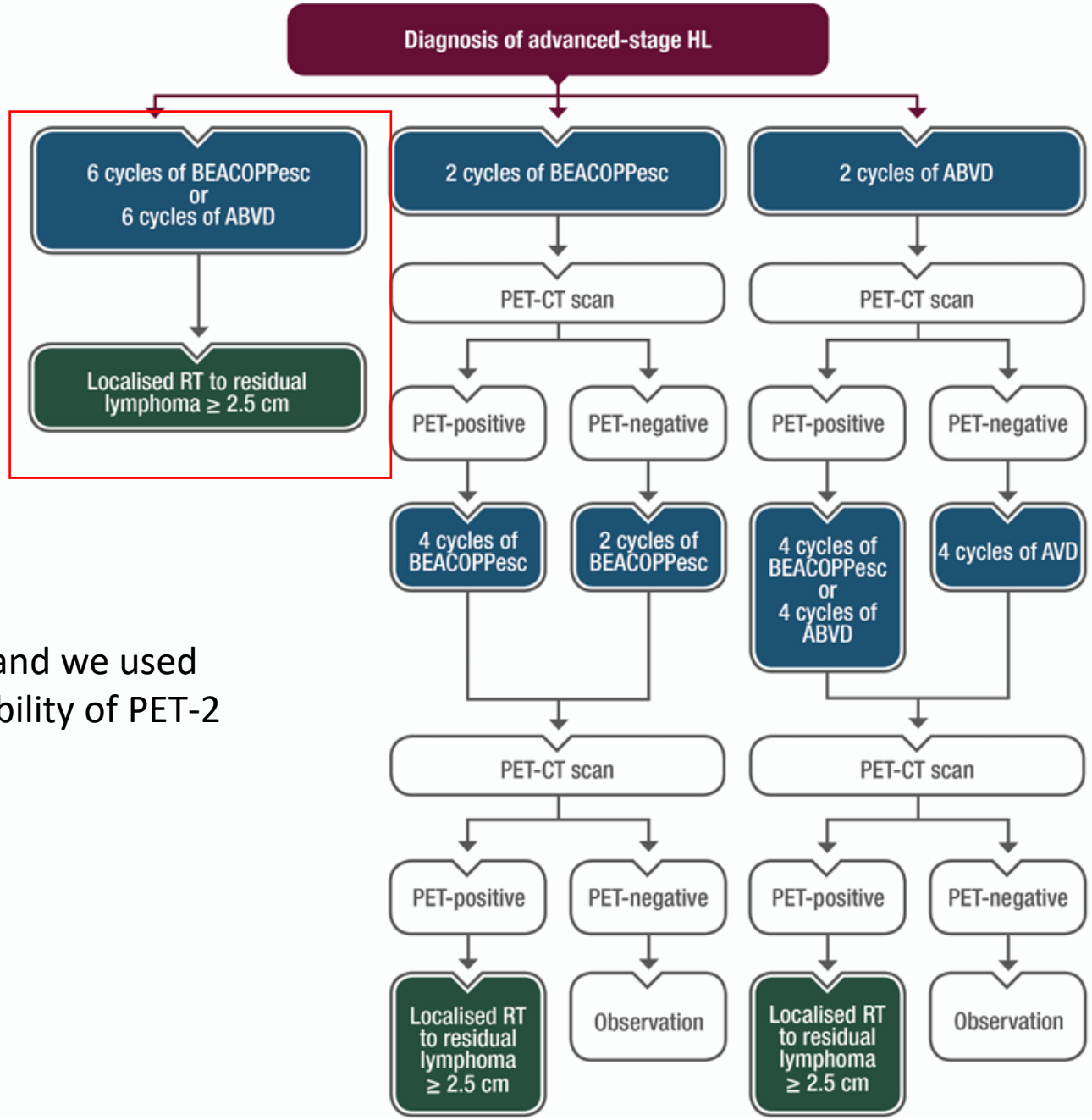
- Treatment algorithm of intermediate-stage HL



Eichenauer DA, et al. Hodgkin lymphoma: ESMO Clinical Practice Guidelines for diagnosis, treatment and follow-up. Ann Oncol. 2018; 29(Suppl 4): iv19-iv29.

Discussion

- Treatment algorithm of advanced-stage HL

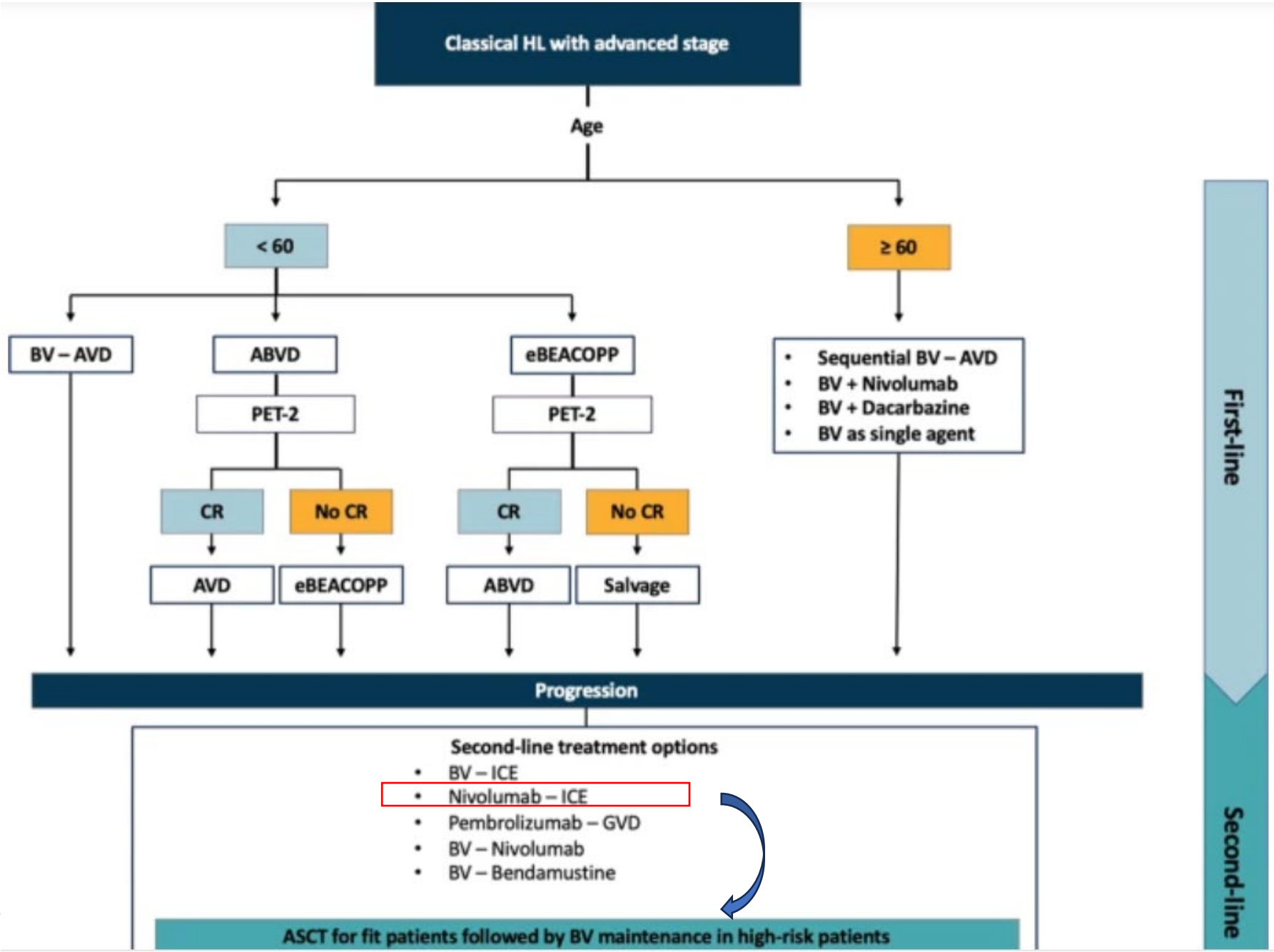


Our patient falls under advanced stage and we used this frontline treatment due to unavailability of PET-2 scan

Eichenauer DA, et al. Hodgkin lymphoma: ESMO Clinical Practice Guidelines for diagnosis, treatment and follow-up. Ann Oncol. 2018; 29(Suppl 4): iv19-iv29.

Discussion

Latest advances in the management of classical Hodgkin lymphoma – the era of novel therapies



Mohty R, et al. Latest advances in the management of classical Hodgkin lymphoma: the era of novel therapies. Blood Cancer J. 2021; 11: 126.

Conclusion

- Frontline therapy in Hodgkin lymphoma
  - Risk- and response-adapted strategies
- Therapeutic priority
  - Optimize cure rate without increasing toxicity in advanced-stage Hodgkin lymphoma
- Novel agents can address the above issues
  - However, individualized treatment is required – especially in resource-limited settings

References

- Eichenauer DA, et al. Hodgkin lymphoma: ESMO Clinical Practice Guidelines for diagnosis, treatment and follow-up. Ann Oncol. 2018; 29(Suppl 4): iv19-iv29
- Mohty R, et al. Latest advances in the management of classical Hodgkin lymphoma: the era of novel therapies. Blood Cancer J. 2021; 11: 126