

EHA-MSH Hematology Tutorial

Clinical Case – Session 4:
Managing First Relapse & Refractory
Disease with Intention to Cure

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Kuala Lumpur, Malaysia
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| Disclosure

- The presenter has no conflicts of interest to disclose as related to companies or products mentioned in this presentation

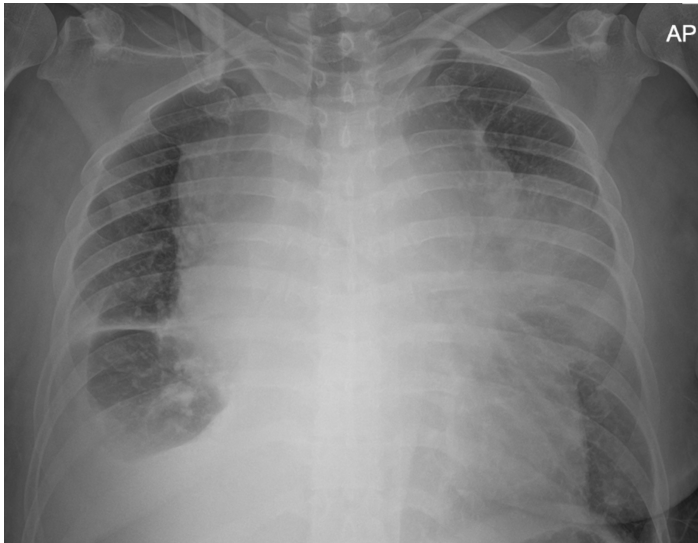
| Learning objectives

Following participation in this activity, attendees will be able to:

- Discuss the limitations and challenges in treating relapsed/refractory Hodgkin lymphoma in the setting of limited access to novel agent-based salvage regimens
- Identify the best strategy for salvage treatment in relapsed/refractory Hodgkin lymphoma prior to ASCT
- Describe the most appropriate timing of ASCT and potential alternatives

| Clinical history

- 33-year-old female patient
- Background bronchial asthma and eczema; ECOG PS of 0



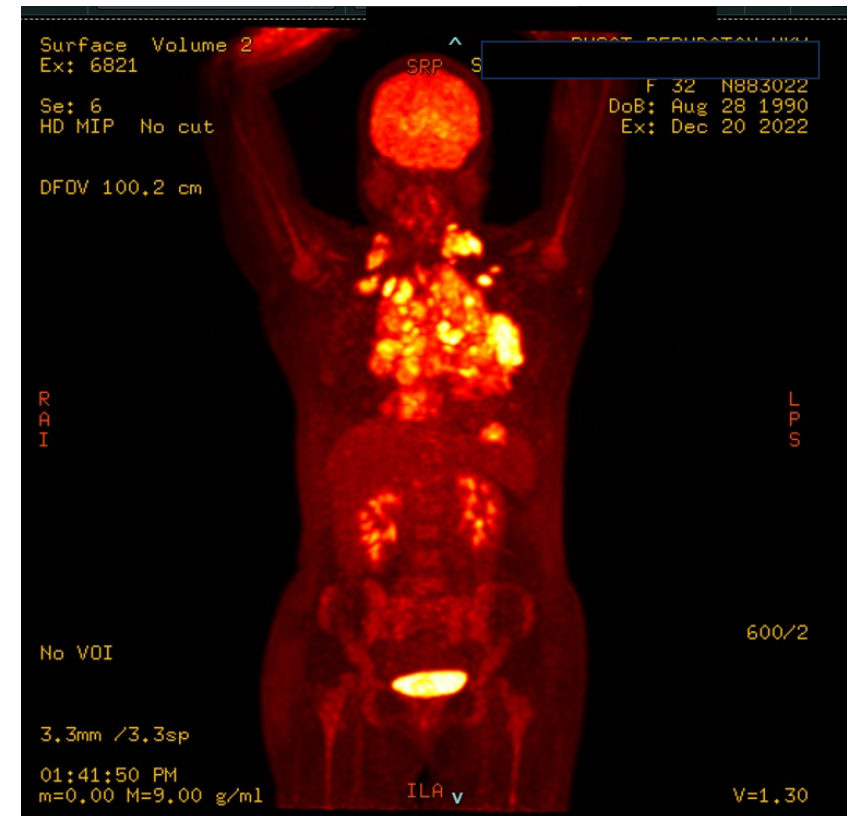
May of 2022

- Symptoms and signs of superior vena cava obstruction
- Plain radiography reveals bulky mediastinum
- Tissue (mediastinum mass) biopsy performed showed
 - Nodular sclerosis Hodgkin lymphoma
- No data on subsequent staging
- Patient is not kept on chemotherapy; defaulted from follow-up

Clinical history

December of 2022

- Patient presented in our hospital with worsening compressive symptoms (i.e. chronic cough)
- Pre-phase low-dose cyclophosphamide × 5/7
- PET/CT (re-staging) on December 20, 2022
 - Multiple hypermetabolic supradiaphragmatic nodal groups (SUV_{max} 4.5–9.6)
 - Hypermetabolic (SUV_{max} 9.6) consolidation at anterior segment and lingular segment of left-upper lobe
 - 8.4 × 4.7 × 7.1 cm
 - Moderate bilateral pleural effusion with low-level FDG uptake
 - Diffuse hypermetabolic marrow (SUV_{max} 3.1)



| Diagnosis

- Nodular sclerosis Hodgkin lymphoma
- Stage 4A (advanced stage, bulky mediastinum)
- IPS score of 4:
 - 5-years PFS: 67%
 - 5-year OS: 85%

| Treatment history (first line)

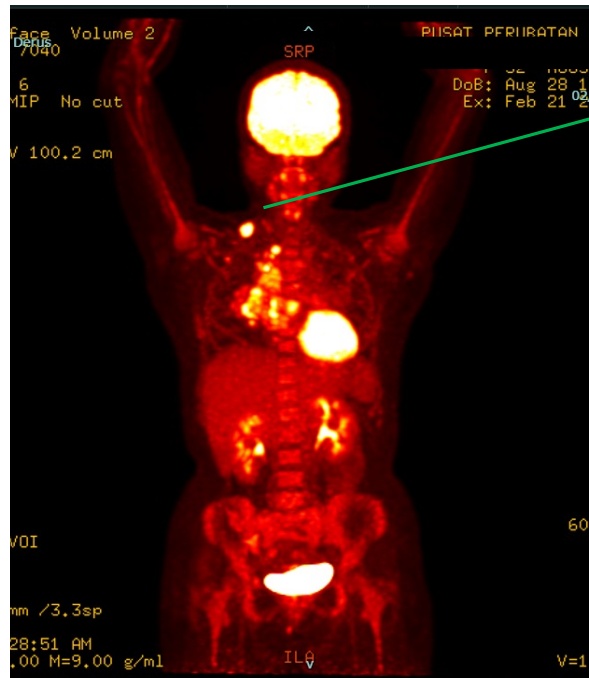
Date	Regime/cycle	Remarks/complication
December 21, 2022	BEACOPP cycle 1	<ul style="list-style-type: none">• Left-lobar pneumonia• Bronchoscopy (January 1, 2023)• BAL:<ul style="list-style-type: none">• Negative for malignancy• Culture was AFB-, MTB-, and Aspergillus Ag-negative
January 20, 2023	BEACOPP cycle 2	Non-neutropenic sepsis (right lower-limb cellulitis)
February 21, 2023	Interim PET/CT	<ul style="list-style-type: none">• Considered as partial response (PET+ with residual CT lesions)• One right-supraclavicular node remained (stable in size), but showed increased metabolic activity (SUV_{max} 6.5 → 10.1; Deauville score of 4)

Interim PET/CT (after 2 cycles of BEACOPP)

Staging (December 21, 2023)



Interim (February 21, 2023)



February 27, 2023

Biopsy of right supraclavicular node reveals:

- Atypical cells
- Positive for CD30
- Negative for CD20, CD3, MUM1, PAX 5, BOB-1, OCT-2
- CD15 was inconclusive

| Treatment history (first line)

Date	Regime/cycle	Remarks/Complication
February 28, 2023	BEACOPP cycle 3	Uneventful
March 28, 2023	BEACOPP cycle 4	Uneventful
May 3, 2023	EOT-PET/CT <ul style="list-style-type: none">• Some lesions have resolved, some with background metabolic activity, some with increased metabolic activity• New additional hypermetabolic right-hilar node → persistent PET/CT positive	

| PET/CT (after 4 cycles of BEACOPP)

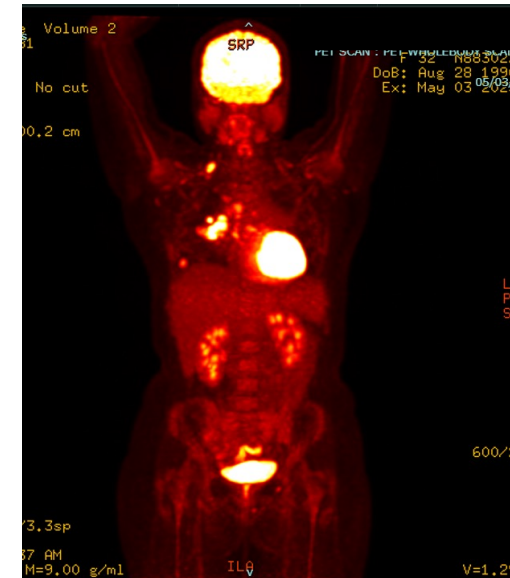
Staging
(December 21, 2023)



Interim
(February 21, 2023)



EOT
(May 3, 2023)



| Treatment history (second line)

Date	Regime/cycle	Remarks/complication
May 29, 2023		BMAT: no lymphomatous infiltration
May 30, 2023	ICE cycle 1	Uneventful
July 4, 2023	ICE cycle 2	Uneventful
August 9, 2023		PET/CT (after 2 cycles of ICE) <ul style="list-style-type: none">• Progressive disease• Supradiaphragmatic nodes<ul style="list-style-type: none">• Mixed response (background metabolic activity + increasing metabolic activity)• New hypermetabolic abdominal nodes• New hypermetabolic patchy nodular opacities in right lung

| Re-biopsy



August 18, 2023

- CT-guided biopsy of right-lung mass
- HPE → in favor of extranodal classical Hodgkin lymphoma, nodular sclerosis subtype

| Treatment history (third line)

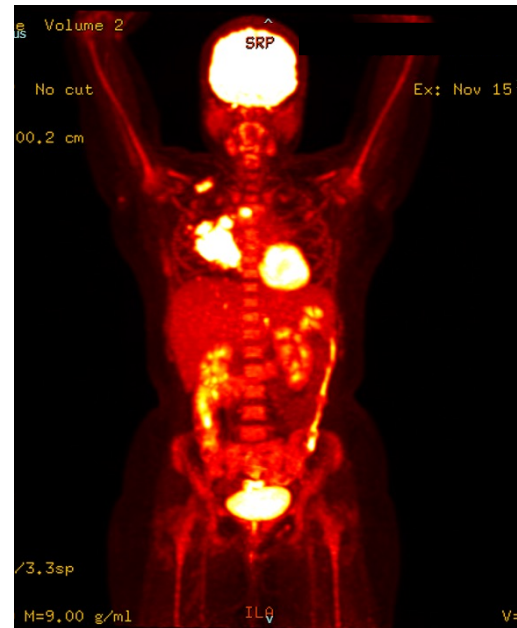
Date	Regime/cycle	Remarks/complication
September 5, 2023	BV-DHAP cycle 1	Uneventful
September 27, 2023	BV-DHAP cycle 2	Uneventful
November 15, 2023	PET/CT (after 2 cycles of BV-DHAP) <ul style="list-style-type: none"> • Overall partial response (PET⁺) with lung inflammation • Mixed areas of improved lung inflammation with new sites → stable lung changes 	
December 27, 2023	BV-DHAP cycle 3 (plus G-CSF stem-cell mobilization)	Infection <ul style="list-style-type: none"> • <i>Enterobacter cloacae</i> bacteremia • Treated; responded well to antibiotics Stem-cell harvest on January 9, 2024 <ul style="list-style-type: none"> • 12.8×10^6 cells/kg
January 2, 2024	BV-DHAP cycle 4	Uneventful
PET/CT (after 4 cycles of BV-DHAP): Pending		

| PET/CT (after 2 cycles of BV-DHAP)

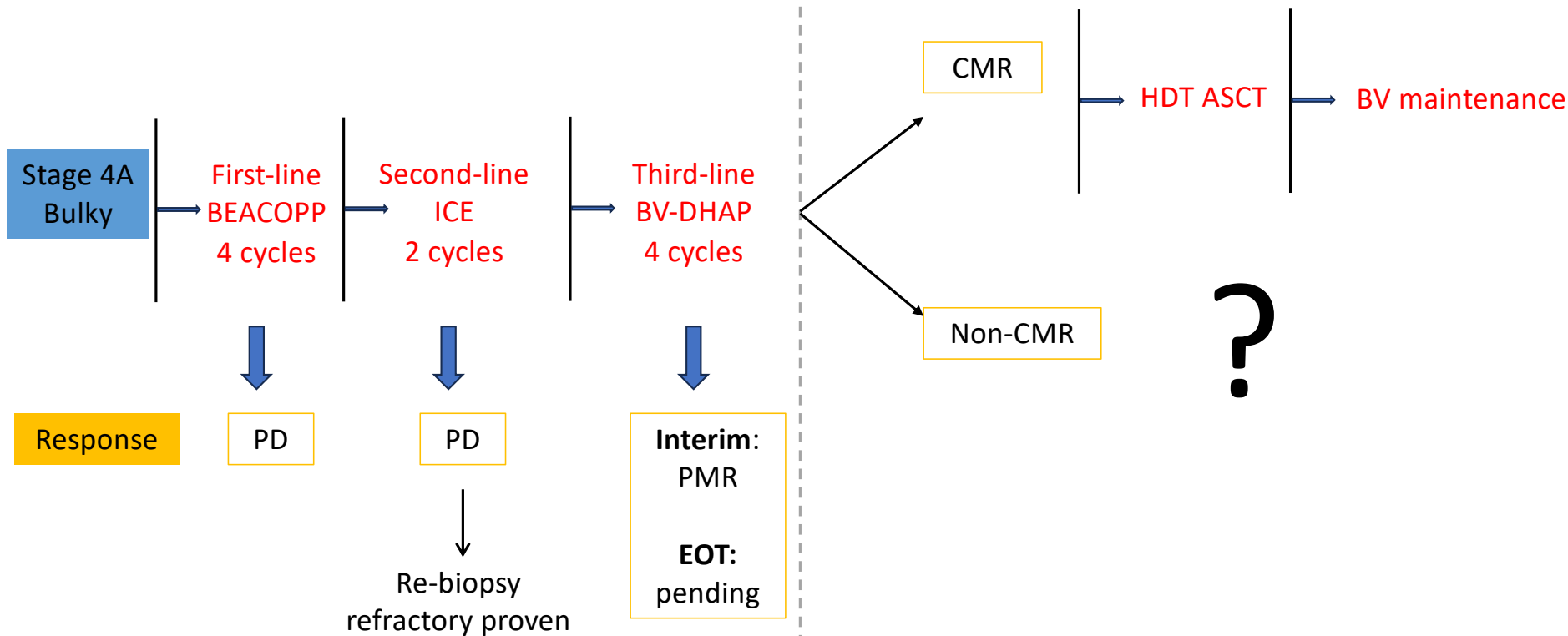
**Before BV-DHAP
(August 9, 2023)**



**After 2 cycles of BV-DHAP
(November 15, 2023)**



Discussion



| Discussion:

Disease refractory to at least 3 prior lines of therapy

Options

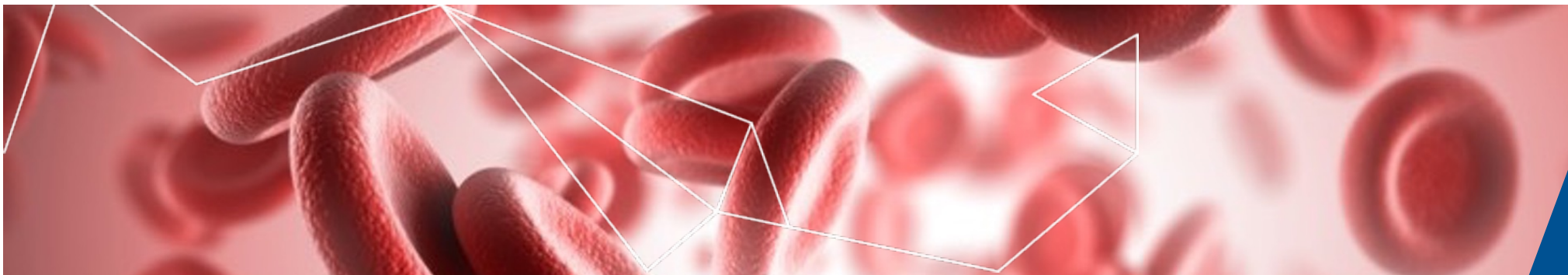
- Immune checkpoint inhibitor therapy
 - Pembrolizumab or nivolumab \pm systemic chemotherapy \pm radiotherapy
- HDT ASCT followed by BV maintenance
- Clinical trial enrollment
 - i.e. anti-CD30 CAR-T cell therapy

| Discussion:

Disease refractory to at least 3 prior lines of therapy

Challenges

- Limited access to novel agents
- Novel agents are approved and registered in Malaysia; however, not fully funded by the government
 - Self-funding
 - NGOs
 - Special application under government or local authorities
 - For government-sector staff



Thank you