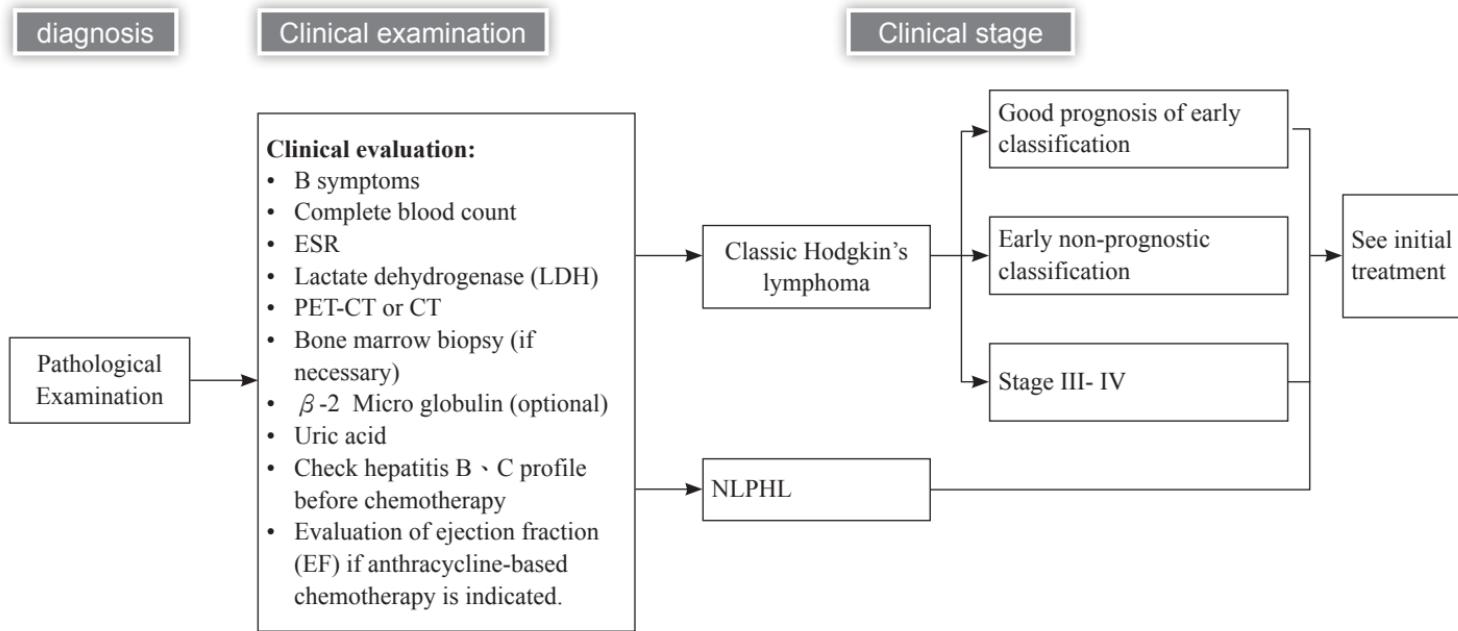




Lymphoma



1. B symptoms : fever, night sweating, body weight loss.

2. Poor prognostic factors: ESR>50, B symptoms, Nodal sites >3, bulky tumor(>10) or large mediastinum lesion(MMR>0.33).

3. Clinical trial is always an option of treatment.

[Diagnosis and treatment of lymphoma consensus -2] CLASSICAL HODGKIN LYMPHOMA (CHL)

Clinical Stage	Clinical Stage	Clinical Stage	Guidelines Page
	No	No	Favorable Disease
IA / IIA	No	Yes	Favorable /Unfavorable Disease
	Yes	Yes/No	Unfavorable Disease
IB / IIB	Yes / No	Yes/No	Unfavorable Disease
III - IV	Yes / No	N/A	Advanced Disease

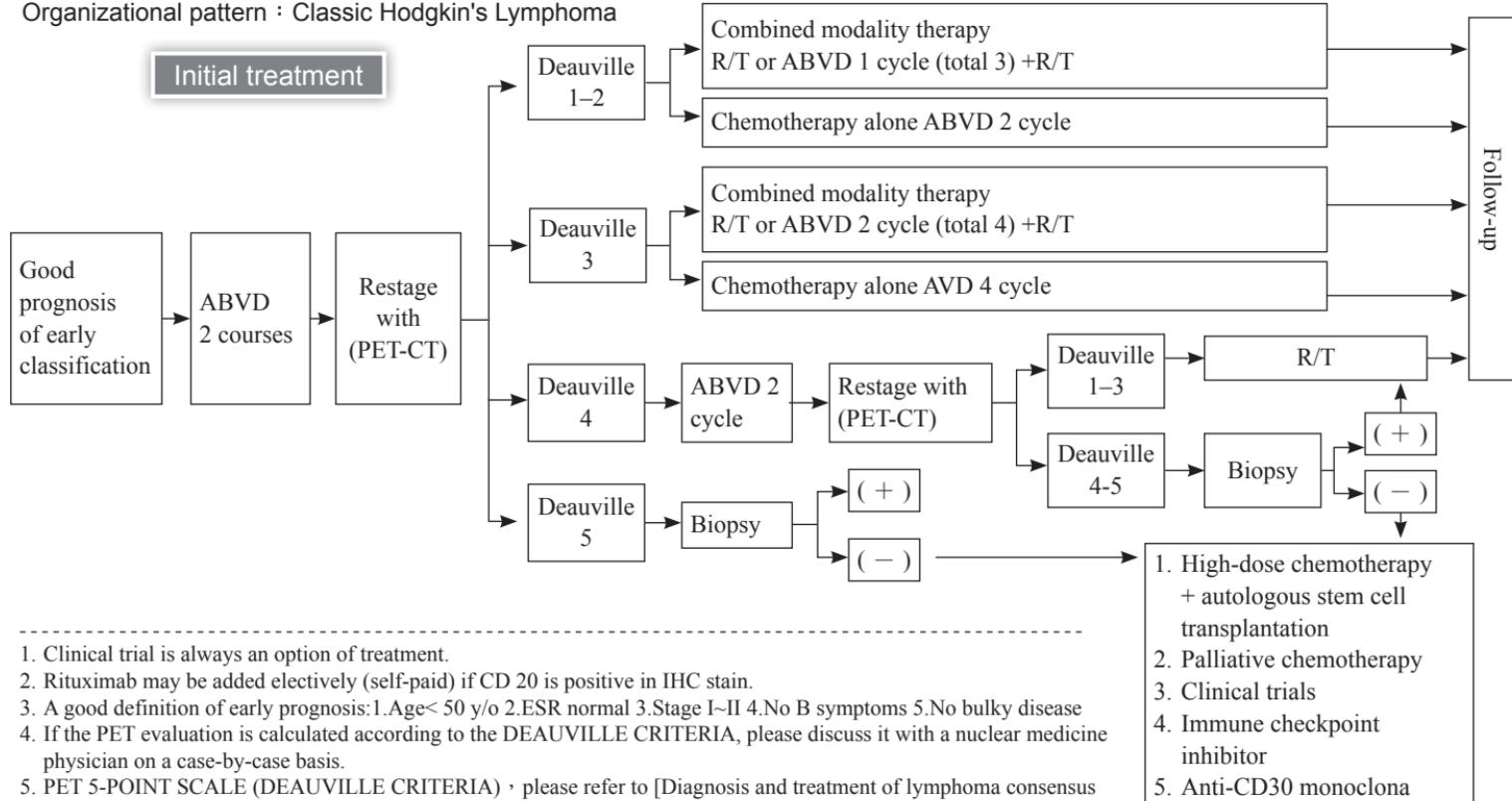
[Diagnosis and treatment of lymphoma consensus -3]-- (Hodgkin's Lymphoma)

PET 5-POINT SCALE (DEAUVILLE CRITERIA)

Score PET		CT Scan Result
Negative	1	No uptake
	2	Uptake \leq mediastinum
	3	Uptake $>$ mediastinum but \leq liver
Positive	4	Uptake moderately higher than liver and visually above adjacent background activity
	5	Uptake markedly higher than liver and/or new lesions
	X	New areas of uptake unlikely to be related to lymphoma

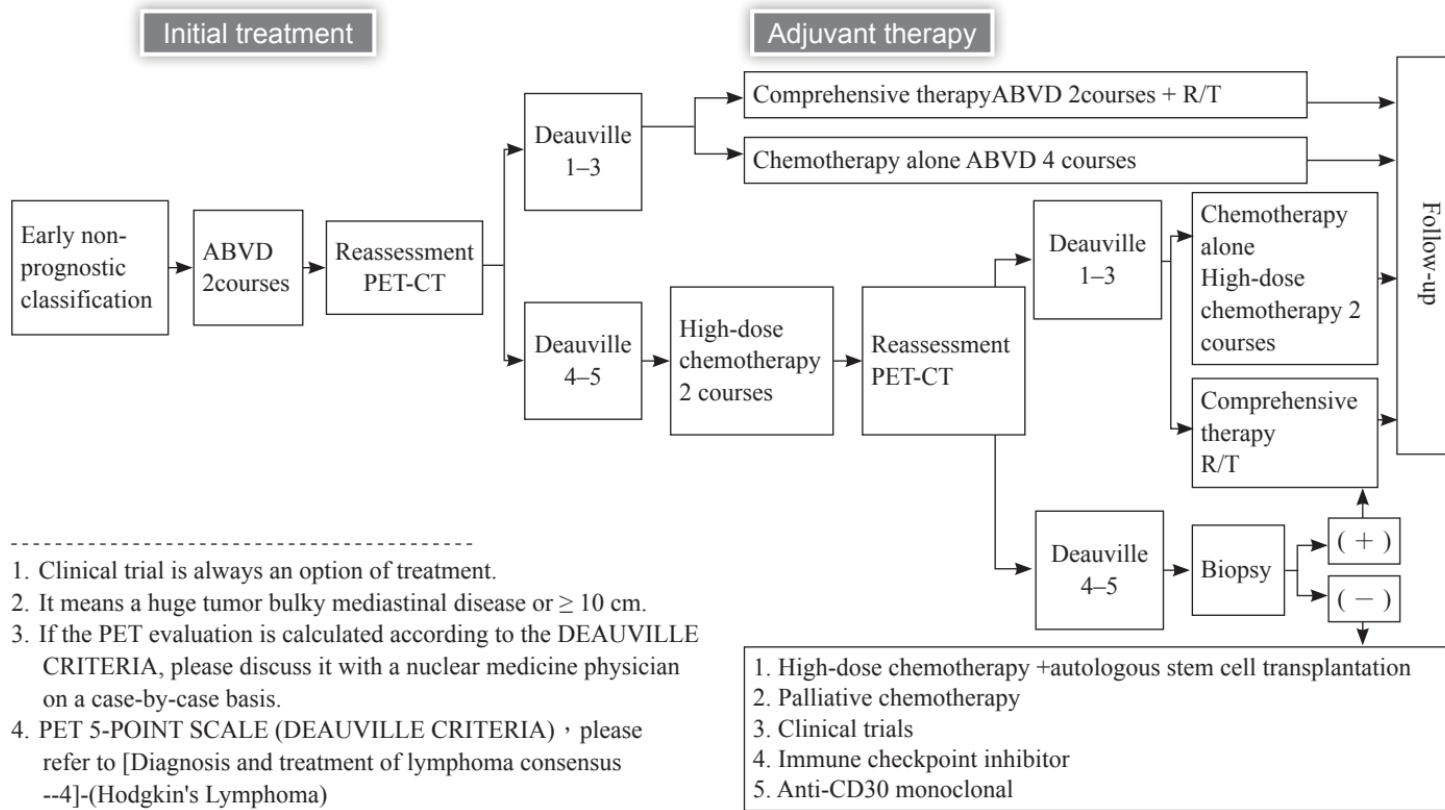
[Diagnosis and treatment of lymphoma consensus -4]— (Hodgkin's Lymphoma) (Age 18- 60years)

Organizational pattern : Classic Hodgkin's Lymphoma

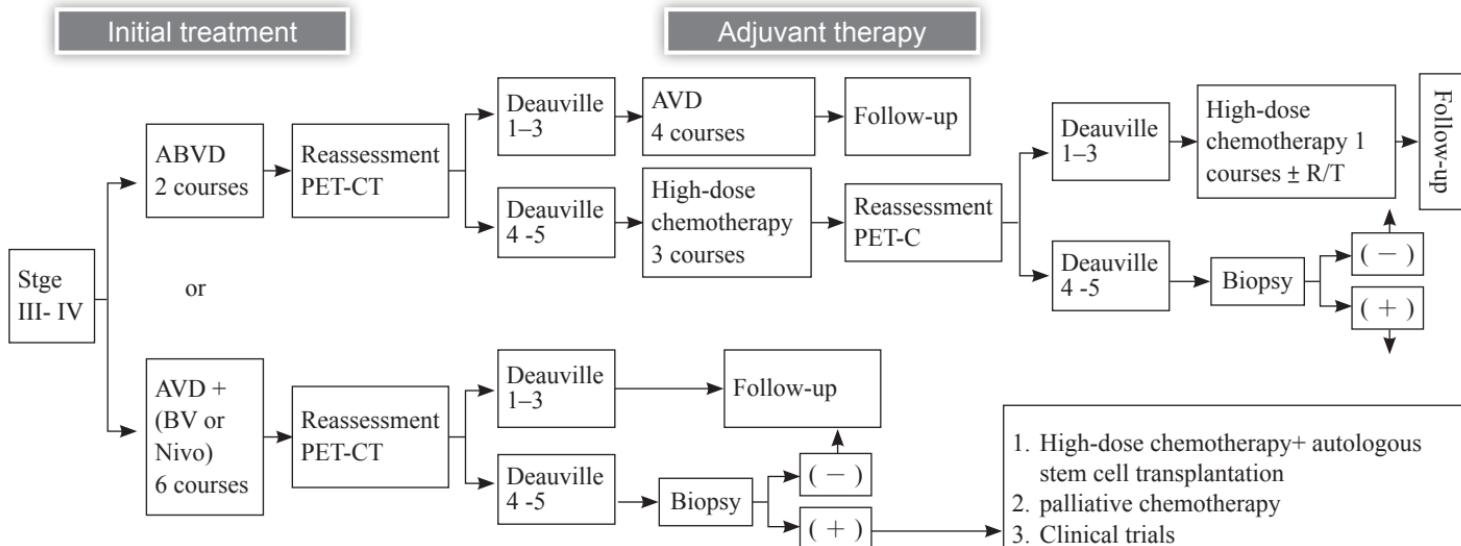


[Diagnosis and treatment of lymphoma consensus -5]—(Hodgkin's Lymphoma)

(Age 18- 60years) Organizational pattern : Classic Hodgkin's Lymphoma



[Diagnosis and treatment of lymphoma consensus -6] - Classic Hodgkin's Lymphoma (Age 18- 60years)



1. Clinical trial is always an option of treatment.
2. It means a huge tumor bulky mediastinal disease or ≥ 10 cm.
3. If the PET evaluation is calculated according to the DEAUVILLE CRITERIA, please discuss it with a nuclear medicine physician on a case-by-case basis.
4. PET 5-POINT SCALE (DEAUVILLE CRITERIA) , please refer to [Diagnosis and treatment of lymphoma consensus -4]-(Hodgkin's Lymphoma)

* Reevaluation (PET-CT) after chemotherapy at least 2 courses.

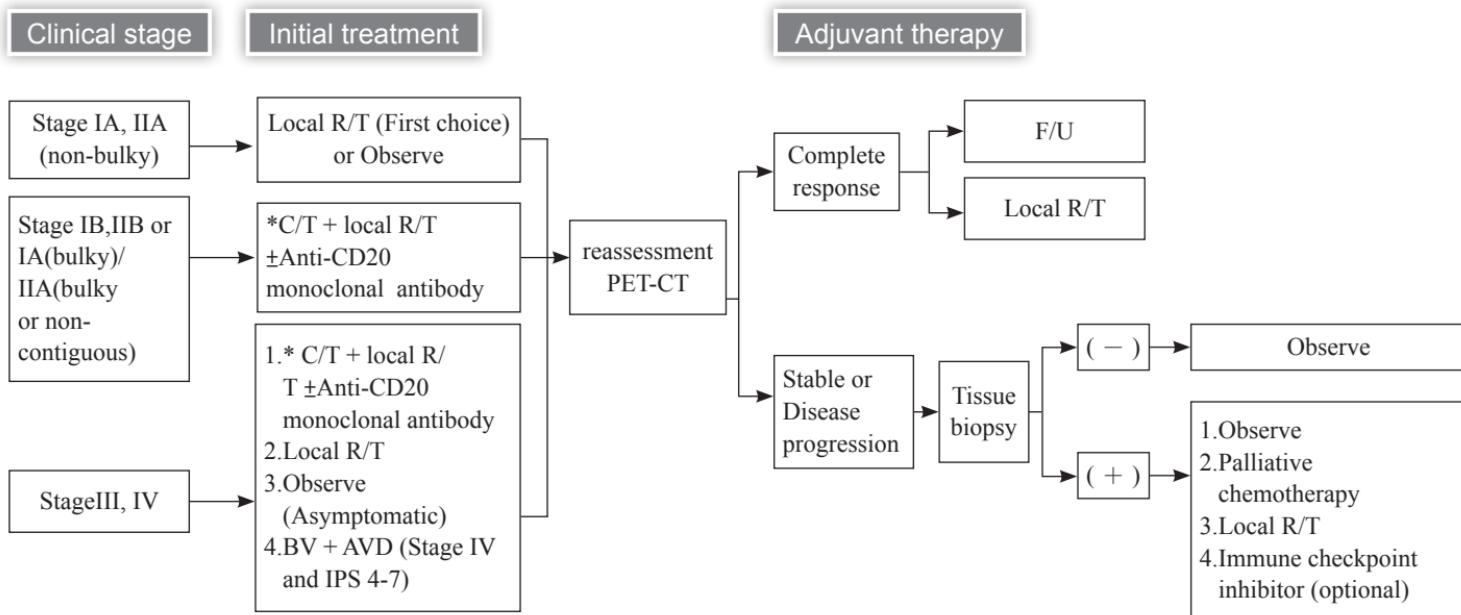
**Total 6 courses

1. High-dose chemotherapy+ autologous stem cell transplantation
2. palliative chemotherapy
3. Clinical trials
4. Immune checkpoint inhibitor
5. Anti-CD30 monoclonal
6. R/T

***PRINCIPLES OF SYSTEMIC THERAPY Primary Systemic Therapy Regimens**

Primary Systemic Therapy Regimens	
Stage I-II Favorable Disease	<ul style="list-style-type: none"> • A(B)VD_{a,b,c,h} (2 cycles) ± AVD (2 cycles) + ISRT_d (preferred) ° • CHOP (4 cycles) + R/T °
Stage I-II Unfavorable or Stage III-IV Disease	<ul style="list-style-type: none"> • A(B)VD(2 cycles) followed by AVD (4 cycles) if FDG-PET scan is negative after 2 cycles of ABVD → Patients with a positive FDG-PET scan after 2 cycles of ABVD need individualized treatment ° • BV followed by AVD, conditionally followed by BV in patients with CR or PR and no neuropathy ° • CHOP (6 cycles) ± R/T °
Patients with Low EF	<ul style="list-style-type: none"> • Add dexamethasone to ABVD_{a,b,c} or CHOP, with close cardiology follow-up ° • BV-DTIC (dacarbazine) °

[Diagnosis and treatment of lymphoma consensus -8]- Nodular lymphocyte–predominant Hodgkin's Lymphoma



* Reevaluation(PET-CT) after chemotherapy at least 2 courses Clinical trial is always an option of treatment. PET

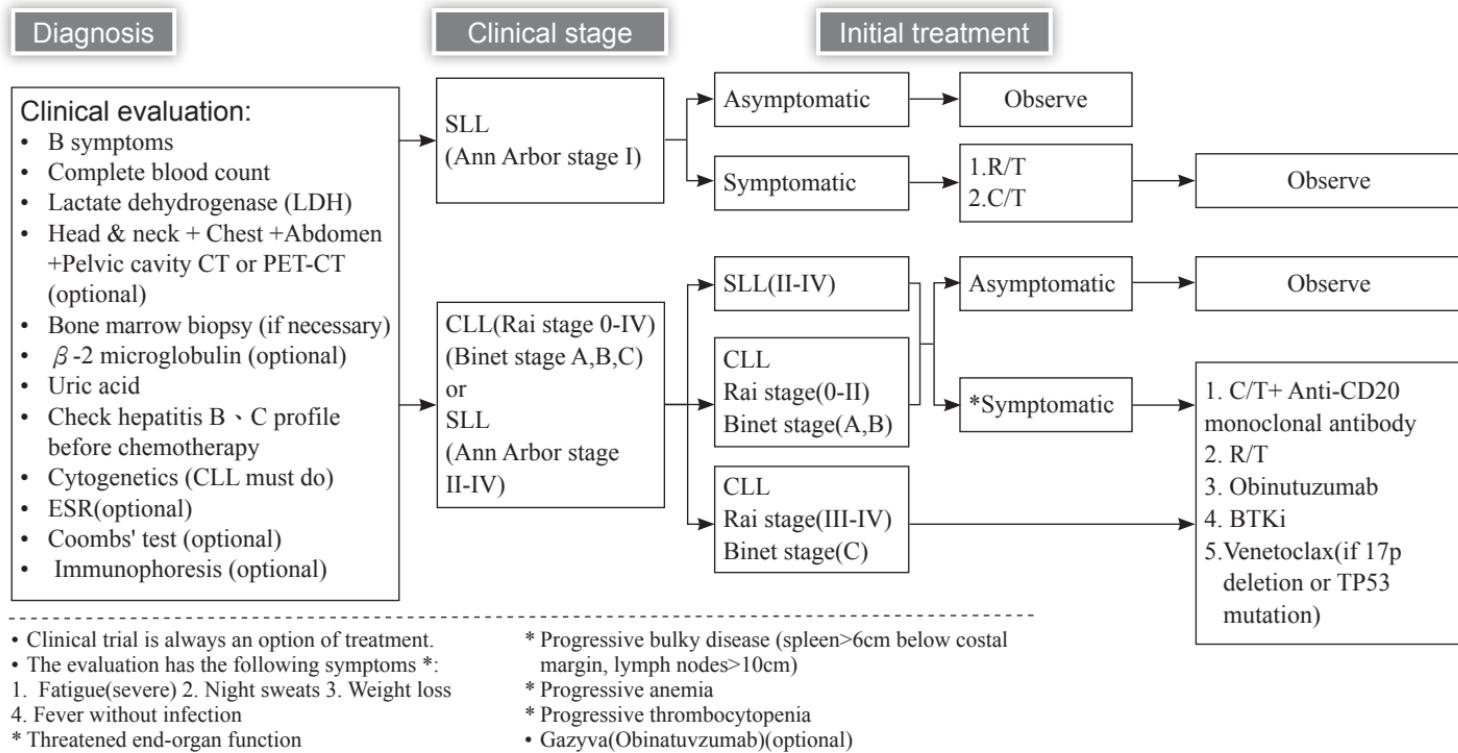
* If the PET evaluation is calculated according to the DEAUVILLE CRITERIA, please discuss it with a nuclear medicine physician on a case-by-case basis.

* PET 5-POINT SCALE (DEAUVILLE CRITERIA), please refer to [Diagnosis and treatment of lymphoma consensus --4]-(Hodgkin's Lymphoma)

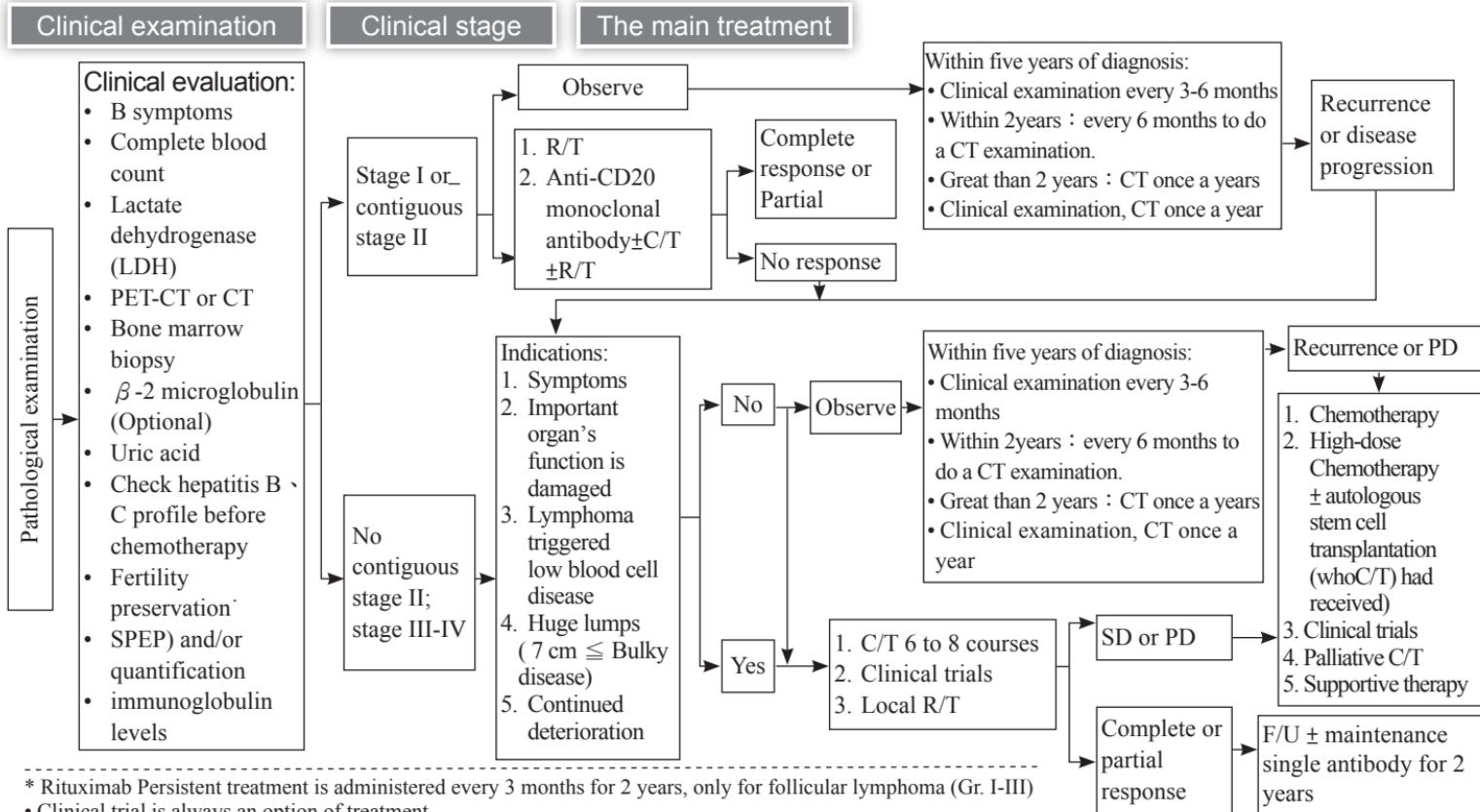
* IPSused risk stratification tool for patients with advanced Hodgkin lymphoma- Risk factor items/calculation methods (7 items in total): Serum albumin/ <4 g/dL ; Hb/ <10.5 g/dL; Male/yes ; Stage IV/yes ; Age/ ≥ 45 y/o ; WBC count/ ≥ 15k/mcL ; Lymphocyte count/ <600/mcL or <8% of WBC count .

* BV: Brentuximab vedotin .

[Diagnosis and treatment of lymphoma consensus -9] -Chronic lymphocytic leukemia (CLL)/small lymphocytic lymphoma (SLL)



[Diagnosis and treatment of lymphoma consensus -10] —(Follicular Lymphoma) - Grade 1、2、3A



* Rituximab Persistent treatment is administered every 3 months for 2 years, only for follicular lymphoma (Gr. I-III)

• Clinical trial is always an option of treatment.

* contiguous stage II: Follicular lymphoma cells are found in lymph node groups next to each other。

* No contiguous stage II: Follicular lymphoma cells are found in two or more lymph node groups on the same side of the diaphragm。

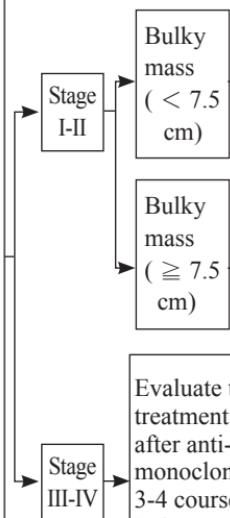
[Diagnosis and treatment of lymphoma consensus -11]- DLBCL / FL Grade 3B

Clinical examination

Clinical evaluation:

- B symptoms
- Complete blood count
- Lactate dehydrogenase (LDH)
- PET-CT or CT
- Bone marrow biopsy (optional)
- β -2 microglobulin (Optional)
- Uric acid
- Check hepatitis B、C profile before chemotherapy
- Evaluation of ejection fraction (EF) if anthracycline-based chemotherapy is indicated.

Clinical stage

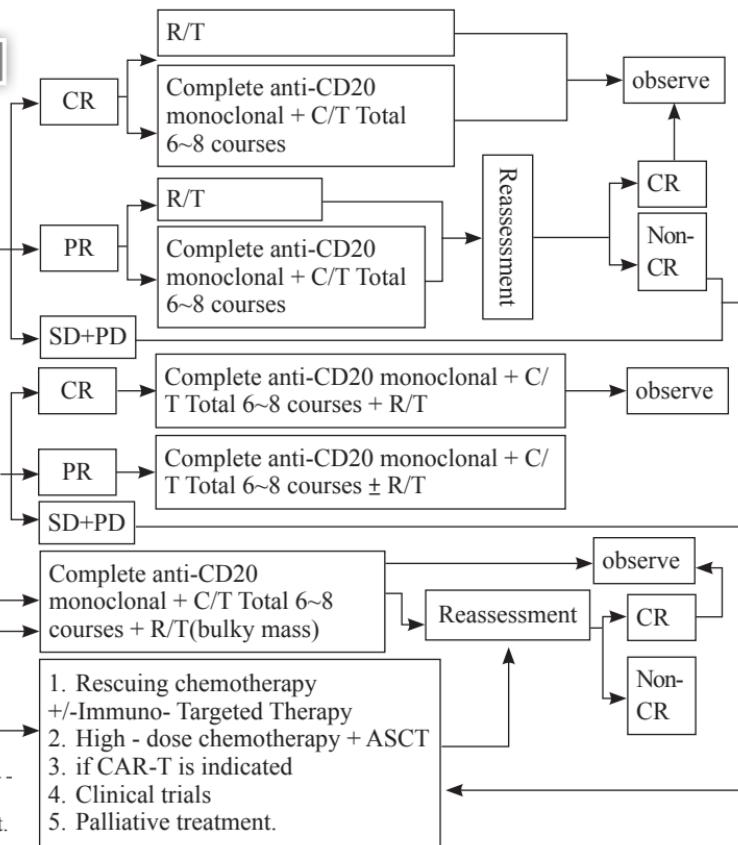


Initial treatment

Evaluate the treatment response after anti-CD20 monoclonal \pm Polatuzumab/ \pm Gofitamab 3-4 courses

Evaluate the treatment response after anti-CD20 monoclonal \pm Polatuzumab/ \pm Gofitamab 3-4 courses

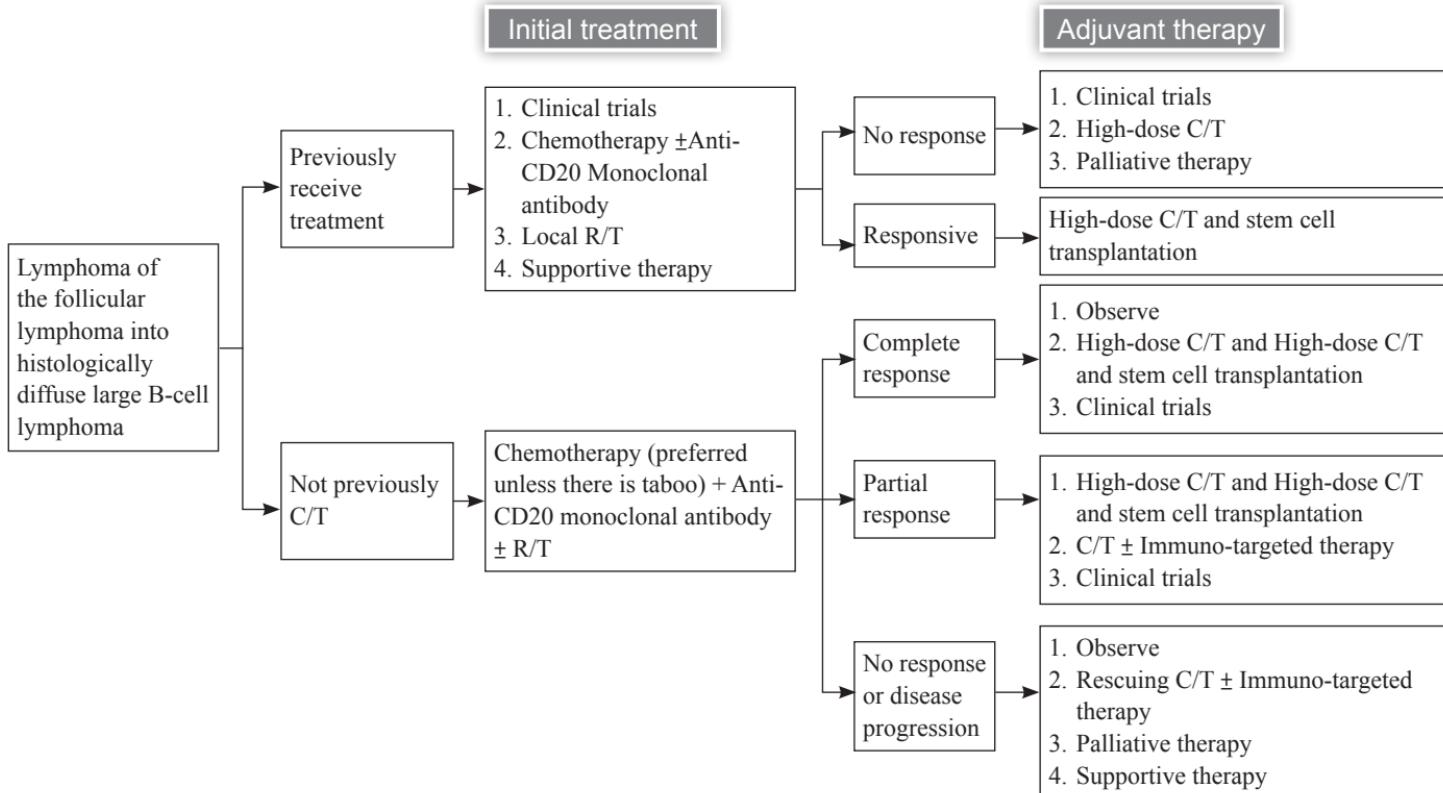
Evaluate the treatment response after anti-CD20 monoclonal 3-4 courses \pm Polatuzumab / \pm Gofitamab



* Rituximab persistent treatment is administered every 3 months for 2 years, only for follicular lymphoma (Gr. I-III). *Clinical trial is always an option of treatment.

[Diagnosis and treatment of lymphoma consensus12] –

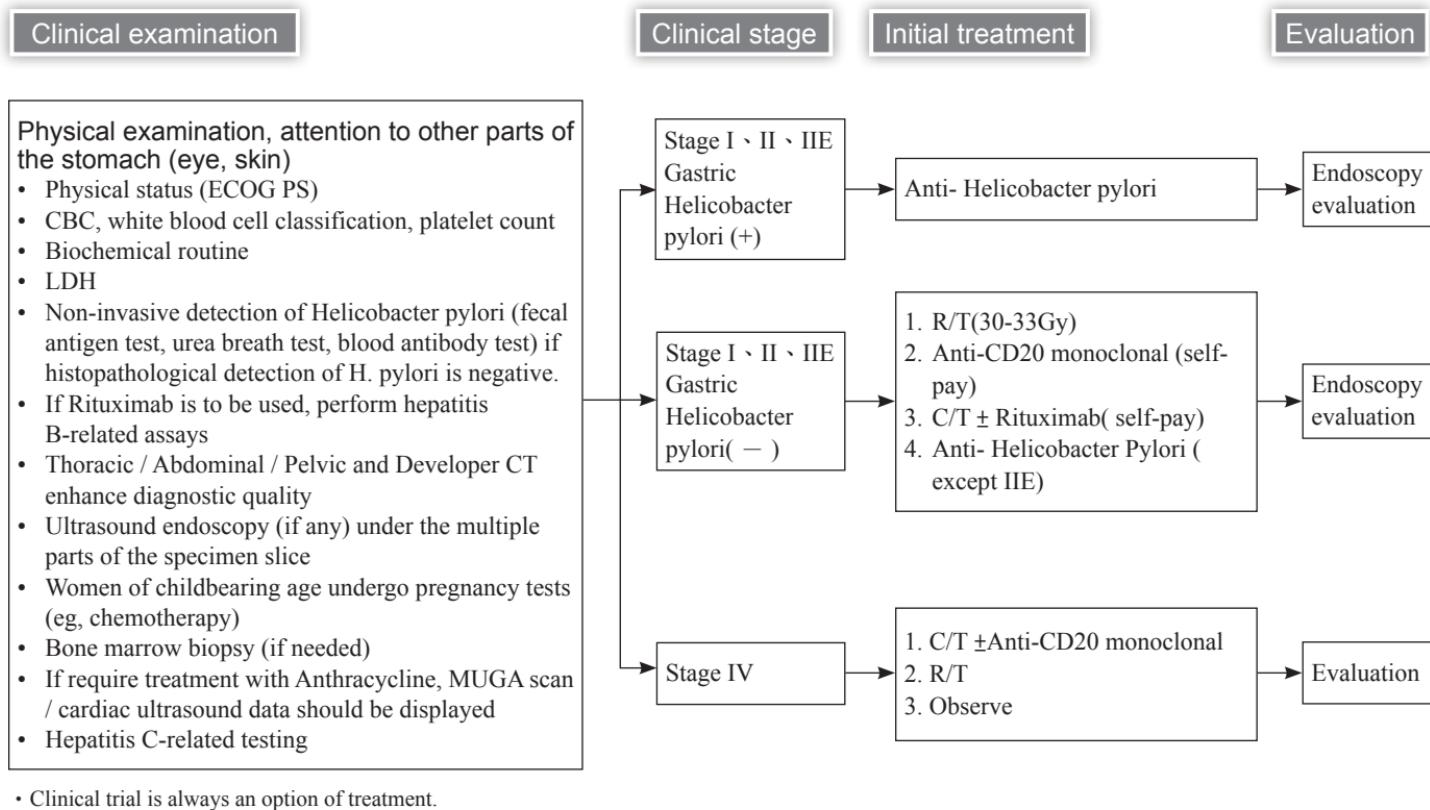
Follicular lymphoma transformed into diffuse large B-cell lymphoma(FL → DLBCL)



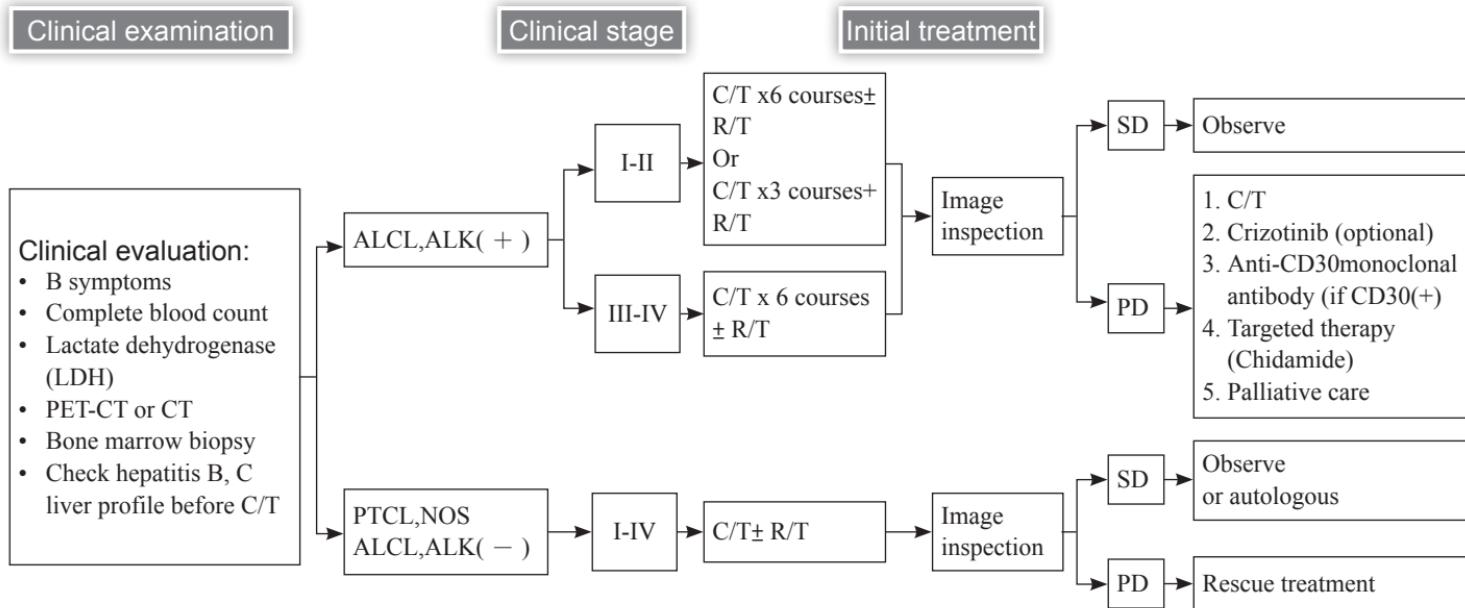
[Diagnosis and treatment of lymphoma consensus -13] Lugano Staging

Lugano Staging System for Gastrointestinal Lymphomas		Lugano Modification of Ann Arbor Staging System	TNM Staging System Adapted for Gastric Lymphoma		Tumor Extension	
Stage I	Confined to GI tracta					
	I ₁ = mucosa, submucosa	I _E	T1	N0	M0	Mucosa, submucosa
	I ₂ = muscularis propria, serosa	I _E	T2	N0	M0	Muscularis propria
		I _E	T3	N0	M0	Serosa
Stage II	Extending into abdomen					
	II ₁ = local nodal involvement	II _E	T1-3	N1	M0	Perigastric lymph nodes
	II ₂ = distant nodal involvement	II _E	T1-3	N2	M0	More distant regional lymph nodes
Stage III	Penetration of serosa to involve adjacent organs or tissues	II _E	T4	N0	M0	Invasion of adjacent structures
Stage IVB	Disseminated extranodal involvement or concomitant supradiaphragmatic nodal involvement	IV	T1-4	N3	M0	Lymph nodes on both sides of the diaphragm/ distant metastases (eg, bone marrow or additional extranodal sites)
			T1-4	N0-3	M1	

[Diagnosis and treatment of lymphoma consensus -14] —(Gastric MALT lymphoma)



[Diagnosis and treatment of lymphoma consensus -15]—T-cell lymphoma



1.Clinical trial is always an option of treatment.

2.Treatment with diffuse large B cell lymphoma without rituximab.

3.aalPI: Age - adjusted International Prognostic Index

《 Reference 》

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I 、 Therapeutic Range

1. Lymphoma
2. High risk for Lymphoma invasion

II 、 Irradiation Dose / Fraction Number

1. Total irradiation dose

▲ Hodgkin Lymphoma :

- (1) Non-bulky disease : Dose : 20-30 Gy, Fractions : 10-20fx, 1.5-2.0 Gy per fraction
- (2) Bulky disease : 30-36Gy, Fractions : 15-20fx, 1.5-2.0 Gy per fraction
- (3) Sites of PR to chemotherapy : 36-40Gy, Fractions : 18-27fx, 1.5-2.0 Gy per fraction

▲ Non-Hodgkin Lymphoma :

Follicular lymphoma

- (1) Dose : 24-30 Gy, Fractions : 12-20fx, 1.5-2.0 Gy per fraction

Early-stage mantle cell lymphoma

- (1) Dose : 24-36 Gy, Fractions : 12-24fx, 1.5-2.0 Gy per fraction

Marginal zone lymphoma

- (1) Dose : 24-30 Gy, Fractions : 12-16fx, 1.5-2.0 Gy per fraction
- (2) Gastric: Dose: 24Gy, Fractions : 16fx, 1.5 Gy per fraction

DLBCL

- (1) Consolidation after chemotherapy CR : Dose : 30-36 Gy, Fractions : 15-24fx
- (2) Complimentary after PR : Dose : 36-50Gy, Fractions : 18-34fx
- (3) RT as primary treatment for refractory or non-candidates for chemotherapy : Dose : 40-55Gy, Fractions : 20-37fx

(4) In combination with stem cell transplantation : Dose : 20-36Gy, Fractions : 10-24fx

NK/T-cell lymphoma

(1) Primary treatment : Dose : 50-55 Gy, Fractions : 25-31fx,

(2) RT in combined modality therapy : Dose : 45-56Gy, Fractions : 22-32fx

PTCL

(1) Consolidation after chemotherapy CR : Dose : 30-36 Gy, Fractions : 15-20fx

(2) Complimentary after PR : Dose : 40-50Gy, Fractions : 20-34fx

(3) RT as primary treatment for refractory or non-candidates for chemotherapy : Dose : 40-55Gy, Fractions : 20-37fx

(4) In combination with HCT : Dose : 20-36Gy, Fractions : 10-24fx

PCMZL & PCFCL

(1) Primary treatment : Dose : 24-30 Gy, Fractions : 12-17fx

MF & SS

(1) Individual plaque and tumor lesions : Dose : 8-12 Gy, Fractions : 1-6fx

(2) Unilesional MF : Dose : 24-30Gy, Fractions : 12-20fx

(3) TSEBT : Dose : 12-36Gy, Fractions : 2-9fx, general 4-6 Gy per week

Primary cutaneous ALCL

(1) Curative treatment : Dose : 24-30 Gy, Fractions : 12-20fx

Primary CNS Lymphoma

(1) WBRT: Dose: 20Gy-24Gy, Fractions : 10-16fx

(2) Consider focal boost to 40-50Gy

Breast implant associated anaplastic large cell lymphoma, (BIA-ALCL)

(1) for local residual disease Dose: 24-36Gy, Fractions: 15-20fx

III 、 Radiation Technique :

Intensity-modulated radiation therapy (IMRT) technique can be used including Arc therapy or Tomotherapy, and combined with image-guide radiation therapy.

Radiation therapy planning: Simultaneously integrated boost (SIB) technique; Complete phase I radiotherapy followed by phase II boost

IV 、 Reference :

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