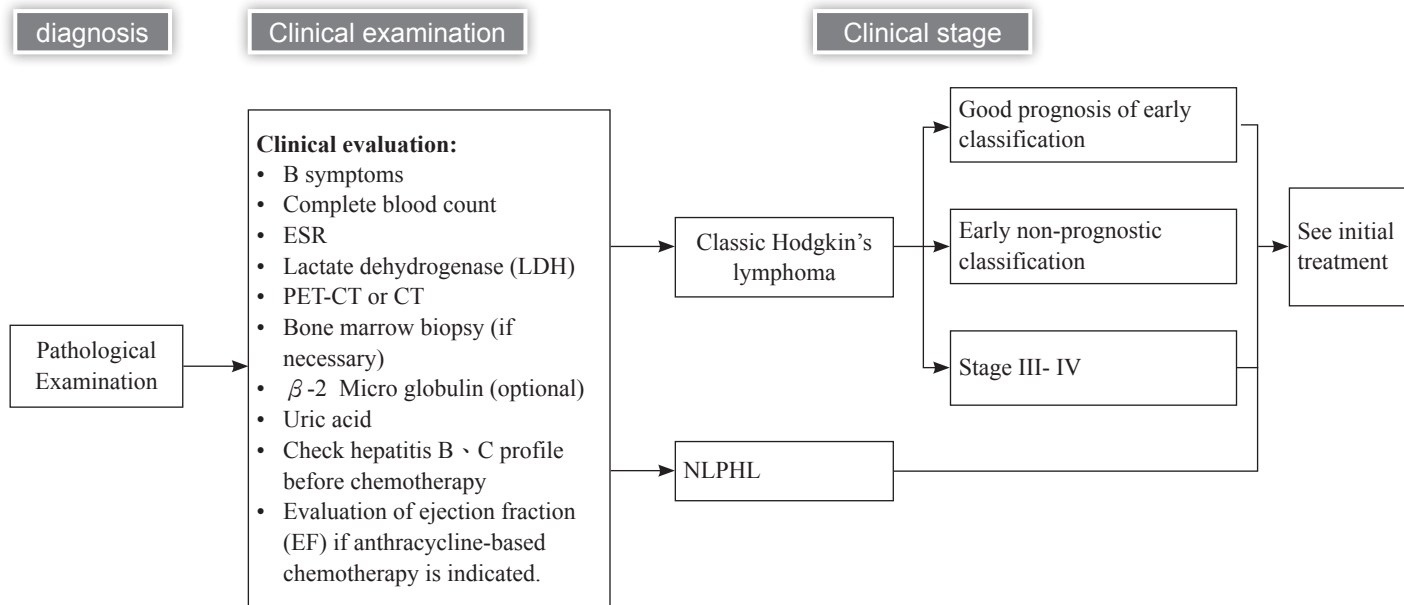


The background features a light gray gradient with several overlapping geometric shapes. A large, light gray diamond is centered, with a smaller, darker gray diamond to its left. In the top right and bottom left corners, there are faint, overlapping circles. The word "Lymphoma" is centered within the large diamond, underlined.

# **Lymphoma**

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# [Diagnosis and treatment of lymphoma consensus-1]-- (Hodgkin's 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
IA / IIA	No	No	Favorable Disease
	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

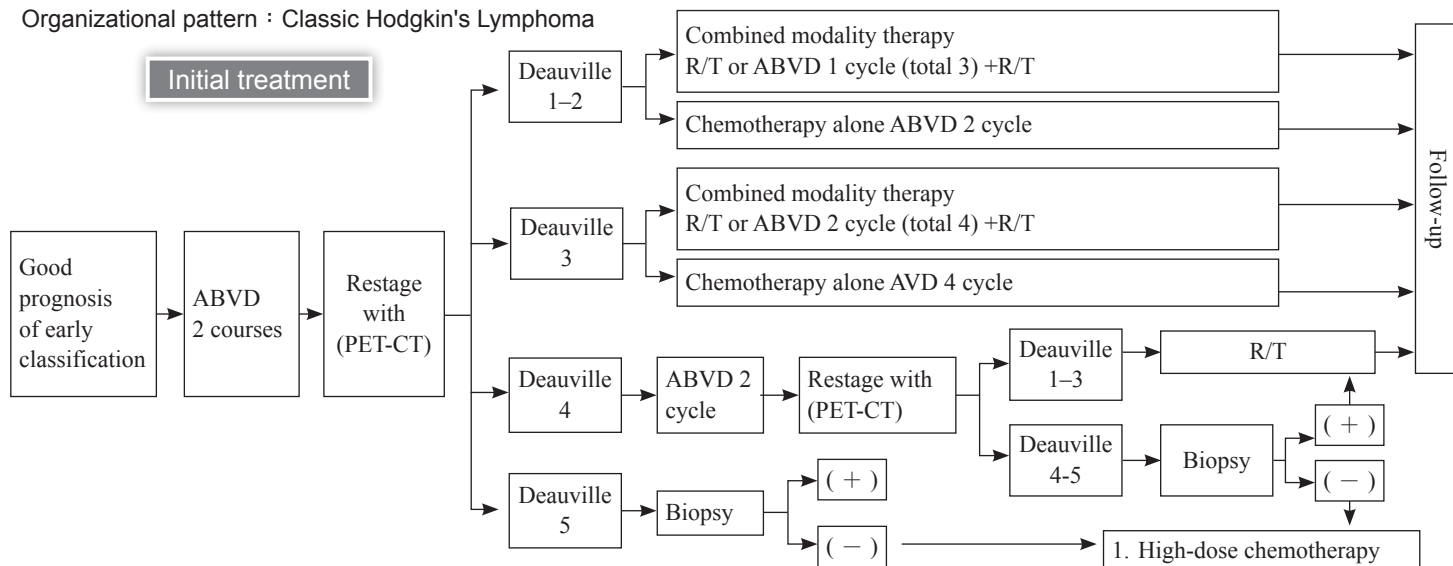
## [Diagnosis and treatment of lymphoma consensus -3]-- (Hodgkin's Lymphoma)

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

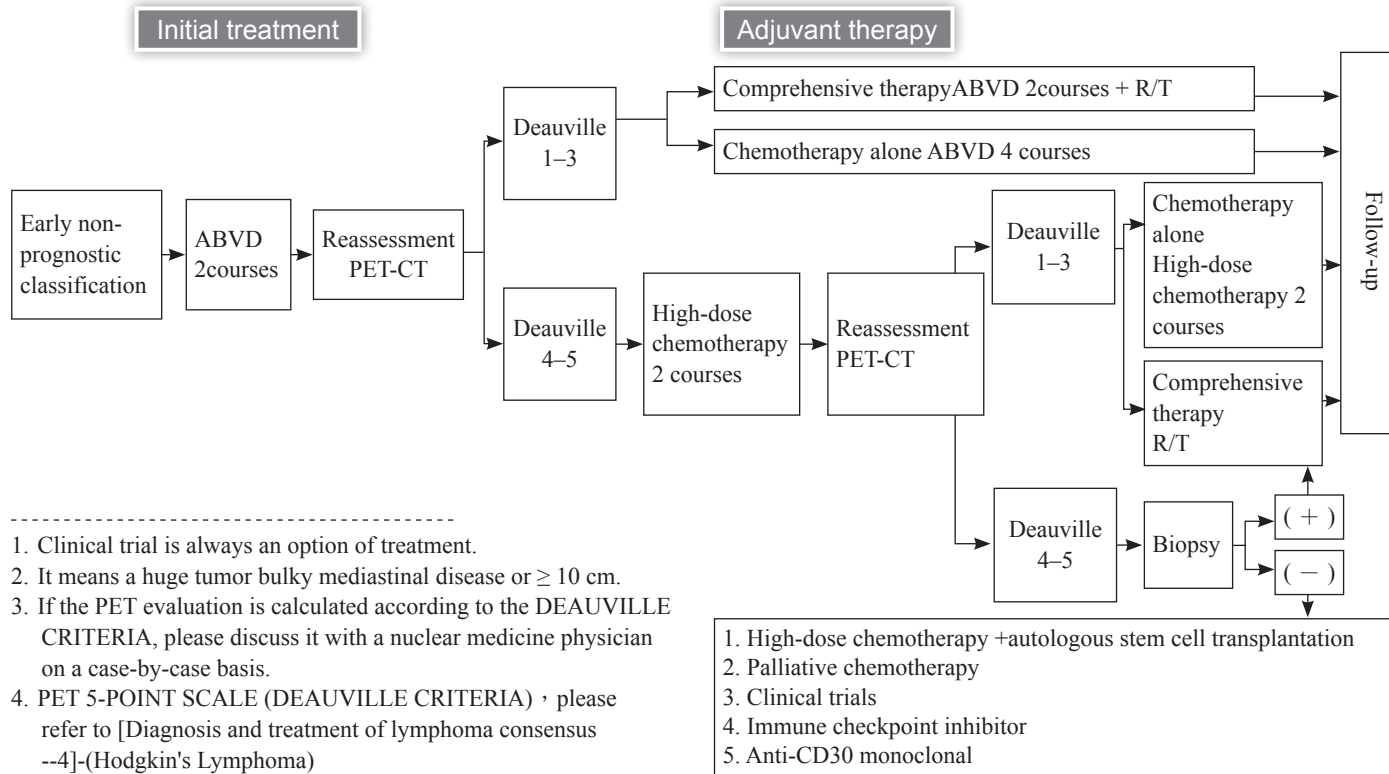


1. Clinical trial is always an option of treatment.
2. Rituximab may be added electively (self-paid) if CD 20 is positive in IHC stain.
3. A good definition of early prognosis: 1. Age < 50 y/o 2. ESR normal 3. Stage I-II 4. No B symptoms 5. No bulky disease
4. If the PET evaluation is calculated according to the DEAUVILLE CRITERIA, please discuss it with a nuclear medicine physician on a case-by-case basis.
5. PET 5-POINT SCALE (DEAUVILLE CRITERIA) · please refer to [Diagnosis and treatment of lymphoma consensus

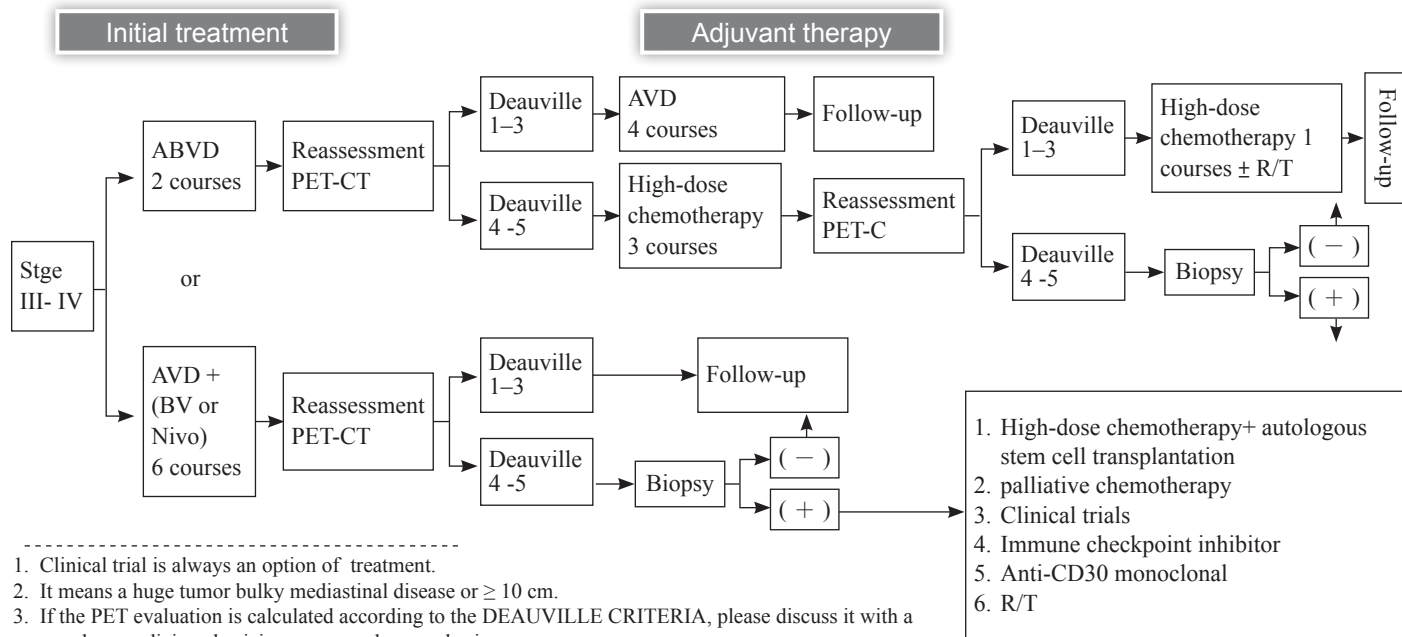
1. High-dose chemotherapy + autologous stem cell transplantation
2. Palliative chemotherapy
3. Clinical trials
4. Immune checkpoint inhibitor
5. Anti-CD30 monoclonal antibody

# [ 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  $\geq 10$  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

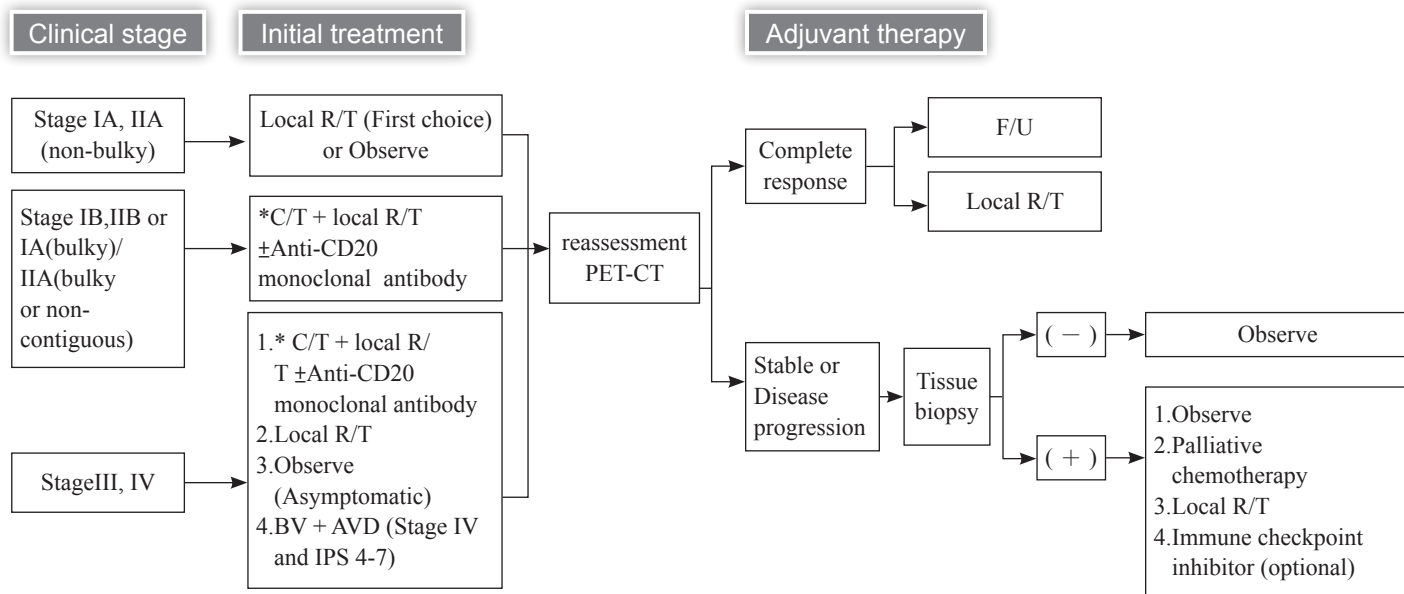
# [Diagnosis and treatment of lymphoma consensus -7] - Classic Hodgkin's Lymphoma ( in Adults Age >60 Years or Adults With Poor Performance Status or Substantial Comorbidities)

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

Primary Systemic Therapy Regimens	
Stage I–II Favorable Disease	<ul style="list-style-type: none"> <li>• A(B)VDa,b,c,h (2 cycles) ± AVD (2 cycles) + ISRTd (preferred) °</li> <li>• CHOP (4 cycles) + R/T °</li> </ul>
Stage I–II Unfavorable or Stage III–IV Disease	<ul style="list-style-type: none"> <li>• 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 °</li> <li>• BV followed by AVD, conditionally followed by BV in patients with CR or PR and no neuropathy °</li> <li>• CHOP (6 cycles) ± R/T °</li> </ul>
Patients with Low EF	<ul style="list-style-type: none"> <li>• Add dexrazoxane to ABVDa,b,c or CHOP, with close cardiology follow-up °</li> <li>• BV-DTIC (dacarbazine) °</li> </ul>



## [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

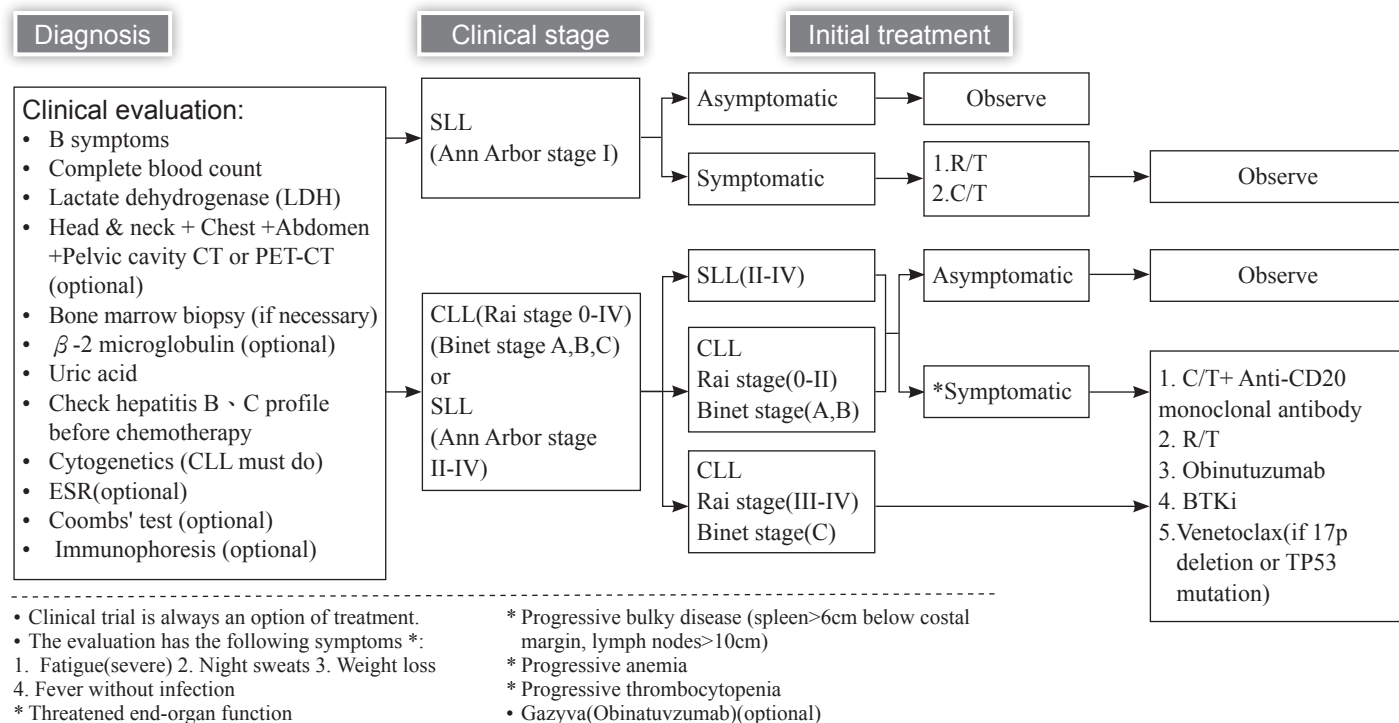
\* If the PET evaluation is calculated according to the DEAUVILLE CRITERIA, please discuss it with a nuclear medicine physician on a case-by-case basis.

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

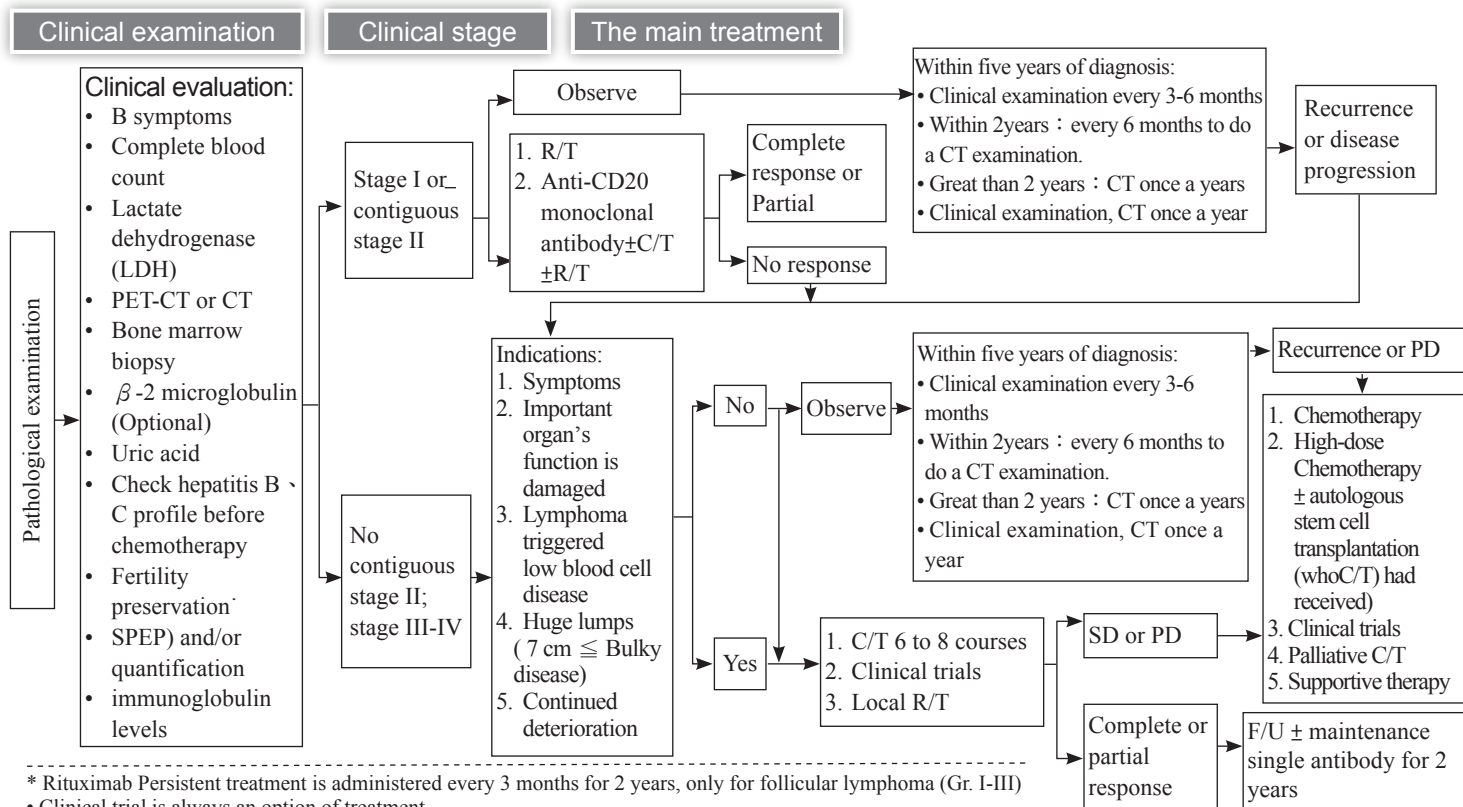
\* IPS used risk stratification tool for patients with advanced Hodgkin lymphoma- Risk factor items/calculation methods (7 items in total): Serum albumin/ <4 g/dL ; Hb /<10.5 g/dL; Male/yes ; Stage IV/yes ; Age/ ≥ 45 y/o ; WBC count/ ≥ 15k/mcL ; Lymphocyte count/<600/mcL or <8% of WBC count °

\* 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



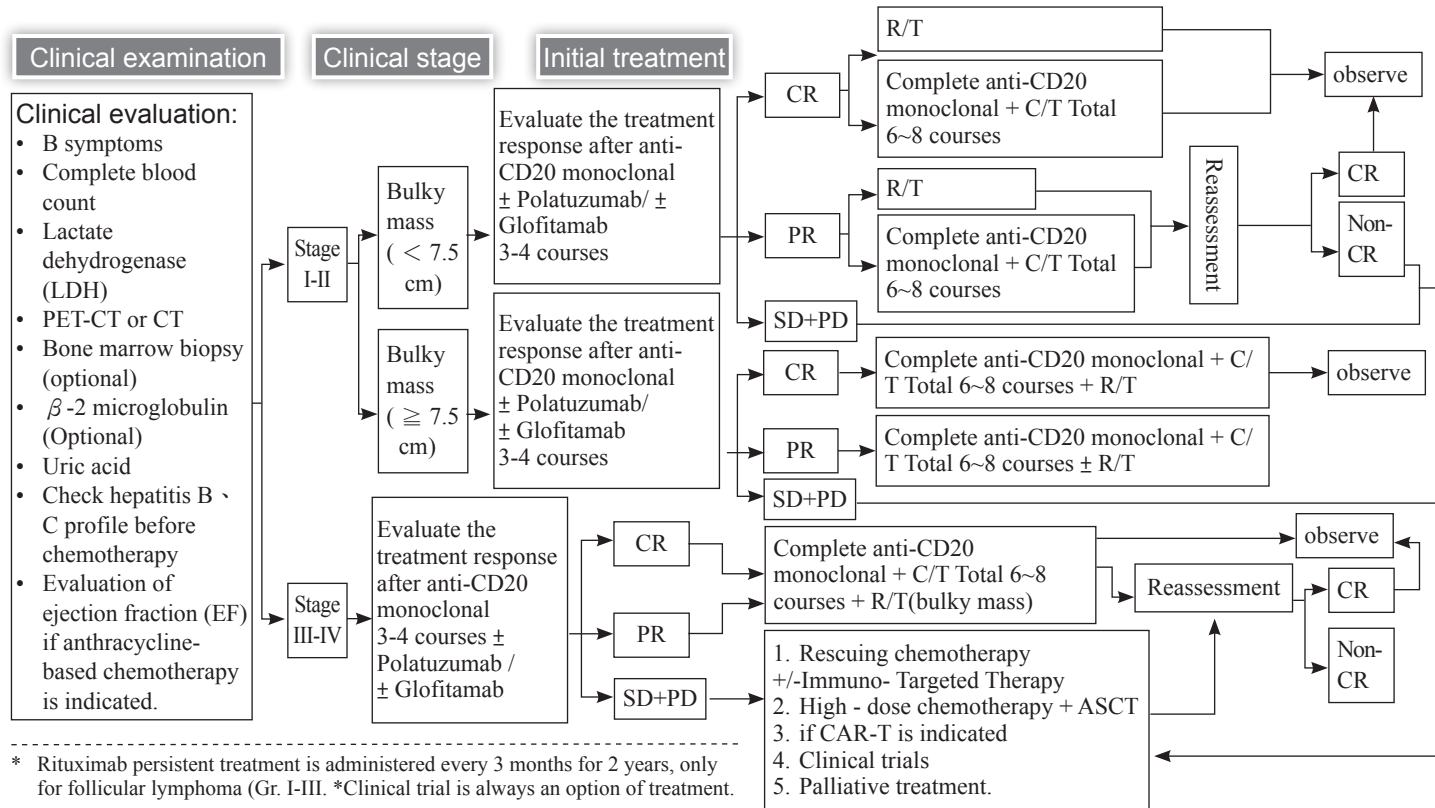
\* Rituximab Persistent treatment is administered every 3 months for 2 years, only for follicular lymphoma (Gr. I-III)

• Clinical trial is always an option of treatment.

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

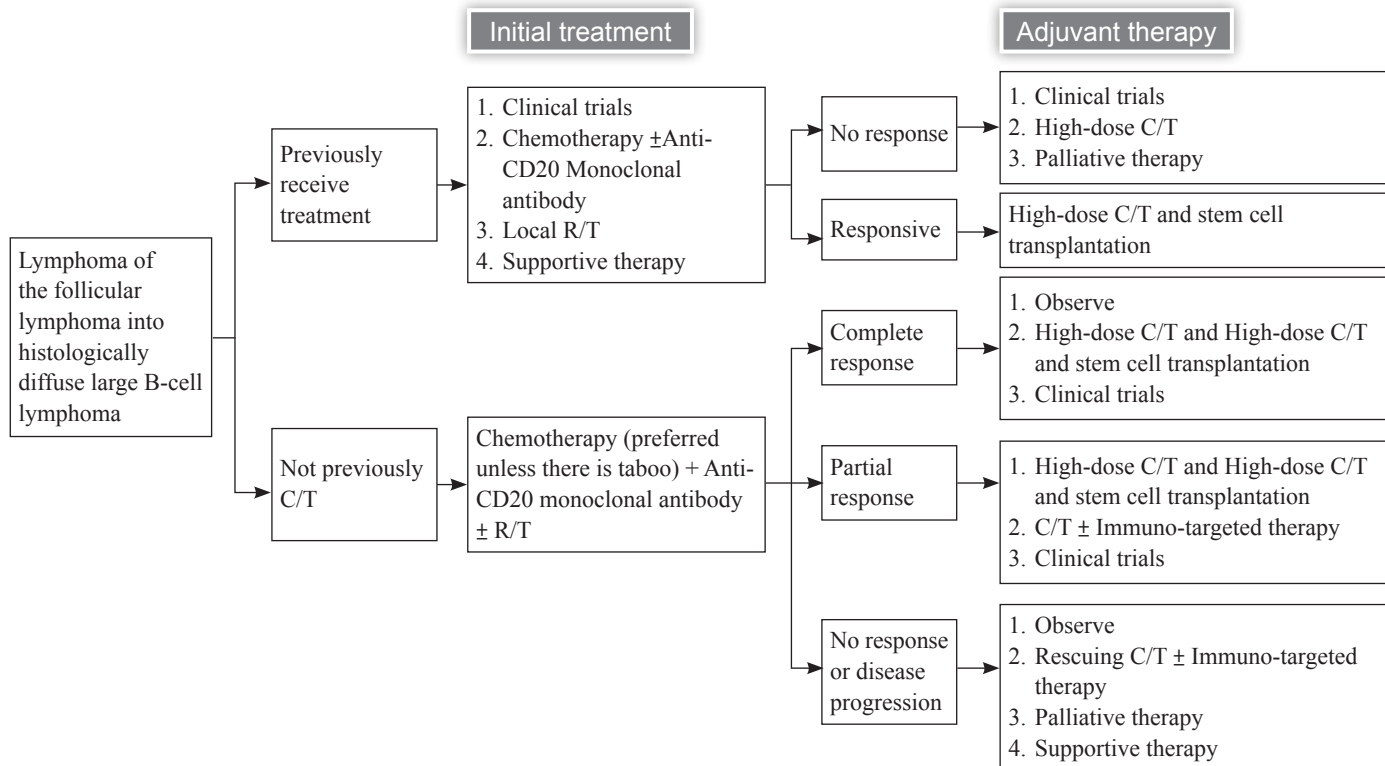
\* No contiguous stage II: Follicular lymphoma cells are found in two or more lymph node groups on the same side of the diaphragm .

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



\* 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.

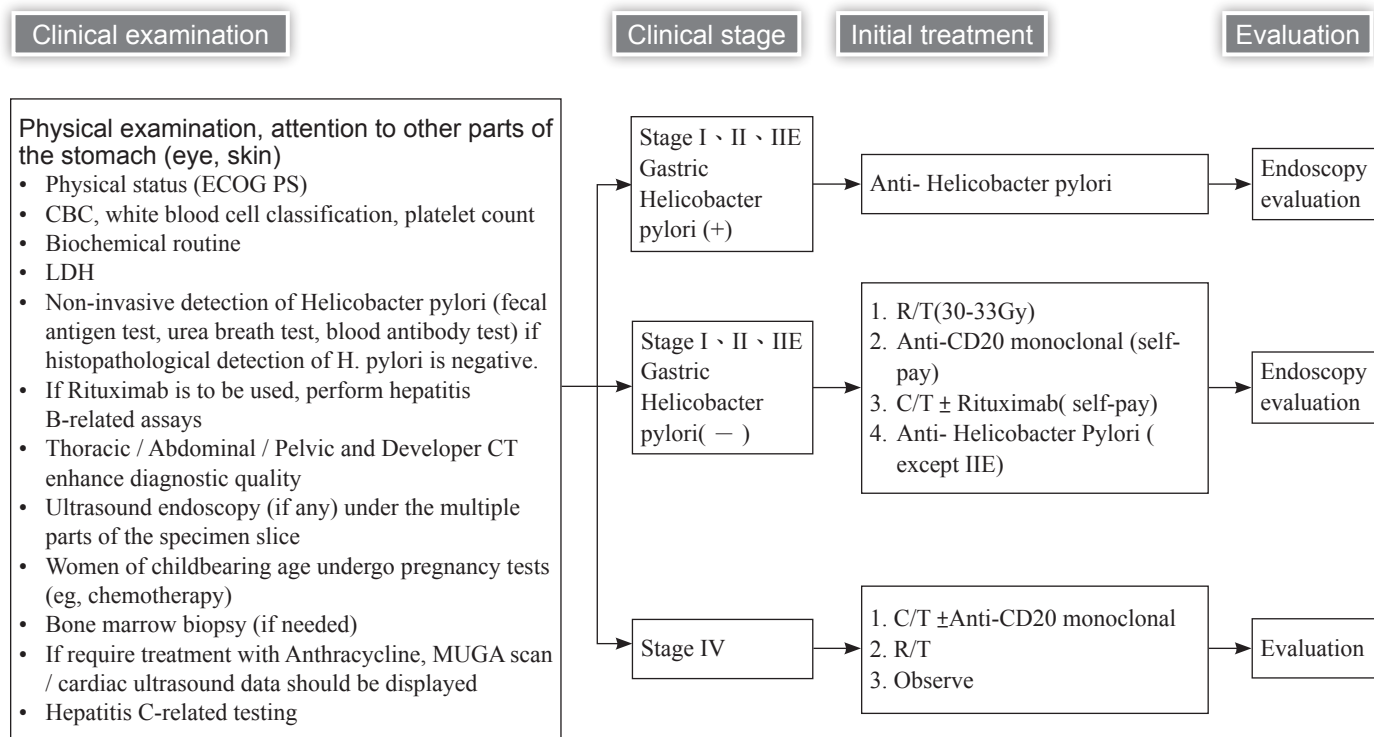
## [Diagnosis and treatment of lymphoma consensus12] – Follicular lymphoma transformed into diffuse large B-cell lymphoma(FL → DLBCL)



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

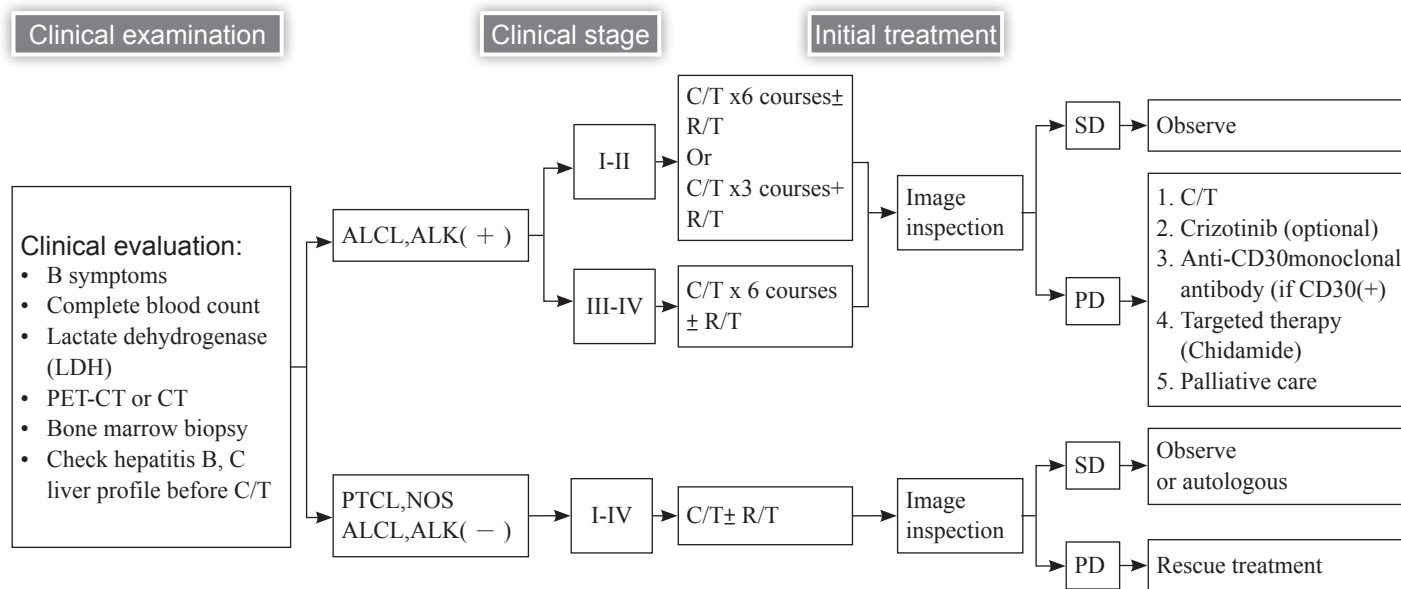
Lugano Staging System for Gastrointestinal Lymphomas		Lugano Modification of Ann Arbor Staging System	TNM Staging System Adapted for Gastric Lymphoma	Tumor Extension
Stage I	Confined to GI tracta			
	I <sub>1</sub> = mucosa, submucosa	I <sub>E</sub>	T1 N0 M0	Mucosa, submucosa
	I <sub>2</sub> = muscularis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

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



• Clinical trial is always an option of treatment.

# [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 Lymphomainvasion

## **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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