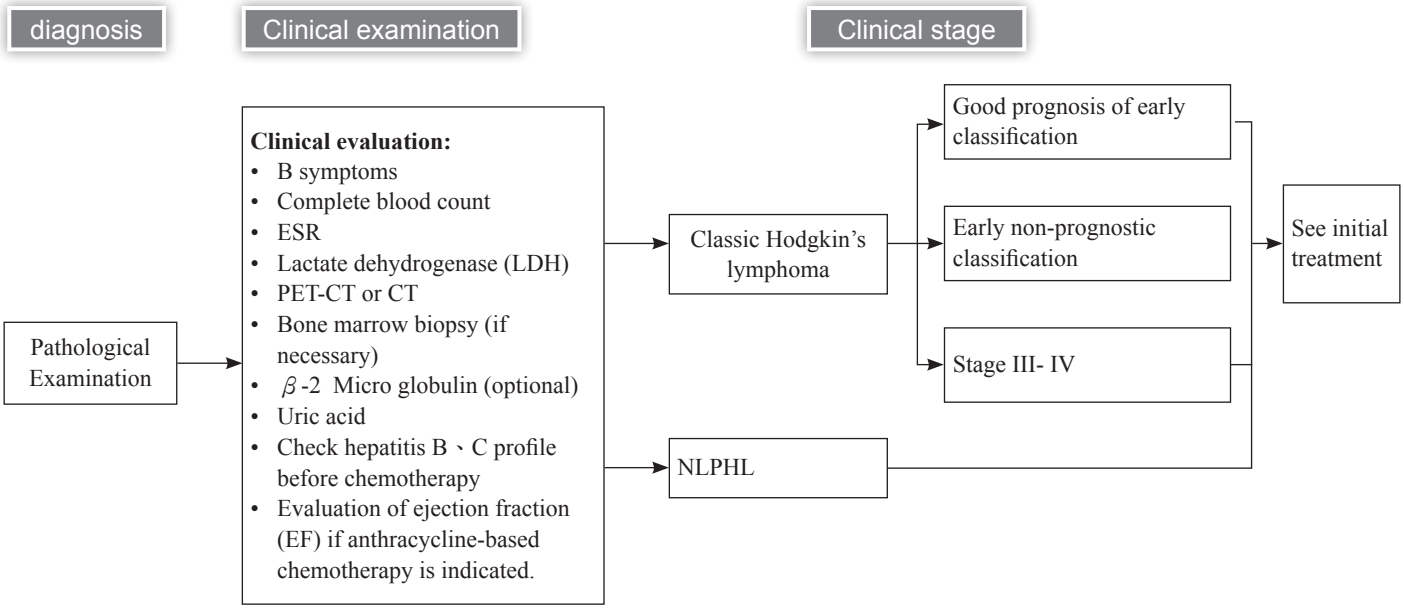
Lymphoma

[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

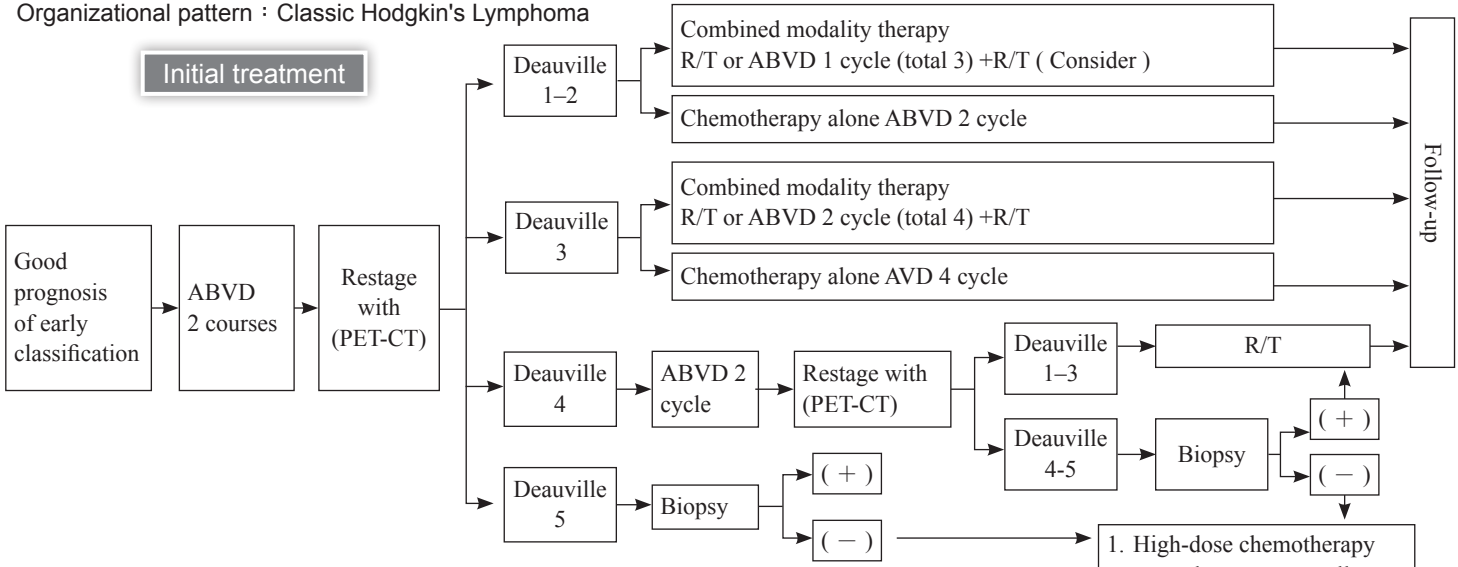
[Diagnosis and treatment of lymphoma consensus -3]-- (Hodgkin's Lymphoma)

PET 5-POINT SCALE (DEAUVILLE CRITERIA)

Score PET		CT Scan Result
Negative	1	No uptake
	2	Uptake ≤ mediastinum
	3	Uptake > mediastinum but ≤ 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)

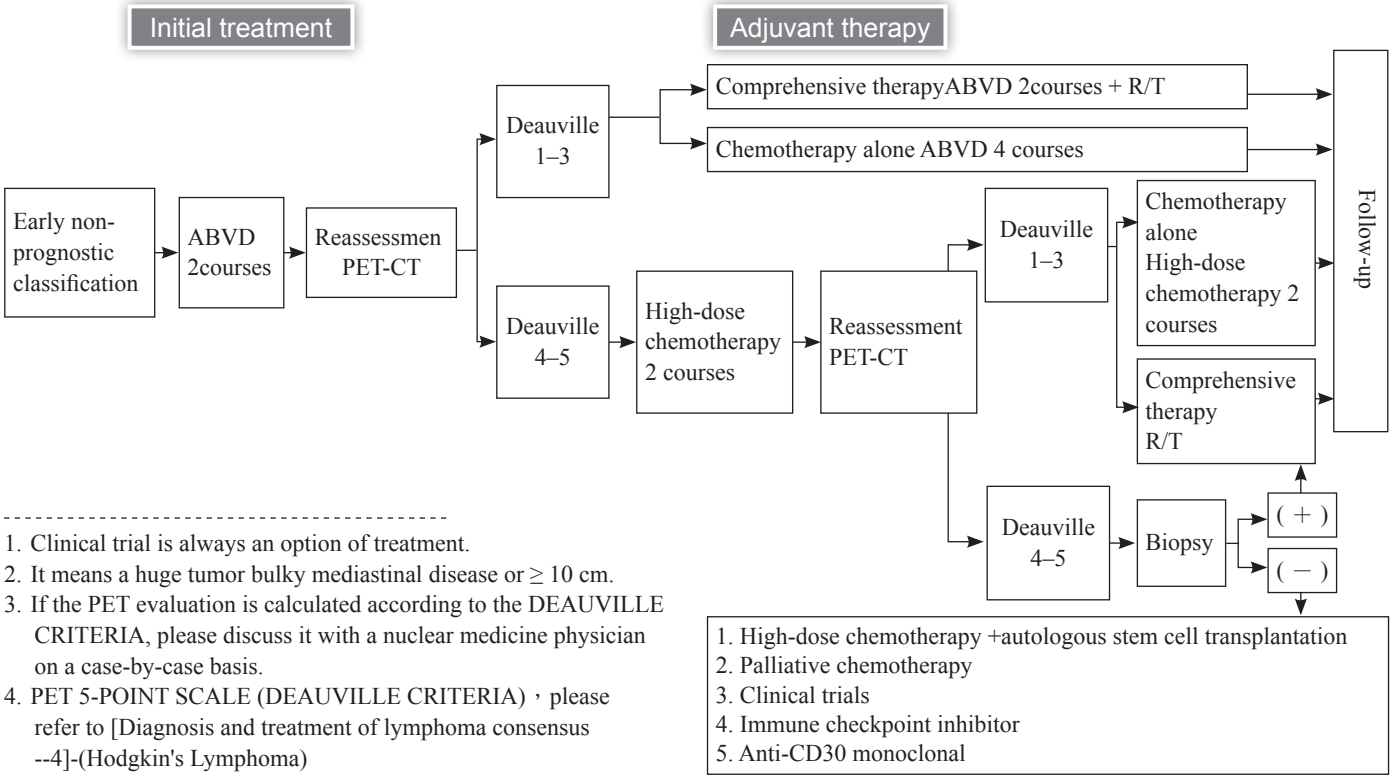
Organizational pattern：Classic Hodgkin's Lymphoma



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

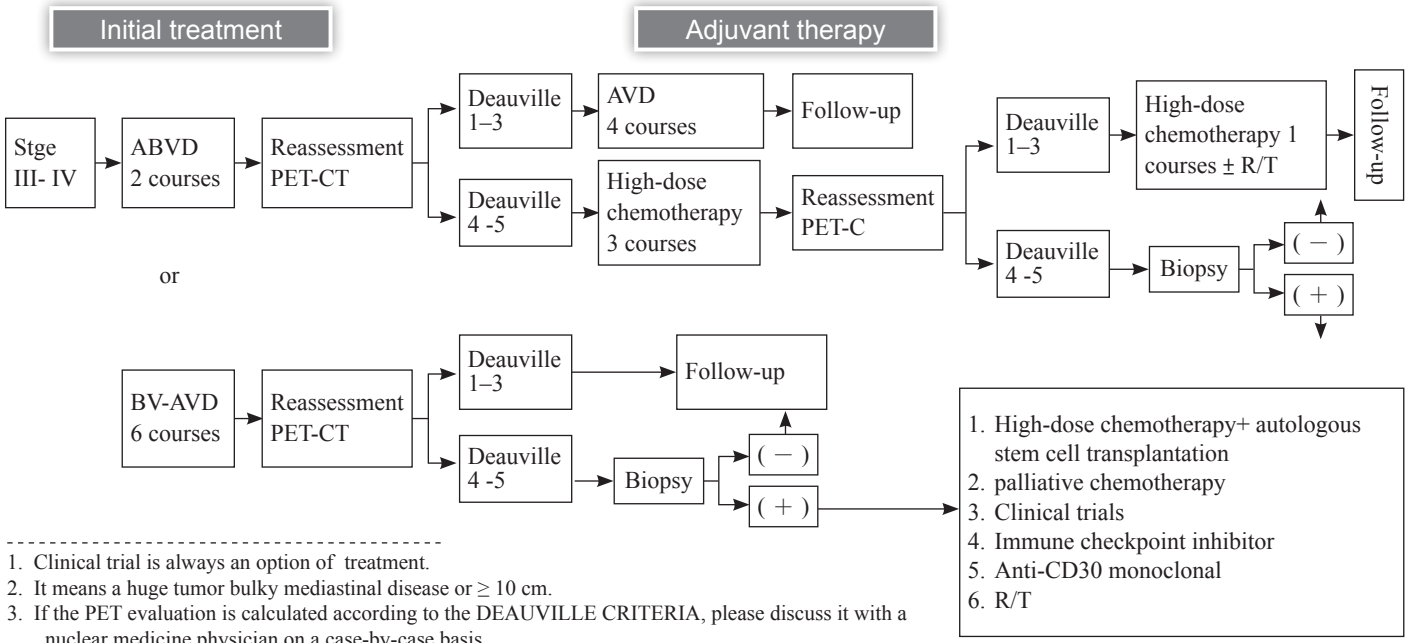
[Diagnosis and treatment of lymphoma consensus -5]—(Hodgkin's Lymphoma) (Age 18- 60years)

Organizational pattern：Classic Hodgkin's Lymphoma



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)

[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.

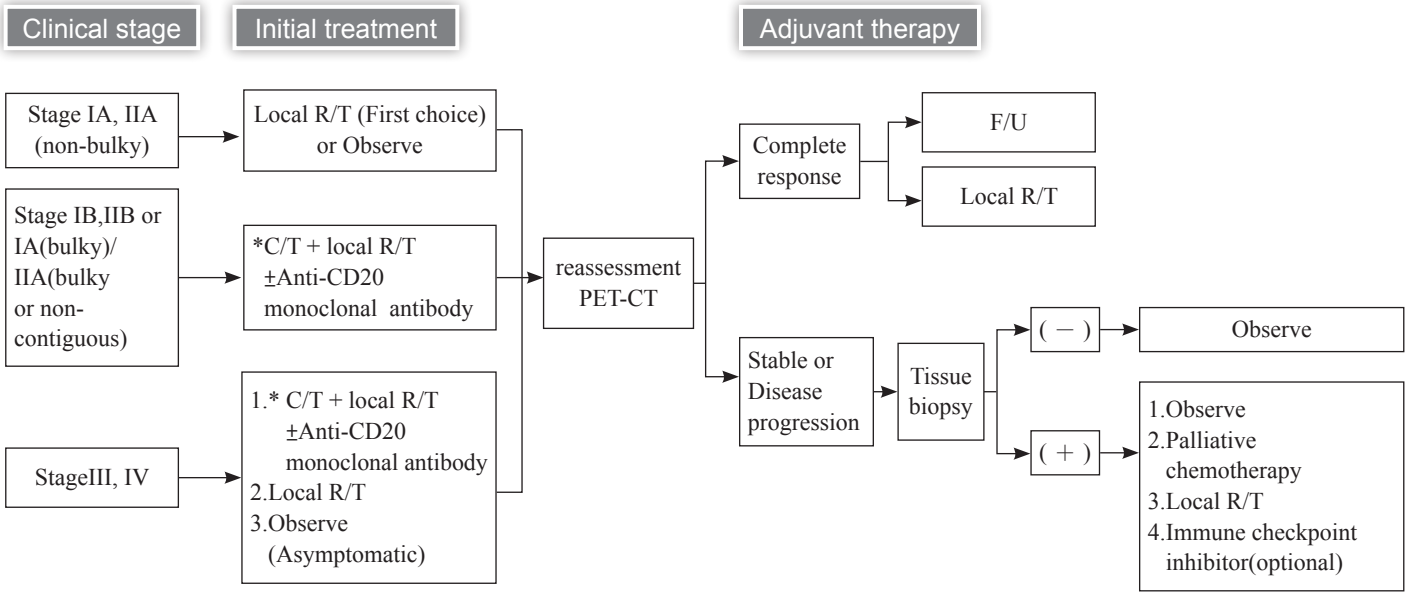
**Total 6 courses

[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**

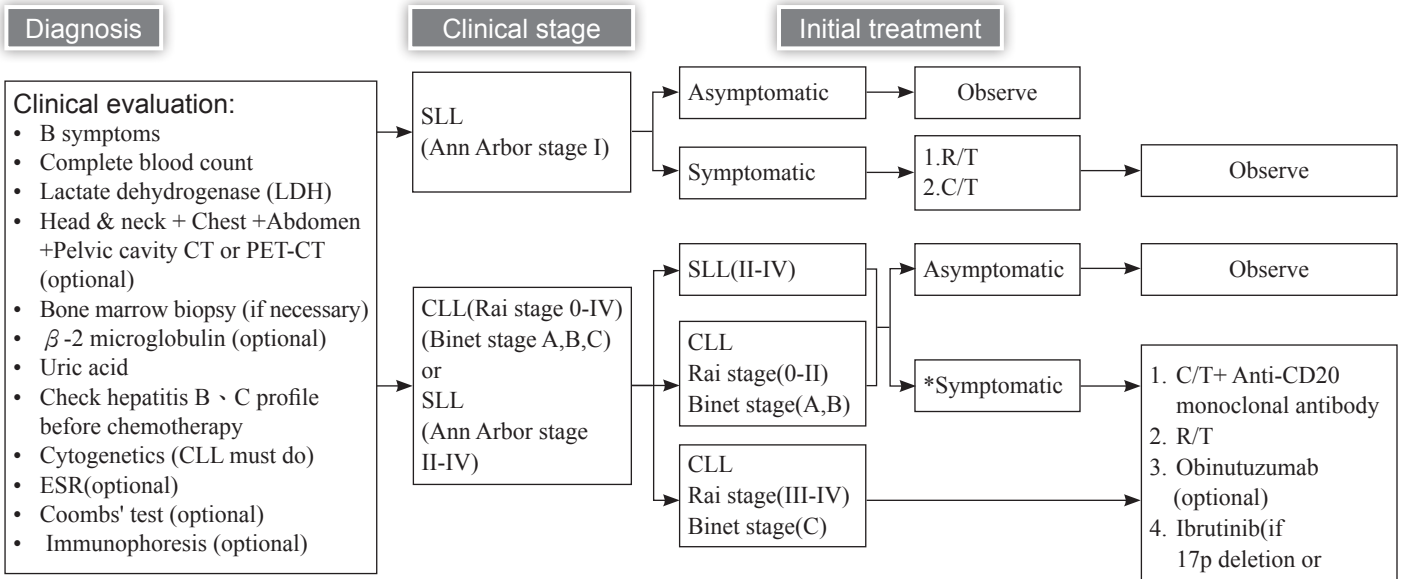
Primary Systemic Therapy Regimens	
Stage I–II Favorable Disease	• A(B)VDa,b,c,h (2 cycles) ± AVD (2 cycles) + ISRTd (preferred) ◦ • CHOP (4 cycles) + R/T ◦
Stage I–II Unfavorable or Stage III–IV Disease	• A(B)VD(2 cycles) followed by AVD (4 cycles)if FDG-PET scan is negative after 2 cycles of ABVD →Patients 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	• Add dexrazoxane to ABVDa,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。

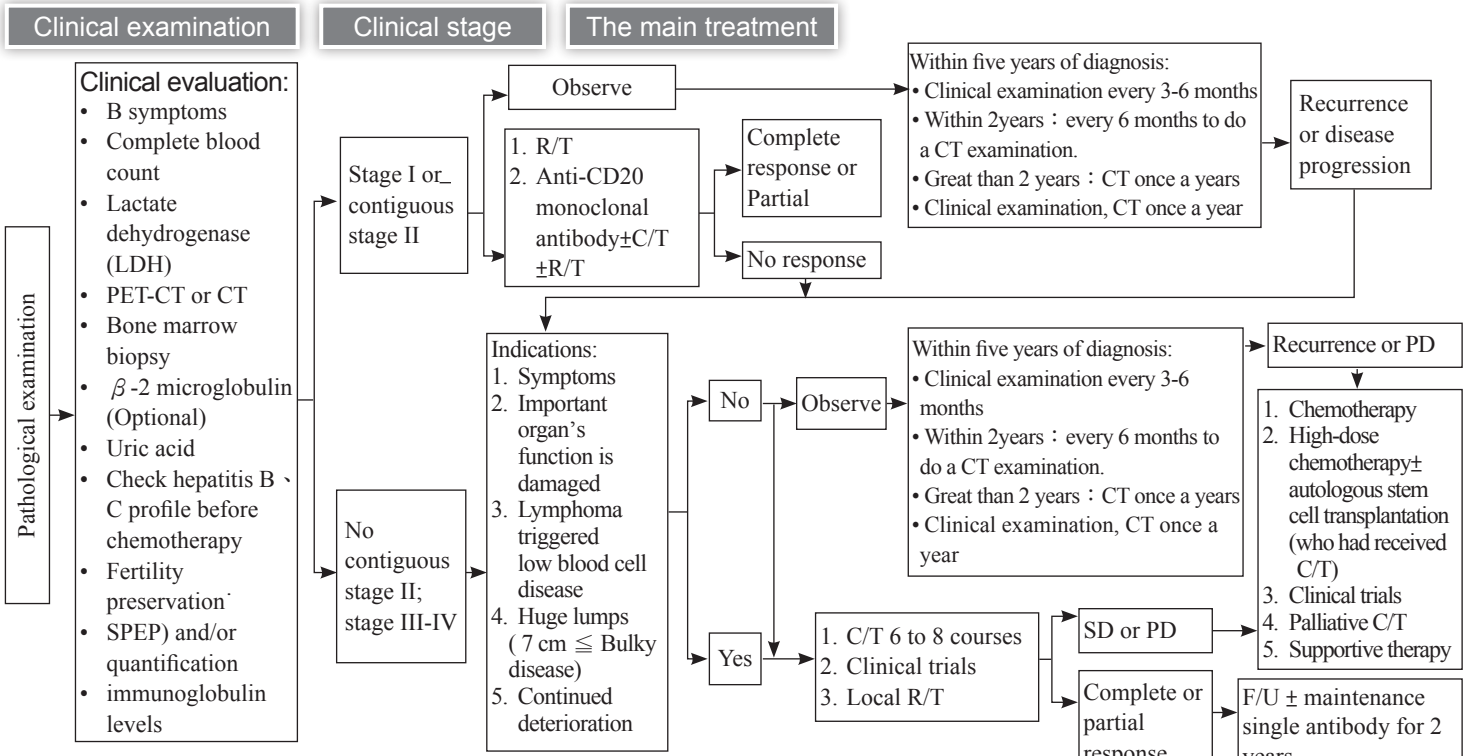
[Diagnosis and treatment of lymphoma consensus -9] -Chronic lymphocytic leukemia (CLL)/ small lymphocytic lymphoma (SLL)



• Clinical trial is always an option of treatment.
• The evaluation has the following symptoms *:
1. Fatigue(severe) 2. Night sweats 3. Weight loss
4. Fever without infection
* Threatened end-organ function

* Progressive bulky disease(spleen>6cm below costal margin, lymph nodes>10cm)
* Progressive anemia
* Progressive thrombocytopenia
• Gazyva(Obinatuvzumab)(optional)

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



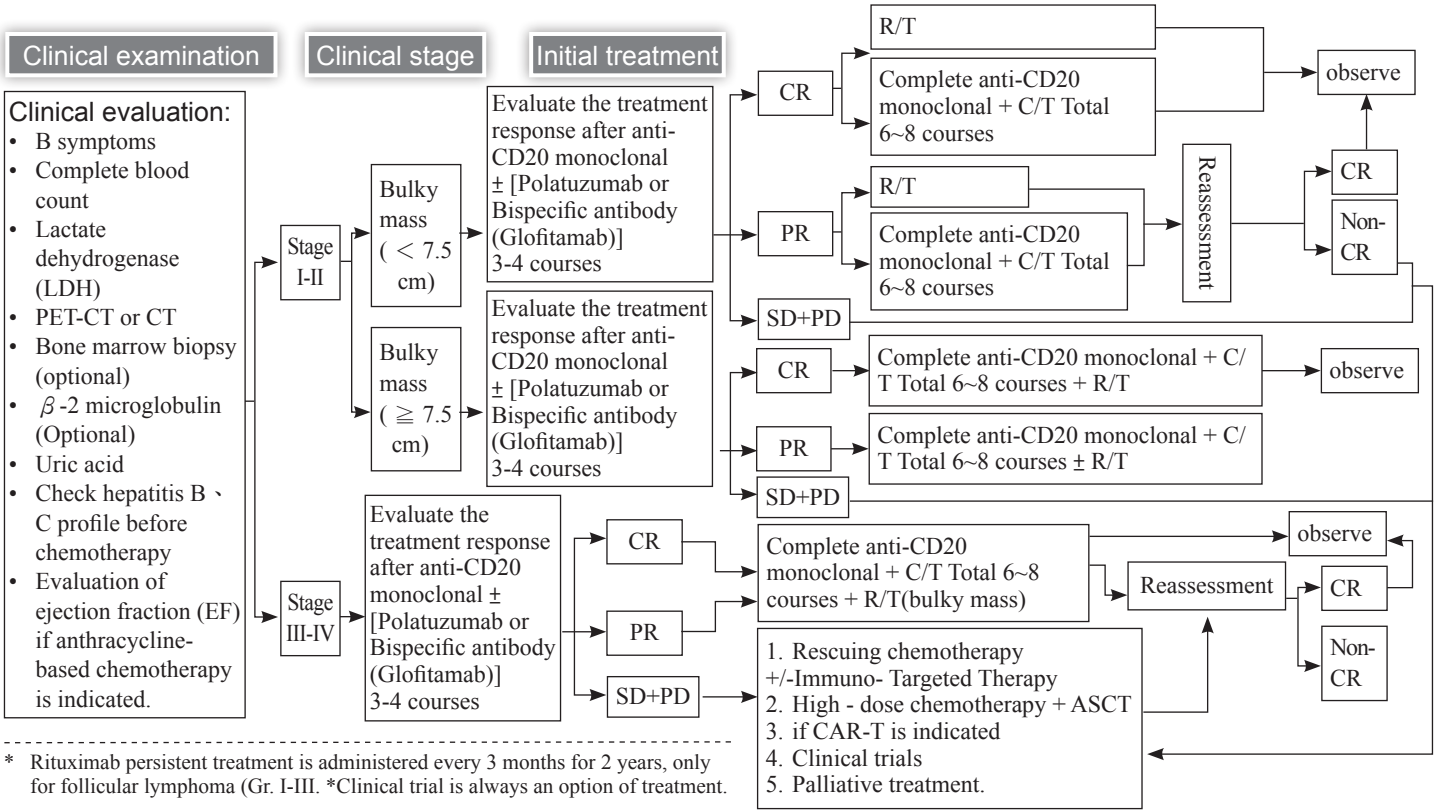
* Rituximab Persistent treatment is administered every 3 months for 2 years, only for follicular lymphoma (Gr. I-III)

• Clinical trial is always an option of treatment.

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

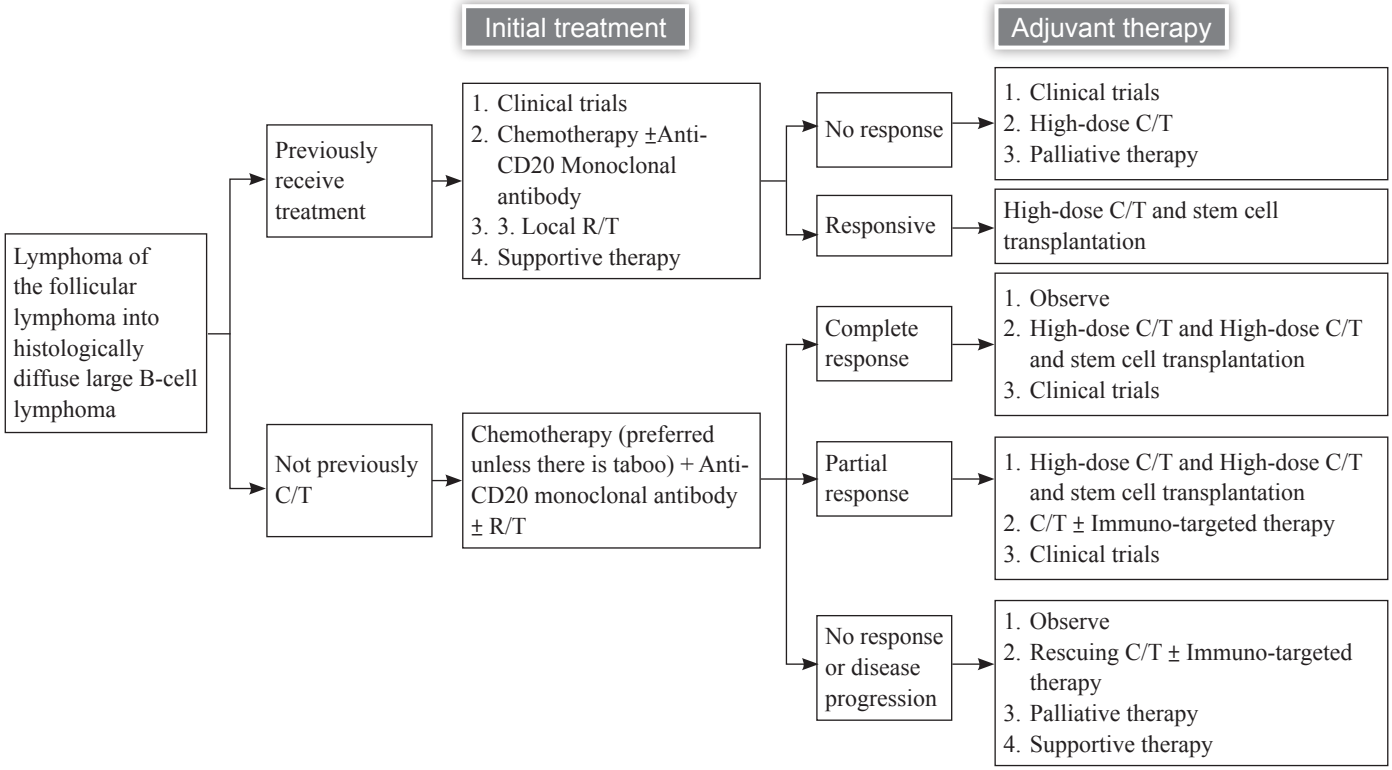
* No contiguous stage II: Follicular lymphoma cells are found in two or more lymph node groups on the same side of the diaphragm。

[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.

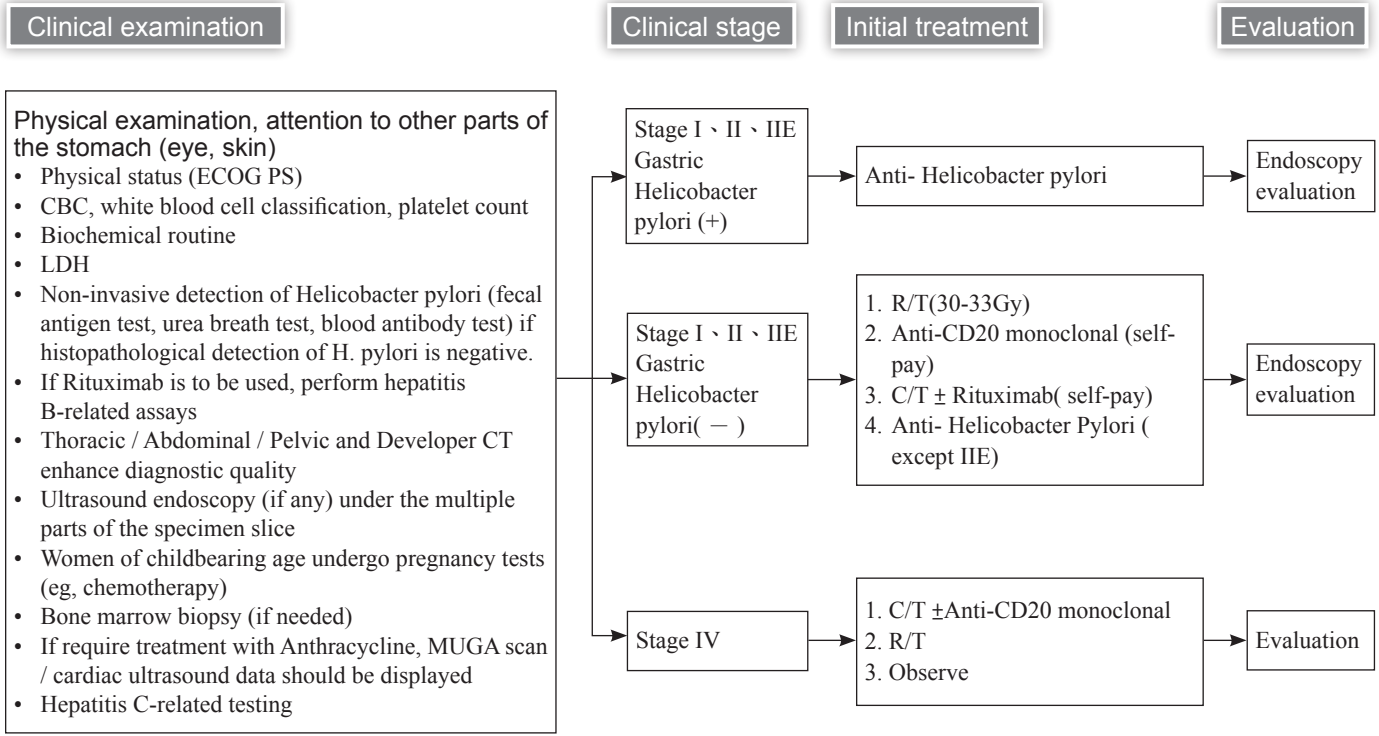
[Diagnosis and treatment of lymphoma consensus12] – Follicular lymphoma transformed into diffuse large B-cell lymphoma(FL → DLBCL)



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

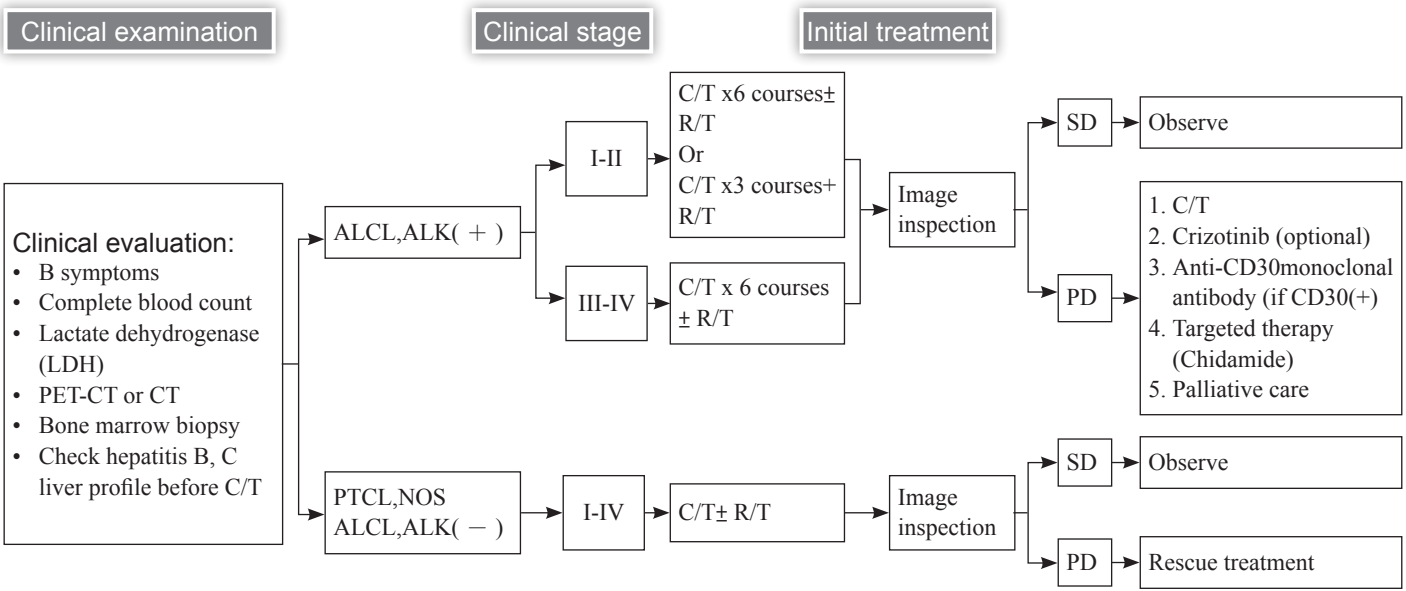
Lugano Staging System for Gastrointestinal Lymphomas		Lugano Modification of Ann Arbor Staging System	TNM Staging System Adapted for Gastric Lymphoma	Tumor Extension
Stage I	Confined to GI tracta			
	I_1 = mucosa, submucosa	I_E	T1 N0 M0	Mucosa, submucosa
	I_2 = muscularis propria, serosa	I_E	T2 N0 M0	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 IIE	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		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.aaIPI: Age - adjusted International Prognostic Index

《 Reference 》

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Principle of Radiation Therapy in Lymphoma

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 fractrion
(2) Bulky disease : 30-36Gy, Fractions : 15-24fx, 1.5-2.0 Gy per fractrion
(3) Sites of PR to chemotherapy : 36-45Gy, Fractions : 18-30fx, 1.5-2.0 Gy per fractrion

▲ **Non-Hodgkin Lymphoma :**

Follicular lymphoma

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

Early-stage mantle cell lymphoma

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

Marginal zone lymphoma

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

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 : 24-36 Gy, Fractions : 12-24fx

Primary CNS Lymphoma

(1) WBRT: Dose: 23.4Gy-36Gy, Fractions : 13-20fx

(2) Consider focal boost to 45Gy

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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