天主教聖馬爾定醫院

血液惡性疾病診療指引

造血癌多專科團隊擬定

99.04 初制
113.03 修訂

Hodgkin Lymphoma

初版日期：99.04
更新版日期：113.03

Diagnosis	workup
1.Excisional biopsy (recommended) 2.Core needle biopsy may be adequate if diagnostic 3.Immunohistochemistry evaluation	1.Complete H&P B symptoms Performance status Examination of lymph nodes Liver, spleen 2.CBC/DC, ESR 3.Biochemistry: AST,ALT, uric acid, Cr, Ca, albumin, total protein, sugar, LDH,total bilirubin 4.Others: HBsAg, anti-HCV Ab 5.CXR (encouraged) 6.Diagnosis Whole body CT scan or PET scan 7.BM aspiration + biopsy (optional) 8.HIV (encouraged)

參考資料來源：
1. V2 2024. NCCN Hodgkin Lymphomas Guidelines

Staging	Risk factors

Lugano Classification for Hodgkin and Non-Hodgkin Lymphoma

Staging	Lugano Stage
I	Involvement of a single lymphatic site (i.e., nodal region, Waldeyer's ring, thymus, or spleen)
IE	Single extralymphatic site in the absence of nodal involvement (rare in Hodgkin lymphoma)
II	Involvement of two or more lymph node regions on the same side of the diaphragm
IIE	Contiguous extralymphatic extension from a nodal site with or without involvement of other lymph node regions on the same side of the diaphragm
III	Involvement of lymph node regions on both sides of the diaphragm；nodes above the diaphragm with spleen involvement
IV	Diffuse or disseminated involvement of one or more extralymphatic organs, with or without associated lymph node involvement； or *noncontiguous* extralymphatic organ involvement in conjunction with nodal Stage II disease or *any* extralymphatic organ involvement in nodal Stage III disease Stage IV includes *any* involvement of the CSF, bone marrow, liver, or multiple lung lesions (other than by direct extension in Stage IIE disease)

※若為stage I or II, 有大於1個以上的risk factors, 為unfavorable risk
unfavorable factors(localized presentations)

(1)Bulky disease:

- Mediastinal mass (chest x-ray):
  Maximum mass width 1
  Maximum intrathoraci diameter 3
- Any mass > 10cm (CT)

(2)Erythrocyte sedimentation rate ≥ 50, if asymptomatic
(3)> 3 lymphoid regions
(4)B symptoms

※ 若為stage III or IV,IPS大於4個以上的risk factors, 為unfavorable riskInternational prognostic score (IPS):

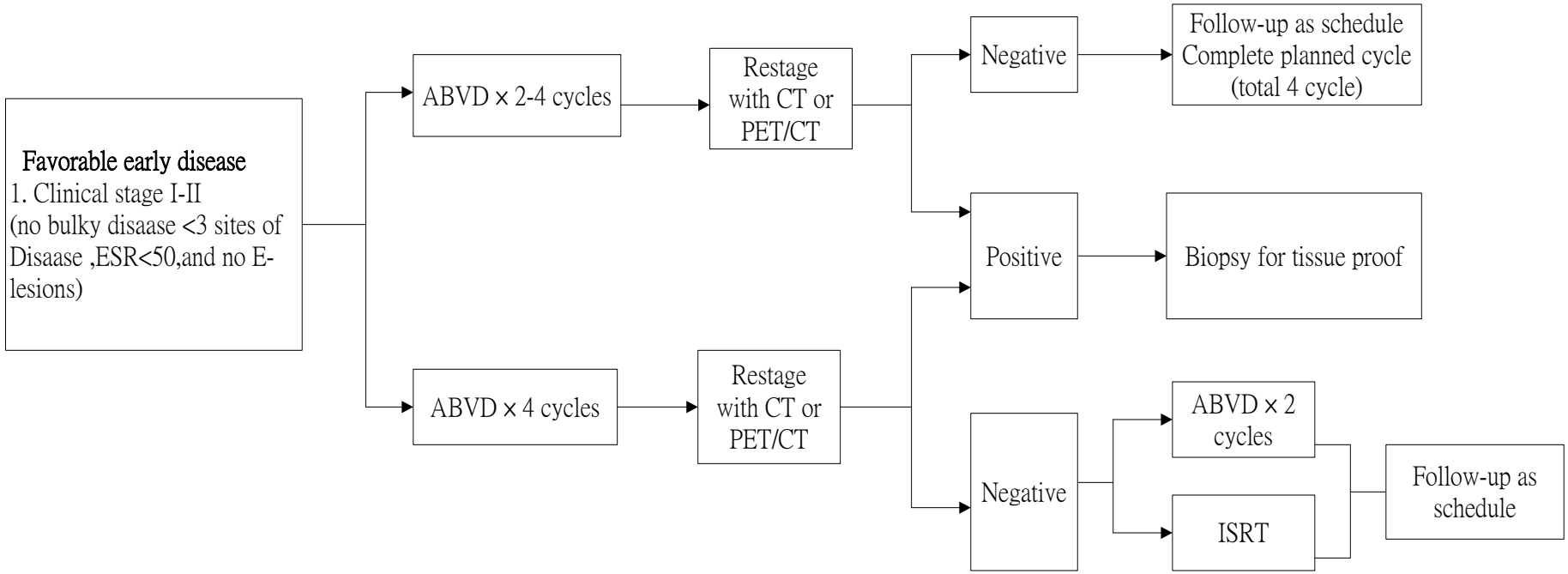
International prognostic score (IPS)1 point per factor (advanced disease)2

- Albumin <4 g/dL
- Hemoglobin <10.5 g/dL
- Male
- Age ≧45 years
- Stage IV disease
- Leukocytosis (white blood cell count ≧ 15,000/mm3)
- Lymphocytopenia (lymphocyte count <8% of WBC count, and/or lymphocyte count <600/mm3)

Score	5 years PFS (%)	5 years OS (%)
0	84	89
1	77	90
2	67	81
3	60	78
4	51	61
5~7	42	56

參考資料來源：
1. V2 2024. NCCN **Hodgkin Lymphomas Guidelines**

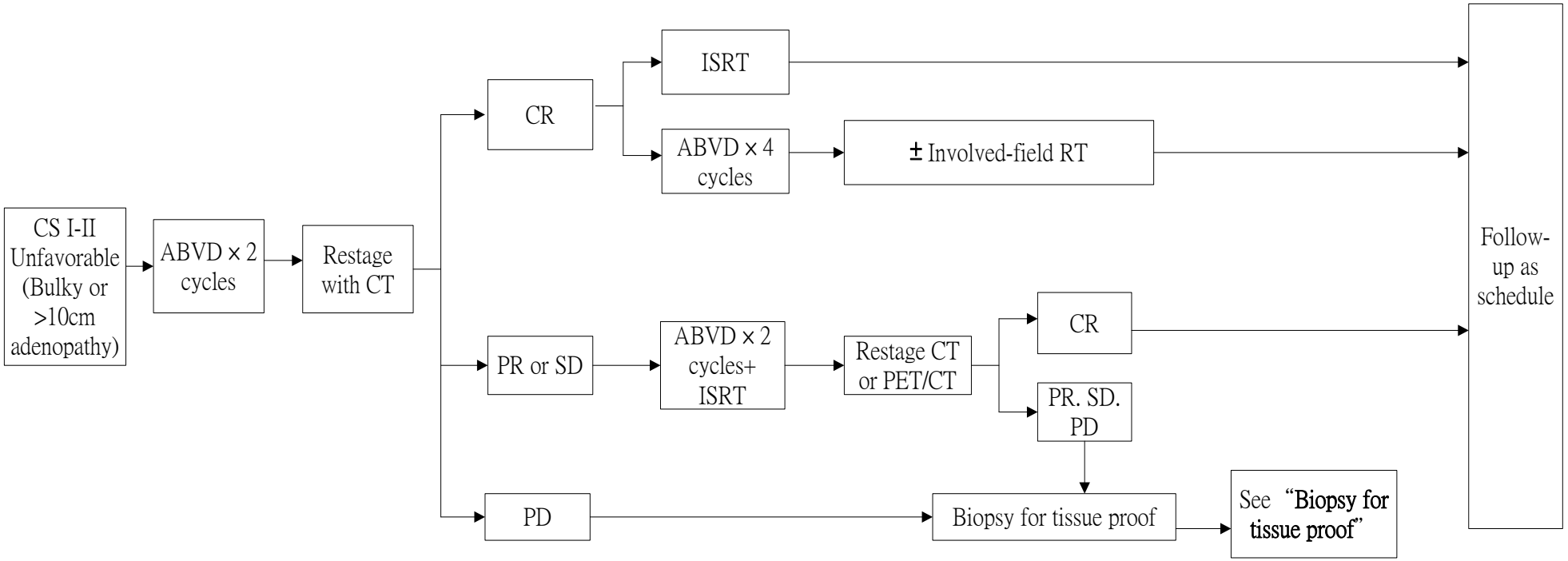
Management of Classical Hodgkin lymphoma (CHL) CS IA-IIA Favorable Disease



註：
ISRT: Involved site radiation therapy

參考資料來源：
1. V2 2024. NCCN **Hodgkin Lymphomas Guidelines**

Management of CHL CS I-II Unfavorable Disease
Management of CHL CS III-IV Disease



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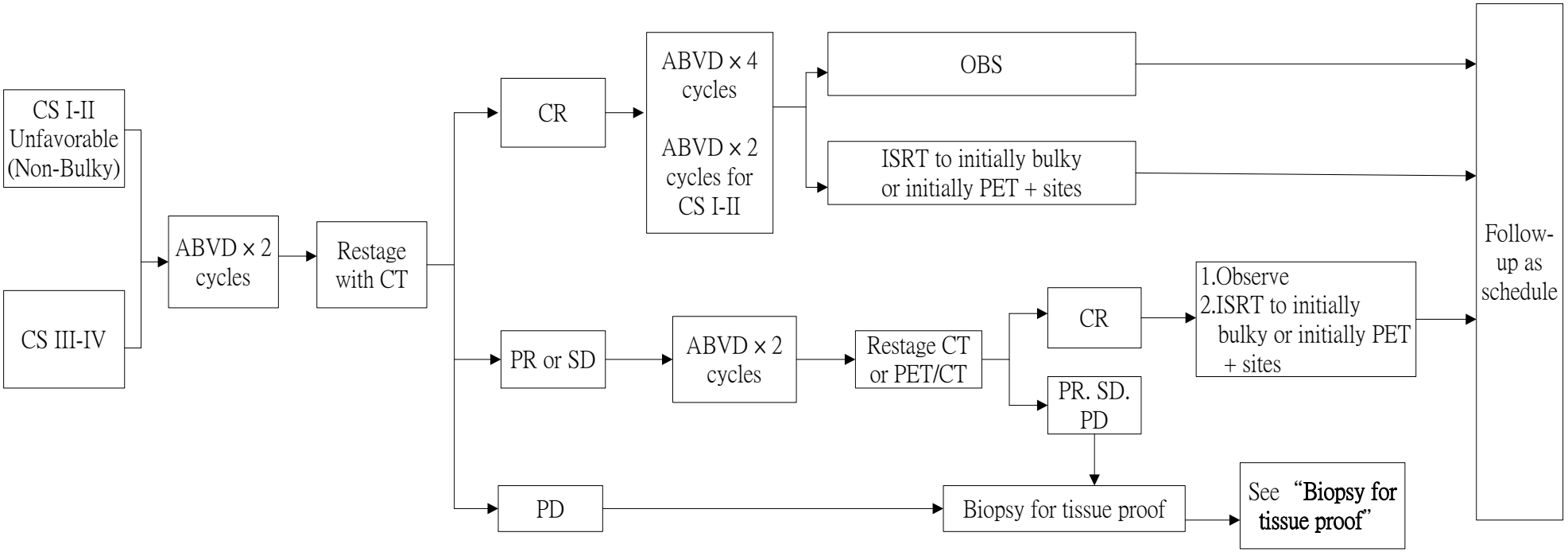
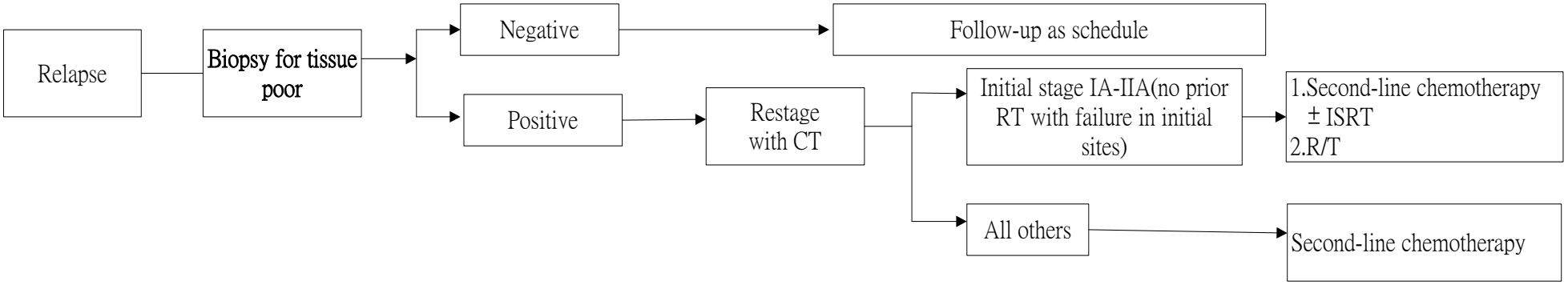
1. V2 2024. NCCN **Hodgkin Lymphomas Guidelines**

Management of CHL CS I-II Unfavorable Disease
Management of CHL CS III-IV Disease



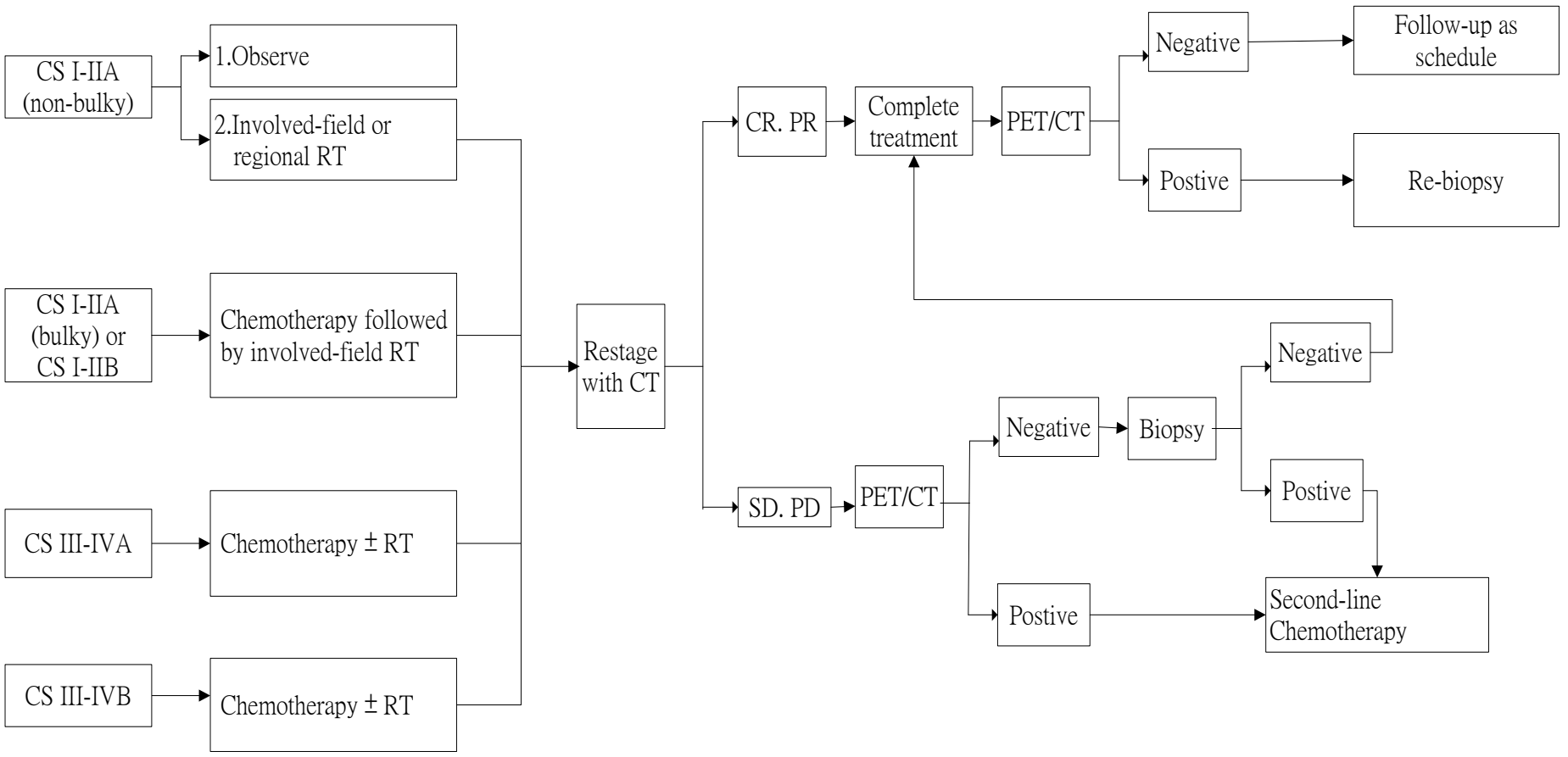
參考資料來源：
1. V2 2024. NCCN **Hodgkin Lymphomas Guidelines**

Management of Relapsed Hodgkin Lymphoma



參考資料來源：
1. V2 2024. NCCN Hodgkin Lymphomas Guidelines

Management of Nodular Lymphocyte-Predominant HD (NLPHL)



參考資料來源：
1. V2 2024. NCCN **Hodgkin Lymphomas Guidelines**

Follow-up schedule

- Interim H&P:
  Every 3-6 mo for 1-2 y, then every 6-12 mo for next 3-5 y
- Laboratory studies:
  Every 3-6 mo for 1-2 y, then every 6-12 mo for next 3-5 y
  TSH at least annually if RT to neck
- Imaging studies:
  Every 6-12 mo during first 2-5 y

- After 5 years
  Annually F/U

參考資料來源：
1. V2 2024. NCCN **Hodgkin Lymphomas Guidelines**

Non-Hodgkin Lymphoma

初版日期：99.04
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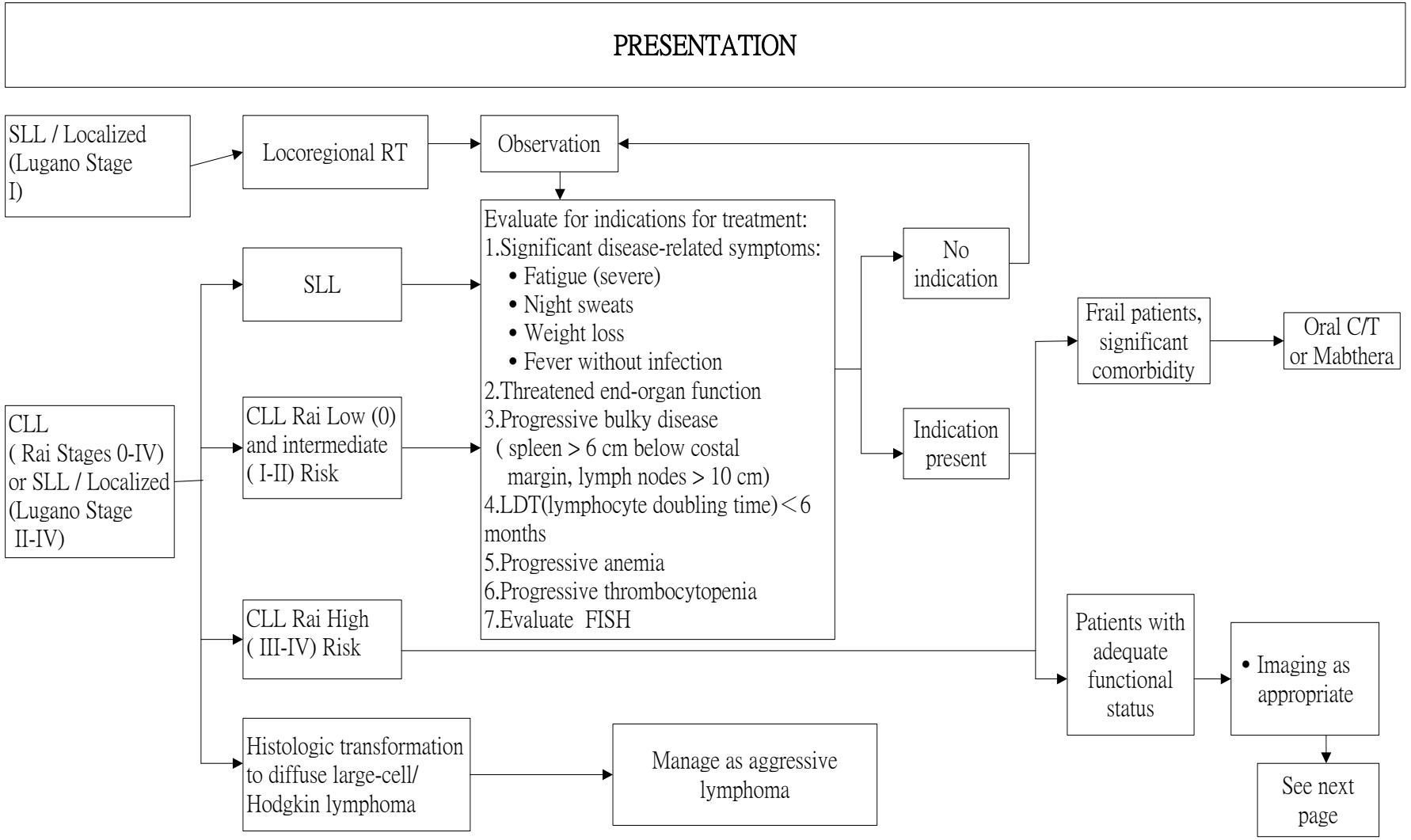
Diagnosis	Staging work-up
1.Surgical biopsy of the largest lymph nodes or mass lesion 2.Flow cytometry or cytogenetic studies(optional) 3.Immunohistochemistry evaluation	1.Complete history and physical examination including Waldeyer's rings, B symptoms, risk of HIV infection, infection, autoimmune diseases, immunosuppressive therapies 2.complete blood cell count with a differential, HBsAg, HCV Ab, HBc Ab testing (for all patients receiving anti-CD 20 antibody therapy) 3.Chemistry profiles: LDH, AST, ALT, uric acid, Cr, Ca, albumin, total protein, sugar 4.Whole body, Ga scan, Local CT,or PET 5.Bone marrow aspiration and biopsy(optional). 6.Lumbar puncture (optional) with cytology in selected patients. a. All patients with Burkitt lymphoma. b. Patients with NHL in certain sites e.g CNS, epidural space, testes, ethmoid sinus, breast and large cell lymphoma with bone marrow involvementc. c. HIV positive patients 7.Gastrointestinal studiesa. a. Esophagogastroduodenoscopy, upper gastrointestinal plus small bowel and lower gastrointestinal series for patients with gastrointestinal tract lymphoma b.Considered in patients with positive stool occult blood 8. Cytogenetic and molecular tests in selected patients (optional); cardiac ejection fractionfor age >60 if anthracycline will be used (optional). Anthracyline is contraindicated if ejection fraction is less than 50% 9.EB virus (NK/T-cell lymphoma) 10.Pregnancy testing in wonmen of child-bearing age (If chemotherapy planned) 11.Beta-2 microglobulin(optional)

參考資料來源：
1. V1 2024. NCCN B-cell Lymphomas Guidelines
2. V1 2024.NCCN T-cell Lymphomas Guidelines
3. V1 2024. NCCN CLL/SLL Guidelines

SLL/CLL Lymphoma



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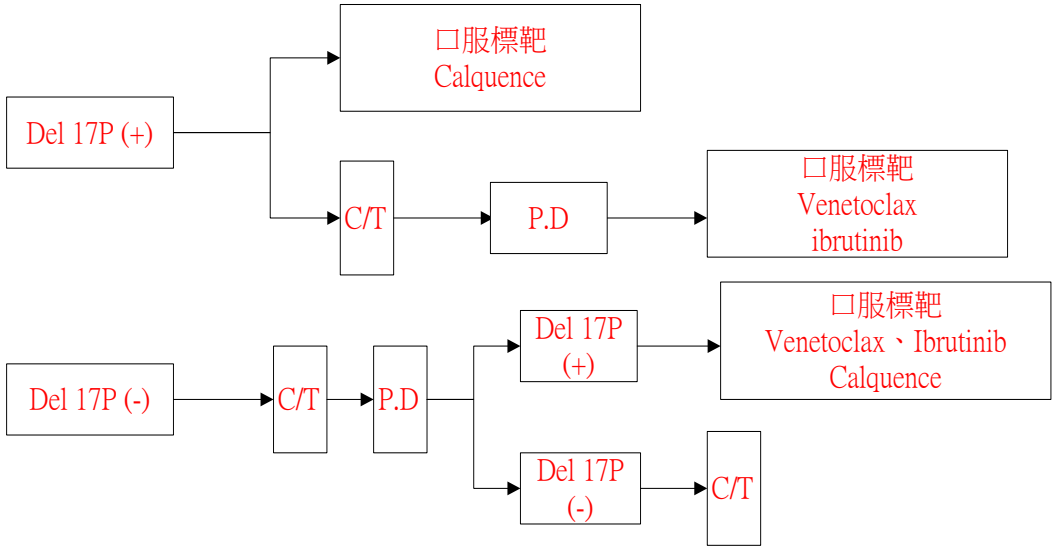
2. V1 2024.NCCN T-cell **Lymphomas** Guidelines
3. V1 2024. NCCN CLL/SLL Guidelines

SLL/CLL Lymphoma



(備註)
1. antibiotics for repetitive infections
2. if IgG ＜500mg/dl → IVIG 0.3~0.5g/kg/month, to keep IgG＞500-700mg/dl
3. Acyclovir, for prevention or treatment of Herpes zoster
4. check Direct Coombs' test, reticulocyte count, haptoglobin for AIHA, especially for Fludarabine
5. PRCA, check parvo B19
6. 疫苗：
   A. 每年流行性感冒疫苗，每5年肺炎雙球菌疫苗注射
   B. 避免活菌/減毒疫苗

參考資料來源：
1. V1 2024. NCCN B-cell **Lymphomas** Guidelines
2. V1 2024.NCCN T-cell **Lymphomas** Guidelines
3. V1 2024. NCCN CLL/SLL Guidelines

SLL/CLL Lymphoma

CLL STAGING SYSTEMS

Rai System[a]

Stage	Description	Risk Status
0	Lymphocytosis, lymphocytes in blood >15,000/mcL and >40% lymphocytes in the bone marrow	Low
I	Stage 0 with enlarged node(s)	Intermediate
II	Stage 0–I with splenomegaly, hepatomegaly, or both	Intermediate
III[c]	Stage 0–II with hemoglobin <11.0 g/dL or hematocrit <33%	High
IV[c]	Stage 0–III with platelets <100,000/mcL	High

Binet System[b]

Stage	Description
A	Hemoglobin ≥10 g/dL and Platelets ≥100,000/mm^3 and <3 enlarged areas
B	Hemoglobin ≥10 g/dL and Platelets ≥100,000/mm^3 and ≥3 enlarged areas
C[c]	Hemoglobin <10 g/dL and/or Platelets <100,000/mm^3 and any number of enlarged areas

參考資料來源：
1. V1 2024. NCCN B-cell Lymphomas Guidelines
2. V1 2024.NCCN T-cell Lymphomas Guidelines
3. V1 2024. NCCN CLL/SLL Guidelines

SLL/CLL Lymphoma

SLL STAGING SYSTEM

Lugano Modification of Ann Arbor Staging System

(for primary nodal lymphomas)

Stage[e]	Involvement[g]	Extranodal (E) status
Limited		
Stage I	One node or a group of adjacent nodes	Single extranodal lesions without nodal involvement
Stage II	Two or more nodal groups on the same side of the diaphragm	Stage I or II by nodal extent with limited contiguous extranodal involvement
Stage II bulky[f]	II as above with "bulky" disease	Not applicable
Advanced		
Stage III	Nodes on both sides of the diaphragm	Not applicable
	Nodes above the diaphragm with spleen involvement	
Stage IV	Additional non-contiguous extralymphatic involvement	Not applicable

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2. V1 2024.NCCN T-cell Lymphomas Guidelines
3. V1 2024. NCCN CLL/SLL Guidelines

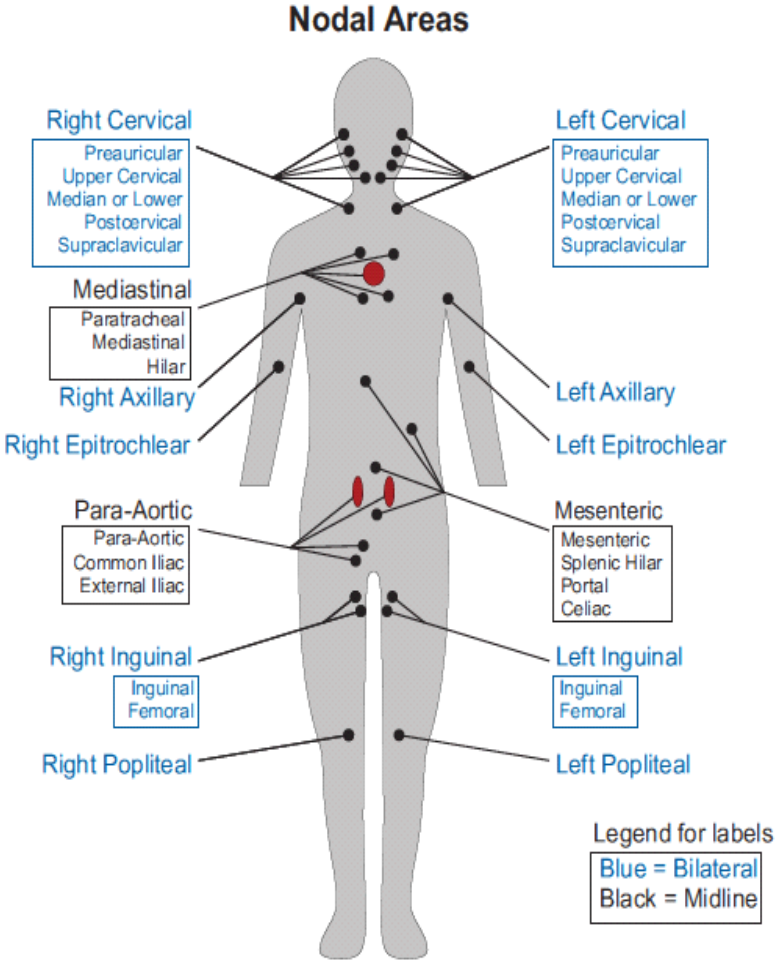
Treatment Guidelines for Follicular Lymphoma, Grades I and II (Grades III as DLBCL)

Follicular lymphoma international prognostic index (FLIPI)

1. Age ≧60
2. Ann Arbor stage III-IV
3. Hb level <12g /dL.
4. LDH >normal
5. Involved nodal sites ≧5

score	Risk Group	5 years OS (%)	CR rate (%)
0 ~ 1	Low	91	71
2	Intermediate	78	51
3 ~ 5	High	52	36

Blood 2004; 104: 1258



Mannequin used for counting the number of involved areas.[e]

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1. V1 2024. NCCN B-cell Lymphomas Guidelines
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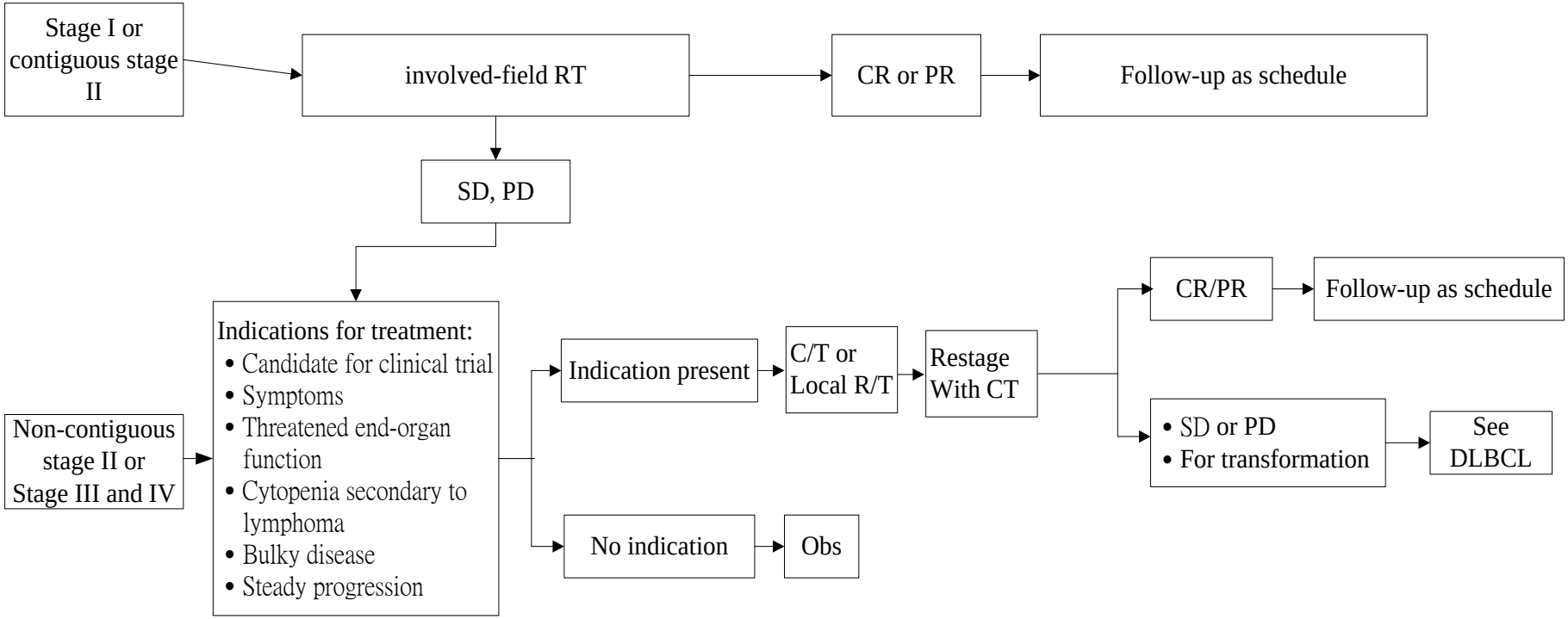

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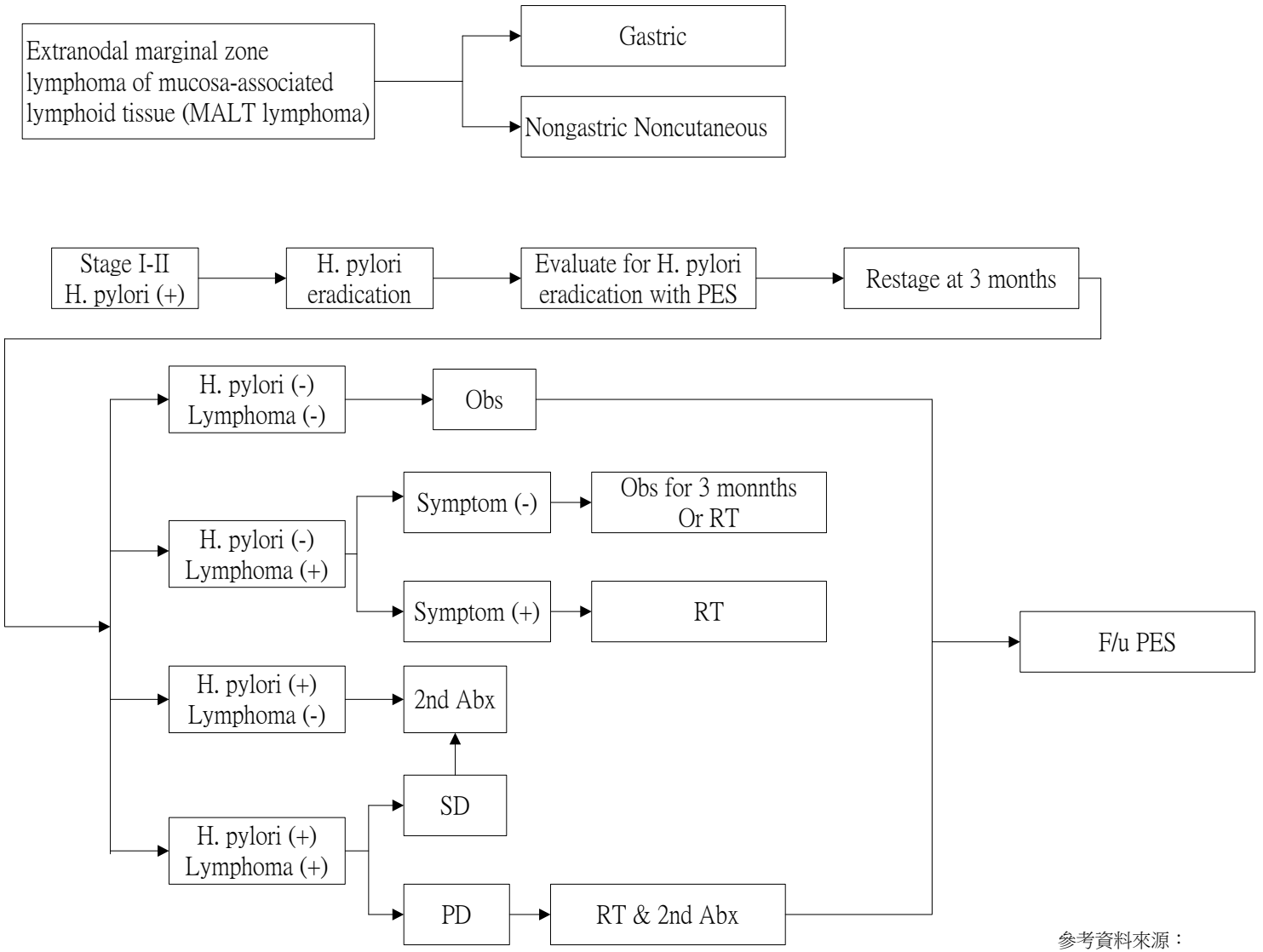
2. V1 2024.NCCN T-cell Lymphomas Guidelines
3. V1 2024. NCCN CLL/SLL Guidelines

Gastric MALT Lymphoma



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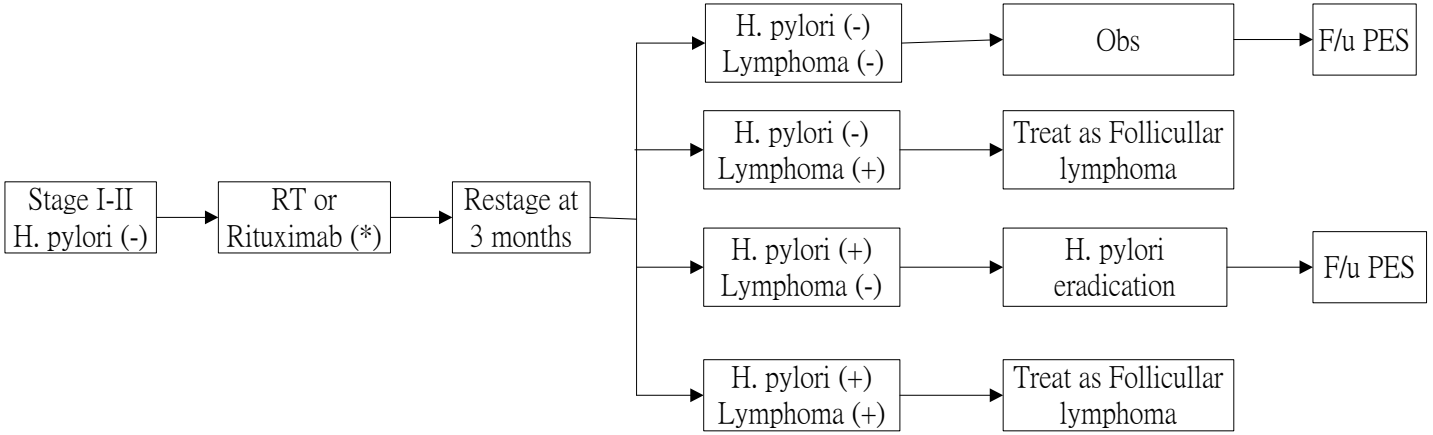

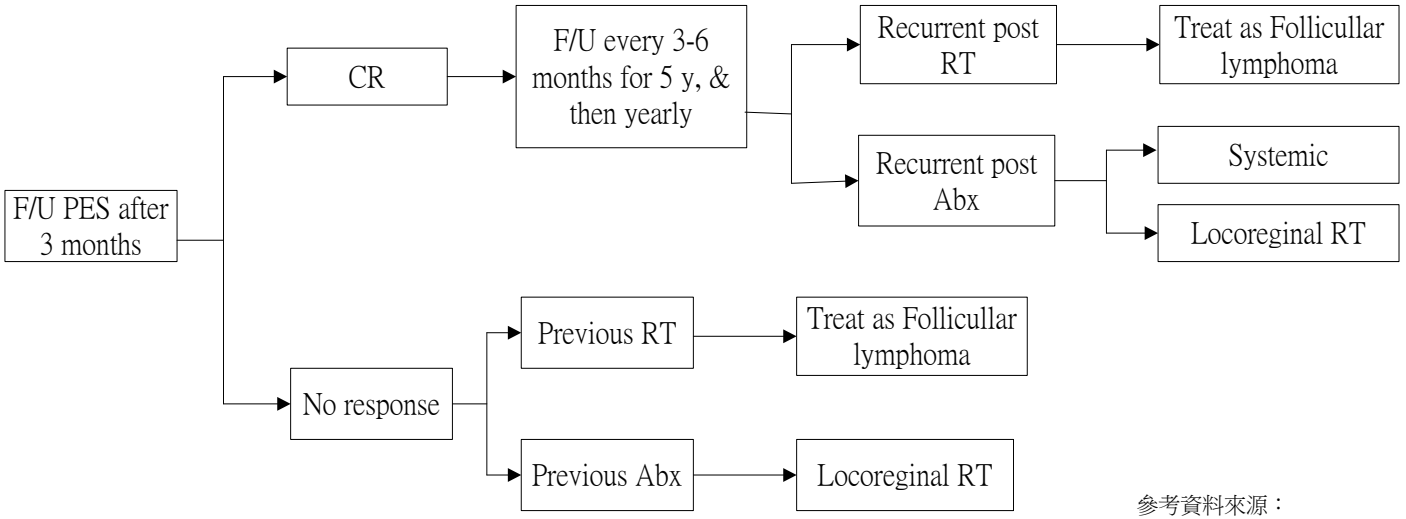

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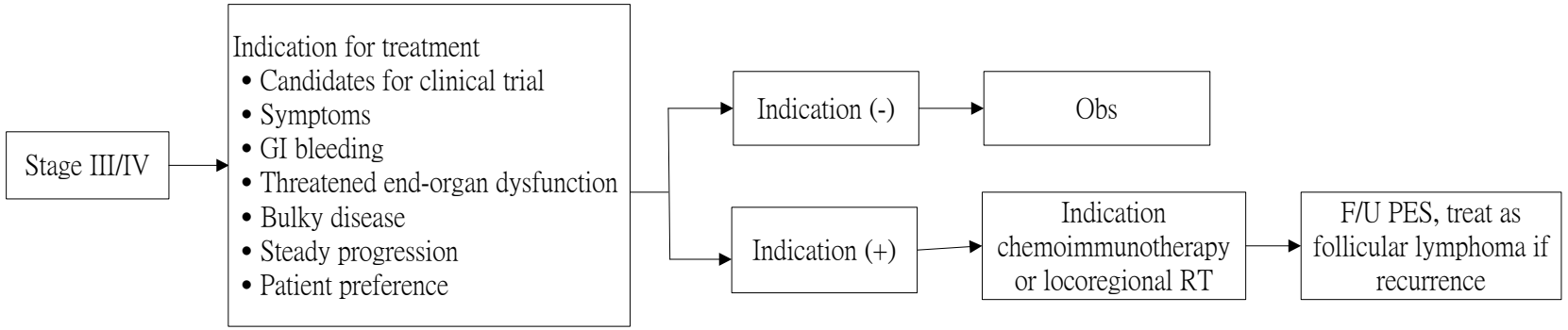
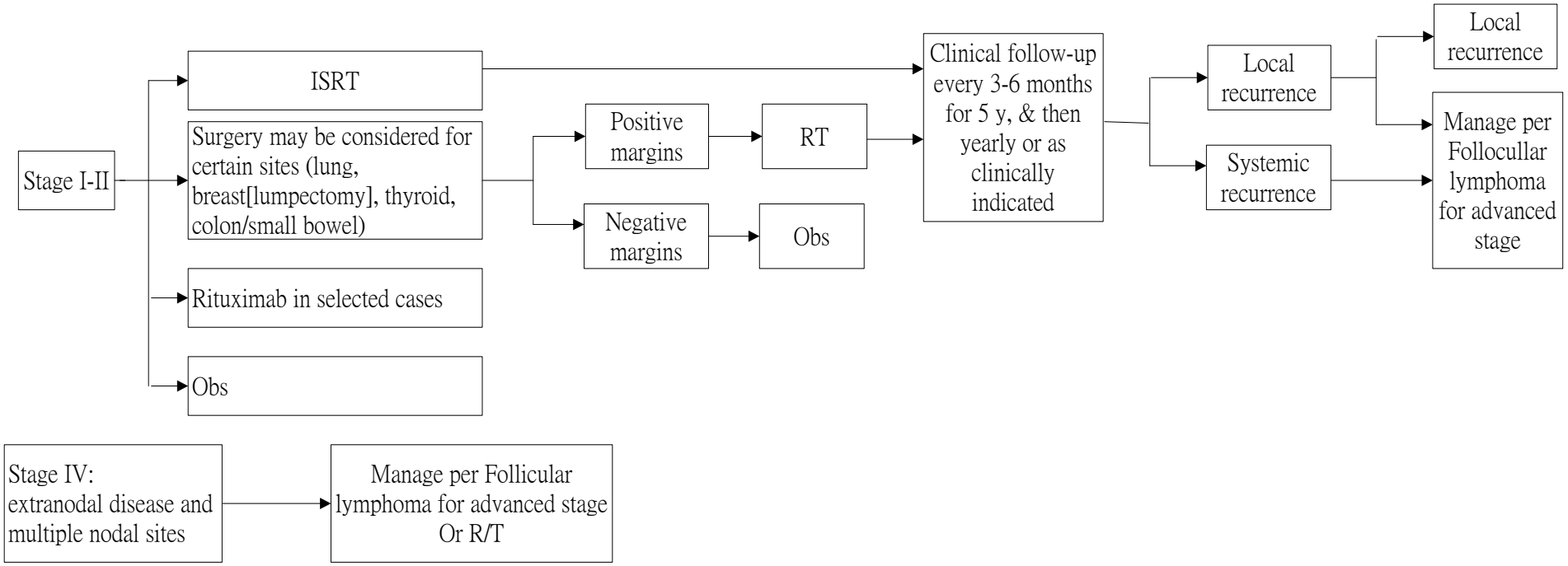
2. V1 2024.NCCN T-cell **Lymphomas** Guidelines
3. V1 2024. NCCN CLL/SLL Guidelines

Gastric MALT Lymphoma



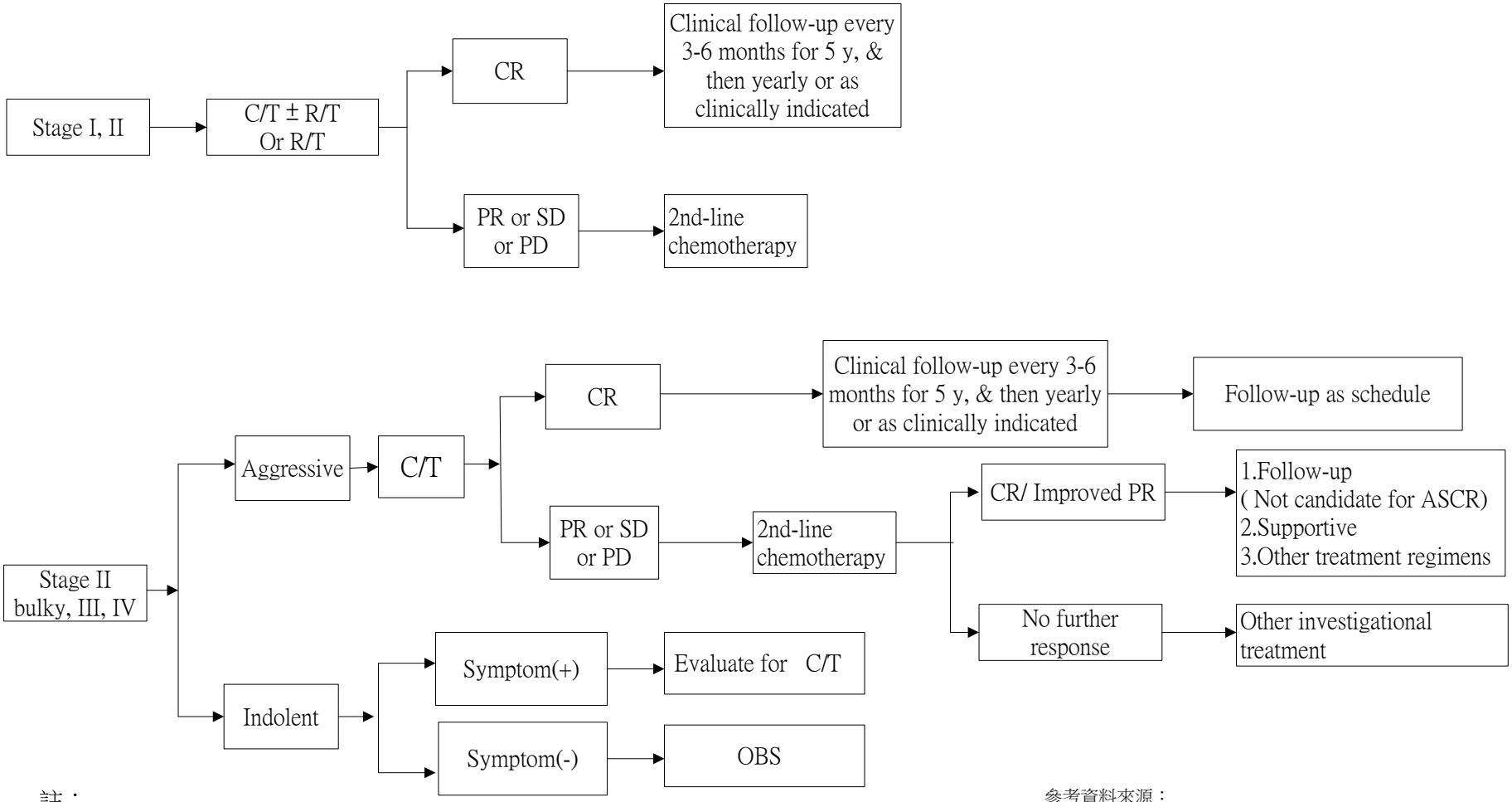
參考資料來源：
1. V1 2024. NCCN B-cell **Lymphomas** Guidelines
2. V1 2024.NCCN T-cell **Lymphomas** Guidelines
3. V1 2024. NCCN CLL/SLL Guidelines

Nongastric MALT Lymphoma



參考資料來源：
1. V1 2024. NCCN B-cell Lymphomas Guidelines
2. V1 2024.NCCN T-cell Lymphomas Guidelines
3. V1 2024. NCCN CLL/SLL Guidelines

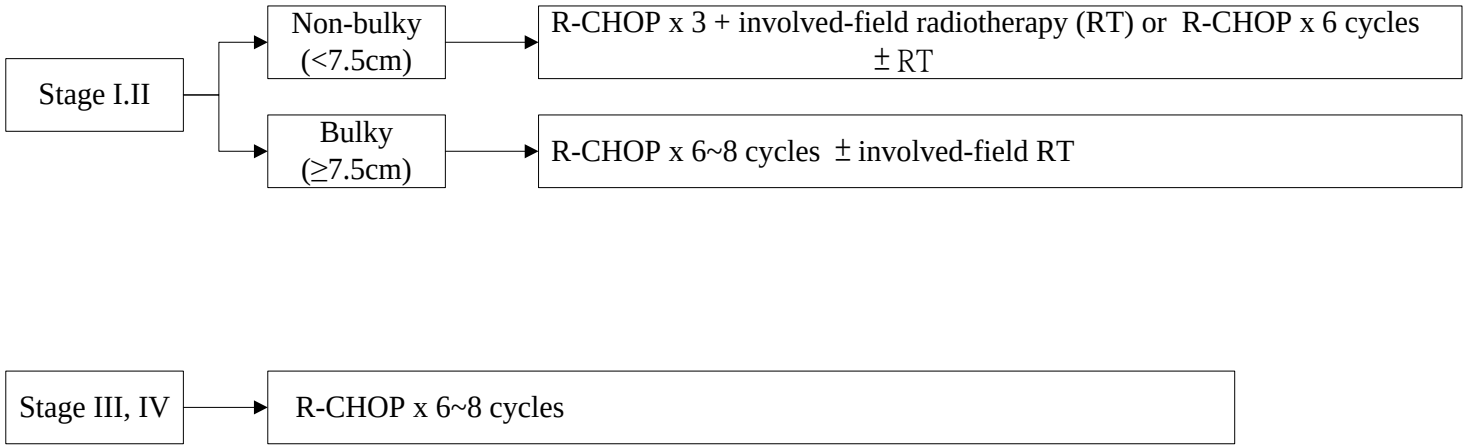
Treatment Guidelines for Mantle cell lymphoma



註：
HDT: High dose therapy
ASCR: Autologous stem cell rescue

參考資料來源：
1. V1 2024. NCCN B-cell **Lymphomas** Guidelines
2. V1 2024.NCCN T-cell **Lymphomas** Guidelines
3. V1 2024. NCCN CLL/SLL Guidelines

Treatment Guidelines for Diffuse Large B-cell Lymphoma



註：
* R-CHOP or R-COP for old age
# PET /CT if response is uncertain

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1. V1 2024. NCCN B-cell Lymphomas Guidelines
2. V1 2024.NCCN T-cell Lymphomas Guidelines
3. V1 2024. NCCN CLL/SLL Guidelines

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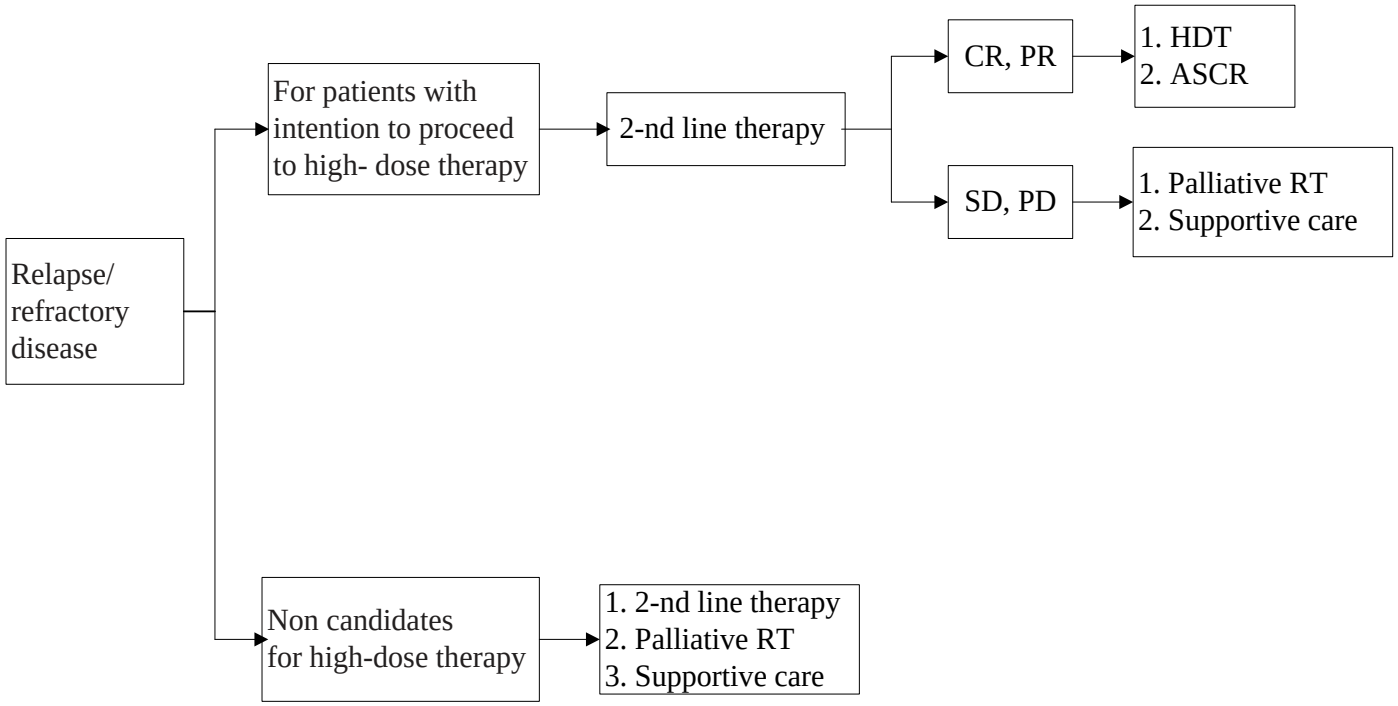

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3. V1 2024. NCCN CLL/SLL Guidelines

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International prognostic index (IPI score)

International Prognostic Index (Aggressive NHL)

- Age >60 years
- Serum LDH >1x normal
- ECOG Performanance status ≧ 2
- Ann Arbor Stage III or IV
- Extranodal involvement >1 sites

score	Risk Group	5 years OS (%)	CR rate (%)
0 or 1	Low	73	87
2	Low ~ intermediate	51	67
3	High ~ intermediate	43	55
4 or 5	High	26	44

NEJM 1993: 329: 987

Revised International Prognostic Index (for DLBCL)

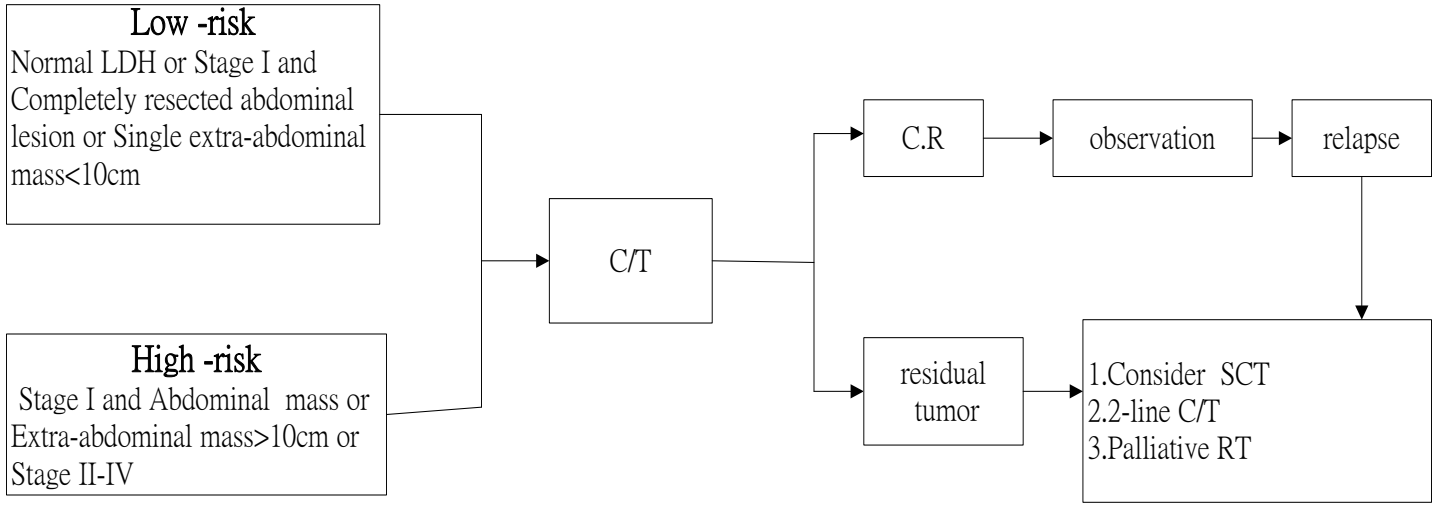
score	Risk Group	4 years OS (%)	4 years PFS (%)
0	Very good	94	94
1~2	Good	79	80
3~5	Poor	55	53

Blood 2007; 109: 1857

參考資料來源：
1. V1 2024. NCCN B-cell Lymphomas Guidelines
2. V1 2024.NCCN T-cell Lymphomas Guidelines
3. V1 2024. NCCN CLL/SLL Guidelines

Burkitt's Lymphoma

Risk assessment



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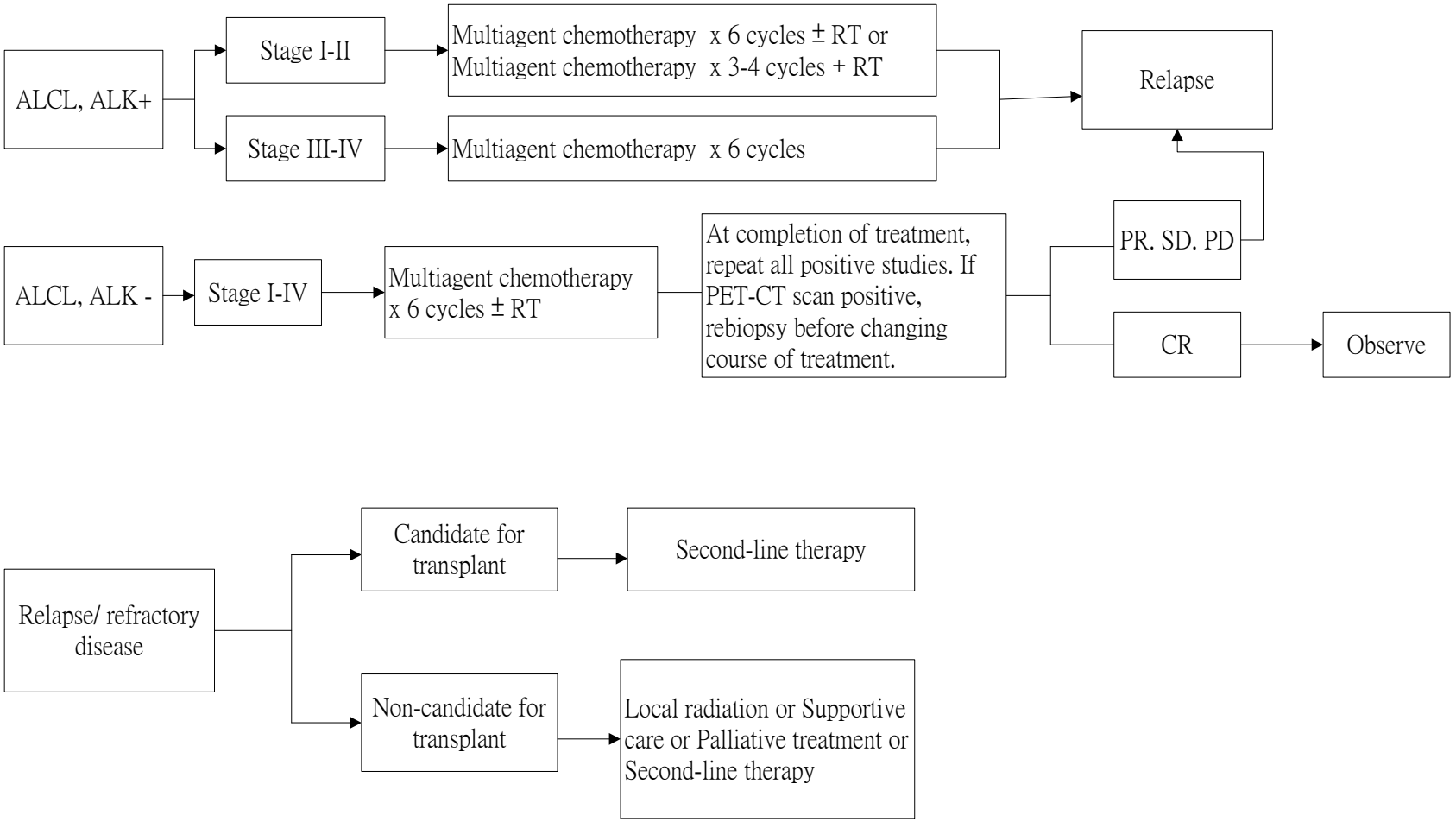
1. V1 2024. NCCN B-cell Lymphomas Guidelines
2. V1 2024.NCCN T-cell Lymphomas Guidelines
3. V1 2024. NCCN CLL/SLL Guidelines

Treatment for Peripheral T-cell Lymphoma



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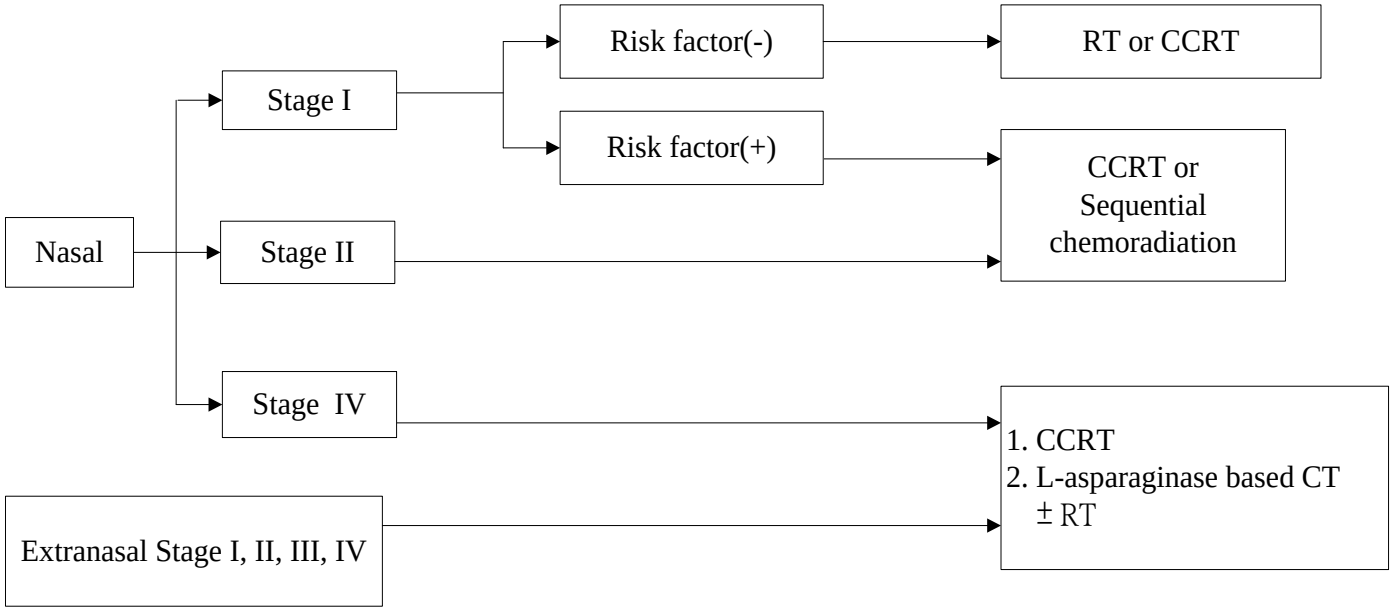
1. V1 2024. NCCN B-cell **Lymphomas** Guidelines
2. V1 2024.NCCN T-cell **Lymphomas** Guidelines
3. V1 2024. NCCN CLL/SLL Guidelines

Treatment for Extranodal NK/T Cell lymphoma, nasal type



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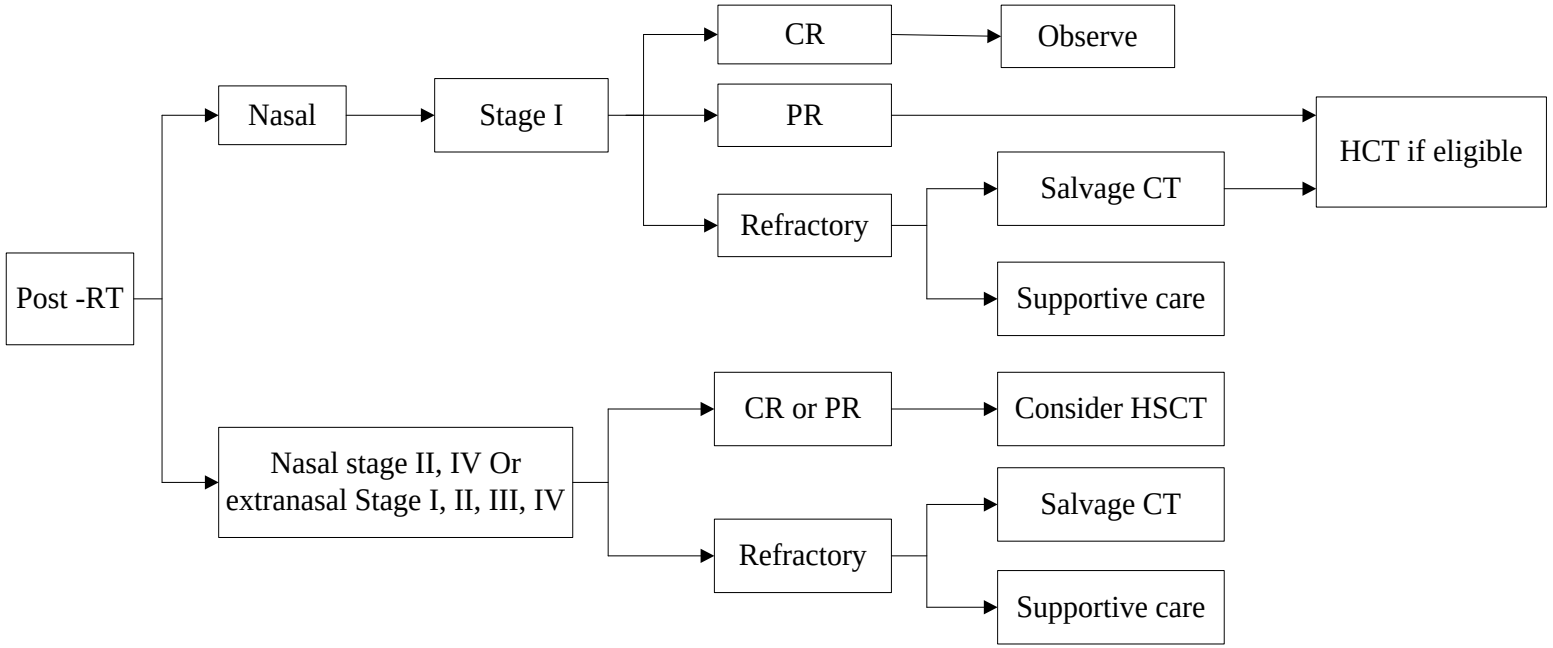

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3. V1 2024. NCCN CLL/SLL Guidelines

天主教聖馬爾定醫院

Multiple myeloma

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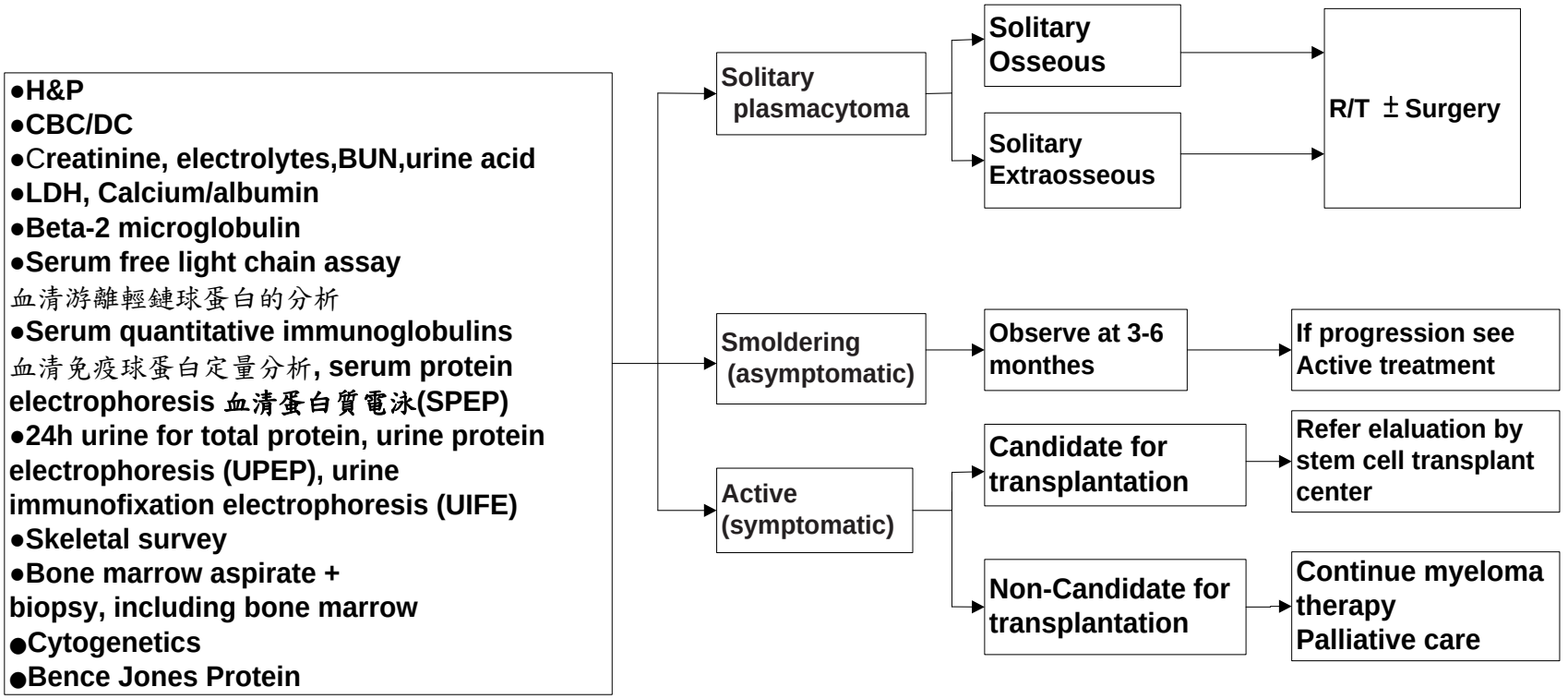
WORKUP	Clinical presentation	Treatment



參考資料來源：
1. V2 2024.NCCN Multiple myeloma Guidelines

STAGING SYSTEMS FOR MULTIPLE MYELOMA

Stage	ISS	RISS
I	Serum beta- 2 microglobulin < 3.5 mg/L, Serum albumin ≥ 3.5 g/dL	ISS stage I and atandard-risk Chromosmal abnomalities by FISH and Serum LDH ≤ the upper limit of nnormal
II	Neither stage l nor stage lll	Not R-ISS stage I or III
lll	Serum beta-2 microglobulin ≥ 5.5 mg/L	ISS stage III and either high-risk Chromosmal abnomalities by FISH and Serum LDH > the upper limit of nnormal

參考資料來源：
1. V2 2024.NCCN Multiple myeloma Guidelines