



# 中山醫學大學附設醫院

## 淋巴瘤診療指引 (Follicular Lymphoma grade1-2)

本臨床指引參考台灣國家衛生研究院、與美國NCCN版本

淋巴瘤多專科醫療團隊編修

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2018/11/15 Version 9.0  
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2015/11/19 Version 6.0  
2014/11/20 Version 5.0  
2013/11/21 Version 4.0  
2012/11/22 Version 3.0  
2011/11/23 Version 2.0  
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修訂內容

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Polatuzumab vedotin-piiq ± bendamustine ± rituximab	Polatuzumab vedotin-piiq (Polivy) 1.8mg/kg i.v. at 90min repeat cycle every 21 d ± Benamustine 90mg/m <sup>2</sup> /day on day1, day2 ± rituximab 375 mg/m <sup>2</sup> i.v. on day 1 Total 6 cycle	Morschhauser F, Flinn IW, Advani R, et al. Polatuzumab vedotin or pinatuzumab vedotin plus rituximab in patients with relapsed or refractory non-Hodgkin lymphoma: final results from a phase 2 randomised study (ROMULUS). Lancet Haematol 2019;6:e254-e265. Sehn LH, Herrera AF, Flowers CR, et al. Polatuzumab vedotin in relapsed or refractory diffuse large B-cell lymphoma. J Clin Oncol 2020;38:155-165.

六、化學治療原則(Principles of chemotherapy)		
第一線用藥		
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RCHOP	Rituximab 375 mg/m <sup>2</sup> i.v. on day 1 Cyclophosphamide 750 mg/m <sup>2</sup> i.v. on day 1 Doxorubicin 50 mg/m <sup>2</sup> i.v. on day 1 Vincristine 1.4 mg/m <sup>2</sup> i.v. on day 1(maximum dose of 2 mg) Prednisone 100mg p.o. daily on day1-5	McKelvey EM. cancer 1976;38:1484-1493.Lenz G. J Clin Oncol 2005;23:1984-1992. Hiddemann W.Blood 2005;106:3725-3732
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BR	Rituximab 375 mg/m <sup>2</sup> i.v. on day 1 Bendamustine 90-120mg/m <sup>2</sup> day 1-2	Nastoupil LJ, Hess G, Pavlovsky MA, Danilewicz I, Freeman J, Garcia-Sanchez AM, Glazunova V, Grigg A, Hou JZ, Janssens A, Kim SJ, Mashak Z, McKay P, Merli F, Munakata W, Nagai H, Özcan M, Preis M, Wang T, Rowe M, Tansignon M, Qin R, Henninger T, Curtis M, Caces DB, Thieblemont C, Salles G. Phase 3 SELENE study: ibrutinab plus BR/R-CHOP in previously treated patients with follicular or marginal zone lymphoma. Blood Adv. 2023 Nov 28;7(22):7141-7150
GB	Bendamustine 90-120mg/m <sup>2</sup> day 1-2 Obinutuzumab maintenance (1000 mg every 8 weeks for 12 doses)	Sehn L. H., N. Chua, J. Mayer, et al. 2016. "Obinutuzumab plus bendamustine versus bendamustine monotherapy in patients with rituximab-refractory indolent non-Hodgkin lymphoma (GADOLIN): a randomised, controlled, open-label, multicentre, phase 3 trial." Lancet Oncol 17(8):1081-1093.



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## 一、前言

淋巴瘤，是指由淋巴組織所衍生出的惡性腫瘤。淋巴瘤的臨床表現，常常是不正常的淋巴結腫大，有時還會合併發燒，體重減輕，夜間盜汗等症狀，也就是所謂的B症狀 (B Symptom)。這樣的腫瘤，因其具有不正常增生與分化的特性，所以淋巴瘤基本上都是惡性的。為了在名稱上不會混淆，惡性淋巴瘤反而能更精準的讓病人了解其罹患疾病的特性。

淋巴瘤大致上可分為兩大類，一是何杰金氏淋巴瘤 (Hodgkin lymphoma)，一是非何杰金氏淋巴瘤 (Non-Hodgkin lymphoma)。約莫80%的淋巴瘤屬於非何杰氏金淋巴瘤，而何杰金氏淋巴瘤佔約20%。何杰金氏淋巴瘤與非何杰金氏淋巴瘤的區別在於組織型態的差異。何杰金氏淋巴瘤的癌細胞常常會出現如貓頭鷹眼狀的細胞型態，這類的細胞，我們稱之為 Reed-Sternberg Cell (RS cell)。其癌細胞的免疫組織染色，會呈現陽性的 CD15以及CD30。何杰金氏淋巴瘤的組織分類，根據世界衛生組織 (WHO) 的分類，可區分為兩大類，Lymphocyte predominant, nodular以及典型 (classic) 何杰金氏淋巴瘤。而典型何杰金氏淋巴瘤又細分為五大類，分別是 Lymphocyte-rich classic HL, Nodular sclerosis, Mixed Cellularity, Lymphocyte depleted, 以及無法分類的典型何杰金氏淋巴瘤

非何杰金氏淋巴瘤分類上則相對較複雜。依照其細胞來源，我們簡單的將非何杰金氏淋巴瘤區分為B細胞與T細胞兩大類。非何杰金氏淋巴瘤臨床的分類可以將淋巴瘤分為低惡性度 (Indolent)，高惡性度 (Aggressive)，簡單的說，如果低惡性度的淋巴瘤不治療，病人尚可存活數月甚至數年，如果高惡性度的淋巴瘤不治療，病人恐怕只可存活數月。最近世界衛生組織重新將非何杰金氏淋巴瘤做了分類，



## 二、組織病理分類與分化

2016年WHO淋巴瘤分類 (Classification of lymphoma)

### Mature B-cell neoplasms

Chronic lymphocytic leukemia/small lymphocytic lymphoma

Monoclonal B-cell lymphocytosis\*

B-cell prolymphocytic leukemia

Splenic marginal zone lymphoma

Hairy cell leukemia

Splenic B-cell lymphoma/leukemia, unclassifiable

Splenic diffuse red pulp small B-cell lymphoma

Hairy cell leukemia-variant

Lymphoplasmacytic lymphoma

Waldenström macroglobulinemia

Monoclonal gammopathy of undetermined significance (MGUS), IgM\*

m heavy-chain disease

g heavy-chain disease

a heavy-chain disease

Monoclonal gammopathy of undetermined significance (MGUS), IgG/A\*

Plasma cell myeloma

Solitary plasmacytoma of bone

Extraosseous plasmacytoma

Monoclonal immunoglobulin deposition diseases\*



Extranodal marginal zone lymphoma of mucosa-associated lymphoid tissue

(MALT lymphoma)

Nodal marginal zone lymphoma

Pediatric nodal marginal zone lymphoma

Follicular lymphoma

In situ follicular neoplasia\*

Duodenal-type follicular lymphoma\*

Pediatric-type follicular lymphoma\*

Large B-cell lymphoma with IRF4 rearrangement\*

Primary cutaneous follicle center lymphoma

Mantle cell lymphoma

In situ mantle cell neoplasia\*

Diffuse large B-cell lymphoma (DLBCL), NOS

Germinal center B-cell type\*

Activated B-cell type\*

T-cell/histiocyte-rich large B-cell lymphoma

Primary DLBCL of the central nervous system (CNS)

Primary cutaneous DLBCL, leg type

EBV1 DLBCL, NOS\*

EBV1 mucocutaneous ulcer\*

DLBCL associated with chronic inflammation

Lymphomatoid granulomatosis

Primary mediastinal (thymic) large B-cell lymphoma

Intravascular large B-cell lymphoma



ALK1 large B-cell lymphoma

Plasmablastic lymphoma

Primary effusion lymphoma

HHV81 DLBCL, NOS\*

Burkitt lymphoma

Burkitt-like lymphoma with 11q aberration\*

High-grade B-cell lymphoma, with MYC and BCL2 and/or BCL6 rearrangements\*

High-grade B-cell lymphoma, NOS\*

B-cell lymphoma, unclassifiable, with features intermediate between DLBCL and classical Hodgkin lymphoma

**Mature T and NK neoplasms**

T-cell prolymphocytic leukemia

T-cell large granular lymphocytic leukemia

Chronic lymphoproliferative disorder of NK cells

Aggressive NK-cell leukemia

Systemic EBV1 T-cell lymphoma of childhood\*

Hydroa vacciniforme-like lymphoproliferative disorder\*

Adult T-cell leukemia/lymphoma

Extranodal NK-/T-cell lymphoma, nasal type

Enteropathy-associated T-cell lymphoma

Monomorphic epitheliotropic intestinal T-cell lymphoma\*

Indolent T-cell lymphoproliferative disorder of the GI tract\*

Hepatosplenic T-cell lymphoma

Subcutaneous panniculitis-like T-cell lymphoma



Mycosis fungoides

Sézary syndrome

Primary cutaneous CD30<sup>+</sup> T-cell lymphoproliferative disorders

Lymphomatoid papulosis

Primary cutaneous anaplastic large cell lymphoma

Primary cutaneous gd T-cell lymphoma

Primary cutaneous CD81 aggressive epidermotropic cytotoxic T-cell lymphoma

Primary cutaneous acral CD81 T-cell lymphoma\*

Primary cutaneous CD41 small/medium T-cell lymphoproliferative disorder\*

Peripheral T-cell lymphoma, NOS

Angioimmunoblastic T-cell lymphoma

Follicular T-cell lymphoma\*

Nodal peripheral T-cell lymphoma with TFH phenotype\*

Anaplastic large-cell lymphoma, ALK1

Anaplastic large-cell lymphoma, ALK2\*

Breast implant-associated anaplastic large-cell lymphoma\*

### **Hodgkin lymphoma**

Nodular lymphocyte predominant Hodgkin lymphoma

Classical Hodgkin lymphoma

Nodular sclerosis classical Hodgkin lymphoma

Lymphocyte-rich classical Hodgkin lymphoma

Mixed cellularity classical Hodgkin lymphoma

Lymphocyte-depleted classical Hodgkin lymphoma



**Posttransplant lymphoproliferative disorders (PTLD)**

Plasmacytic hyperplasia PTLD

Infectious mononucleosis PTLD

Florid follicular hyperplasia PTLD\*

Polymorphic PTLD

Monomorphic PTLD (B- and T-/NK-cell types)

Classical Hodgkin lymphoma PTLD

**Histiocytic and dendritic cell neoplasms**

Histiocytic sarcoma

Langerhans cell histiocytosis

Langerhans cell sarcoma

Indeterminate dendritic cell tumor

Interdigitating dendritic cell sarcoma

Follicular dendritic cell sarcoma

Fibroblastic reticular cell tumor

Disseminated juvenile xanthogranuloma

Erdheim-Chester disease\*

### 三、分期

淋巴瘤的分期，是依照 Ann Arbor Staging System 來分期。淋巴瘤一般分為四期，簡單的說，當淋巴瘤只侵犯單一區域淋巴結時，稱為第一期。當淋巴瘤侵犯兩個區域以上淋巴結，且在橫膈膜同側時，稱為第二期。當淋巴瘤侵犯兩個區域以上淋巴結，且在橫膈膜異側時，稱為第三期。當淋巴瘤侵犯淋巴組織以外的地方，或是侵犯肝臟或骨髓時，則稱為第四期。這樣分期的目的，是為了決定治療方式與評估預後。簡單的說，三、四期病患的預後一般來說比一、二期的病患差。



四、淋巴瘤臨床指引

Workup	Stage	Induction therapy (grade 1-2)	Response to therapy	Follow up
<b>Physical Exam</b> <b>Performance status</b> <b>B symptoms</b> <b>CBC ,differential/count</b> <b>LDH、Uric acid(optional)</b> <b>Hepatitis B C testing</b> <b>Beta-2-microglobulin(optional)</b> <b>SPEP and/or quantitative immunoglobulin levels(optional)</b> <b>Comprehensive metabolic panel</b> <b>CT scan with contrast and/or PET/CT(optional)</b> <b>Bone marrow biopsy</b> <b>Calculation of FLIPI</b> <b>Pregnancy testing in women of child-bearing age(optional)</b> <b>Echocardiogram·(optional)</b> <b>Discussion of fertility issues and sperm banking(optional)</b>	<b>Stage I,II (&lt;7cm)</b>	<b>ISRT</b>	<b>CR or PR</b> <b>NR</b>	<b>Progressive disease (接流程圖 A)</b>
	<b>Stage I,II (≥7cm)</b>	<b>Anti-CD 20 monoclonal antibody ± chemotherapy or</b> <b>Anti-CD 20 monoclonal antibody ± chemotherapy (category 2B) or Observation</b>	<b>CR or PR</b> <b>NR</b>	<b>imaging follow-up every 6 mo&gt;2 y and H&amp;P and labs</b> <b>Every 3-6mo for 5y than annually</b> <b>Consider ISRT</b>



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<b>Physical Exam</b>				
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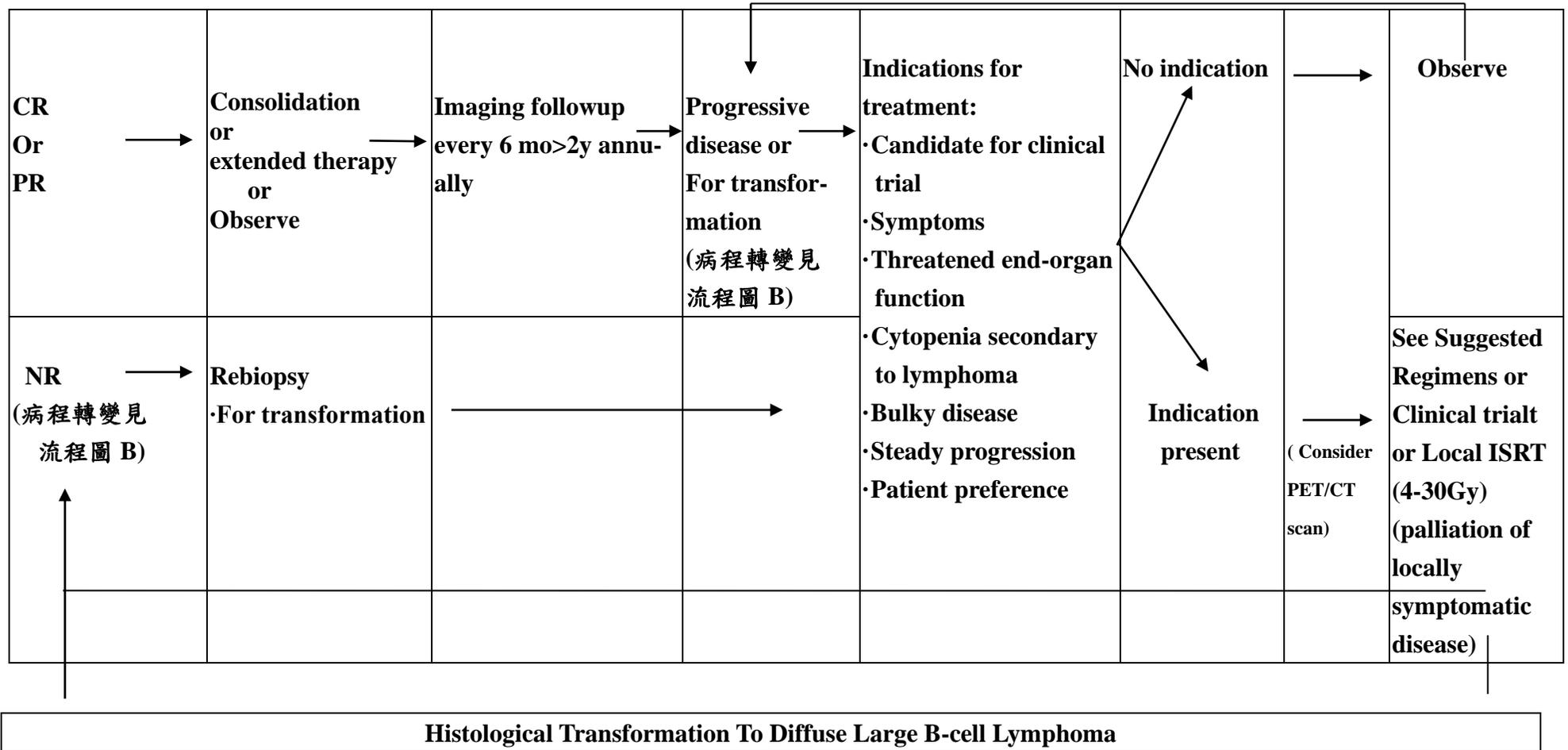


<b>Performance status</b> <b>B symptoms</b> <b>CBC ,differential/count</b> <b>LDH 、Uric acid(optional)</b> <b>Hepatitis B C testing</b> <b>Beta-2-microglobulin(optional)</b> <b>SPEP and/or quantitative immunoglobulin levels(optional)</b> <b>Comprehensive metabolic panel</b> <b>CT scan with contrast and/or PET/CT(optional)</b> <b>Bone marrow biopsy</b> <b>Calculation of FLIPI</b> <b>Pregnancy testing in women of child-bearing age(optional)</b> <b>Echocardiogram·(optional)</b> <b>Discussion of fertility issues and sperm banking(optional)</b>	<b>Stage III, IV</b>	<b>Indications for treatment:</b> ·Candidate for clinical trial ·Symptoms ·Threatened end-organ function ·Cytopenia secondary to lymphoma ·Bulky disease ·Steady progression	<b>No Indication</b>	<b>Observe (category 1)</b>	<b>imaging follow-up every 6 mo&gt;2 y H&amp;P and labs</b> <b>Every 3-6mo for 5yand than annually</b>	<b>Progressive disease (接流程圖 B)</b> <b>For transformation</b>
			<b>Indication present</b>	<b>Consider PET/CT scan</b>	<b>See Suggested Regimens or Clinical trial or Local ISRT (4–30 Gy) (palliation of locally symptomatic disease)</b>	<b>Progressive disease (接流程圖 A)</b>

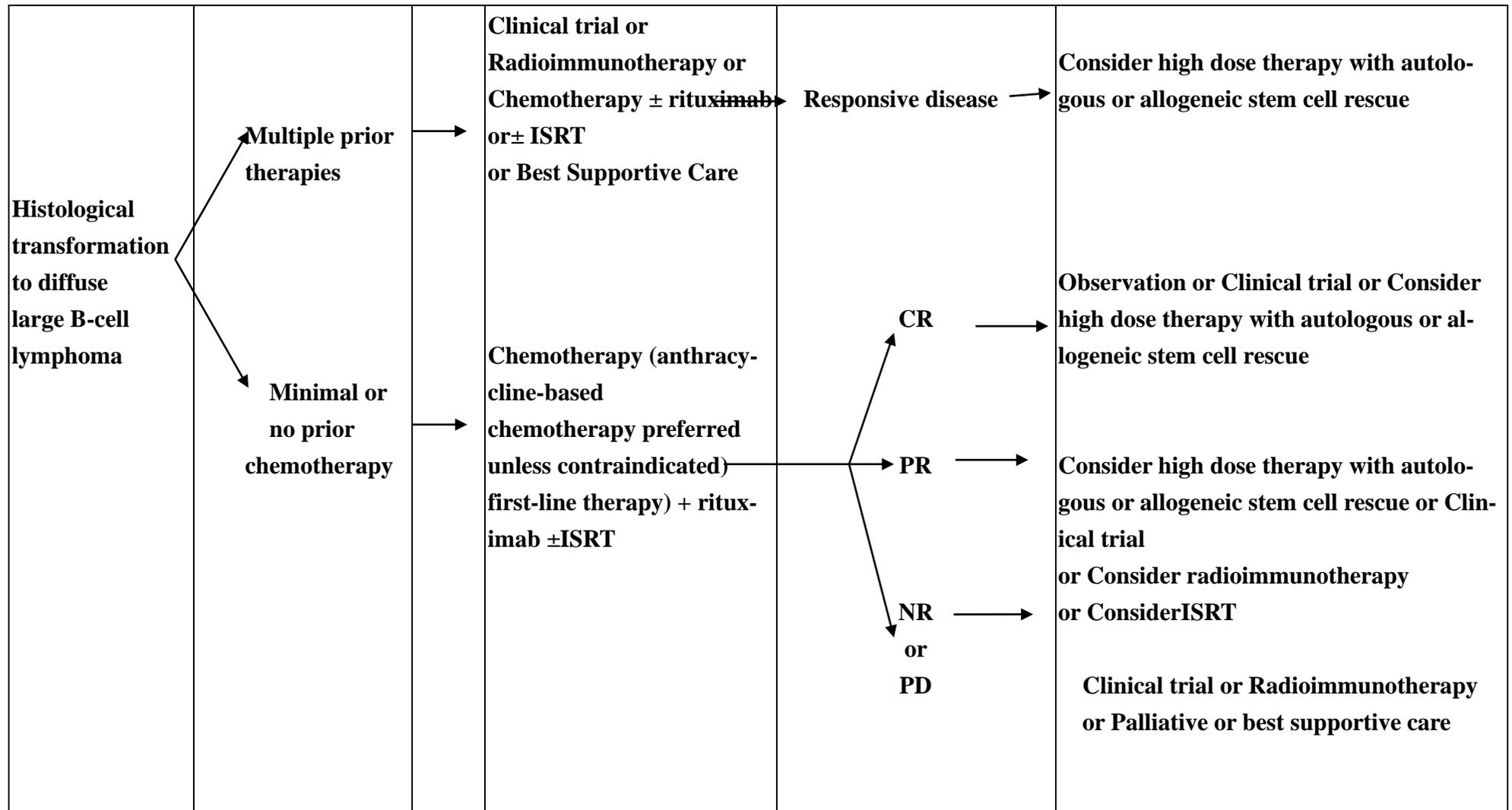
<b>Workup</b>	<b>Stage</b>	<b>Induction therapy (grade 1-2)</b>	<b>Response to therapy</b>	<b>Follow up</b>
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<b>End-of- treatment responen</b>	<b>Optional extended therapy</b>	<b>Follow-up</b>	<b>Second-line and subsequent therapy</b>
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流程圖 A



流程圖 B



五、FL International prognostic Index (FLIPI)



Age $\geq$ 60 Stage III-IV Hemoglobin level <12g/dL Serum LDH>ULN (upper limite of normal) Number of nodal sites $\geq$ 5	Risk group according to FLIPI chart	
		Number of factors
	Low	0 - 1
	Intermediate	2
	High	$\geq$ 3

## 六、化學治療原則(Principles of chemotherapy)

**第一線用藥**

Regimen	Dosage	Reference
RCHOP	Rituximab 375 mg/m <sup>2</sup> i.v. on day 1 Cyclophosphamide 750 mg/m <sup>2</sup> i.v. on day 1 Doxorubicin 50 mg/m <sup>2</sup> i.v. on day 1 Vincristine 1.4 mg/m <sup>2</sup> i.v. on day 1 (maximum dose of 2 mg) Prednisone 100mg p.o. daily on day1-5	McKelvey EM. cancer 1976;38:1484-1493. Lenz G. J clin Oncol 2005;23:1984-1992. Hiddemann W. Blood 2005;106:3725-3732
RCEOP	Rituximab 375 mg/m <sup>2</sup> i.v. on day 1 Cyclophosphamide 750 mg/m <sup>2</sup> i.v. on day 1 Epirubicin 50 mg/m <sup>2</sup> i.v. on day 1 Vincristine 1.4 mg/m <sup>2</sup> i.v. on day 1 (maximum dose of 2 mg) Prednisone 100mg p.o. daily on day1-5	
BR	Rituximab 375 mg/m <sup>2</sup> i.v. on day 1 Bendamustine 90-120mg/m <sup>2</sup> day 1-2	Nastoupil LJ, Hess G, Pavlovsky MA, Danielewicz I, Freeman J, García-Sancho AM, Glazunova V, Grigg A, Hou JZ, Janssens A, Kim SJ, Masliak Z, McKay P, Merli F, Munakata W, Nagai H, Özcan M, Preis M, Wang T, Rowe M, Tamegnon M, Qin R, Henninger T, Curtis M, Caces DB, Thieblemont C, Salles G. Phase 3 SELENE study: ibrutinib plus BR/R-CHOP in previously treated patients with follicular or marginal zone lymphoma. Blood Adv. 2023 Nov 28;7(22):7141-7150
GB	Bendamustine 90-120mg/m <sup>2</sup> day 1-2 Obinutuzumab maintenance (1000 mg every 8 weeks for 12 doses)	Sehn, L. H., N. Chua, J. Mayer, et al. 2016. "Obinutuzumab plus bendamustine versus bendamustine monotherapy in patients with rituximab-refractory indolent non-Hodgkin lymphoma (GADOLIN): a randomised, controlled, open-label, multicentre, phase 3 trial." Lancet Oncol 17(8):1081-1093.
RCOP	Rituximab 375 mg/m <sup>2</sup> i.v. on day 1 Cyclophosphamide 750 mg/m <sup>2</sup> i.v. on day 1	van Oers MH, Klasa R, Marcus RE, Wolf M, Kimby E, Gascoyne RD, Jack A, Van 't Veer M, Vranovsky A, Holte H, van Glabbeke M, Teodorovic I, Rozewicz C, Hagenbeek A.

	<p>Vincristine 1.4 mg/m<sup>2</sup> i.v. on day 1(maximum dose of 2 mg)                  Prednisone 100mg p.o. daily on day1-5</p>	<p>Rituximab maintenance improves clinical outcome of relapsed/resistant follicular non-Hodgkin lymphoma in patients both with and without rituximab during induction: results of a prospective randomized phase 3 intergroup trial. Blood. 2006 Nov 15;108(10):3295-301. Epub 2006 Jul 27</p>
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**第二線用藥**

Regimen	Dosage	Reference
DHAP±Rituximab	<p>Cisplatin 100 mg/m<sup>2</sup> CIVI over 24 h on day 1                      Cytarabine 2000 mg/m<sup>2</sup> i.v. q12h x2 dose on day 2                      Dexamethasone 40 mg/m<sup>2</sup> p.o./i.v. daily on day 1-4                      Repeat cycle every 21-28 d</p>	<p>Velasquez WS. Blood 1988;71:117-122.</p>
ESHAP±Rituximab	<p>Etoposide 40 mg/m<sup>2</sup> i.v. daily on days 1-4                      Methylprednisolone 500 mg/m<sup>2</sup> i.v. daily on days 1-5                      Cytarabine 2000 mg/m<sup>2</sup> CIVI on day 5                      Cisplatin 25 mg/m<sup>2</sup> i.v. daily on days 1-4                      Repeat cycle every 21-28 d</p>	<p>Velasquez WS. J clin Oncol 1994;12:1169-1176.</p>
ICE±Rituximab	<p>Ifosfamide 5000 mg/m<sup>2</sup> CIVI over 24h on day 2                      Mesna 5000 mg/m<sup>2</sup> CIVI over 24h on day 2                      Carboplatin AUC 5 i.v. on day 2(maximum dose of 800 mg)                      Etoposide 100 mg/m<sup>2</sup> i.v. daily on days 1-3                      ±Rituximab 375 mg/m<sup>2</sup> i.v. 48 h before start of cycle 1 and on day 1 of each cycle                      Repeat cycle every 14-15 d</p>	<p>Moskowitz CHOJ clin oncol 1999;17:3776-3785.                      Kewalramans T. blood 2004;103:3684-3688</p>

**七、放射線治療原則 (Principles of radiation)**



Disease	Indication	Target area	Dose	Note
Follicular Lymphoma	Stage I~II, CR <sup>a</sup> Non-bulky <sup>b</sup>	Locoregional RT	24-30Gy	1. testicular lymphoma should include contralateral testis to 30-36Gy
	Stage I~II, CR <sup>a</sup> Bulky	Locoregional RT	24-30Gy <sup>a</sup>	
	Stage I~II, PR <sup>c</sup>	Locoregional RT	24-30Gy	
	Palliative RT	2Gy*2 fractions or 4Gy*1 fractions(which may be repeated as needed; dose up to 30Gy may be appropriate in select circumstances)		

a: complete response from previous chemotherapy

b : with adverse effects such as elevated LDH, stage II, age > 60y, performance status ECOG > 2

c: partial response from previous chemotherapy

## 八、安寧緩和照護原則

若預期疾病難以治癒時，病人存活期小於 6 個月便適合安寧療護(Pomeranz & Brustman, 2005 ; Waldrop & Rinfrette,



2009)。若藉由症狀、檢驗數據、及確切的腫瘤診斷，證實臨床上該惡性腫瘤已經廣泛侵犯、或進展快速；功能分數(Palliative Performance Scale)低於70%；拒絕進一步腫瘤治癒性治療，或者在治療之下仍持續惡化者，即可轉介緩和醫療團隊(彭等，2006)。

## 九、實證醫學

Categories of Evidence and Consensus :

Category 1: There is uniform NCCN consensus, based on high-level evidence, that the recommendation is appropriate.

Category 2A: There is uniform NCCN consensus, based on lower-level evidence including clinical experience, that the recommendation is appropriate.

Category 2B: There is nonuniform NCCN consensus (but no major disagreement), based on lower-level evidence including clinical experience, that the recommendation is appropriate.

Category 3: There is major NCCN disagreement that the recommendation is appropriate.

All recommendations are category 2A unless otherwise noted.

## 十、參考文獻(Reference)

1. NCCN Clinical Practice Guidelines in Oncology. B-cell Lymphomas V3. 2025.



2. McKelvey EM. cancer 1976;38:1484-1493. Lenz G. J clin Oncol 2005;23:1984-1992. Hiddemann W. Blood 2005;106:3725-3732
3. Velasquez WS. Blood 1988;71:117-122.
4. Velasquez WS. J clin Oncol 1994;12:1169-1176.
5. Moskowitz CH. J clin oncol 1999;17:3776-3785.
6. Kewalramans T. blood 2004;103:3684-3688
7. BLOOD, 19 MAY 2016 x VOLUME 127, NUMBER 20:2376