中 山 醫 學 大 學 附 設 醫 院

肺 癌 診 療 指 引

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2016/12/15 Version11.0
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2013/12/24 Version 8.0
2012/12/11 Version 7.0
2012/01/03 Version 6.0
2010/08/05 Version 5.0
2009/12/15 Version 4.0
2008/05/27 Version 3.0
2008/02/05 Version 2.0

本臨床指引參考美國NCCN版本

肺癌多專科醫療團隊編修

癌症委員會主任委員	癌症委員會執行長	癌症中心主任	團隊負責人

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AJCC 第八版 TNM stage

T	Primary Tumor
TX	Primary tumor cannot be assessed, or tumor proven by the presence of malignant cells in sputum or bronchial washings but not visualized by imaging or bronchoscopy
T0	No evidence of primary tumor
Tis	Carcinoma in situ Squamous cell carcinoma in situ (SCIS) Adenocarcinoma in situ (AIS): adenocarcinoma with pure lepidic pattern, ≤3 cm in greatest dimension
T1	umor ≤3 cm in greatest dimension, surrounded by lung or visceral pleura, without bronchoscopic evidence of invasion more proximal than the lobar bronchus (i.e., not in the main bronchus) *T1mi Minimally invasive adenocarcinoma: adenocarcinoma (≤3 cm in greatest dimension) with a predominantly lepidic pattern and ≤5 mm invasion in greatest dimension *T1a Tumor ≤1 cm in greatest dimension. A superficial, spreading tumor of any size whose invasive component is limited to the bronchial wall and may extend proximal to the main bronchus also is classified as T1a, but these tumors are uncommon. *T1b Tumor >1 cm but ≤2 cm in greatest dimension *T1c Tumor >2 cm but ≤3 cm in greatest dimension
T2	Tumor >3 cm but ≤5 cm or having any of the following features: (1) Involves the main bronchus, regardless of distance to the carina, but without involvement of the carina; (2) Invades visceral pleura (PL1 or PL2); (3) Associated with atelectasis or obstructive pneumonitis that extends to the hilar region, involving part or all of the lung *T2a Tumor >3 cm but ≤4 cm in greatest dimension *T2b Tumor >4 cm but ≤5 cm in greatest dimension
T3	Tumor >5 cm but ≤7 cm in greatest dimension or directly invading any of the following: parietal pleura (PL3), chest wall (including superior sulcus tumors), phrenic nerve, parietal pericardium; or separate tumor nodule(s) in the same lobe as the primary
T4	Tumor >7 cm or tumor of any size invading one or more of the following: diaphragm, mediastinum, heart, great vessels, trachea, recurrent laryngeal nerve, esophagus, vertebral body, carina; separate tumor nodule(s) in an ipsilateral lobe different from that of the primary

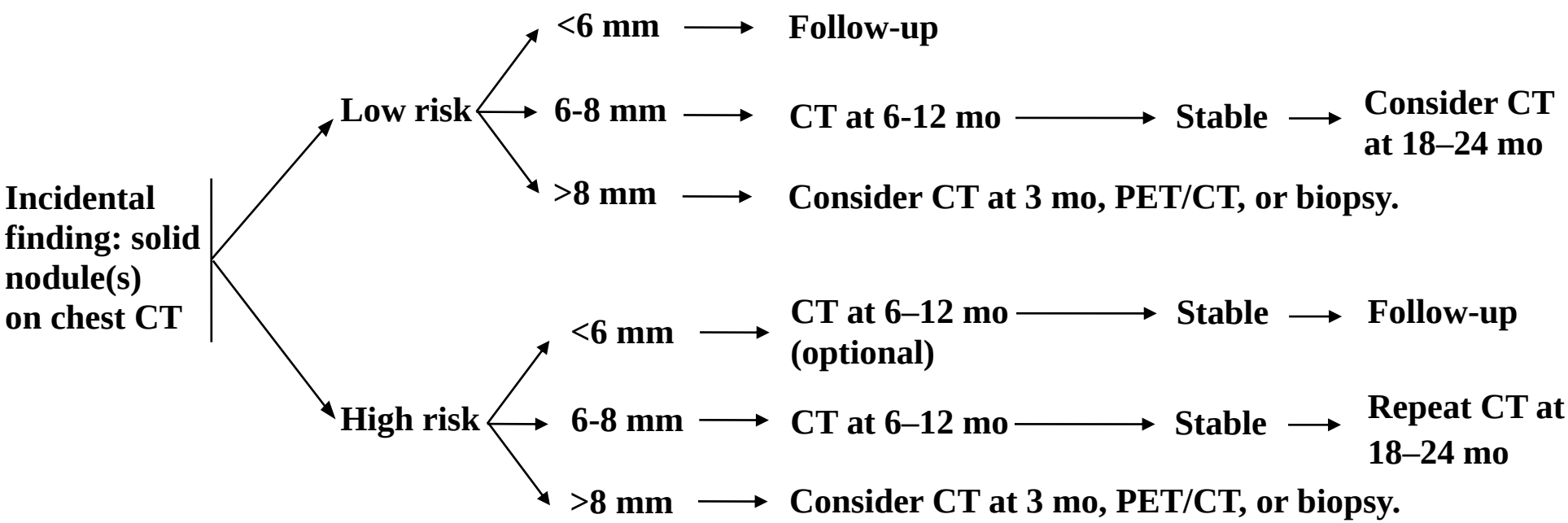
N	Regional Lymph Nodes
NX	Regional lymph nodes cannot be assessed
N0	No regional lymph node metastasis
N1	Metastasis in ipsilateral peribronchial and/or ipsilateral hilar lymph nodes and intrapulmonary nodes, including involvement by direct extension
N2	Metastasis in contralateral mediastinal, contralateral hilar, ipsilateral or contralateral scalene, or supraclavicular lymph node(s)
N3	Metastasis in contralateral mediastinal, contralateral hilar, ipsilateral or contralateral scalene, or supraclavicular lymph node(s)
M	**Distant Metastasis**
M0	No distant metastasis
M1	Distant metastasis
M1a	Separate tumor nodule(s) in a contralateral lobe; tumor with pleural or pericardial nodules or malignant pleural or pericardial effusiona
M1b	Single extrathoracic metastasis in a single organ (including involvement of a single nonregional node)
M1c	Multiple extrathoracic metastases in a single organ or in multiple organs

	T	N	M
Occult Carcinoma	TX	N0	M0
Stage 0	Tis	N0	M0
Stage IA1	T1mi	N0	M0
	T1a	N0	M0
Stage IA2	T1b	N0	M0
Stage IA3	T1c	N0	M0
Stage IB	T2a	N0	M0
Stage IIA	T2b	N0	M0
Stage IIB	T1a	N1	M0
	T1b	N1	M0
	T2a	N1	M0
	T2b	N1	M0
	T3	N0	M0
Stage IIIA	T1a	N2	M0
	T1b	N2	M0
	T2a	N2	M0
	T2b	N2	M0
	T3	N1	M0
	T4	N0	M0
	T4	N1	M0

	T	N	M
Stage IIIB	T1a	N3	M0
	T1b	N3	M0
	T1c	N3	M0
	T2a	N3	M0
	T2b	N3	M0
	T3	N2	M0
	T4	N2	M0
Stage IIIC	T3	N3	M0
	T4	N3	M0
Stage IVA	**Any T**	Any N	M1a
	Any T	Any N	M1b
Stage IVB	**Any T**	Any N	M1c

一、檢查

FINDINGS	FOLLOW-UP



註:實際情況及手術與否需與胸腔內科/外科及放射腫瘤科等多專科團隊討論(SDM)

Note: All recommendations are category 2A unless otherwise indicated.

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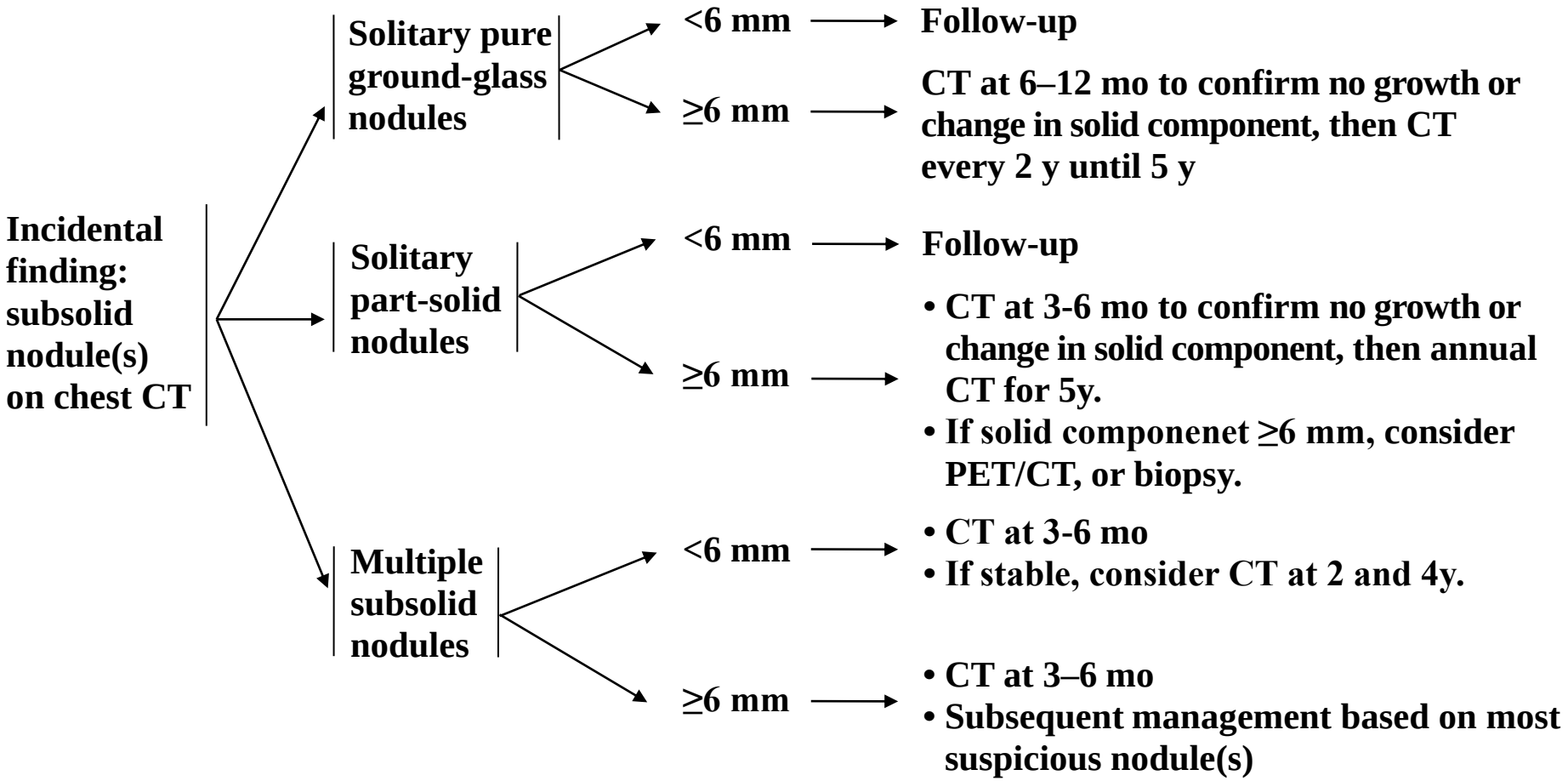

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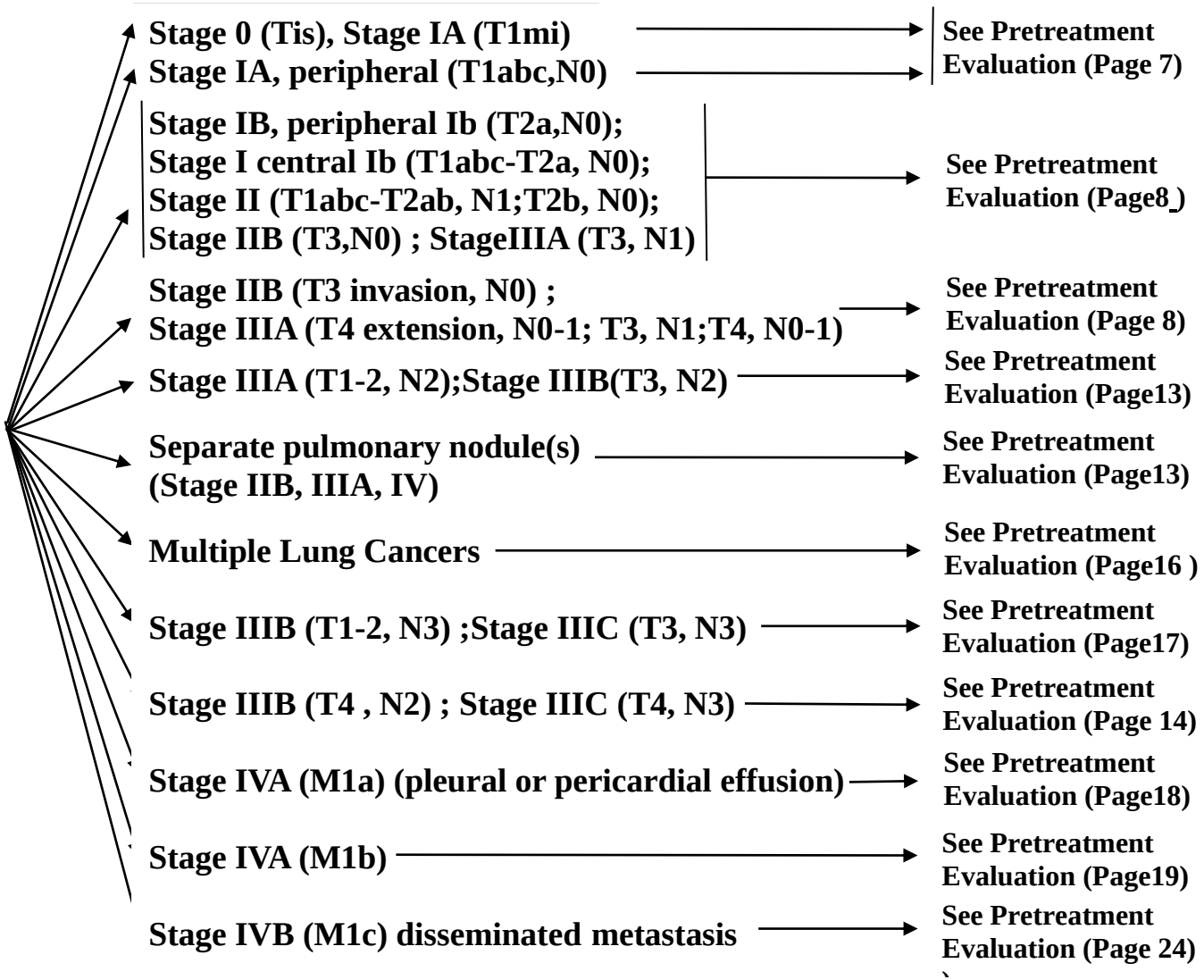
WORK-UP	CLINICAL STAGE

- Pathology review
- H&P (include performance status+weight loss)
- CT chest and upper abdomen with contrast, including adrenals
- CBC, platelets
- Chemistry profile
- Smoking cessation advice, counseling,and pharmacotherapy
- Integrate palliative care
- For tools to aid in the optimal assessment and mamagement of older adults, see the NCCN Guidelines for Older Adult Oncology



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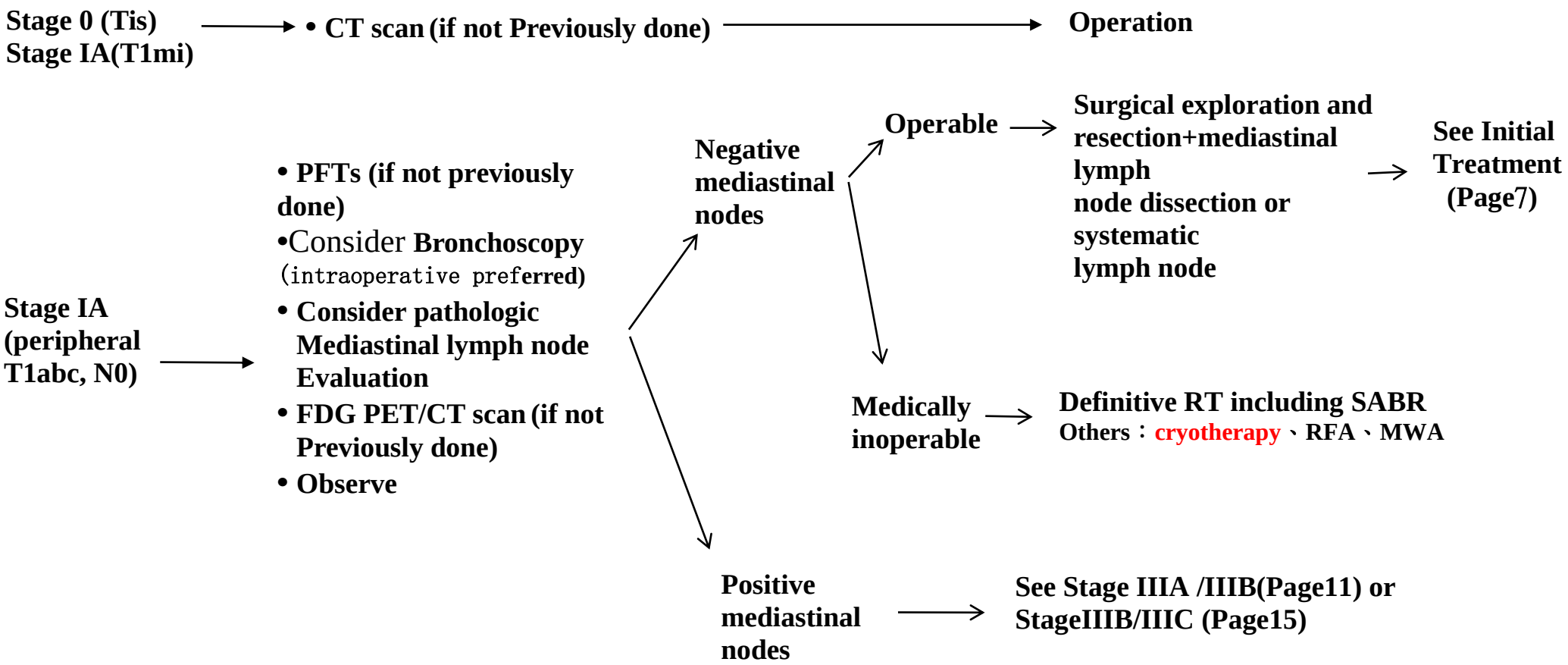

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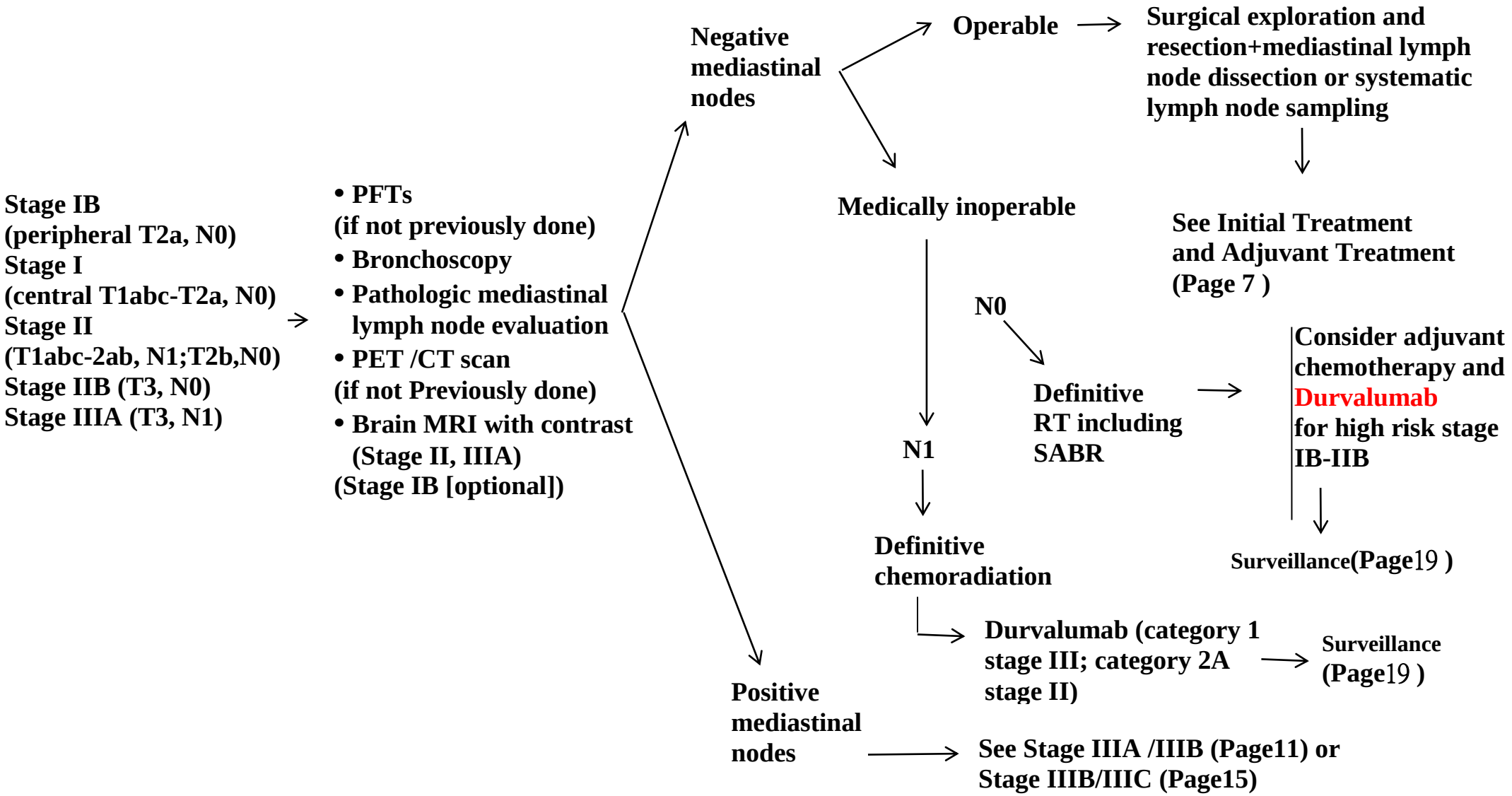

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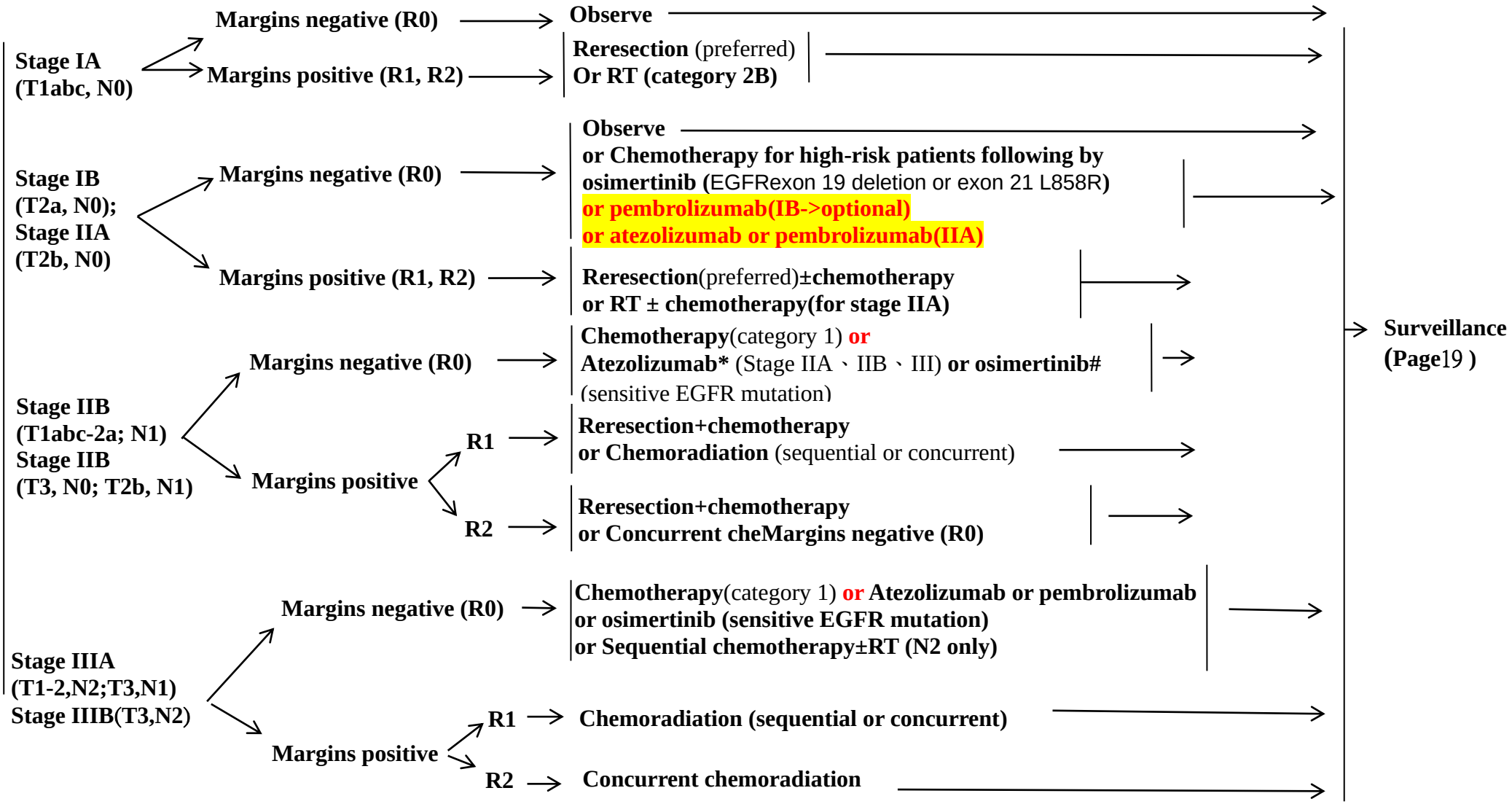

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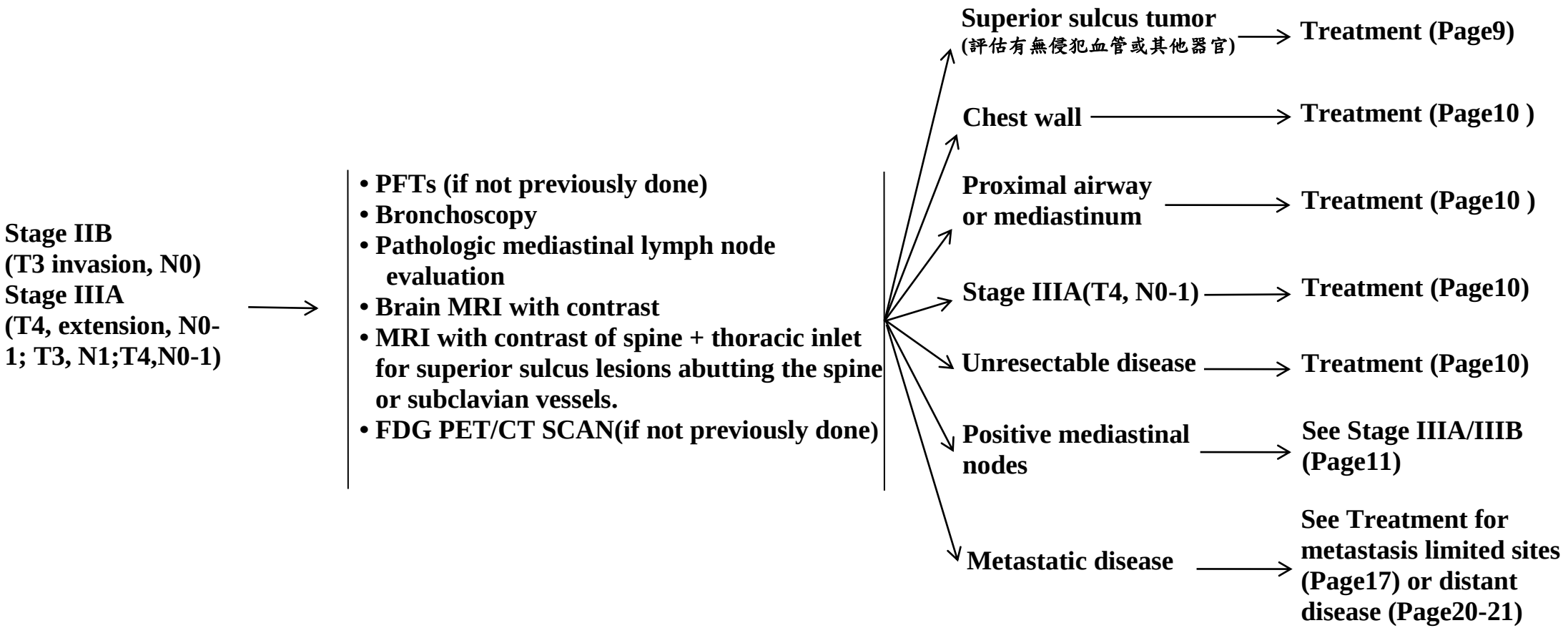

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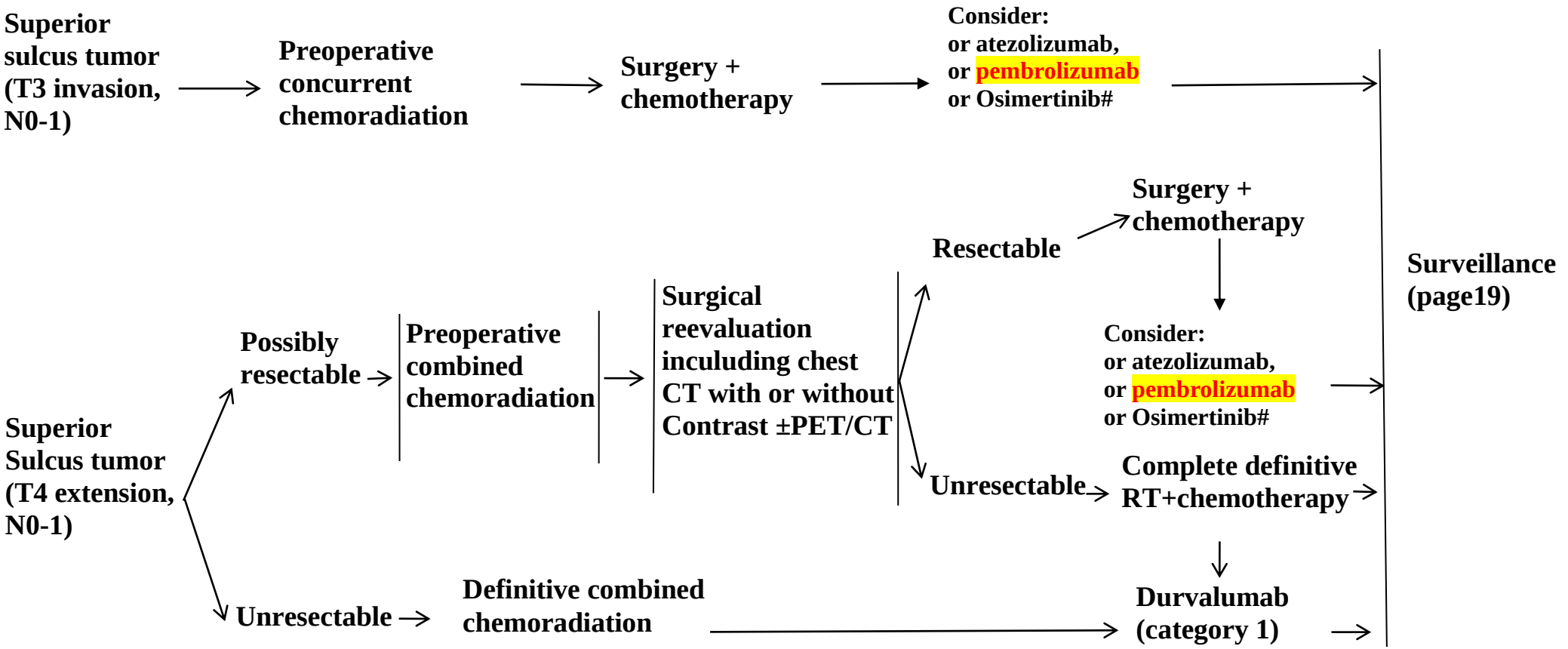

#: osimertinib :建議治療 3 年以上

註: pembrolizumab (keytruda)適合 II-IIIB(ACJJ8th)或 IB 且 Tumor>4cm,PDL1>1%,可考慮自費使用 from the phase 3 KEYNOTE-091 trial。

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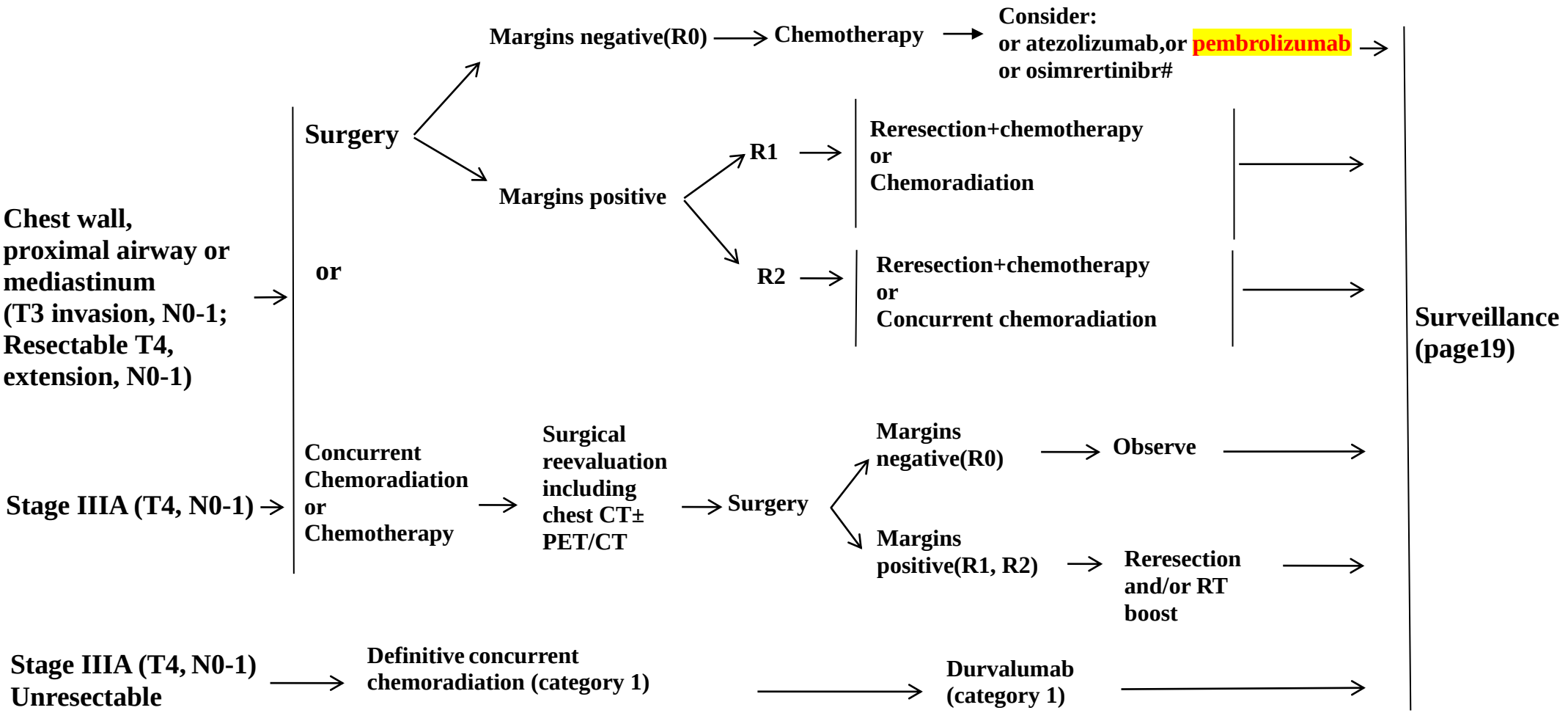

Atezolizumab :適用於 IB 以上，需自費。 #: osimertinib :建議治療 3 年以上

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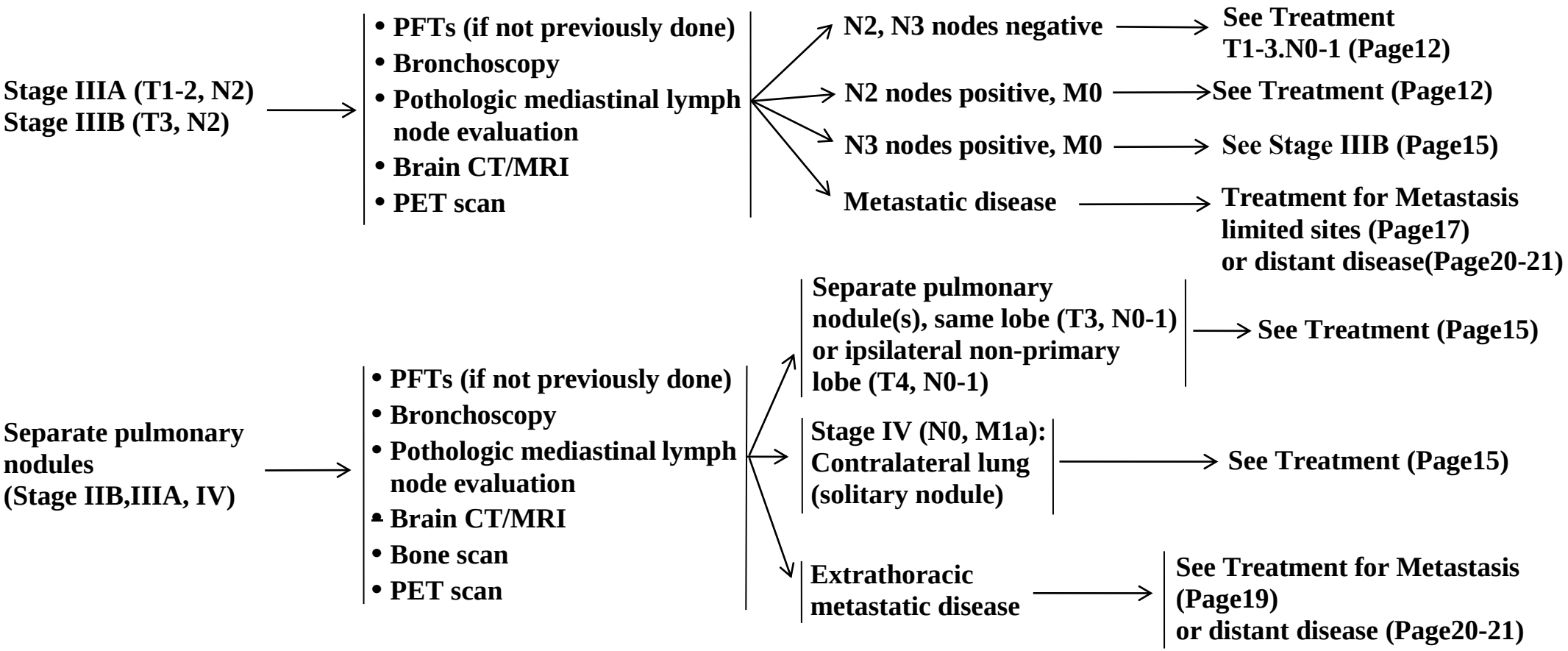

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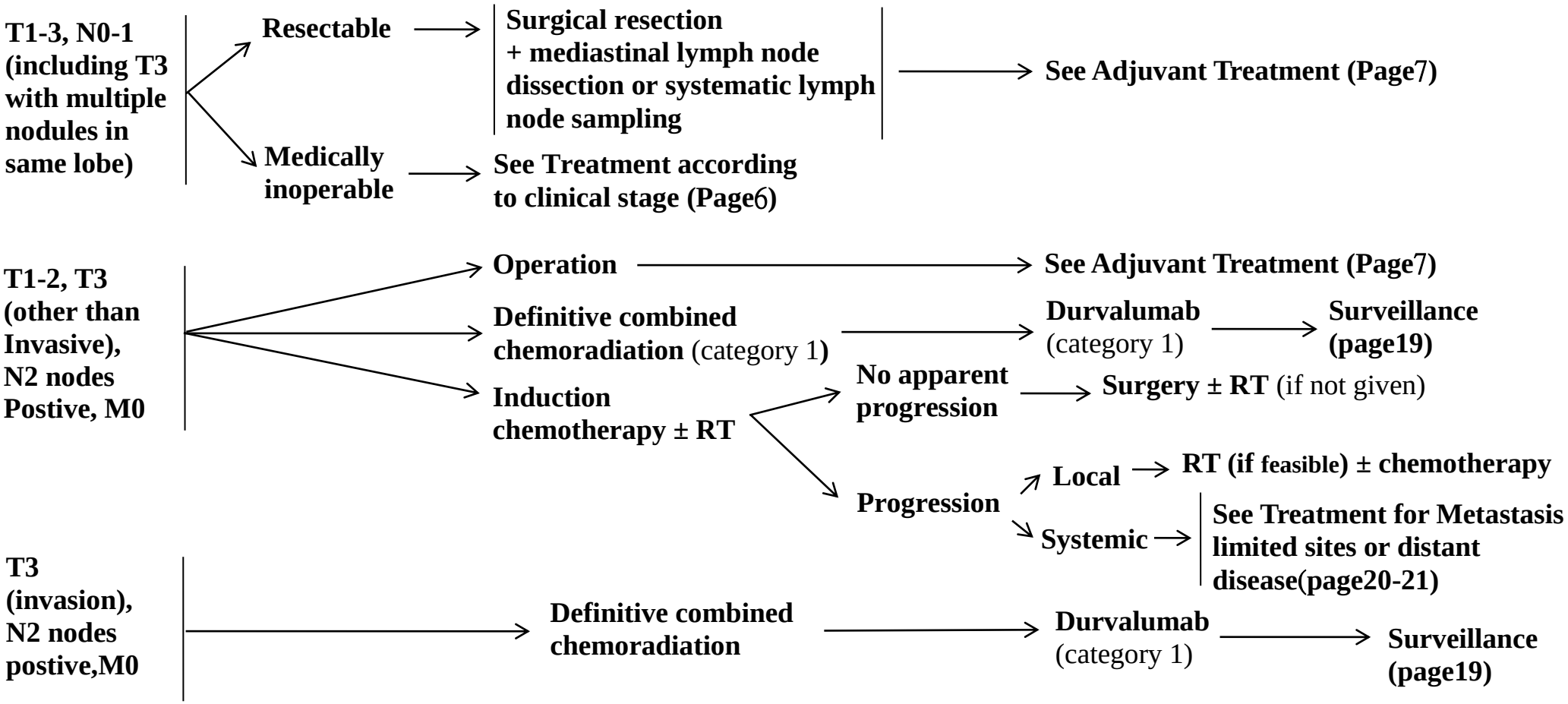

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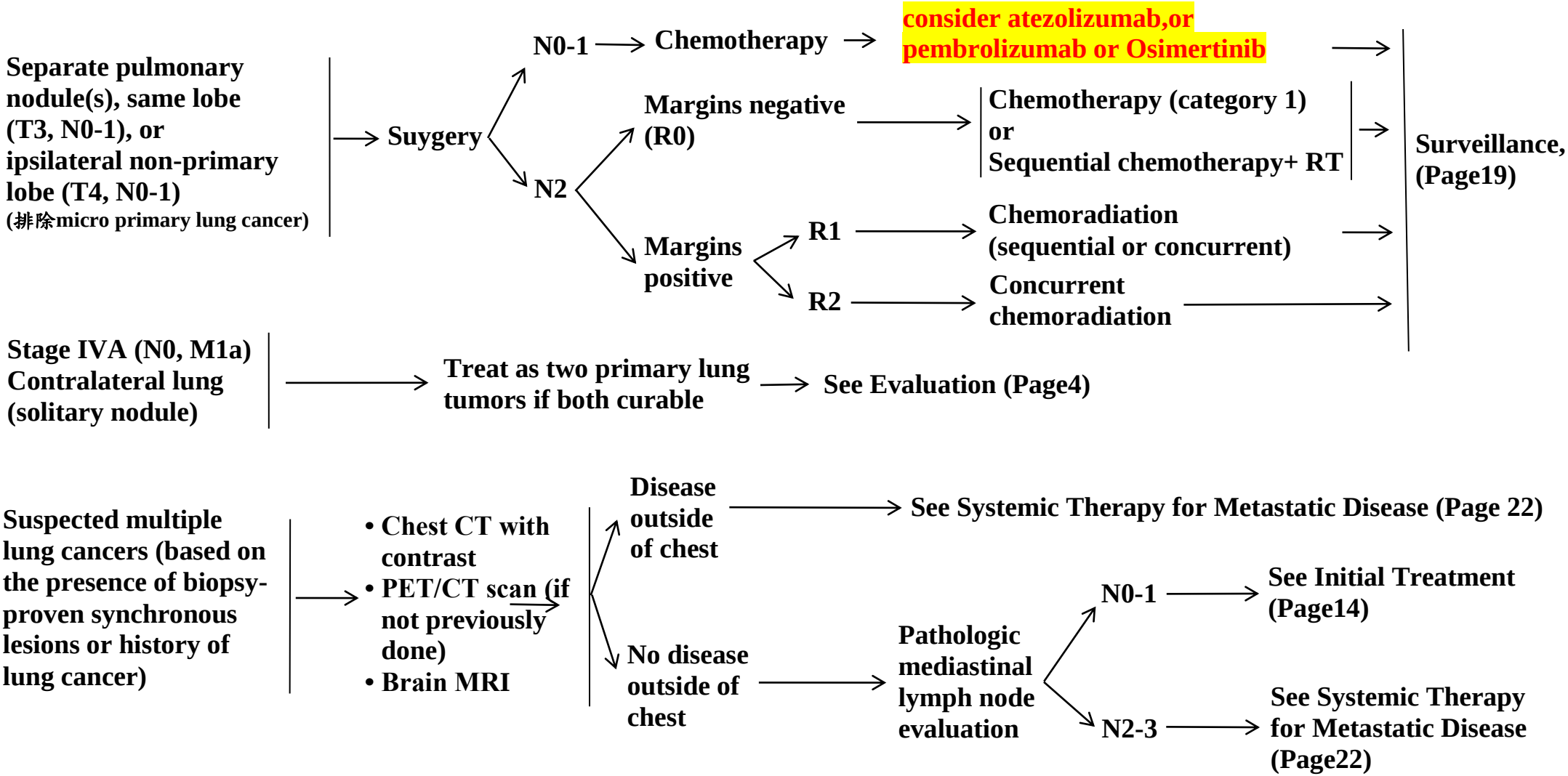

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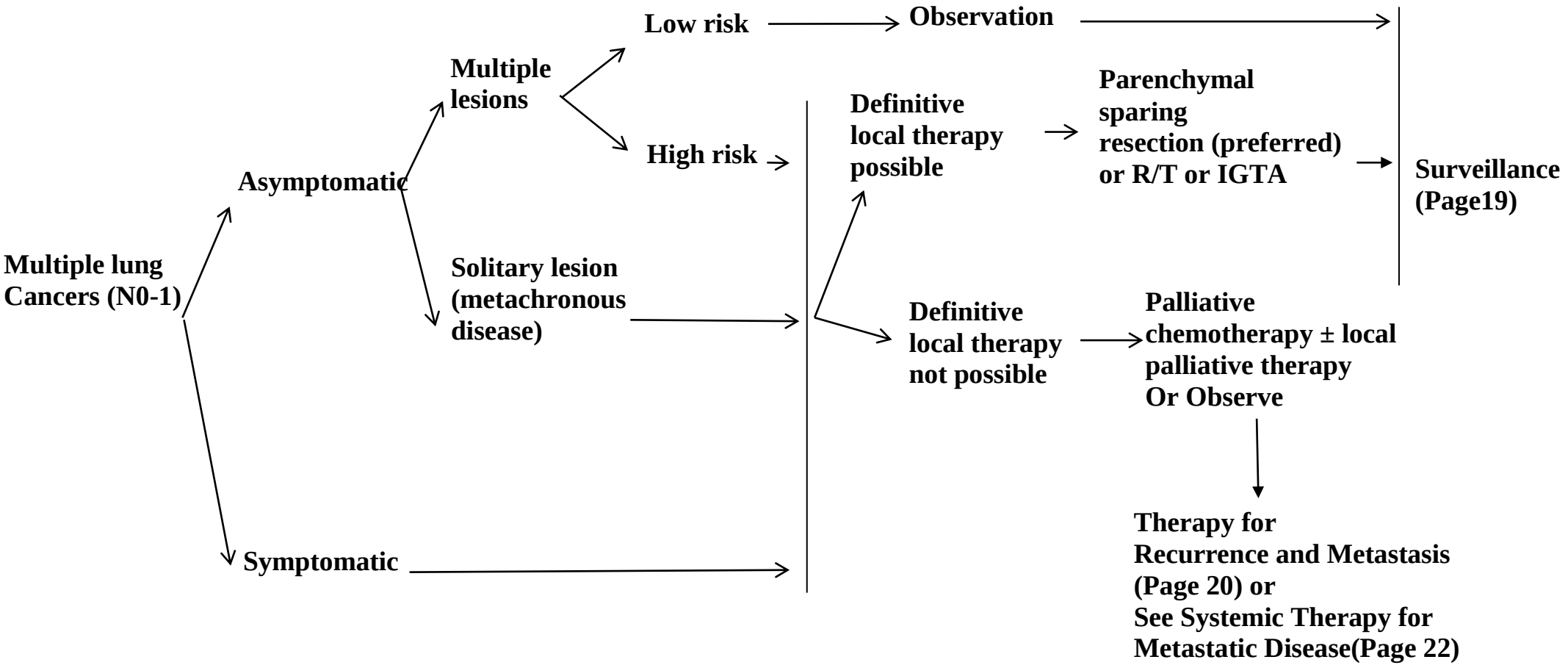

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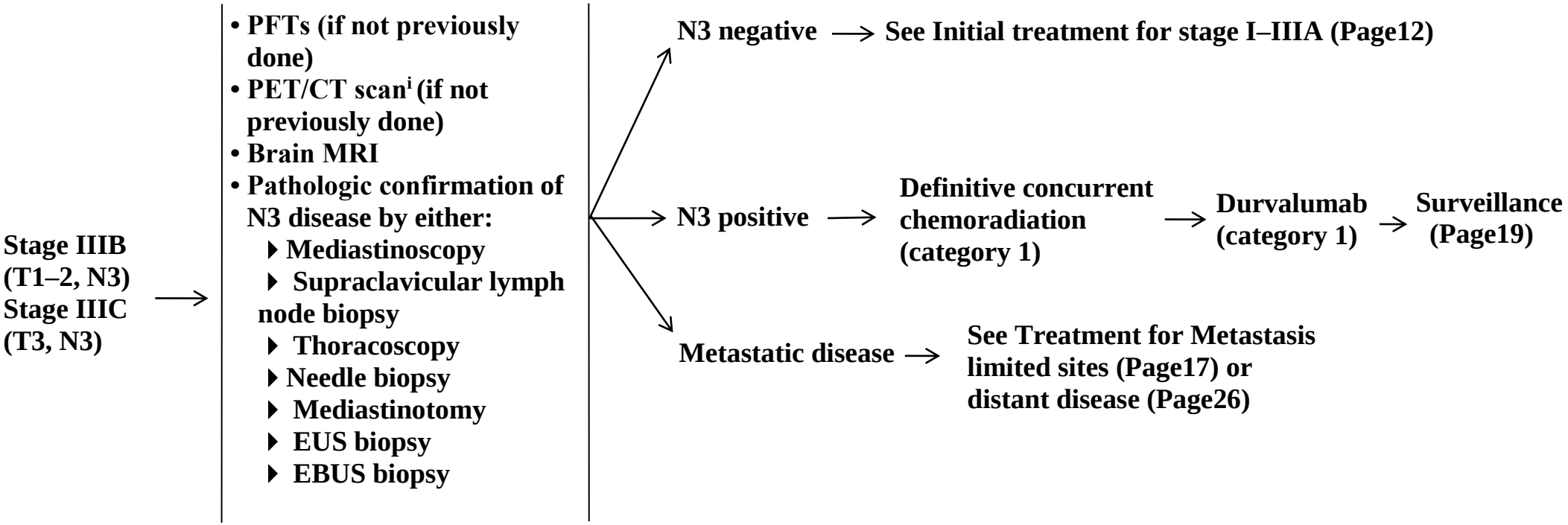

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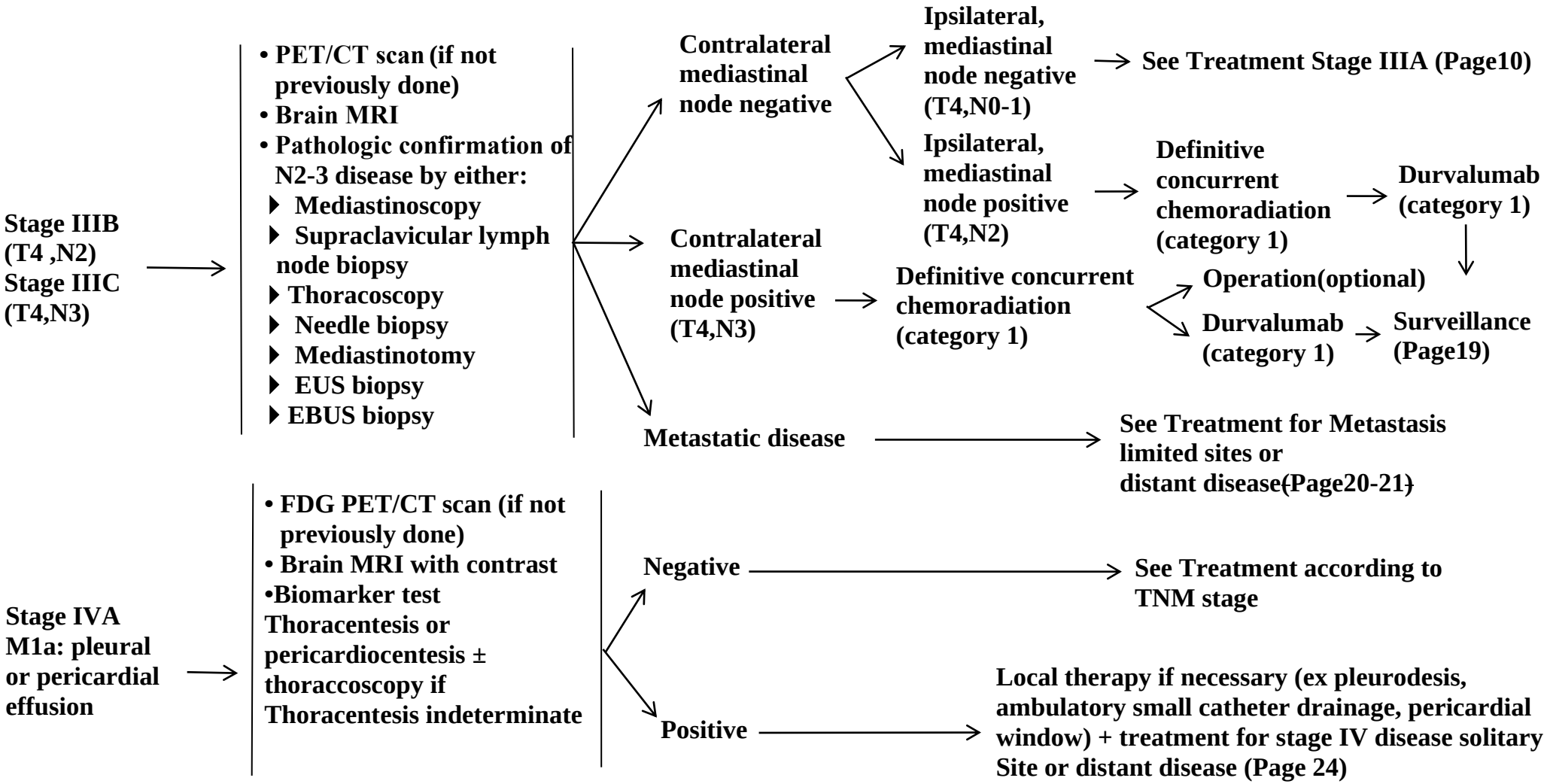

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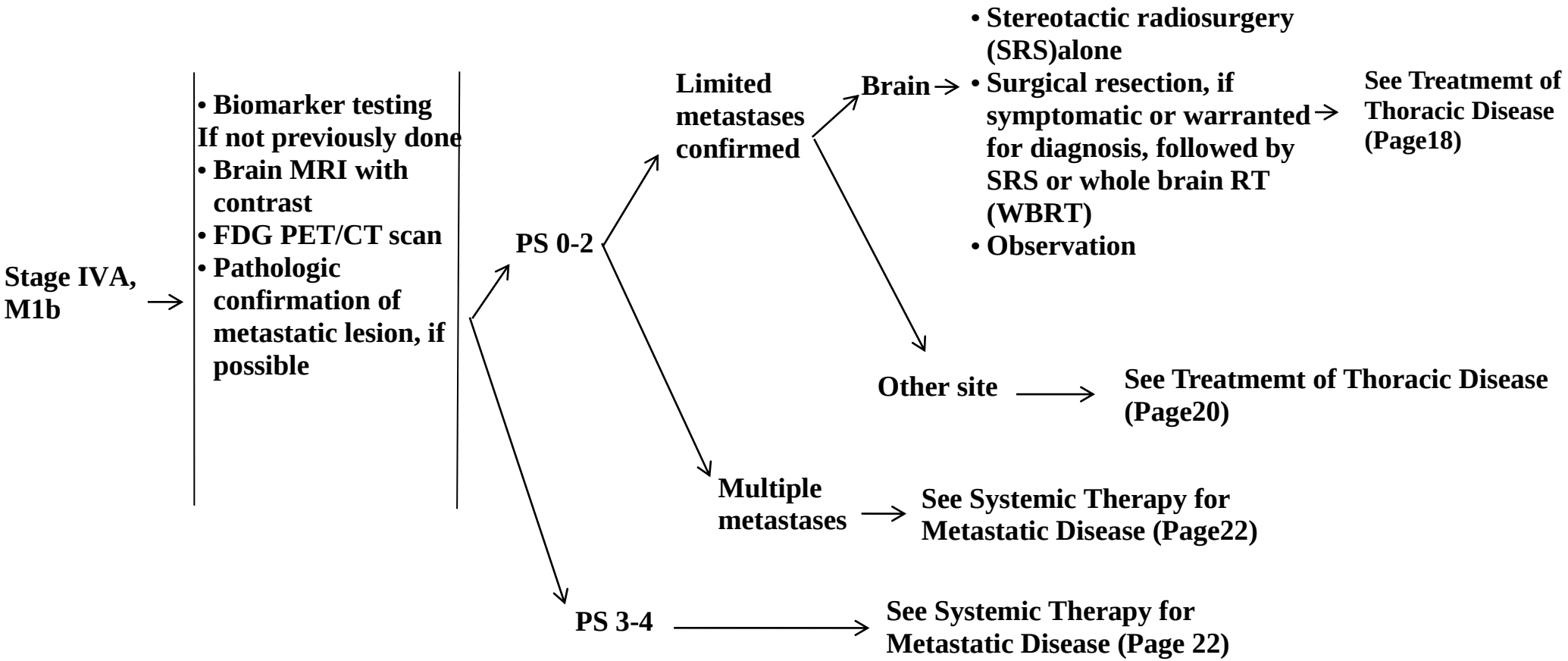

stageIV 若接受 TKI、化療、電療後若可開刀，可與胸腔內/外科等多專科團隊討論

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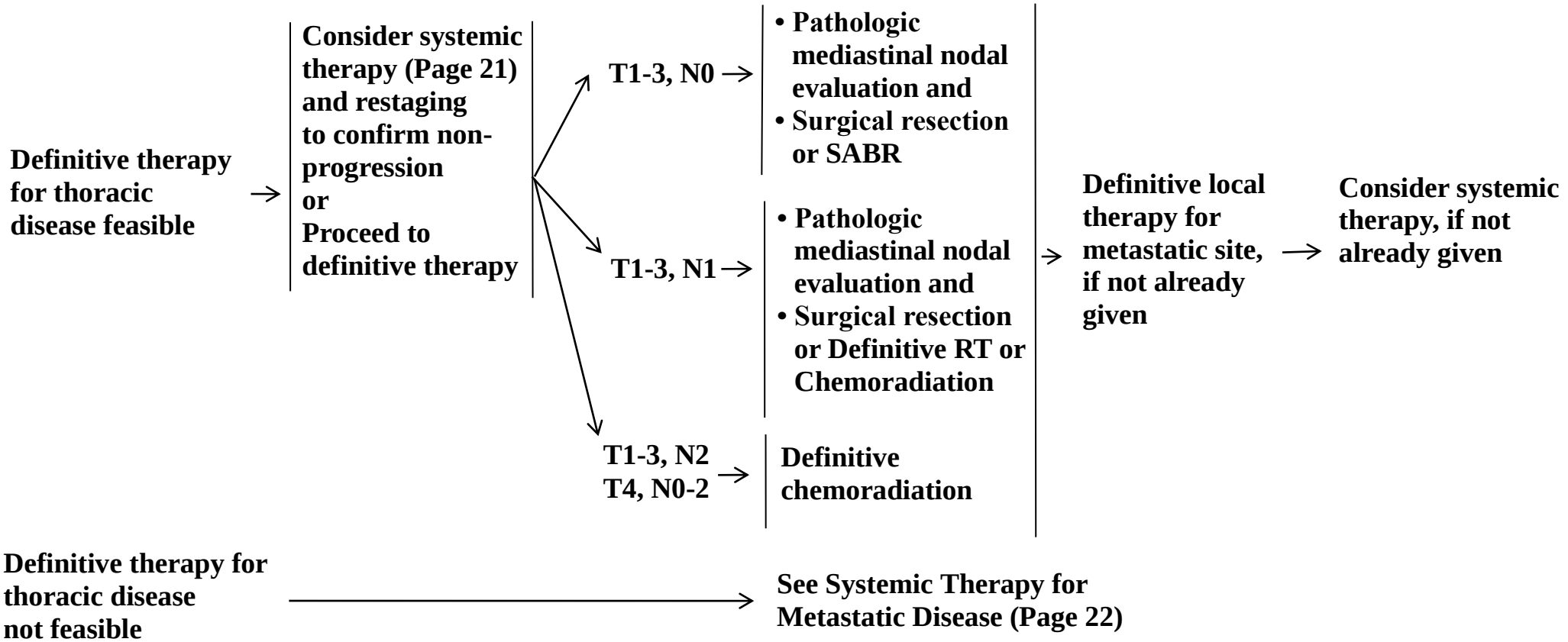
TREATMENT OF THORACIC DISEASE



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SURVEILLANCE AFTER COMPLETIOF DEFINITIVE

No evidence of clinical/radiographic disease

- **Stage I–II (primary treatment included surgery ± chemotherapy) H&P and chest CT ± contrast every 3-6 mo for 2–3 y, then H&P and a LDCT**
- **Stage I–II (primary treatment included RT) or stage III or stage IV (oligometastatic with all sites treated with definitive intent) H&P and chest CT ± contrast every 3–6 mo for 3 y, then H&P and chest CT ± contrast every 6 mo for 2 y, then H&P and a LDCT**
- **Residual or new radiographic abnormalities may require more frequent imaging**
- **Smoking cessation advice, counseling, and pharmacotherapy**
- **PET/CT**

→ **Recurrence** →

- **PET/CT**
- **Brain MRI with**

→ **Locoregional recurrence (Page20)**

→ **Distant metastases (Page21)**

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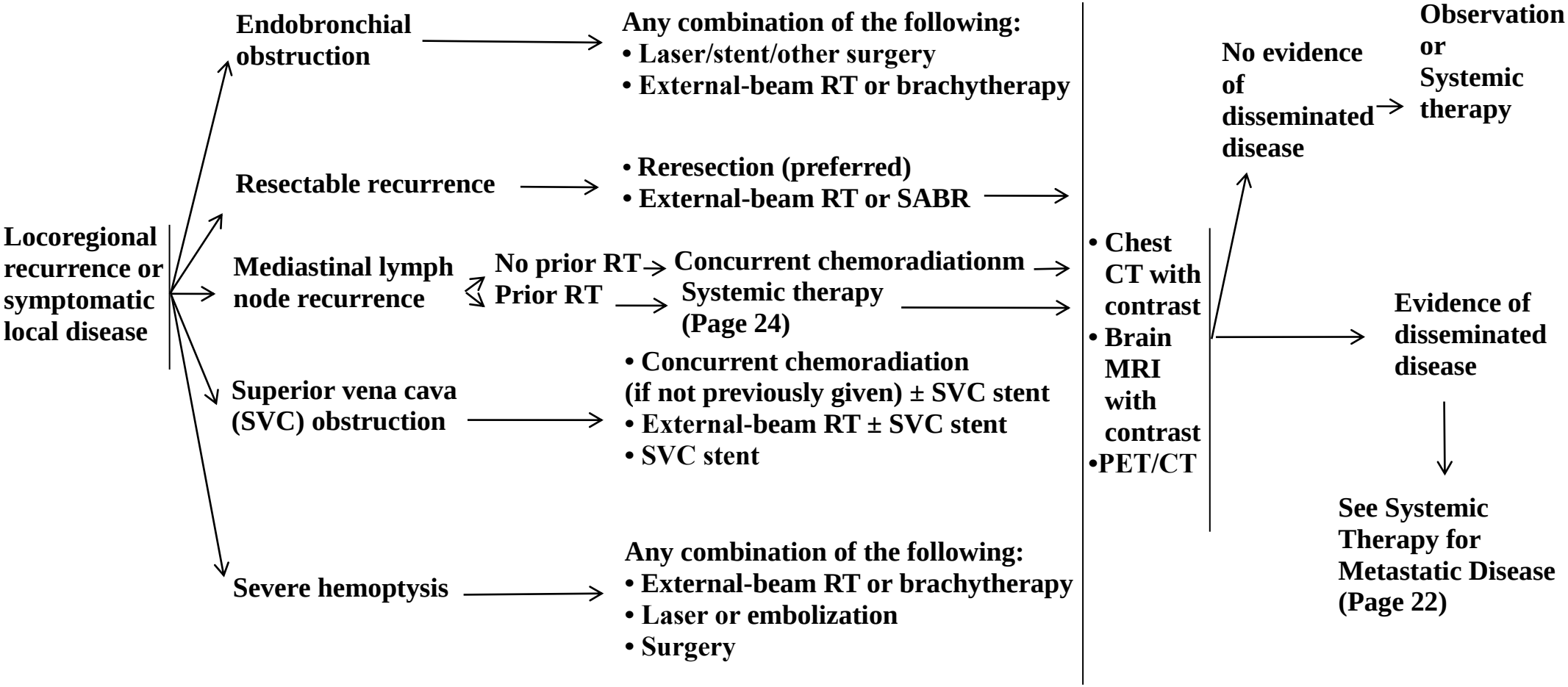
THERAPY FOR RECURRENCE AND METASIS



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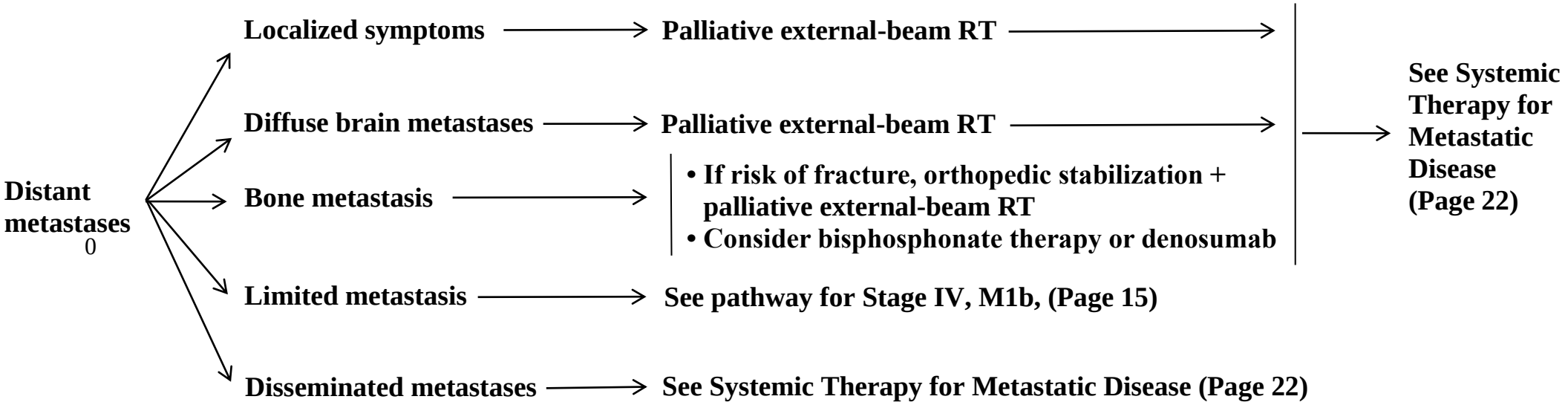

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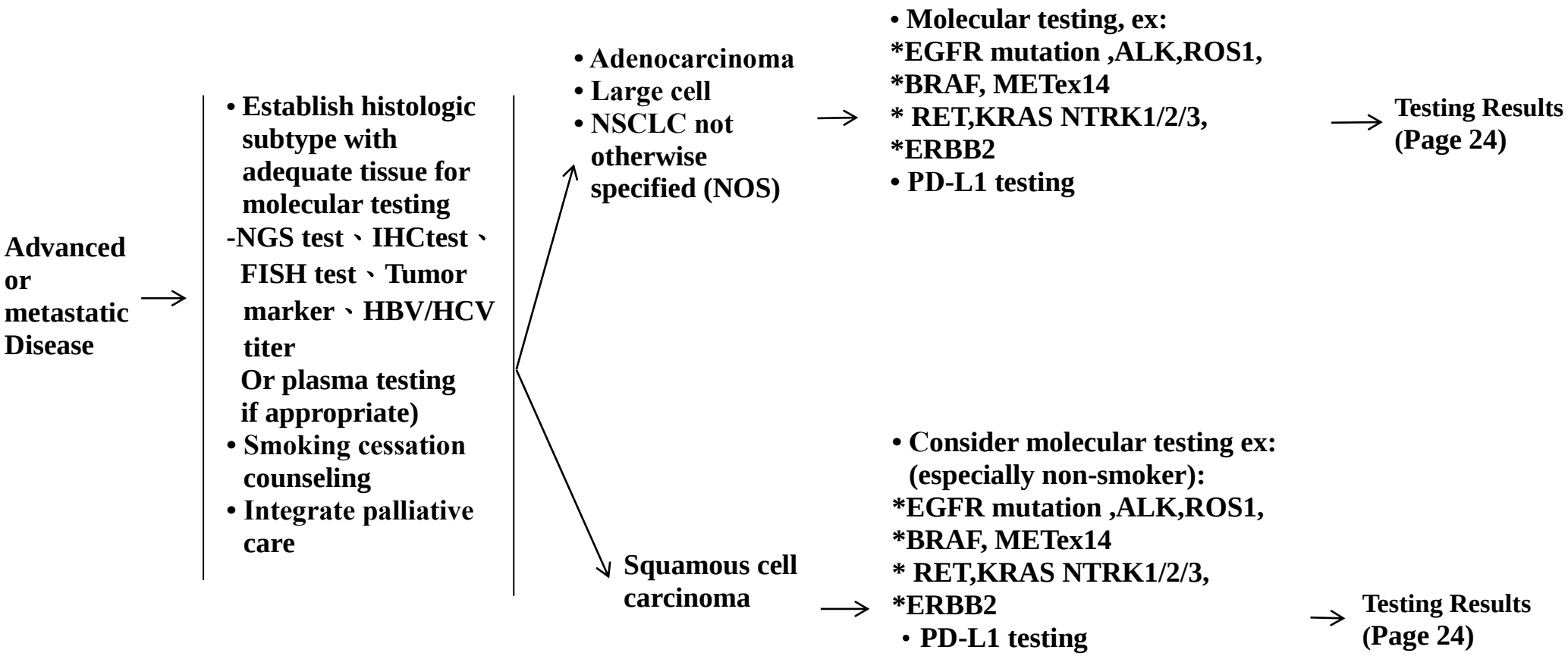
CLINICAL PRESENTATION	HISTOLOGIC	TESTING SUBTYPE	TESTING RESULTS



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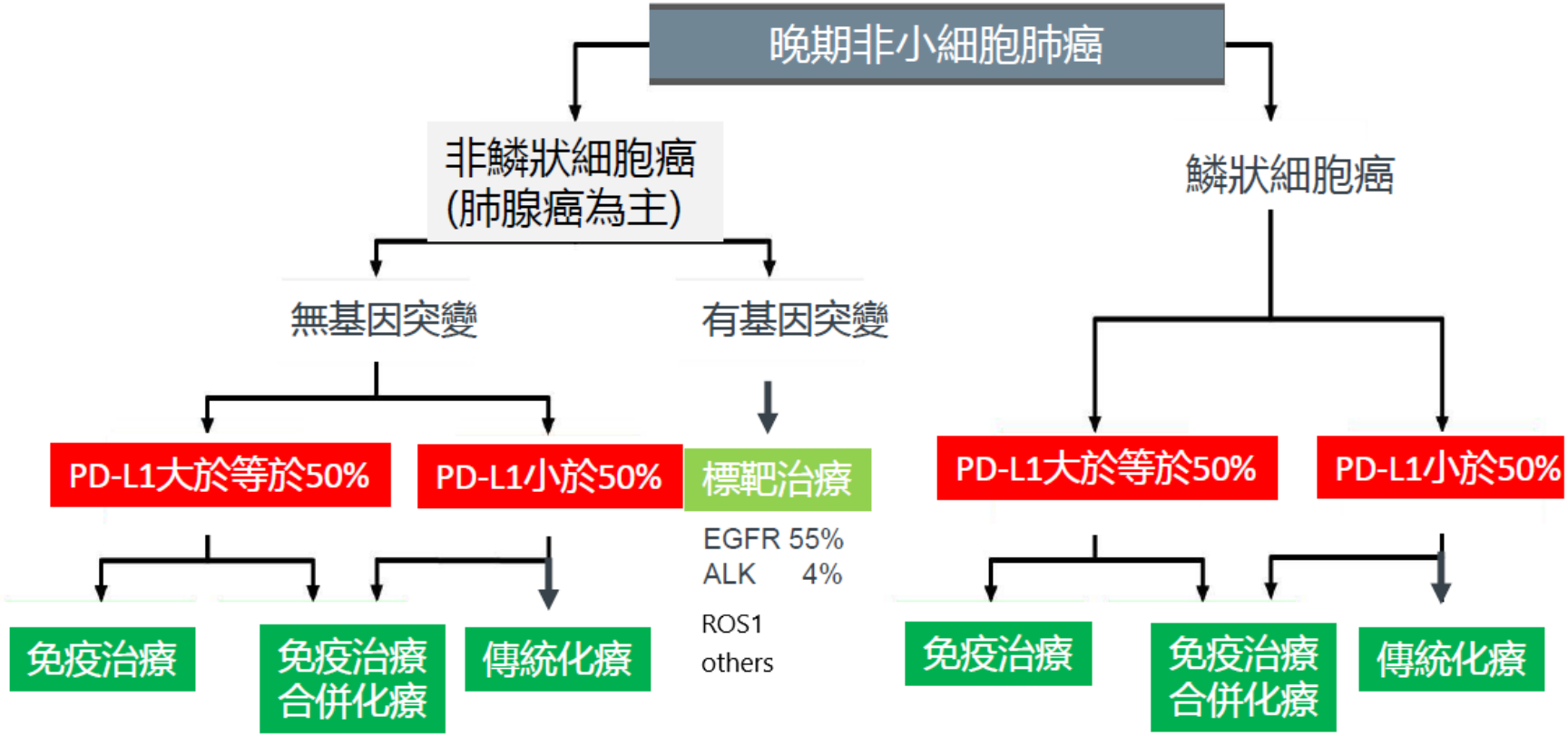
晚期非小細胞肺癌藥物治療的選擇



註：實際情況需與醫師討論(SDM)

Note: All recommendations are category 2A unless otherwise indicated.

Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

TESTING RESULTS

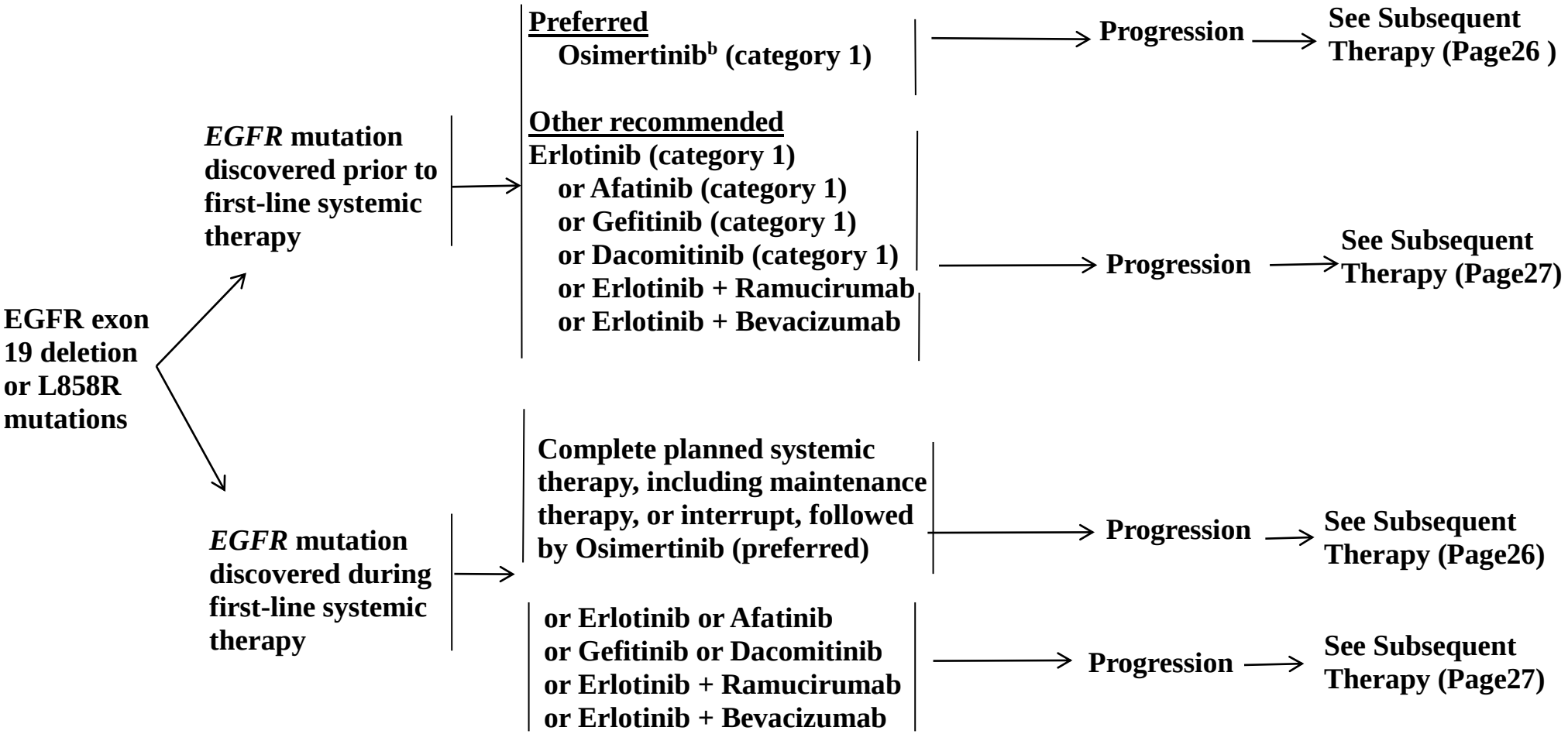
EGFR exon 19 deletion or L858R mutation positive	**Page 25**
EGFR S768I, L861Q, and/or G719X mutation positive	**Page 28**
EGFR exon 20 insertion mutation positive	**Page 29**
KRAS G12C mutation positive	**Page 30**
ALK rearrangement positive	**Page31**
ROS1 rearrangement positive	**Page34**
BRAF V600E mutation positive	**Page 36**
NTRK1/2/3 gene fusion positive	**Page 37**
METex14 skipping mutation positive	**Page 38**
RET rearrangement positive	**Page 39**
ERBB2 (HER2) mutation positive	**Page 40**
PD-L1 ≥50% and negative for actionable molecular biomarkers above	**Page 41**
PD-L1 ≥1%–49% and negative for actionable molecular biomarkers above	**Page 42**
PD-L1 <1% and negative for actionable molecular biomarkers above	**Page 43**

註：實際情況需與醫師討論(SDM)

Note: All recommendations are category 2A unless otherwise indicated.

Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

EGFR EXON 19 DELETION OR L858R MUTATIONS	FIRST-LINE THERAPY



Stage:IV 接受 TKI 治療後可與胸腔外科討論進行局部治療(含開刀.放療)治療

[a]Clinical Trials: INSIGHT.

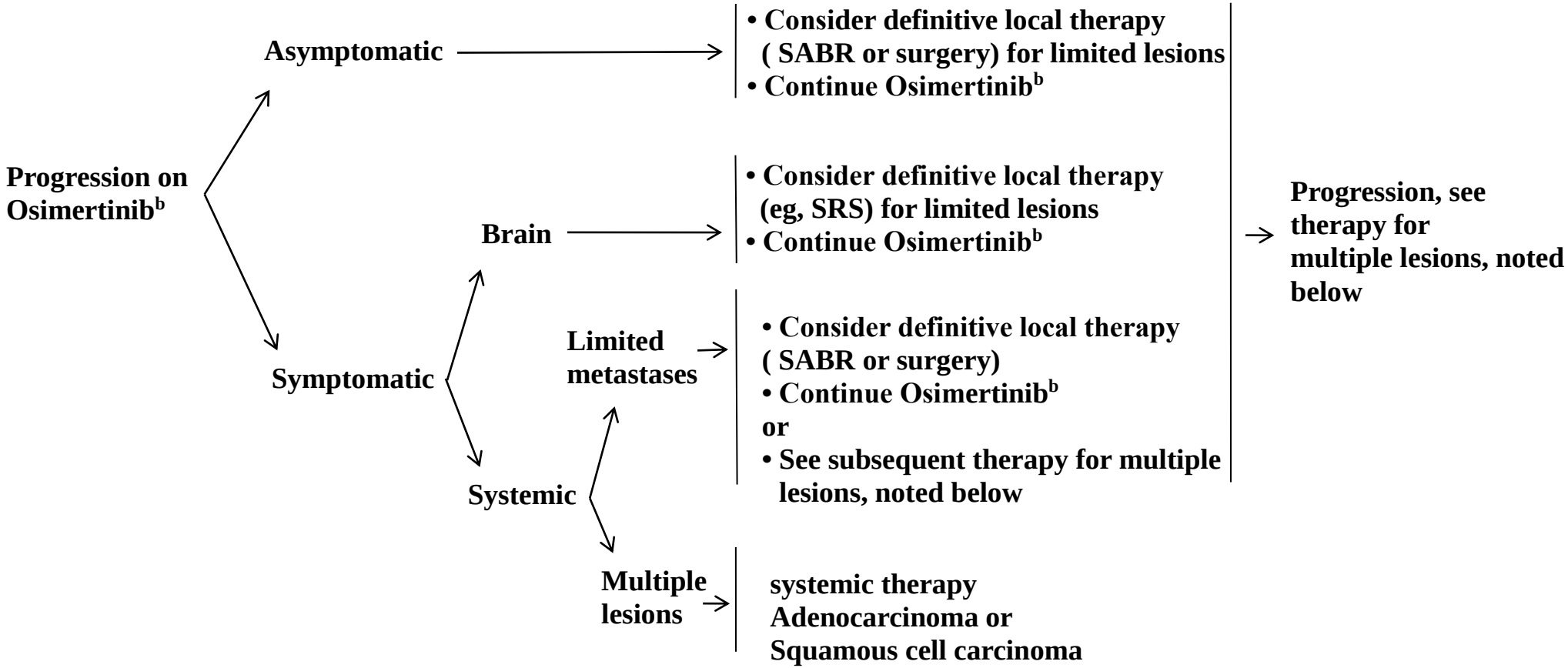
[b] 建保條件：限單獨使用於(1)具有 EGFR Exon 19 Del 基因突變且無腦轉移（non-CNS）之轉移性（第IV期）肺腺癌病患之第一線治療。(2)先前已使用過 EGFR 標靶藥物 Gefitinib、Erlotinib 或 Afatinib 治療失敗，且具有 EGFR T790M 基因突變之局部侵犯性或轉移性之非小細胞肺癌之第二線治療用藥。

註：: 實際情況需與醫師討論(SDM)

Note: All recommendations are category 2A unless otherwise indicated.

Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

EGFR EXON 19 DELETION OR L858R MUTATIONS	SUBSEQUENT THERAPY



Stage:IV 接受 TKI 治療後可與胸腔外科討論進行局部治療(含開刀.放療)治療

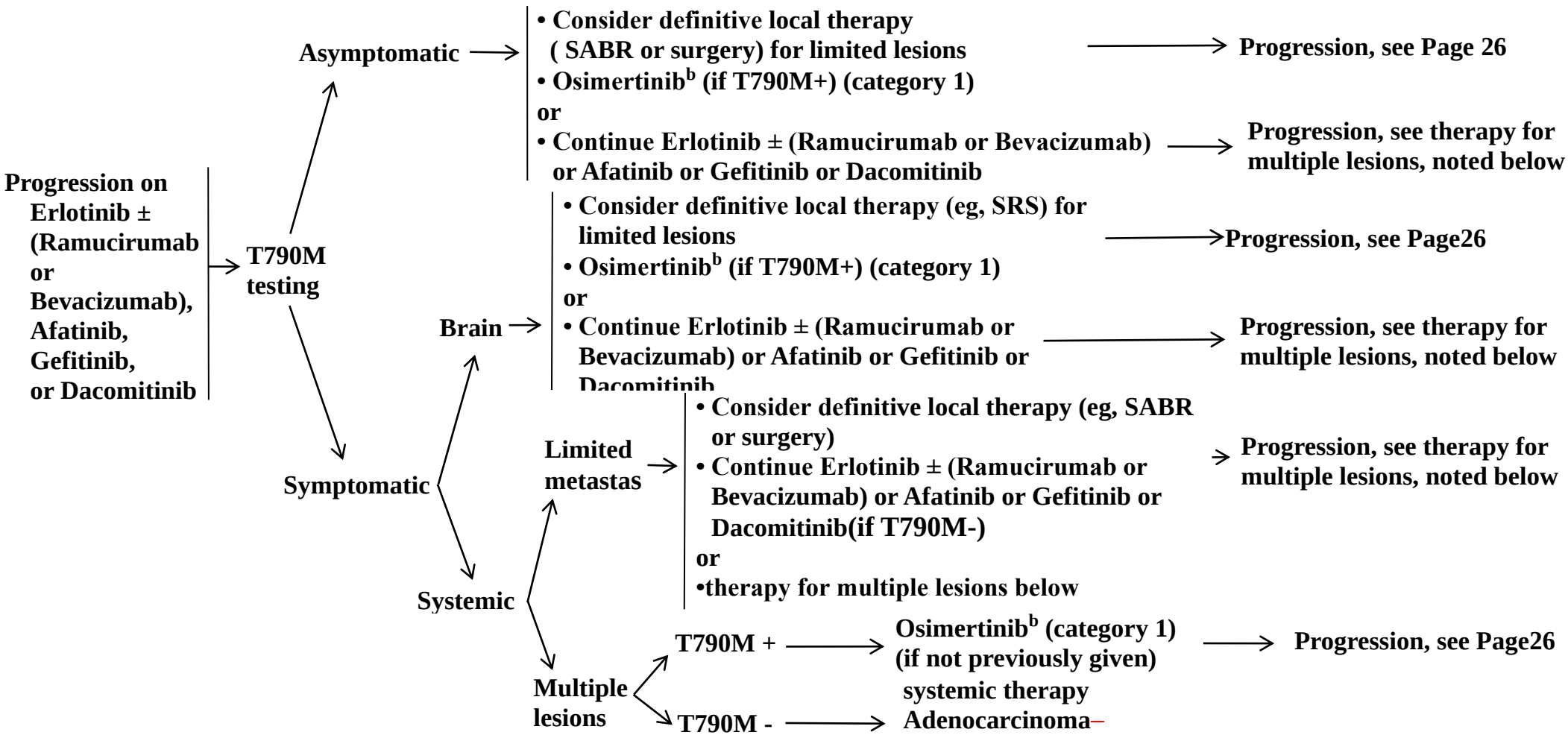
[b] 建保條件：限單獨使用於(1)具有 EGFR Exon 19 Del 基因突變且無腦轉移（non-CNS）之轉移性（第IV期）肺腺癌病患之第一線治療。(2)先前已使用過 EGFR 標靶藥物 gefitinib、erlotinib 或 afatinib 治療失敗，且具有 EGFR T790M 基因突變之局部侵犯性或轉移性之非小細胞肺癌之第二線治療用藥。

註：實際情況需與醫師討論(SDM)

Note: All recommendations are category 2A unless otherwise indicated.

Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

EXON 19 DELETION OR L858R MUTATION)	SUBSEQUENT THERAPY



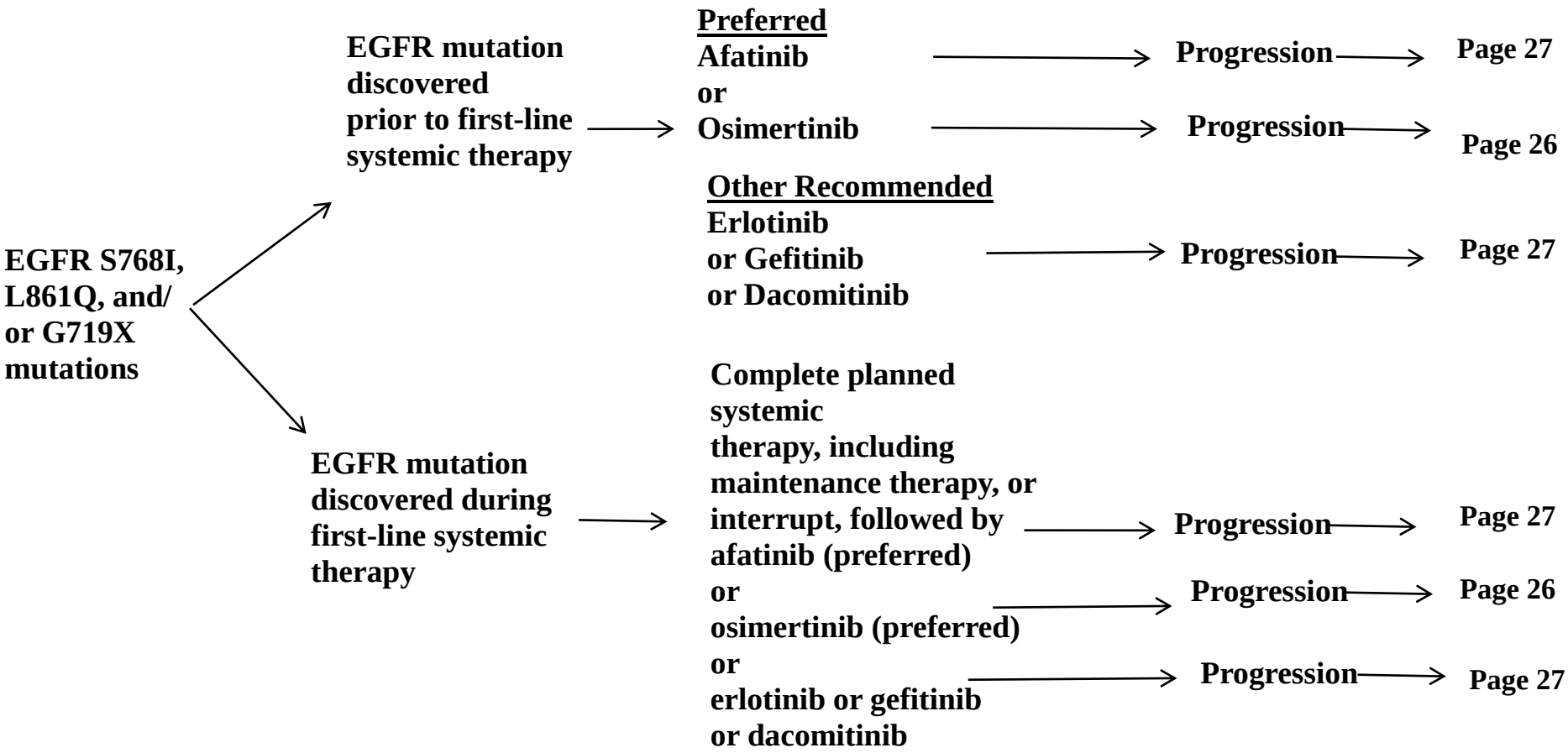
[b] 建保條件：限單獨使用於(1)具有 EGFR Exon 19 Del 基因突變且無腦轉移（non-CNS）之轉移性（第IV期）肺腺癌病患之第一線治療。(2)先前已使用過 EGFR 標靶藥物 Gefitinib、Erlotinib 或 Afatinib 治療失敗，且具有 EGFR T790M 基因突變之局部侵犯性或轉移性之非小細胞肺癌之第二線治療用藥。

註：實際情況需與醫師討論(SDM)

Note: All recommendations are category 2A unless otherwise indicated.

Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

EGFR S768I, L861Q, and/or *G719X* MUTATIONS	FIRST-LINE THERAPY



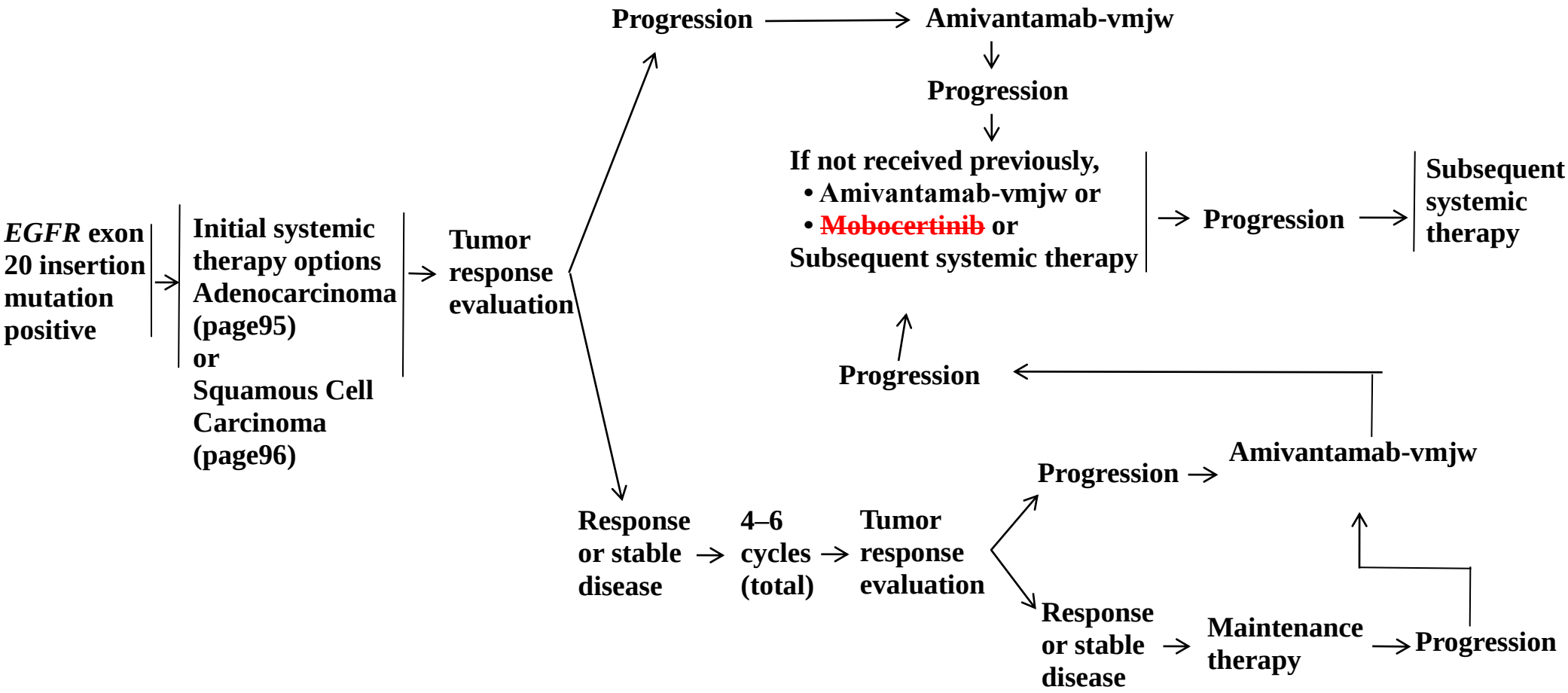
註：實際情況需與醫師討論(SDM)

Stage:IV 接受 TKI 治療後可與胸腔外科討論進行局部治療(含開刀.放療)治療

Note: All recommendations are category 2A unless otherwise indicated.

Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

EGFR MUTATION POSITIVE (EXON 20 INSERTION)	SUBSEQUENT THERAPY



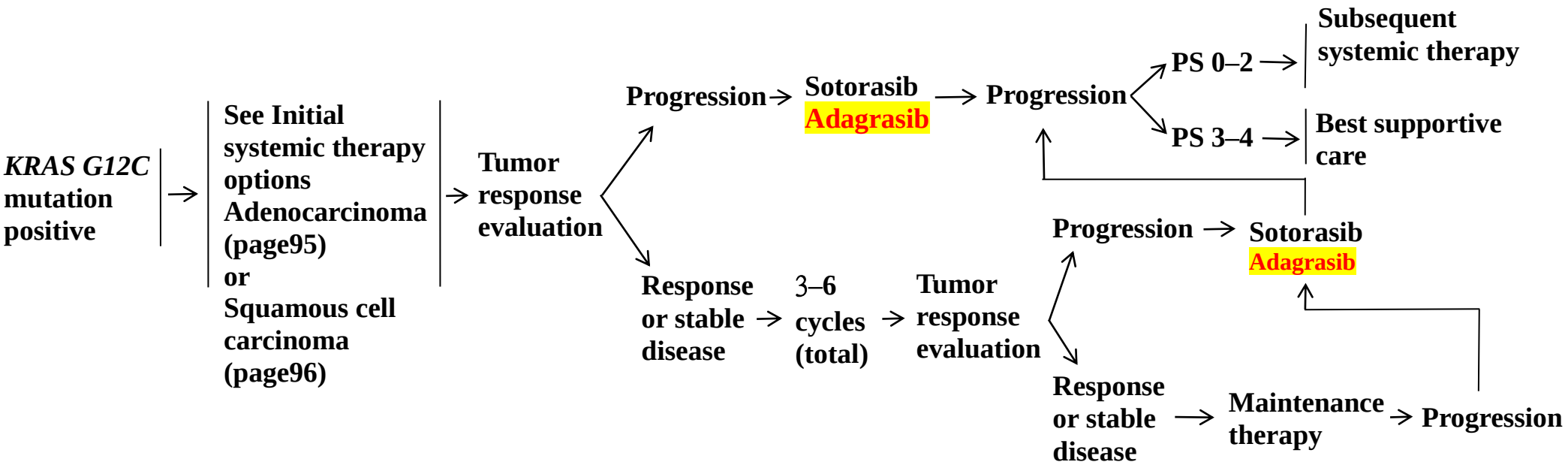
此類個案可建議使用 Afatinib。

註：實際情況需與醫師討論(SDM)

Note: All recommendations are category 2A unless otherwise indicated.

Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

KRAS G12C MUTATION POSITIVE FIRST-LINE THERAPY	SUBSEQUENT THERAPY



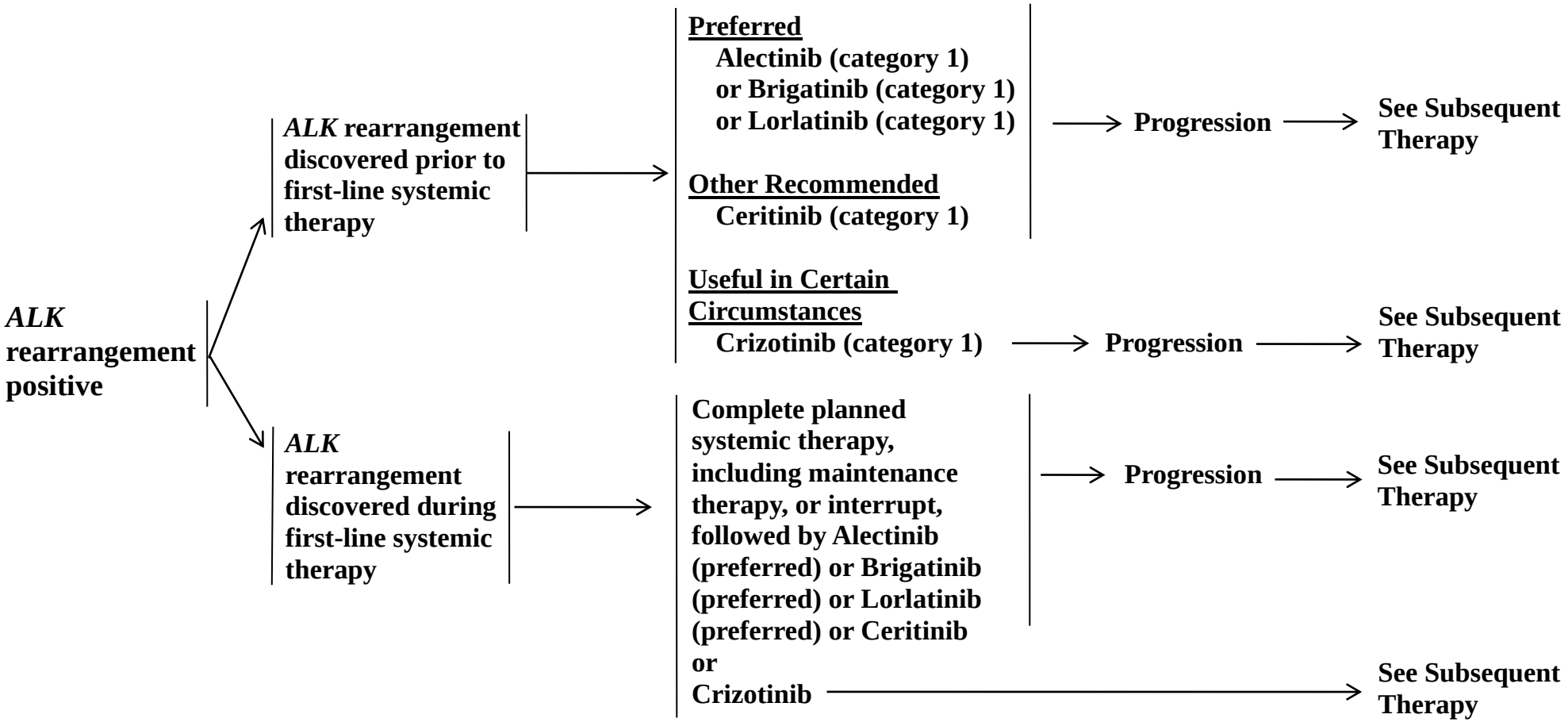
Stage:IV 接受 TKI 治療後可與胸腔外科討論進行局部治療(含開刀.放療)治療

註：實際情況需與醫師討論(SDM)

Note: All recommendations are category 2A unless otherwise indicated.

Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

ALK REARRANGEMENT POSITIVE	FIRST-LINE THERAPY

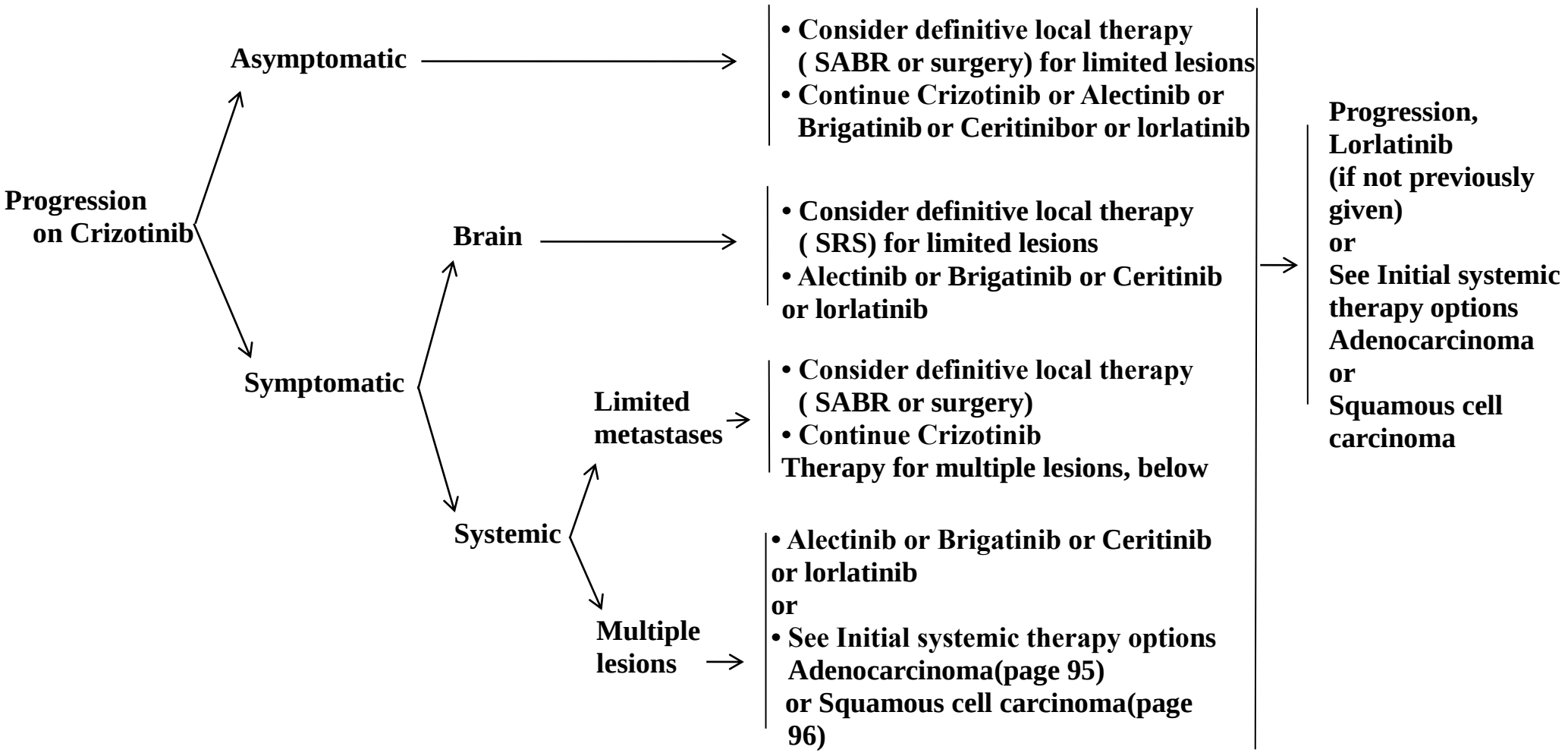


註：實際情況需與醫師討論(SDM)

Note: All recommendations are category 2A unless otherwise indicated.

Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

ALK REARRANGEMENT POSITIVE	SUBSEQUENT THERAPY



[d] 建保條件：適用於在 Crizotinib 治療中惡化之 ALK 陽性的晚期非小細胞肺癌患者。

*健保未給付

註：實際情況需與醫師討論(SDM)

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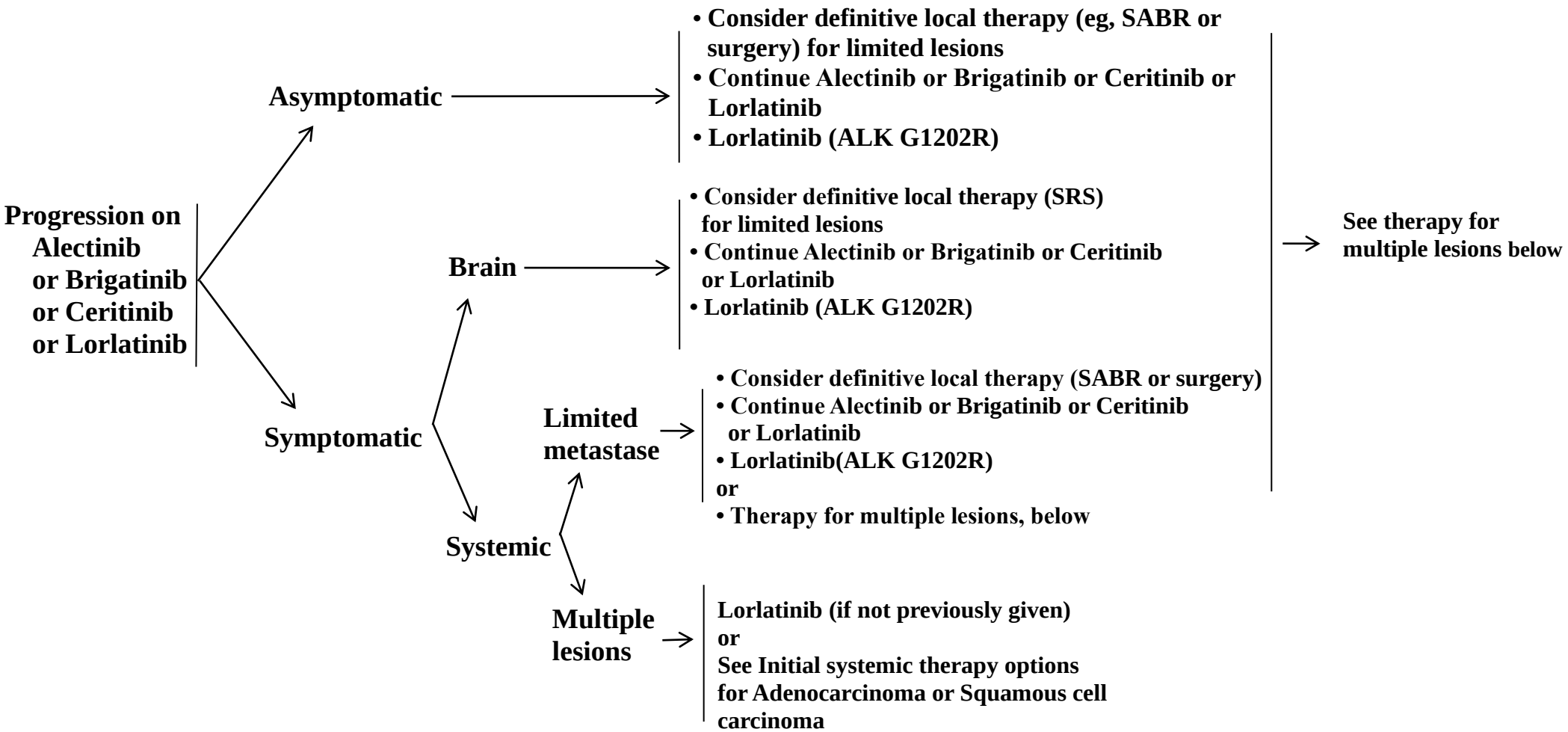
ALK REARRANGEMENT POSITIVE	SUBSEQUENT THERAPY

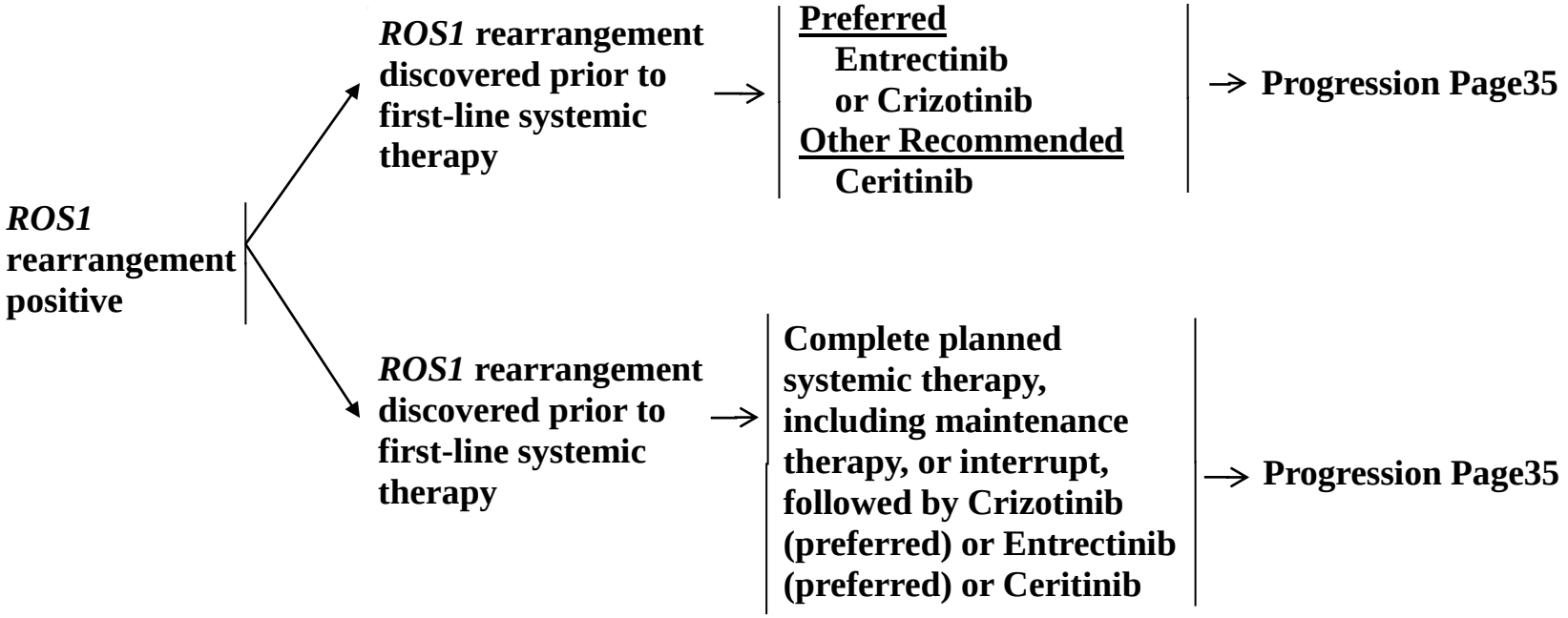


註：實際情況需與醫師討論(SDM)

Note: All recommendations are category 2A unless otherwise indicated.

Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

ROS1 REARRANGEMENT POSITIVE	FIRST-LINE THERAPY	SUBSEQUENT THERAPY



#本院有藥但健保須送申請
¥健保有給付

註：實際情況需與醫師討論(SDM)

Note: All recommendations are category 2A unless otherwise indicated.
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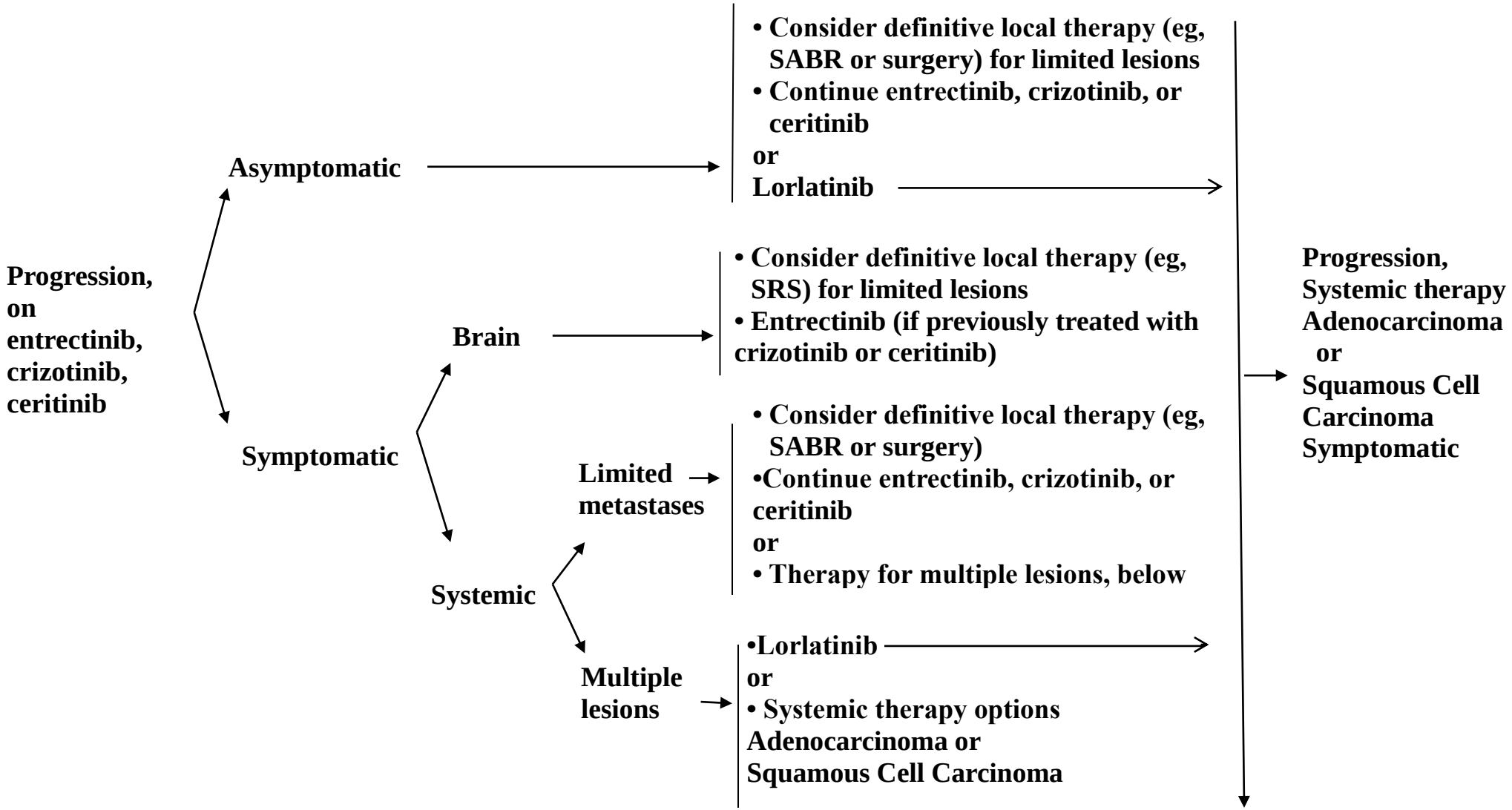
ROS1 REARRANGEMENT POSITIVE	SUBSEQUENT THERAPY

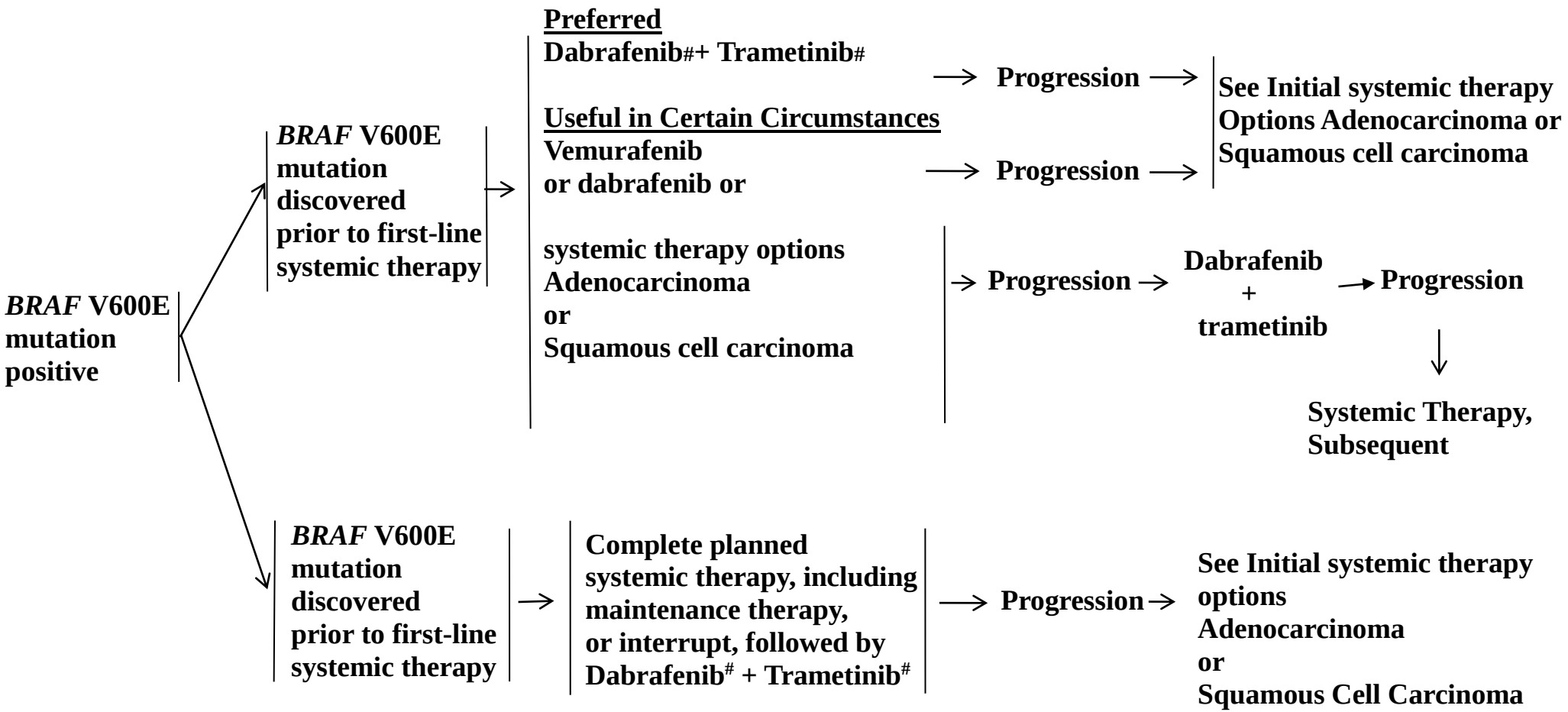


註：實際情況需與醫師討論(SDM)

Note: All recommendations are category 2A unless otherwise indicated.

Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

BRAF V600E MUTATION POSITIVE	FIRST-LINE THERAPY	SUBSEQUENT THERAPY



#本院有藥但健保未給付 Stage:IV 接受 TKI 治療後可與胸腔外科討論進行局部治療(含開刀.放療)治療
$本院無此藥物

註：實際情況需與醫師討論(SDM)

Note: All recommendations are category 2A unless otherwise indicated.
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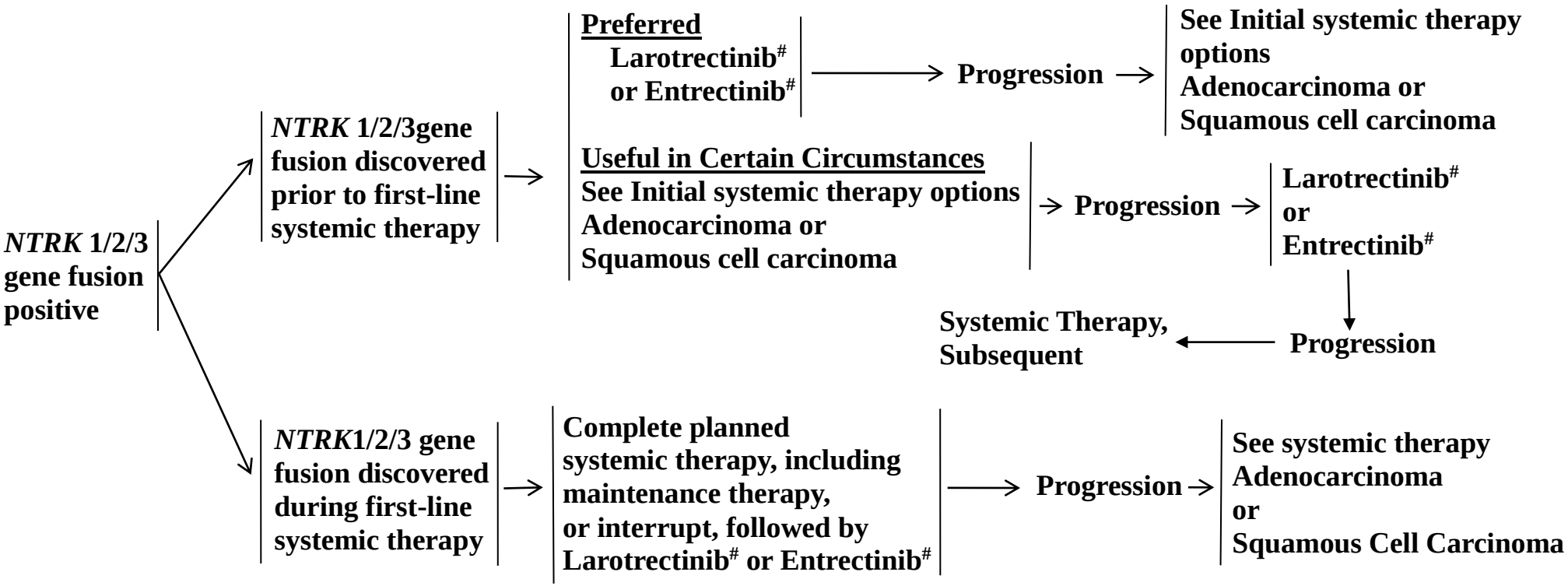
NTRK GENE FUSION POSITIVE	FIRST-LINE THERAPY	SUBSEQUENT THERAPY



Stage:IV 接受 TKI 治療後可與胸腔外科討論進行局部治療(含開刀.放療)治療

#本院有藥但健保未給付

註：實際情況需與醫師討論(SDM)

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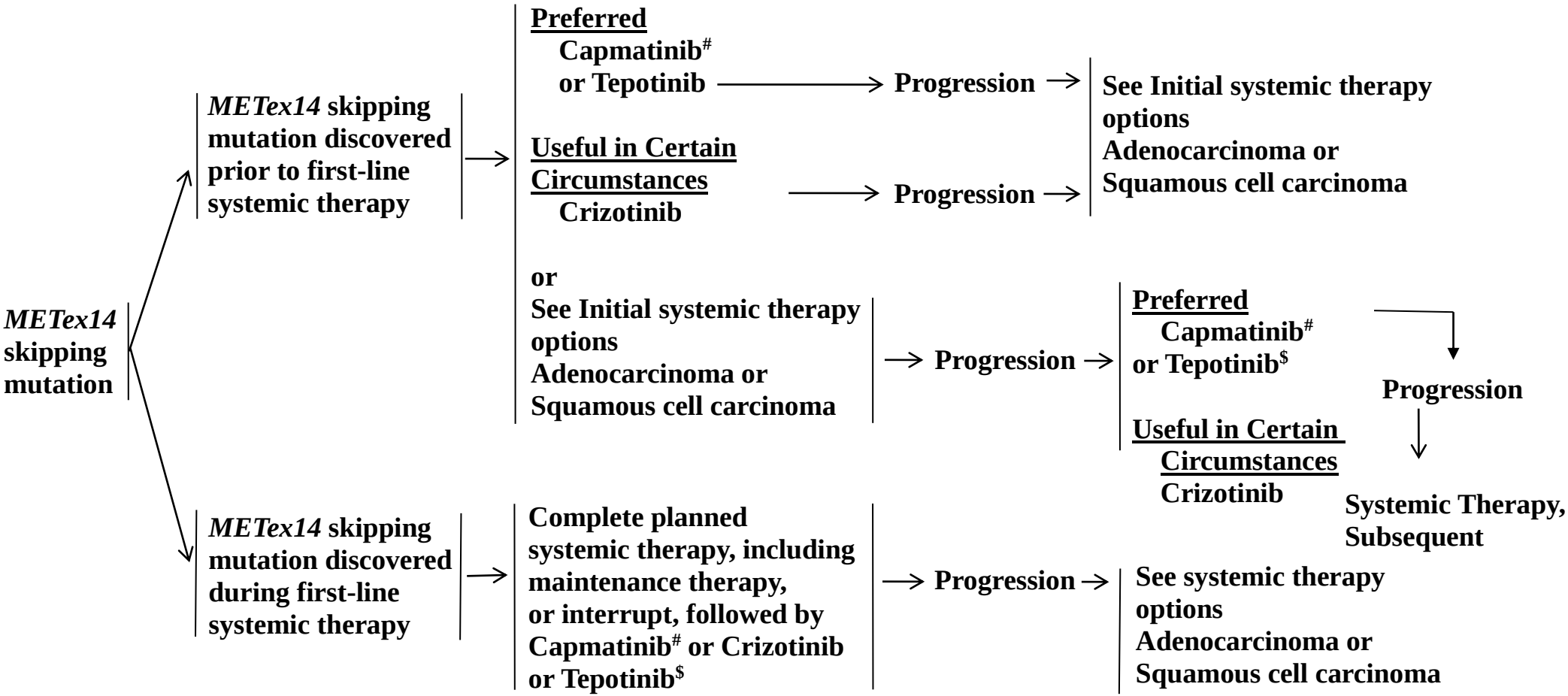
METex14 SKIPPING MUTATION	FIRST-LINE THERAPY	SUBSEQUENT THERAPY



#本院有藥但健保未給付

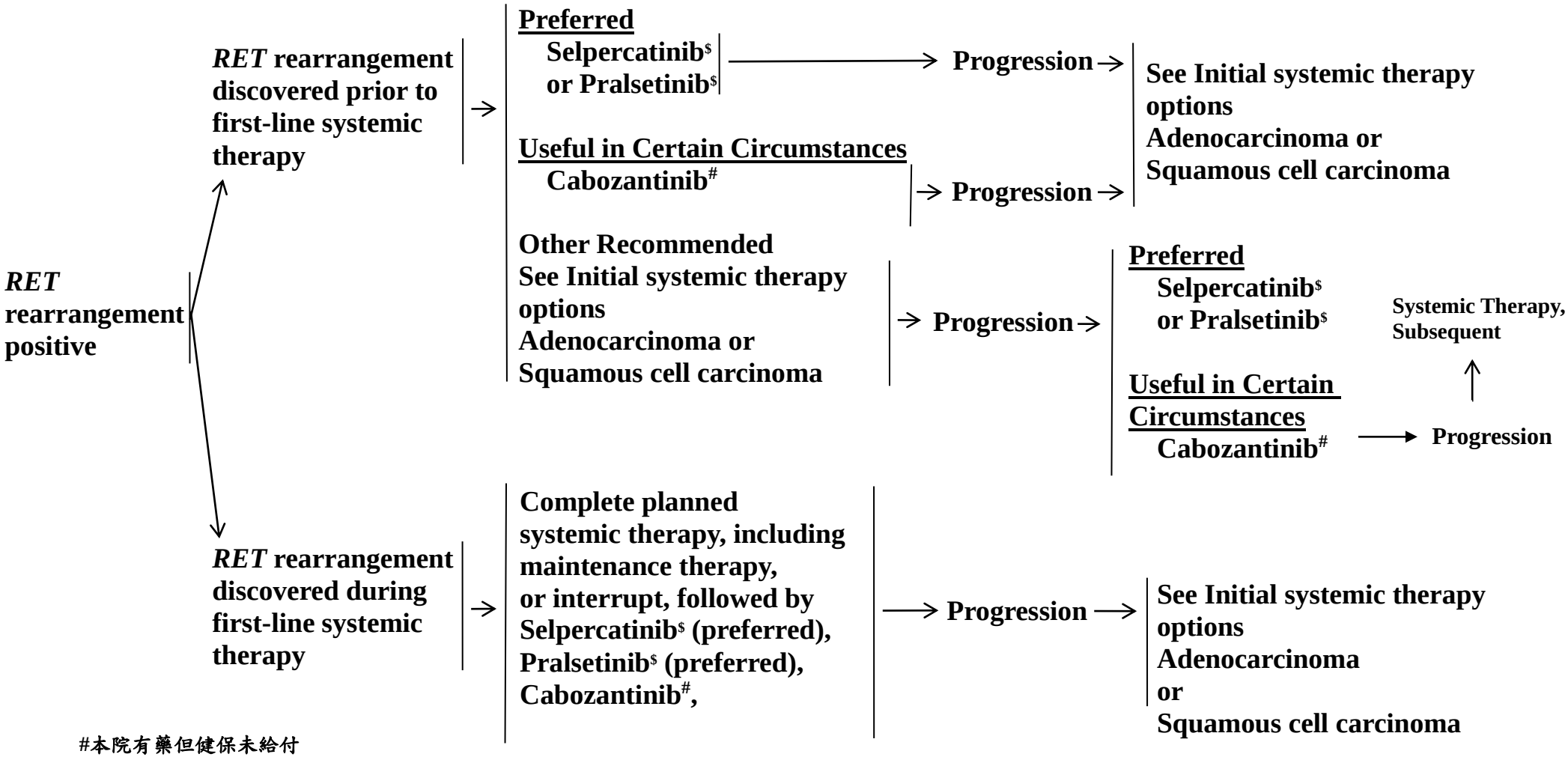
Stage:IV 接受 TKI 治療後可與胸腔外科討論進行局部治療(含開刀.放療)治療

註：實際情況需與醫師討論(SDM)

Note: All recommendations are category 2A unless otherwise indicated.

Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

RET REARRANGEMENT POSITIVE	FIRST-LINE THERAPY	SUBSEQUENT THERAPY



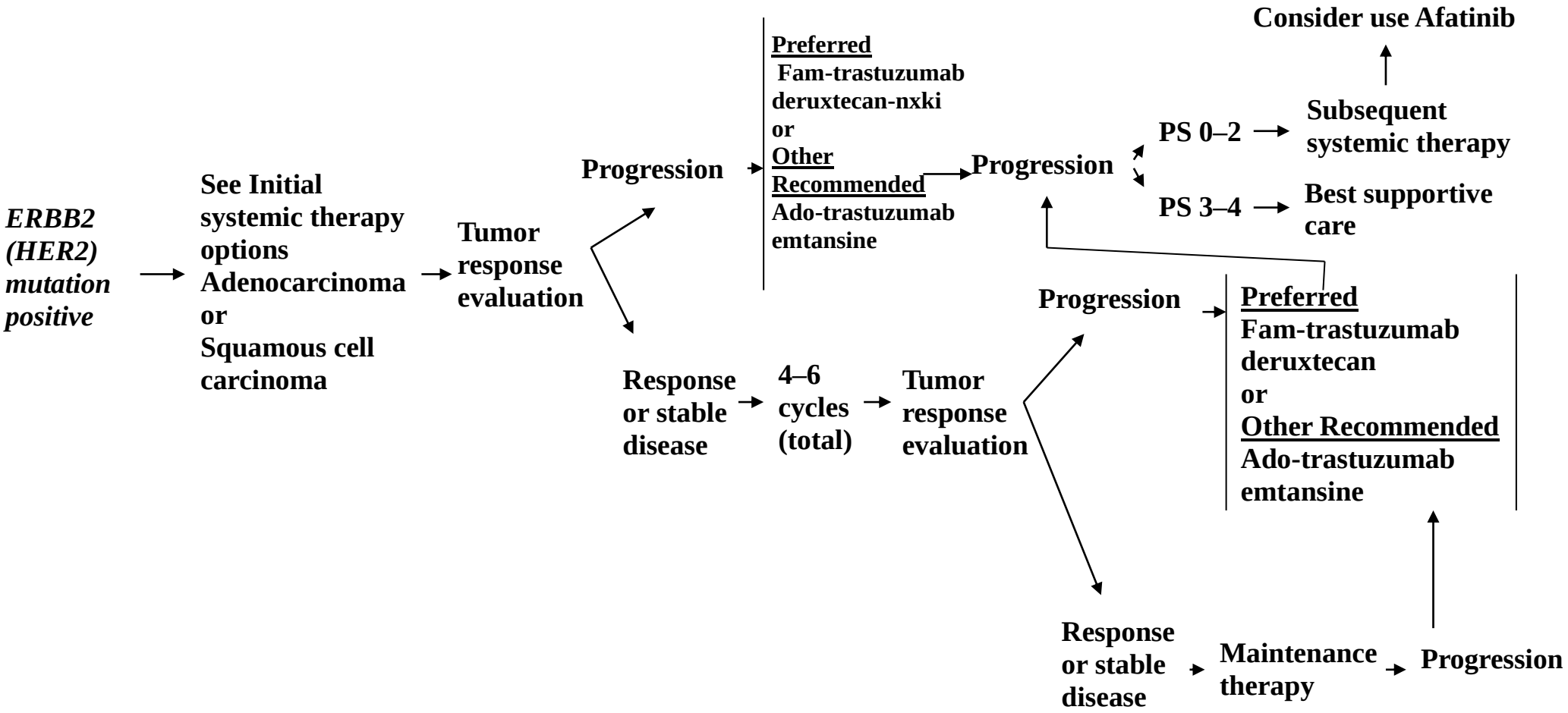
#本院有藥但健保未給付
$本院無此藥物

註：實際情況需與醫師討論(SDM)

Note: All recommendations are category 2A unless otherwise indicated.

Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

ERBB2 (HER2) MUTATION POSITIVE	FIRST-LINE THERAPY	SUBSEQUENT THERAPY



Stage:IV 接受 TKI 治療後可與胸腔外科討論進行局部治療(含開刀.放療)治療

註：實際情況需與醫師討論(SDM)

Note: All recommendations are category 2A unless otherwise indicated.

Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

***PD-L1* expression positive (≥50%) and negative for actionable molecular**

FIRST-LINE THERAPY

PS 0-2

Adenocarcinoma, large cell, NSCLC NOS

Preferred
Pembrolizumab (category 1)
or (Carboplatin or Cisplatin) + Pemetrexed + Pembrolizumab (category 1)
or Atezolizumab* (category 1)
or Cemiplimab-rwlc (category 1)

Other Recommended
Carboplatin + Paclitaxel + Bevacizumab ± Atezolizumab* (category 1)
or Carboplatin + albumin-bound Paclitaxel ± Atezolizumab*
or (Carboplatin or Cisplatin) + Pemetrexed ±I/O(Nivolumab+Ipilimumab)

Useful in Certain Circumstances
Nivolumab* + Ipilimumab* (category 1)

Response or stable disease →
Continuation maintenance
- Pembrolizumab (category 1)
- Pembrolizumab + Pemetrexed (category 1)
- Atezolizumab and Bevacizumab (category 1)
- Atezolizumab
- Nivolumab + Ipilimumab
- Cemiplimab-rwlc (category 1)

Progression → See Systemic Therapy or Subsequent Therapy

Squamous cell carcinoma

Preferred
Pembrolizumab (category 1)
or Carboplatin + (Paclitaxel or albumin-bound Paclitaxel) + Pembrolizumab (category 1)
or Atezolizumab* (category 1)
or Cemiplimab-rwlc (category 1)

Other Recommended
Carboplatin+ Paclitaxel ±I/O(Nivolumab +Ipilimumab)

Useful in Certain Circumstances
Nivolumab* + Ipilimumab* (category 1)

Response or stable disease →
Continuation maintenance
- Pembrolizumab (category 1)
- Atezolizumab
- Nivolumab + ipilimumab
- Cemiplimab-rwlc (category 1)

Progression → See Systemic Therapy or Subsequent Therapy

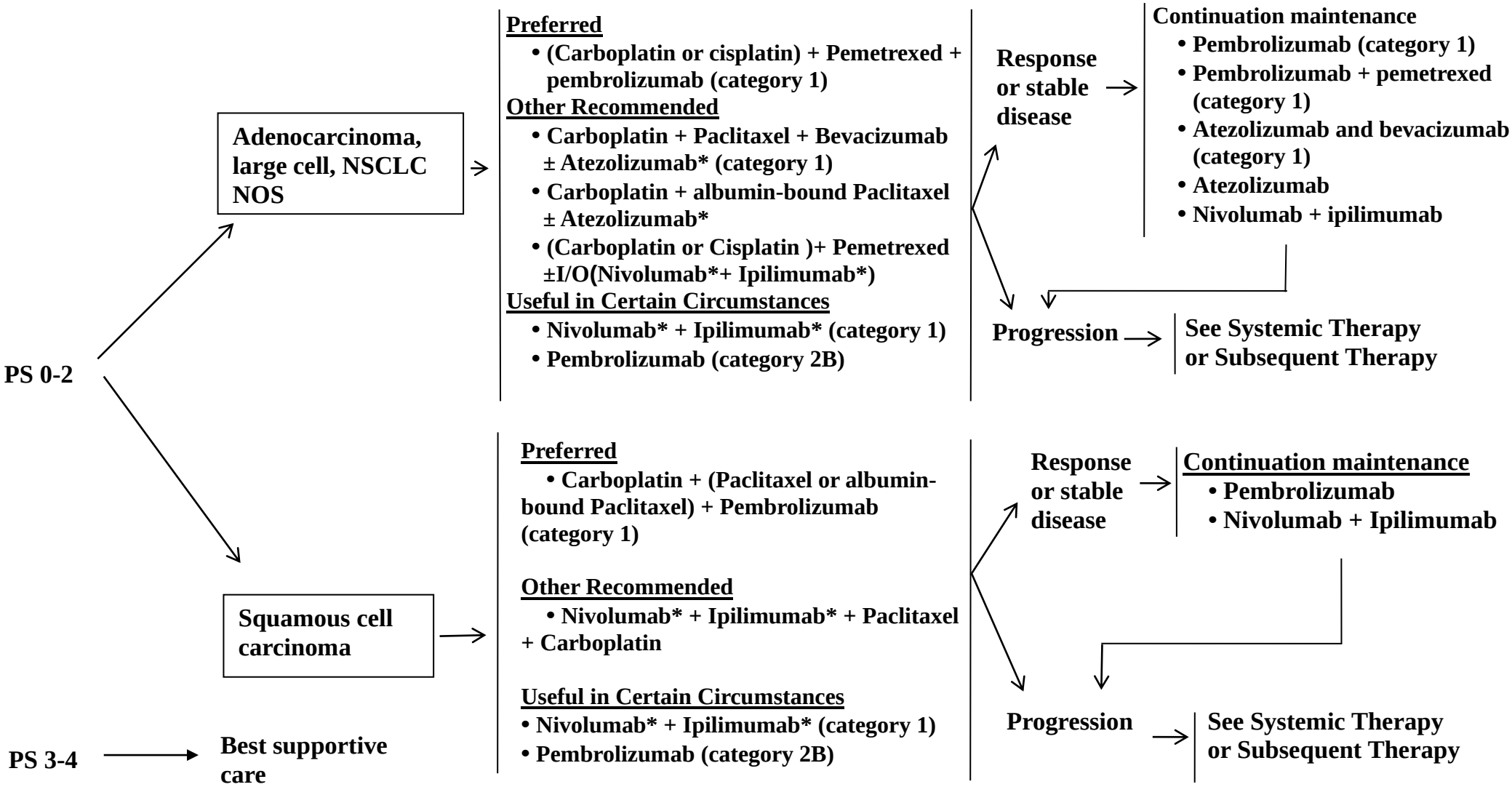
PS 3-4 → **Best supportive care**

註：實際情況需與醫師討論(SDM)

註*Atezolizumab、Nivolumab、Ipilimumab 未有健保給付

Note: All recommendations are category 2A unless otherwise indicated.
Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

PD-L1 EXPRESSION POSITIVE(≥1%--49%)ACTIONABLE MOLECULAR MARKERS	FIRST-LINE THERAPY



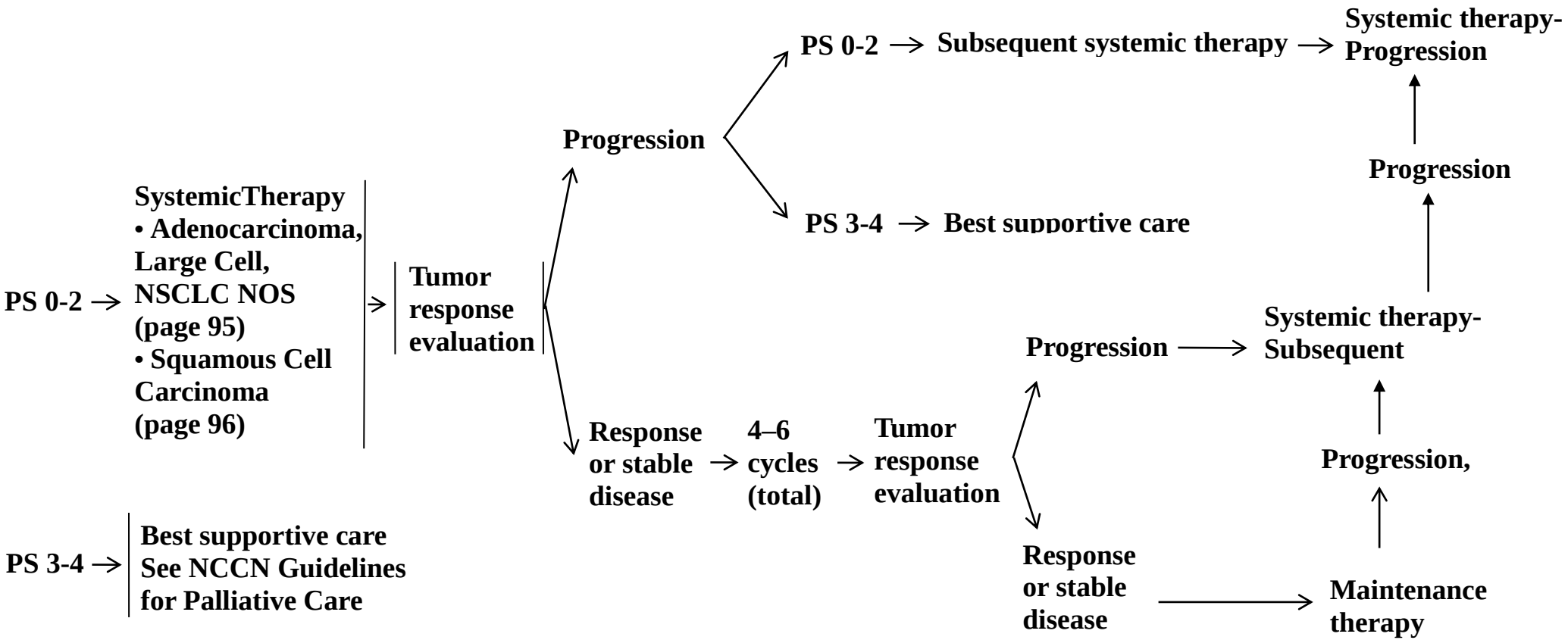
註：實際情況需與醫師討論(SDM)

Note: All recommendations are category 2A unless otherwise indicated.

Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

註*Atezolizumab、Nivolumab、Ipilimumab 未有健保給付

PD-L1 <1% AND NEGATIVE FOR ACTIONABLE MOLECULAR MARKERS INITIAL SYSTEMIC THERAPY	SUBSEQUENT THERAPY



註：實際情況需與醫師討論(SDM)

Note: All recommendations are category 2A unless otherwise indicated.

Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

三、化療原則

Neoadjuvant chemotherapy regimens

建議處方：

B		A
Platinum	**+**	**Gemcitabine**
Platinum	**+**	**Paclitaxel**
Platinum	**+**	**Docetaxel**
Platinum	**+**	**Vinorelbine**
Platinum	**+**	**Etoposide**
Platinum	**+**	**Pemetrexed**

大化療：Platinum(B) + another C/T agent(A)

小化療：single agent(A)

Platinum (鉑)：

Cisplatin (dose adjusted by Ccr)

Carboplatin (dose calculated by Ccr and AUC)

實際施打劑量若因病患肝腎功能有調整，需註記於病歷中

註：實際情況需與醫師討論(SDM)

Note: All recommendations are category 2A unless otherwise indicated.

Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

Adjuvant chemotherapy

建議處方：

B		A
Platinum	**+**	**Gemcitabine**
Platinum	**+**	**Paclitaxel**
Platinum	**+**	**Docetaxel**
Platinum	**+**	**Vinorelbine**
Platinum	**+**	**Etoposide**
Platinum	**+**	**Pemetrexed**

Adenocarcinoma (T2 且腫瘤≧3cm) 可考慮使用 **Ufur**

大化療：Platinum(B) + another C/T agent(A)

小化療：single agent(A)

Platinum (鉑)：

Cisplatin (dose adjusted by Ccr)

Carboplatin (dose calculated by Ccr and AUC)

實際施打劑量若因病患肝腎功能有調整，需註記於病歷中

註：實際情況需與醫師討論(SDM)

Note: All recommendations are category 2A unless otherwise indicated.

Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

Platinum-base doublet

- **Cisplatin** 50-75mg/m^2 (adjusted by Ccr) or **Carboplatin** AUC: 3-6 (if Ccr <60ml/min or cisplatin not suitable) Day 1 or 15 and **Gemcitabine** 1000 mg/m^2 Day 1, 8, 15 IV
- **Cisplatin** 50-75mg/m^2 (adjusted by Ccr) or **Carboplatin** AUC: 3-6 (if Ccr <60ml/min or cisplatin not suitable) Day 1 or 15 and **Paclitaxel** 60-80 mg/m^2 Day 1, 8, 15 or **Paclitaxel** 160-225mg/m2 D1 IV
- **Cisplatin** 50-75mg/m^2 (adjusted by Ccr) or **Carboplatin** AUC: 3-6 (if Ccr <60ml/min or cisplatin not suitable) IV Day 1 or 15 and **Etoposide** 100mg/m^2 IV Day 1-3 or Day 1, 8, 15(Three weekly cycle)

Platinum-base doublet

- **Cisplatin** 50-75mg/m^2 (adjusted by Ccr) or **Carboplatin** AUC: 3-6 (if Ccr <60ml/min or cisplatin not suitable) Day 1 or 8 and **Gemcitabine** 1000-1250 mg/m^2 Day 1, 8 IV
- **Cisplatin** 50-75mg/m^2 (adjusted by Ccr) or **Carboplatin** AUC: 3-6 (if Ccr <60ml/min or cisplatin not suitable) Day 1 or 8,(15) and **Vinorelbine** 20-30mg/m^2 Day 1, 8, (15) IV
- **Cisplatin** 50-75mg/m^2 (adjusted by Ccr) or **Carboplatin** AUC: 3-6 (if Ccr <60ml/min or cisplatin not suitable) Day 1 or 8,(15) and **Vinorelbine** 60-80mg/m^2 Day 1, 8, (15) PO
- **Cisplatin** 50-75mg/m^2 (adjusted by Ccr) or **Carboplatin** AUC: 3-6 (if Ccr <60ml/min or cisplatin not suitable) Day 1 or 8 and **Docetaxel** 25-35mg/m^2 Day 1,8 or **Docetaxel** 60mg/m^2 Day 1 IV
- **Cisplatin** 50-75mg/m^2 (adjusted by Ccr) or **Carboplatin** AUC: 3-6 (if Ccr <60ml/min or cisplatin not suitable) Day 1 and **Pemetrexed** (non-squamous)500mg/m^2 Day 1 IV every 21days
- **Ufur** 300mg~600mg PO only for Adenocarcinoma (**T2** 且腫瘤≧**3cm**)。
- 輔助化學治療藥物給予時，應依各藥物特性，配合病人狀況，例如：BSA、WBC 及特定之血液檢查值等，調整適當藥物劑量。

註：實際情況需與醫師討論(SDM)

Note: All recommendations are category 2A unless otherwise indicated.

Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

Systemic therapy regmins for neoadjuvant and adjuvant therapy

Neoadjuvant systemic therapy for patients not candidates for immune checkpoint Inhibitors ; Adjuvant systemic therapy

Preferred (non-squamous)

• Cisplatin 75 mg/m2 day 1, pemetrexed 500 mg/m2 day 1 every 21 days for 4 cycles

Preferred (squamous)

• Cisplatin 75 mg/m2 day 1, gemcitabine 1250 mg/m2 days 1 and 8, every 21 days for 4 cycles

• Cisplatin 75 mg/m2 day 1, docetaxel 75 mg/m2 day 1 every 21 days for 4 cycles

Other Recommended

• Cisplatin 50 mg/m2 days 1 and 8; vinorelbine 25 mg/m2 days 1, 8, 15, and 22, every 28 days for 4 cycles

• Cisplatin 100 mg/m2 day 1, vinorelbine 30 mg/m2 days 1, 8, 15, and 22, every 28 days for 4 cycles

• Cisplatin 75–80 mg/m2 day 1, vinorelbine 25–30 mg/m2 days 1 and 8, every 21 days for 4 cycles

• Cisplatin 100 mg/m2 day 1, etoposide 100 mg/m2 days 1–3, every 28 days for 4 cycles

Useful in Certain Circumstances

• Chemotherapy Regimens for Patients with Comorbidities or Patients Not Able to Tolerate Cisplatin

• Carboplatin AUC 6 day 1, paclitaxel 200 mg/m2 day 1, every 21 days for 4 cycles

• Carboplatin AUC 5 day 1, gemcitabine 1000 mg/m2 days 1 and 8, every 21 days for 4 cycles

• Carboplatin AUC 5 day 1, pemetrexed 500 mg/m2 day 1 for non-squamous every 21 days for 4 cycles

All chemotherapy regimens listed above can be used for sequential chemotherapy/RT.

Neoadjuvant Systemic Therapy for Patients Candidates for Immune Checkpoint Inhibitors

• Nivolumab 360 mg and platinum-doublet chemotherapy every 3 weeks for 3 cycles

Platinum-doublet chemotherapy options include:

◊ Carboplatin AUC 5 or AUC 6 day 1, paclitaxel 175 mg/m² or 200 mg/m² day 1 (any histology)

◊ Cisplatin 75 mg/m² day 1, pemetrexed 500 mg/m² day 1 (non-squamous)

◊ Cisplatin 75 mg/m² day 1, gemcitabine 1000 mg/m² 1 and 8 and 15 or 1250 mg/m² days 1 and 8 (squamous histology)

*Cisplatin 75 mg/m² day 1, paclitaxel 175 mg/m² or 200 mg/m² day 1 (any histology)

註：實際情況需與醫師討論(SDM)

Note: All recommendations are category 2A unless otherwise indicated.

Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

Systemic Therapy Following Previous Neoadjuvant or Adjuvant Systemic Therapy

• Test for PD-L1,EGFR mutations, ALK rearrangements (**optional**) (stages IB–IIIA, IIIB [T3,N2]). Principles of Molecular and Biomarker Analysis.
• Osimertinib 80 mg daily: stage IB–IIIA or stage IIIB (T3, N2) positive for exon 19 deletion, exon 21 L858R who received previous adjuvant chemotherapy or are ineligible to receive platinum-based chemotherapy.
• Atezolizumab 840 mg every 2 weeks, 1200 mg every 3 weeks, or 1680 mg every 4 weeks for up to 1 year : stage IIB–IIIA, stage IIIB (T3, N2), or high-risk stage IIA NSCLC with PD-L1 ≥1% and negative for EGFR exon 19 deletion or exon 21 L858R mutations or ALK rearrangements who received previous adjuvant chemotherapy and with no contraindications to immune checkpoint inhibitors.*
• Pembrolizumab 200 mg every 3 weeks or 400 mg every 6 weeks for up to 1 year :stage IIB–IIIA, stage IIIB (T3, N2), or high-risk stage IIA NSCLC and negative for EGFR exon 19 deletion or exon 21 L858R mutations or ALK rearrangements who received previous adjuvant chemotherapy and with no contraindications to immune checkpoint inhibitors.*,14 The benefit for patients with PD-L1

Concurrent Chemoradiation Regimens

Preferred (nonsquamous)

• Carboplatin AUC 5 on day 1, pemetrexed 500 mg/m2 on day 1 every 21 days for 4 cycles; concurrent thoracic RT
• Cisplatin 75 mg/m2 on day 1, pemetrexed 500 mg/m2 on day 1 every 21 days for 3 cycles; concurrent thoracic RT
± additional 4 cycles of pemetrexed 500 mg/m2
• Paclitaxel 45–50 mg/m2 weekly; carboplatin AUC 2, concurrent thoracic RT4,*,†,‡ ± additional 2 cycles every 21 days of paclitaxel 200 mg/m2 and carboplatin AUC 6
• Cisplatin 50 mg/m2 on days 1, 8, 29, and 36; etoposide 50 mg/m2 days 1–5 and 29–33; concurrent thoracic RT

Preferred (squamous)

• Paclitaxel 45–50 mg/m2 weekly; carboplatin AUC 2, concurrent thoracic RT ± additional 2 cycles every 21 days of paclitaxel 200 mg/m2 and carboplatin AUC 6
• Cisplatin 50 mg/m2 on days 1, 8, 29, and 36; etoposide 50 mg/m2 days 1–5 and 29–33; concurrent thoracic RT

Consolidation Immunotherapy for Patients with Unresectable Stage II/III NSCLC, PS 0–1, and No Disease Progression After Definitive Concurrent Chemoradiation

• Durvalumab 10 mg/kg IV every 2 weeks or 1500 mg every 4 weeks for up to 12 months (patients with a body weight of ≥30 kg)(category 1 for stage III; category 2A for stage II)

註：實際情況需與醫師討論(SDM)

Note: All recommendations are category 2A unless otherwise indicated.
Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

Neoadjuvant chemotherapy

藥物名稱	藥物劑量	稀釋液	滴注時間	期程	療法週期
Cisplatin	60 - 80 mg/m^2 (adjusted by Ccr)	N/S	2~12hrs	Day 1 or 15	4weekly cycle
Gemcitabine	1000 mg/m^2	N/S	30mins	Day 1, 8, 15	
藥物名稱	**藥物劑量**	**稀釋液**	**滴注時間**	**期程**	**療法週期**
Carboplatin	AUC: 3 - 6 (if Ccr <60ml/min or cisplatin not suitable)	D5W or N/S	1hr	Day 1 or 15	4weekly cycle
Gemcitabine	1000 mg/m^2	N/S	30mins	Day 1, 8, 15	
藥物名稱	**藥物劑量**	**稀釋液**	**滴注時間**	**期程**	**療法週期**
Cisplatin	60-75mg/m^2 (adjusted by Ccr)	N/S	2~12hrs	Day 1 or 8	3weekly cycle
Gemcitabine	1000-1250 mg/m^2	N/S	30mins	Day 1, 8	

註：實際情況需與醫師討論(SDM)

Note: All recommendations are category 2A unless otherwise indicated.

Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

Neoadjuvant chemotherapy

藥物名稱	藥物劑量	稀釋液	滴注時間	期程	療法週期
Cisplatin	60-75mg/m^2 (adjusted by Ccr)	N/S	2~12hrs	Day 1 or 8	3 weekly cycle
Gemcitabine	1000-1250 mg/m^2	N/S	30mins	Day 1, 8	
藥物名稱	**藥物劑量**	**稀釋液**	**滴注時間**	**期程**	**療法週期**
Carboplatin	AUC: 3 - 6 (if Ccr <60ml/min or Cisplatin not suitable)	D5W or N/S	1hr	Day 1 or 15	4 weekly cycle
Paclitaxel	60 - 80 mg/m^2	D5W or N/S	1-2hrs	Day 1, 8, 15	
藥物名稱	**藥物劑量**	**稀釋液**	**滴注時間**	**期程**	**療法週期**
Cisplatin	60 - 80 mg/m^2 (adjusted by Ccr)	N/S	2~12hrs	Day 1 or 15	4 weekly cycle
Paclitaxel	60-80 mg/m^2	D5W or N/S	1-2hrs	Day 1, 8, 15	

註：實際情況需與醫師討論(SDM)

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Neoadjuvant chemotherapy

藥物名稱	藥物劑量	稀釋液	滴注時間	期程	療法週期
Cisplatin	60 - 75 mg/m2 (adjusted by Ccr)	N/S	2~12hrs	Day 1	3 weekly cycle
Paclitaxel	60 - 75 mg/m2 (adjusted by Ccr)	D5W or N/S	1-2hrs	Day 1	
藥物名稱	**藥物劑量**	**稀釋液**	**滴注時間**	**期程**	**療法週期**
Carboplatin	AUC: 3-6 (if Ccr <60ml/min or Cisplatin not suitable)	D5W or N/S	1hr	Day 1 or 15	3 weekly cycle
Paclitaxel	160-225 mg/m2	D5W or N/S	1-2hrs	Day 1	
藥物名稱	**藥物劑量**	**稀釋液**	**滴注時間**	**期程**	**療法週期**
Cisplatin	60 - 80mg/m2 (adjusted by Ccr)	N/S	2~12hrs	Day 1 or 15	4 weekly cycle
Etoposide	100 mg/m2	N/S or D5W	1hrs	Day 1-3 or Day1.8.15	

註：實際情況需與醫師討論(SDM)

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Neoadjuvant chemotherapy

藥物名稱	藥物劑量	稀釋液	滴注時間	期程	療法週期
Cisplatin	60 - 75mg/m2 (adjusted by Ccr)	N/S	2~12hrs	Day 1 or 8	3 weekly cycle
Vinorelbine	60-80mg/m2	PO		Day 1, 8	
藥物名稱	**藥物劑量**	**稀釋液**	**滴注時間**	**期程**	**療法週期**
Carboplatin	AUC: 3-6 (if Ccr <60ml/min or Cisplatin not suitable)	D5W or N/S	1hr	Day 1 or 8	3 weekly cycle
Vinorelbine	60-80mg/m2	PO		Day 1, 8	
藥物名稱	**藥物劑量**	**稀釋液**	**滴注時間**	**期程**	**療法週期**
Cisplatin	60 - 75 mg/m2 (adjusted by Ccr)	N/S	2~12hrs	Day 1 or 8	3 weekly cycle
Docetaxel	25-35mg/m2	D5W or N/S	0.5-1hr	Day 1, 8	
藥物名稱	**藥物劑量**	**稀釋液**	**滴注時間**	**期程**	**療法週期**
Carboplatin	AUC: 3-6 (if Ccr <60ml/min or Cisplatin not suitable)	D5W or N/S	1hr	Day 1 or 8	3 weekly cycle
Docetaxel	25-35mg/m2	D5W or N/S	0.5-1hr	Day 1, 8	

註：實際情況需與醫師討論(SDM)

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Neoadjuvant chemotherapy

藥物名稱	藥物劑量	稀釋液	滴注時間	期程	療法週期
Cisplatin	60 - 75 mg/m^2 (adjusted by Ccr)	N/S	2~12hrs	Day 1	3 weekly cycle
Docetaxel	60 mg/m^2	D5W or N/S	0.5-1hr	Day 1	
藥物名稱	**藥物劑量**	**稀釋液**	**滴注時間**	**期程**	**療法週期**
Carboplatin	AUC: 3 – 6 (if Ccr <60ml/min or Cisplatin not suitable)	D5W or N/S	1hr	Day 1	3 weekly cycle
Docetaxel	60 mg/m^2	D5W or N/S	0.5-1hr	Day 1	
藥物名稱	**藥物劑量**	**稀釋液**	**滴注時間**	**期程**	**療法週期**
Cisplatin	60 - 75 mg/m^2 (adjusted by Ccr)	N/S	2~12hrs	Day 1	3 weekly cycle
Pemetrexed (non-squamous)	500 mg/m^2	N/S	10-15mins	Day 1	
藥物名稱	**藥物劑量**	**稀釋液**	**滴注時間**	**期程**	**療法週期**
Carboplatin	AUC: 3-6 (if Ccr <60ml/min or cisplatin not suitable)	D5W or N/S	1hr	Day 1	3 weekly cycle
Pemetrexed (non-squamous)	500 mg/m^2	N/S	10-15mins	Day 1	

註：實際情況需與醫師討論(SDM)

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Adjuvant chemotherapy

藥物名稱	藥物劑量	稀釋液	滴注時間	期程	療法週期
Cisplatin	60 - 80 mg/m^2 (adjusted by Ccr)	N/S	2~12hrs	Day 1 or 15	4 weekly cycle
Gemcitabine	1000 mg/m^2	N/S	30mins	Day 1, 8, 15	
藥物名稱	**藥物劑量**	**稀釋液**	**滴注時間**	**期程**	**療法週期**
Cisplatin	60-75 mg/m2 (adjusted by Ccr)	N/S	2~12hrs	Day 1 or 8	3 weekly cycle
Gemcitabine	1000-1250 mg/m2	N/S	30mins	Day 1, 8	
藥物名稱	**藥物劑量**	**稀釋液**	**滴注時間**	**期程**	**療法週期**
Carboplatin	AUC: 3 - 6 (if Ccr <60ml/min or Cisplatin not suitable)	D5W or N/S	1hr	Day 1 or 15	4 weekly cycle
Gemcitabine	1000-1250 mg/m2	N/S	30mins	Day 1, 8,15	
藥物名稱	**藥物劑量**	**稀釋液**	**滴注時間**	**期程**	**療法週期**
Carboplatin	AUC: 3 - 6 (if Ccr <60ml/min or Cisplatin not suitable)	D5W or N/S	1hr	Day 1 or 8	3 weekly cycle
Gemcitabine	1000-1250 mg/m2	N/S	30mins	Day 1, 8	

註：實際情況需與醫師討論(SDM)

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Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

藥物名稱	藥物劑量	稀釋液	滴注時間	期程	療法週期
Carboplatin	AUC: 3 - 6 (if Ccr <60ml/min or Cisplatin not suitable)	D5W or N/S	1hr	Day 1 or 15	4 weekly cycle
Paclitaxel	60 - 80 mg/m2	D5W or N/S	1-2hrs	Day 1, 8, 15	
藥物名稱	**藥物劑量**	**稀釋液**	**滴注時間**	**期程**	**療法週期**
Cisplatin	60 - 80 mg/m2 (adjusted by Ccr)	N/S	2~12hrs	Day 1or15	4 weekly cycle
Paclitaxel	60-80mg/m2	D5W or N/S	1-2hrs	Day 1,8,15	
藥物名稱	**藥物劑量**	**稀釋液**	**滴注時間**	**期程**	**療法週期**
Cisplatin	60 - 75 mg/m2 (adjusted by Ccr)	N/S	2~12hrs	Day 1	3 weekly cycle
Paclitaxel	160-225 mg/m2	D5W or N/S	1-2hrs	Day 1	
藥物名稱	**藥物劑量**	**稀釋液**	**滴注時間**	**期程**	**療法週期**
Carboplatin	AUC: 3 - 6 (if Ccr <60ml/min or Cisplatin not suitable)	D5W or N/S	1hr	Day 1	3 weekly cycle
Paclitaxel	60 - 80 mg/m2	D5W or N/S	1-2hrs	Day 1	
藥物名稱	**藥物劑量**	**稀釋液**	**滴注時間**	**期程**	**療法週期**
Carboplatin	AUC: 3-6 (if Ccr <60ml/min or Cisplatin not suitable)	D5W or N/S	1hr	Day 1 or 15	4 weekly cycle
Etoposide	100 mg/m2	N/S or D5W	1hrs	Day 1-3 or Day1,8,15	

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藥物名稱	藥物劑量	稀釋液	滴注時間	期程	療法週期
Cisplatin	60-80mg/m2 (adjusted by Ccr)	N/S	2~12hrs	Day 1 or 15	4 weekly cycle
Etoposide	100 mg/m2	N/S or D5W	1hrs	Day 1-3 or Day1,8,15	
藥物名稱	**藥物劑量**	**稀釋液**	**滴注時間**	**期程**	**療法週期**
Cisplatin	60 - 75 mg/m^2 (adjusted by Ccr)	N/S	2~12hrs	Day 1 or 8	3 weekly cycle
Vinorelbine	60-80mg/m^2	PO		Day 1, 8	
藥物名稱	**藥物劑量**	**稀釋液**	**滴注時間**	**期程**	**療法週期**
Carboplatin	AUC: 3 - 6 (if Ccr < 60ml/min or Cisplatin not suitable)	D5W or N/S	1hr	Day 1 or 8	3 weekly cycle
Vinorelbine	60-80mg/m2	PO		Day 1, 8	
藥物名稱	**藥物劑量**	**稀釋液**	**滴注時間**	**期程**	**療法週期**
Carboplatin	AUC: 3 - 6 (if Ccr <60ml/min or cisplatin not suitable)	D5W or N/S	1hr	Day 1 or 8	3 weekly cycle
Docetaxel	25-35 mg/m2	D5W or N/S	0.5-1hr	Day 1, 8	

註：實際情況需與醫師討論(SDM)

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藥物名稱	藥物劑量	稀釋液	滴注時間	期程	療法週期
Cisplatin	60 - 75 mg/m2 (adjusted by Ccr)	N/S	2~12hrs	Day 1or8	3 weekly cycle
Docetaxel	25-35mg/m2	D5W or N/S	0.5-1hr	Day 1or8	
藥物名稱	藥物劑量	稀釋液	滴注時間	期程	療法週期
Cisplatin	60 - 75 mg/m2 (adjusted by Ccr)	N/S	2~12hrs	Day 1	3 weekly cycle
Docetaxel	60mg/m2	D5W or N/S	0.5-1hr	Day 1	
藥物名稱	藥物劑量	稀釋液	滴注時間	期程	療法週期
Carboplatin	AUC: 3 - 6 (if Ccr <60ml/min or Cisplatin not suitable)	D5W or N/S	1hr	Day 1	3 weekly cycle
Docetaxel	60 mg/m2	D5W or N/S	0.5-1hr	Day 1	
藥物名稱	藥物劑量	稀釋液	滴注時間	期程	療法週期
Cisplatin	60 - 75 mg/m2 (adjusted by Ccr)	N/S	2~12hrs	Day 1	3 weekly cycle
Pemetrexed (non-squamous)	500 mg/m2	N/S	15mins	Day 1	
藥物名稱	藥物劑量	稀釋液	滴注時間	期程	療法週期
Carboplatin	AUC: 3-6 (if Ccr <60ml/min or cisplatin not suitable)	D5W or N/S	1hr	Day 1	3 weekly cycle
Pemetrexed (non-squamous)	500 mg/m2	N/S	15mins	Day 1	

註：實際情況需與醫師討論(SDM)

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Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

Concurrent Chemoradiation Regimen

R/T (5000-7000Gy；25 - 35 次)

1. Paclitaxel 45-60 mg/m^2 IV over 1-2 hour weekly
Carboplatin AUC: 2 (if Ccr <60ml/min or cisplatin not suitable) weekly or
AUC: 3-6 (if Ccr <60ml/min or cisplatin not suitable) monsly IV
Concurrent thoracic radiotherapy

2. Paclitaxel 45-60 mg/m^2 IV over 1-2 hour weekly
Cisplatin 50-75mg/m^2 (adjusted by Ccr) IV
Concurrent thoracic radiotherapy

3. Etoposide 35-50mg/m^2 IV
Cisplatin 50mg/m^2 (adjusted by Ccr) or
Carboplatin AUC: 2 (if Ccr <60ml/min or cisplatin not suitable) weekly or
AUC: 3-6 (if Ccr <60ml/min or cisplatin not suitable) monsly IV
Concurrent thoracic radiotherapy

4. Pemetrexed (non-squamous)500mg/m^2 IV
Cisplatin 50-75mg/m^2 (adjusted by Ccr) IV
Concurrent thoracic radiotherapy

5. Pemetrexed (non-squamous) 500mg/m^2 IV
Carboplatin AUC: 3-6 (if Ccr <60ml/min or cisplatin not suitable) IV
Concurrent thoracic radiotherapy

註：實際情況需與醫師討論(SDM)

Note: All recommendations are category 2A unless otherwise indicated.
Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

Concurrent chemoradiation regimen

◆ Concurrent thoracic radiotherapy (5000 - 7000Gy；25 - 35 次)

藥物名稱	藥物劑量	稀釋液	滴注時間	期程	療法週期
Cisplatin	60 - 75 mg/m^2 (adjusted by Ccr)	N/S	2~12hrs	Day 1 or 8, (15)	3 weekly cycle (4 weekly cycle)
Paclitaxel	45 - 60 mg/m^2	D5W or N/S	1-2hrs	Day 1, 8, (15)	

藥物名稱	藥物劑量	稀釋液	滴注時間	療法週期
Carboplatin	AUC: 2 (if Ccr <60ml/min or cisplatin not suitable)	D5W or N/S	1hr	weekly cycle
Paclitaxel	45 - 60 mg/m^2	D5W or N/S	1-2hrs	

藥物名稱	藥物劑量	稀釋液	滴注時間	期程	療法週期
Carboplatin	AUC: 3 - 6 (if Ccr <60ml/min or cisplatin not suitable)	D5W or N/S	1hr	Day 1 or 8, (15)	3 weekly cycle (4 weekly cycle)
Paclitaxel	45 - 60 mg/m^2	D5W or N/S	1-2hrs	Day 1, 8, (15)	

註：實際情況需與醫師討論(SDM)

Note: All recommendations are category 2A unless otherwise indicated.

Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

Concurrent chemoradiation regimen

◆ Concurrent thoracic radiotherapy (5000 -7000Gy；25 - 35 次)

藥物名稱	藥物劑量	稀釋液	滴注時間	期程
Cisplatin	60 mg/m^2 (adjusted by Ccr)	N/S	2~12hrs	Day 1, 8, 29, 36
Etoposide	35-50 mg/m^2	N/S or D5W	1hrs	Day 1-3 or Day1-5,29-31
藥物名稱	藥物劑量	稀釋液	滴注時間	期程
Carboplatin	AUC: 2 (if Ccr <60ml/min or cisplatin not suitable)	D5W	1hr	weekly
Etoposide	35-50 mg/m^2	N/S or D5W	1hrs	Day 1-3 or Day1-5,29-31
藥物名稱	藥物劑量	稀釋液	滴注時間	期程
Carboplatin	AUC: 3 - 6 (if Ccr <60ml/min or cisplatin not suitable)	D5W or N/S	1hr	4 weekly cycle
Etoposide	35-50 mg/m^2	N/S or D5W	1hrs	Day 1-3 or Day1-5,29-31

註：實際情況需與醫師討論(SDM)

Note: All recommendations are category 2A unless otherwise indicated.

Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

Concurrent chemoradiation regimen

◆ Concurrent thoracic radiotherapy (5000 - 7000Gy；25 - 35 次)

藥物名稱	藥物劑量	稀釋液	滴注時間	期程	療法週期
Cisplatin	**60-75 mg/m^2 (adjusted by Ccr)**	**N/S**	**2~12hrs**	**Day1**	**3 weekly cycle**
Pemetrexed (non-squamous)	**500 mg/m^2**	**N/S**	**15mins**	**Day1**	

藥物名稱	藥物劑量	稀釋液	滴注時間	期程	療法週期
Carboplatin	**AUC: 3 - 6 (if Ccr <60ml/min or cisplatin not suitable)**	**D5W or N/S**	**1hr**	**Day1**	**3 weekly cycle**
Pemetrexed (non-squamous)	**500 mg/m^2**	**N/S**	**15mins**	**Day1**	

註：實際情況需與醫師討論(SDM)

Note: All recommendations are category 2A unless otherwise indicated.

Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

Advanced stage chemotherapy

1. **Gemcitabine** 1000 mg/m^2 IV Day 1, 8, 15
   Cisplatin 50-75 mg/m^2 (adjusted by Ccr) IV or
   Carboplatin AUC: 3-6 (if Ccr <60 ml/min or cisplatin not suitable) IV Day 1 or 15

2. **Gemcitabine** 1000-1250 mg/m^2 IV Day 1, 8
   Cisplatin 50-75 mg/m^2 (adjusted by Ccr) or
   Carboplatin AUC: 3-6 (if Ccr <60 ml/min or cisplatin not suitable) IV Day 1 or 8

3. **Paclitaxel** 60-80 mg/m^2 IV Day 1, 8, 15 or **Paclitaxel** 160-225 mg/m^2 IV Day 1
   Cisplatin 50-75 mg/m^2 (adjusted by Ccr) or
   Carboplatin AUC: 3-6 (if Ccr <60 ml/min or cisplatin not suitable) IV Day 1 or 15

4. **Docetaxel** 25-35 mg/m^2 IV Day 1,8
   Cisplatin 50-75 mg/m^2 (adjusted by Ccr) or
   Carboplatin AUC: 3-6 (if Ccr <60 ml/min or cisplatin not suitable) IV Day 1 or 8

5. **Docetaxel** 60 mg/m^2 IV Day 1
   Cisplatin 50-75 mg/m^2 (adjusted by Ccr) or
   Carboplatin AUC: 3-6 (if Ccr <60 ml/min or cisplatin not suitable) IV Day 1 (Three week cycle)

6. **Vinorelbine** 60-80 mg/m^2 po Day 1, 8, 15
   Cisplatin 50-75 mg/m^2 (adjusted by Ccr) or
   Carboplatin AUC: 3-6 (if Ccr <60 ml/min or cisplatin not suitable) IV Day 1 or 15

註：實際情況需與醫師討論(SDM)

Note: All recommendations are category 2A unless otherwise indicated.
Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

7. **Etoposide** 100 mg/m^2 IV Day 1-3 or Day 1, 8, 15
   Cisplatin 50-75 mg/m^2 (adjusted by Ccr) or
   Carboplatin AUC: 3-6 (if Ccr <60 ml/min or cisplatin not suitable) IV Day 1 or 15

8. **Pemetrexed** (nonsquamous) 500 mg/m^2 IV on a 21-Day cycle.
   Cisplatin 50-75 mg/m^2 (adjusted by Ccr) or
   Carboplatin AUC: 3-6 (if Ccr <60 ml/min or cisplatin not suitable) IV on a 21-Day cycle.

9. **TS-1** 80mg~120mg/天(adjusted by BSA) PO BID Day 1~28,
   休息 14 天 or Day1~14, 休息 7 天。

註：實際情況需與醫師討論(SDM)

Note: All recommendations are category 2A unless otherwise indicated.
Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

Advanced stage chemotherapy

藥物名稱	藥物劑量	稀釋液	滴注時間	期程	療法週期
Cisplatin	60-80 mg/m^2 (adjusted by Ccr)	N/S	2~12hrs	Day 1 or 15	4 weekly cycle
Gemcitabine	1000 mg/m^2	N/S	30mins	Day 1, 8, 15	

藥物名稱	藥物劑量	稀釋液	滴注時間	期程	療法週期
Carboplatin	AUC: 3 - 6 (if Ccr <60ml/min or cisplatin not suitable)	D5W or N/S	1hr	Day 1 or 15	4 weekly cycle
Gemcitabine	1000 mg/m^2	N/S	30mins	Day 1, 8, 15	

藥物名稱	藥物劑量	稀釋液	滴注時間	期程	療法週期
Cisplatin	60-75 mg/m^2 (adjusted by Ccr)	N/S	2~12hrs	Day 1 or 8	3 weekly cycle
Gemcitabine	1000-1250 mg/m^2	N/S	30mins	Day 1, 8	

註：實際情況需與醫師討論(SDM)

Note: All recommendations are category 2A unless otherwise indicated.

Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

Advanced stage chemotherapy

藥物名稱	藥物劑量	稀釋液	滴注時間	期程	療法週期
Carboplatin	AUC: 3 - 6 (if Ccr <60ml/min or cisplatin not suitable)	D5W or N/S	1hr	Day 1 or 8	3 weekly cycle
Gemcitabine	1000-1250 mg/m^2	N/S	30mins	Day 1, 8	

藥物名稱	藥物劑量	稀釋液	滴注時間	期程	療法週期
Cisplatin	60 - 80 mg/m^2 (adjusted by Ccr)	N/S	2~12hrs	Day 1 or 15	4 weekly cycle
Paclitaxel	60 - 80 mg/m^2	D5W or N/S	1-2hrs	Day 1, 8, 15	

藥物名稱	藥物劑量	稀釋液	滴注時間	期程	療法週期
Carboplatin	AUC: 3 - 6 (if Ccr <60ml/min or cisplatin not suitable)	D5W or N/S	1hr	Day 1 or 15	4 weekly cycle
Paclitaxel	60 - 80 mg/m^2	D5W or N/S	1-2hrs	Day 1, 8, 15	

註：實際情況需與醫師討論(SDM)

Note: All recommendations are category 2A unless otherwise indicated.

Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

Advanced stage chemotherapy

藥物名稱	藥物劑量	稀釋液	滴注時間	期程	療法週期
Cisplatin	60-75 mg/m^2 (adjusted by Ccr)	N/S	2~12hrs	Day 1	3 weekly cycle
Paclitaxel	160-225 mg/m^2	D5W or N/S	1-2hrs	Day 1	

藥物名稱	藥物劑量	稀釋液	滴注時間	期程	療法週期
Cisplatin	60 - 75 mg/m^2 (adjusted by Ccr)	N/S	2~12hrs	Day 1 or 8	3 weekly cycle
Docetaxel	25-35mg/m^2	D5W or N/S	0.5-1hr	Day 1, 8	

藥物名稱	藥物劑量	稀釋液	滴注時間	期程	療法週期
Carboplatin	AUC: 3 - 6 (if Ccr <60ml/min or cisplatin not suitable)	D5W or N/S	1hr	Day 1	3 weekly cycle
Paclitaxel	160-225 mg/m^2	D5W or N/S	1-2hrs	Day 1	

註：實際施打情況及劑量需與醫師討論.並紀錄於病歷上(SDM) 6 6

Note: All recommendations are category 2A unless otherwise indicated.

Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

Advanced stage chemotherapy

藥物名稱	藥物劑量	稀釋液	滴注時間	期程	療法週期
Carboplatin	AUC: 3-6 (if Ccr <60ml/min or cisplatin not suitable)	D5W	1hr	Day 1 or 8	3 weekly cycle
Docetaxel	25-35mg/m^2	D5W or N/S	0.5-1hr	Day 1, 8	

藥物名稱	藥物劑量	稀釋液	滴注時間	期程	療法週期
Cisplatin	60 - 80 mg/m^2 (adjusted by Ccr)	N/S	2~12hrs	Day 1 or 15	4 weekly cycle
Etoposide	100 mg/m^2	N/S or D5W	1hrs	Day 1-3 or Day 1,8,15	

藥物名稱	藥物劑量	稀釋液	滴注時間	期程	療法週期
Carboplatin	AUC: 3-6 (if Ccr <60ml/min or cisplatin not suitable)	D5W or N/S	1hr	Day 1 or 15	4 weekly cycle
Etoposide	100 mg/m^2	N/S or D5W	1hrs	Day 1-3 or Day 1,8,15	

註：實際施打情況及劑量需與醫師討論.並紀錄於病歷上(SDM) 6 7

Note: All recommendations are category 2A unless otherwise indicated.

Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

Advanced stage chemotherapy

藥物名稱	藥物劑量	稀釋液	滴注時間	期程	療法週期
Cisplatin	**60-75 mg/m^2 (adjusted by Ccr)**	**N/S**	**2~12hrs**	**Day1**	**3 weekly cycle**
Pemetrexed (nonsquamous)	**500 mg/m^2**	**N/S**	**15mins**	**Day1**	

藥物名稱	藥物劑量	稀釋液	滴注時間	期程	療法週期
Carboplatin	**AUC: 3 - 6 (if Ccr <60ml/min or cisplatin not suitable)**	**D5W or N/S**	**1hr**	**Day1**	**3 weekly cycle**
Pemetrexed (nonsquamous)	**500 mg/m^2**	**N/S**	**15mins**	**Day1**	

藥物名稱	藥物劑量	稀釋液	頻次	期程	療法週期
TS-1	**80 mg ~ 120 m/天 (adjusted by BSA)**	**PO**	**BID**	**Day1~28，休息 14 天 or Day1~14， 休息 7 天**	**6 weekly cycle or 3 weekly cycle**

註：實際施打情況及劑量需與醫師討論.並紀錄於病歷上(SDM) 6 8

Note: All recommendations are category 2A unless otherwise indicated.

Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

MOLECULAR AND BIOMARKER-DIRECTED THERAPY FOR ADVANCED OR METASTATIC DISEASE

EGFR Exon 19 Deletion or Exon 21 L858R:

• First-line therapy :Afatinib、Erlotinib、Dacomitinib、Gefitinib、Osimertinib

Erlotinib + ramucirumab7

Erlotinib + bevacizumabc (nonsquamous)8

• Subsequent therapy

Osimertinib

EGFR S768I, L861Q, and/or G719X

First-line therapy : Afatinib Erlotinib、Dacomitinib Gefitinib、Osimertinib

• Subsequent therapy

Osimertinib

EGFR Exon 20 Insertion Mutation

• Subsequent therapy

Amivantamab-vmjw12

ALK Rearrangement

• First-line therapy:

Alectinib、Brigatinib Ceritinib、Crizotinib Lorlatinib

• Subsequent therapy

Alectinib、Brigatinib Ceritinib、Lorlatinib

KRAS G12C Mutation

• Subsequent therapy

Sotorasib、Adagrasi

ROS1 Rearrangement

•First-line therapy:

Ceritinib Crizotinib28、Entrectinib

•Subsequent therapy :

Lorlatinib30、Entrectinib

BRAF V600E Mutation

•First-line therapy : Dabrafenib/trametinib Encorafenib/binimetinib Dabrafenib、Vemurafenib

•Subsequent therapy Dabrafenib/trametinib Encorafenib/binimetinib

NTRK1/2/3 Gene Fusion

•First-line/Subsequent therapy

Larotrectinib、Entrectinib

MET Exon 14 Skipping Mutation

•First-line therapy/Subsequent therapy

Capmatinib、Crizotinib、 Tepotinib

RET Rearrangeent

• First-line therapy/Subsequent therapy

Selpercatinib、Pralsetinib、Cabozantinib

ERBB2 (HER2) Mutation

• Subsequent therapy

Fam-trastuzuab deruxtecan-nxki

Ado-trastuzumab emtansine

註：實際施打情況及劑量需與醫師討論.並紀錄於病歷上(SDM) 69

Note: All recommendations are category 2A unless otherwise indicated.

Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

Anti-VEGF 血管新生抑制劑							
藥物名稱	商品名	中文名	給付	藥物劑量	稀釋液	滴注時間	療法週期
Bevacizumab	Avastin	癌思婷	自費	7.5 mg~15 mg / kg	N/S	30~ 90mins	3 weekly cycle
Bevacizumab	MVASI	艾法施	自費	7.5 mg~15 mg / kg	N/S	30~ 90mins	3 weekly cycle
Ramucirumab	cyramza	欣銳擇	自費	10 mg / kg	N/S	60mins	2 weekly cycle or 3 weekly cycle

註：實際施打情況及劑量需與醫師討論.並紀錄於病歷上(SDM) 7 0

Note: All recommendations are category 2A unless otherwise indicated.

Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

Immunotherapy

學名	商品名	給付	藥物劑量	稀釋液	滴注時間	療法週期
Nivolumab	Opdivo	健保/自費	3 mg/kg / 360mg with Ipilimumab	D5W or N/S	60mins	2 weekly cycle
Durvalumab	Imfinzi	自費	10 mg/kg /1500mg(小細胞肺癌)	D5W or N/S	60mins	2 weekly cycle
Atezolizumab	Tecentrip	自費	1200 mg	N/S	30~60mins	3 weekly cycle
Pembrolizumab	Keytruda	健保/自費	200 mg or 2mg/kg	D5W or N/S	60mins	3 weekly cycle

Immunotherapy combine therapy

藥物名稱	藥物劑量	稀釋液	滴注時間	期程	療法週期
Carboplatin	AUC: 3-6 (if Ccr <60ml/min or cisplatin not suitable)	D5W or N/S	30~60mins	Day1	3 weekly cycle
Pemetrexed	500 mg/m^2	N/S	10-15 mins	Day1	3 weekly cycle
Pembrolizumab	200 mg	D5W or N/S	30~60mins	Day1	3 weekly cycle

註：實際施打情況及劑量需與醫師討論.並紀錄於病歷上(SDM) 7 1

Note: All recommendations are category 2A unless otherwise indicated.

Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

藥物名稱	藥物劑量	稀釋液	滴注時間	期程	療法週期
Cisplatin	50-75mg/m^2 (adjusted by Ccr)	N/S	2~12hrs	Day1	3 weekly cycle
Pemetrexed	500 mg/m^2	N/S	15mins	Day1	3 weekly cycle
Pembrolizumab	200 mg	D5W or N/S	60mins	Day1	3 weekly cycle
藥物名稱	**藥物劑量**	**稀釋液**	**滴注時間**	**期程**	**療法週期**
Cisplatin	60-75mg/m^2 (adjusted by Ccr)	N/S	2~12hrs	Day1	3 weekly cycle
Pemetrexed	500 mg/m^2	N/S	15mins	Day1	3 weekly cycle
Pembrolizumab	200 mg	D5W or N/S	60mins	Day1	3 weekly cycle
藥物名稱	**藥物劑量**	**稀釋液**	**滴注時間**	**期程**	**療法週期**
Carboplatin	AUC: 3-6 (if Ccr <60ml/min or cisplatin not suitable)	D5W or N/S	1hr	Day1	3 weekly cycle
Pemetrexed	500 mg/m^2	N/S	15mins	Day1	3 weekly cycle
Atezolizumab	1200 mg	N/S	30~60mins	Day1	3 weekly cycle
藥物名稱	**藥物劑量**	**稀釋液**	**滴注時間**	**期程**	**療法週期**
Cisplatin	60-75 mg/m^2 (adjusted by Ccr)	N/S	2~12hrs	Day1	3 weekly cycle
Pemetrexed	500 mg/m^2	N/S	15 mins	Day1	3 weekly cycle
Atezolizumab	1200 mg	N/S	30~60 mins	Day1	3 weekly cycle

註：實際施打情況及劑量需與醫師討論.並紀錄於病歷上(SDM) 7 2

Note: All recommendations are category 2A unless otherwise indicated.

Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

Immunotherapy combine therapy

藥物名稱	藥物劑量	稀釋液	滴注時間	期程	療法週期
Cisplatin	60-75 mg/m^2 (adjusted by Ccr)	N/S	2~12hrs	Day1	3 weekly cycle
Pemetrexed	500 mg/m^2	N/S	15 mins	Day1	3 weekly cycle
Atezolizumab	1200 mg	N/S	30~60 mins	Day1	3 weekly cycle
藥物名稱	**藥物劑量**	**稀釋液**	**滴注時間**	**期程**	**療法週期**
Carboplatin	AUC: 3-6 (if Ccr <60ml/min or cisplatin not suitable)	D5W or N/S	1hr	Day1	3 weekly cycle
Avastin	15 mg/Kg	N/S	90mins	Day 1	3 weekly cycle
Paclitaxel	160-225 mg/m^2	D5W or N/S	1-2hrs	Day 1	3 weekly cycle
Atezolizumab	1200 mg	N/S	30~60mins	Day 1	3 weekly cycle
藥物名稱	**藥物劑量**	**稀釋液**	**滴注時間**	**期程**	**療法週期**
Carboplatin	AUC: 3-6 (if Ccr <60ml/min or cisplatin not suitable)	D5W or N/S	1hr	Day1	3 weekly cycle
Avastin	15 mg/Kg	N/S	90mins	Day 1	3 weekly cycle
Pemetrexed	500 mg/m2	N/S	15 mins	Day1	3 weekly cycle
Atezolizumab	1200 mg	N/S	30~60mins	Day1	3 weekly cycle

註：實際施打情況及劑量需與醫師討論.並紀錄於病歷上(SDM) 7 3

Note: All recommendations are category 2A unless otherwise indicated.

Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

Immunotherapy combine therapy

藥物名稱	藥物劑量	稀釋液	滴注時間	期程	療法週期
Carboplatin	AUC: 3-6 (if Ccr <60ml/min or cisplatin not suitable)	D5W or N/S	1 hr	Day1	3 weekly cycle
Pemetrexed	500 mg/m^2	N/S	15 mins	Day1	3 weekly cycle
Nivolumab	3 mg/kg	D5W or N/S	60 mins	Two weekly cycle	3 weekly cycle
Avastin	15 mg/Kg	N/S	90mins	Day 1	3 weekly cycle
藥物名稱	**藥物劑量**	**稀釋液**	**滴注時間**	**期程**	**療法週期**
Carboplatin	AUC:3-6 (if Ccr <60ml/min or cisplatin not suitable)	D5W or N/S	1hr	Day1	3 weekly cycle
Paclitaxel	160-225 mg/m^2	D5W or N/S	1-2hrs	Day 1	3 weekly cycle
Atezolizumab	1200 mg	N/S	30~60mins	Day 1	3 weekly cycle

註：實際施打情況及劑量需與醫師討論.並紀錄於病歷上(SDM) 7 4

Note: All recommendations are category 2A unless otherwise indicated.

Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

Systemic therapy for advanced or metastatic disease

ADENOCARCINOMA, LARGE CELL, NSCLC NOS (PS 0–1)

(No contraindications to PD-1 or PD-L1 inhibitors)

Preferred

- Pembrolizumab / Carboplatin / Pemetrexed (category 1)
- Pembrolizumab / Cisplatin / Pemetrexed (category 1)

Other Recommended

- Atezolizumab / platinum/ Paclitaxel / Bevacizumabe (category 1)
- Atezolizumab / platinum / albumin-bound Paclitaxel
- Nivolumab / Ipilimumab
- Nivolumab/ipilimumab/pemetrexed/(carboplatin or cisplatin)

ADENOCARCINOMA, LARGE CELL, NSCLC NOS (PS 2)

Preferred

- Carboplatin / Pemetrexed

Other Recommended

- Carboplatin / albumin-bound Paclitaxel
- Carboplatin / Docetaxel
- Carboplatin / Etoposide
- Carboplatin / Gemcitabine
- Carboplatin / Paclitaxel

ADENOCARCINOMA, LARGE CELL, NSCLC NOS (PS 3-4)

- Best supportive care

Contraindications to PD-1 or PD-L1 inhibitorsc Useful in Certain Circumstances

- Bevacizumabe/ Carboplatin / Paclitaxel (category 1)
- Bevacizumabe / Carboplatin / Pemetrexed
- Bevacizumabe / Cisplatin / Pemetrexed
- Carboplatin / albumin-bound Paclitaxel(category 1)
- Carboplatin / Docetaxel (category 1)
- Carboplatin / Etoposide (category 1)
- Carboplatin / Gemcitabine (category 1)
- Carboplatin / Paclitaxel (category 1)
- Carboplatin / Pemetrexed (category 1)
- Cisplatin / Docetaxel (category 1)
- Cisplatin / Etoposide (category 1)
- Cisplatin / Gemcitabine (category 1)
- Cisplatin / Pemetrexed (category 1)
- Gemcitabine / Docetaxel (category 1)
- Gemcitabine / Vinorelbine (category 1)
- Cisplatin/ Paclitaxel

註：實際施打情況及劑量需與醫師討論.並紀錄於病歷上(SDM) 7 5

Note: All recommendations are category 2A unless otherwise indicated.

Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

SYSTEMIC THERAPY FOR ADVANCED OR METASTATIC DISEASE

SQUAMOUS CELL CARCINOMA (PS 0–1)

(No contraindications to PD-1 or PD-L1 inhibitors)

Preferred

- Pembrolizumab / Carboplatin / Paclitaxel (category 1)
- Pembrolizumab / Carboplatin / albumin-bound Paclitaxel (category 1)

Other recommended

- Nivolumab / Ipilimumab
- Nivolumab / Ipilimumab / Paclitaxel / Carboplatin (category 1)

SQUAMOUS CELL CARCINOMA (PS 2)

Preferred

- Carboplatin / albumin-bound Paclitaxel
- Carboplatin / Gemcitabine
- Carboplatin / Paclitaxel

Other Recommended

- Carboplatin / Docetaxel
- Carboplatin / Etoposide

Useful in Certain Circumstances

- Albumin-bound paclitaxel
- Docetaxel
- Gemcitabine
- Paclitaxel

SQUAMOUS CELL CARCINOMA (PS 3-4)

- Best supportive care

Contraindications to PD-1 or PD-L1 inhibitors

Useful in Certain Circumstances

- Carboplatin / albumin-bound Paclitaxel (category 1)
- Carboplatin / Docetaxel (category 1)
- Carboplatin / Gemcitabine (category 1)
- Carboplatin / Paclitaxel (category 1)
- Cisplatin / Docetaxel (category 1)
- Cisplatin / Etoposide (category 1)
- Cisplatin / Gemcitabine (category 1)
- Cisplatin / Paclitaxel (category 1)
- Gemcitabine / Docetaxel (category 1)
- Gemcitabine / Vinorelbine (category 1)

註：實際施打情況及劑量需與醫師討論.並紀錄於病歷上(SDM) 7 6

Note: All recommendations are category 2A unless otherwise indicated.

Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

SYSTEMIC THERAPY FOR ADVANCED OR METASTATIC DISEASE – SUBSEQUENT

ADENOCARCINOMA, LARGE CELL, NSCLC NOS (PS 0–2)

Preferred (no previous IO):

Systemic immune checkpoint inhibitors

- Nivolumab (category 1)
- Pembrolizumab (category 1)
- Atezolizumab (category 1)

Other Recommended (no previous IO or previous IO):

- Docetaxel
- Pemetrexed
- Gemcitabine
- Ramucirumab/docetaxel
- Albumin-bound paclitaxel

SQUAMOUS CELL CARCINOMA (PS 0–2)

Preferred (no previous IO):

Systemic immune checkpoint inhibitorse

- Nivolumab (category 1)
- Pembrolizumab (category 1)
- Atezolizumab (category 1)

Other Recommended (no previous IO or previous IO):

- Docetaxel
- Gemcitabine
- Ramucirumab/docetaxel
- Albumin-bound paclitaxel

ADENOCARCINOMA, LARGE CELL, NSCLC NOS, SQUAMOUS CELL CARCINOMA (PS 3–4): Best supportive care

SYSTEMIC THERAPY FOR ADVANCED OR METASTATIC DISEASE – PROGRESSION

ADENOCARCINOMA, LARGE CELL, NSCLC NOS

- PS 0–2: nivolumab, pembrolizumab, or atezolizumab, docetaxel (category 2B), pemetrexed (category 2B), gemcitabine (category 2B), ramucirumab/docetaxel (category 2B), or albuminbound paclitaxel (category 2B)
- PS 3–4: Best supportive care • Options for further progression are best supportive care or clinical trial

SQUAMOUS CELL CARCINOMA

- PS 0–2: nivolumab, pembrolizumab, or atezolizumab, docetaxel (category 2B), gemcitabine (category 2B), ramucirumab/docetaxel (category 2B), or albumin-bound paclitaxel (category 2B)
- PS 3–4: Best supportive care • Options for further progression are best supportive care or clinical trial.

註：實際施打情況及劑量需與醫師討論.並紀錄於病歷上(SDM) 7 7

Note: All recommendations are category 2A unless otherwise indicated.

Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

SYSTEMIC THERAPY FOR ADVANCED OR METASTATIC DISEASE – MAINTENANCE

Maintenance Therapy

- Continuation maintenance refers to the use of at least one of the agents given in first line, beyond 4–6 cycles, in the absence of disease progression. Switch maintenance refers to the initiation of a different agent, not included as part of the first-line regimen, in the absence of disease progression, after 4–6 cycles of initial therapy.
- Patients should receive maintenance therapy for 2 years if they received front-line immunotherapy.
- Patients should receive maintenance therapy until progression if they received second-line immunotherapy.

ADENOCARCINOMA, LARGE CELL, NSCLC NOS (PS 0–2) Continuation maintenance

- Bevacizumab (category 1)
- Pemetrexed (category 1)
- Bevacizumab/pemetrexed
- Pembrolizumab/pemetrexed (category 1)
- Atezolizumab/bevacizumab (category 1)
- Nivolumab/ Ipilimumab
- Atezolizumabn

Switch maintenance

- Pemetrexed

SQUAMOUS CELL CARCINOMA (PS 0–2) Continuation maintenance

- Pembrolizumab
- Nivolumab/ Ipilimumab
- Gemcitabine (category 2B)
- Durvalumab

ADENOCARCINOMA, LARGE CELL, NSCLC NOS, SQUAMOUS CELL CARCINOMA (PS 3–4)

Best supportive care

註：實際施打情況及劑量需與醫師討論.並紀錄於病歷上(SDM) 7 8

Note: All recommendations are category 2A unless otherwise indicated.

Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

Small Cell Lung Cancer 治療原則

DIAGNOSIS	INITIAL EVALUATION	STAGE

Small cell lung cancer (SCLC) or combined SCLC/ non-small cell lung cancer (NSCLC) on biopsy or cytology of primary or metastatic site →

- **H&Pb**
- **Pathology reviewc**
- **CBC**
- **Electrolytes, liver function tests (LFTs), BUN, creatinine**
- **Chest/abdomen/pelvis CT with contrast**
- **Brain MRI (preferred) or CT with contrast**
- **Consider PET/CT scan (skull base to mid-thigh), if limited stage is suspected or if needed to clarify stage**
- **Smoking cessation counseling and intervention.**
- **Molecular profiling (only for never smokers with extensive stage)**

Limited stage → **See Additional Workup**

Extensive stage → **See Primary Treatment**

註：實際施打情況及劑量需與醫師討論.並紀錄於病歷上(SDM) 7 9

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Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

Limited stage ADDITIONAL WORKUP	STAGE	TREATMENT

- If pleural effusion is present, thoracentesis is recommended; if thoracentesis inconclusive, consider thoracoscopy
- Pulmonary function tests (PFTs) during evaluation for surgery or definitive radiation therapy (RT)
- Bone imaging (radiographs or MRI) as appropriate if PET/CT equivocal (consider biopsy if bone imaging is equivocal)
- Unilateral marrow aspiration/biopsy in select patients

→ Clinical stage I–IIA (T1–2,N0,M0) TNM Classification) → Pathologic mediastinal staging → See Primary Treatment

→ Limited stage IIB–IIIC (T3–4,N0,M0; T1–4,N1–3,M0) → See Primary Treatment

→ Consider arrange Bone marrow biopsy, thoracentesis, or bone studies consistent with malignancy → See Extensive-Stage Disease

註：實際施打情況及劑量需與醫師討論.並紀錄於病歷上(SDM) 8 0

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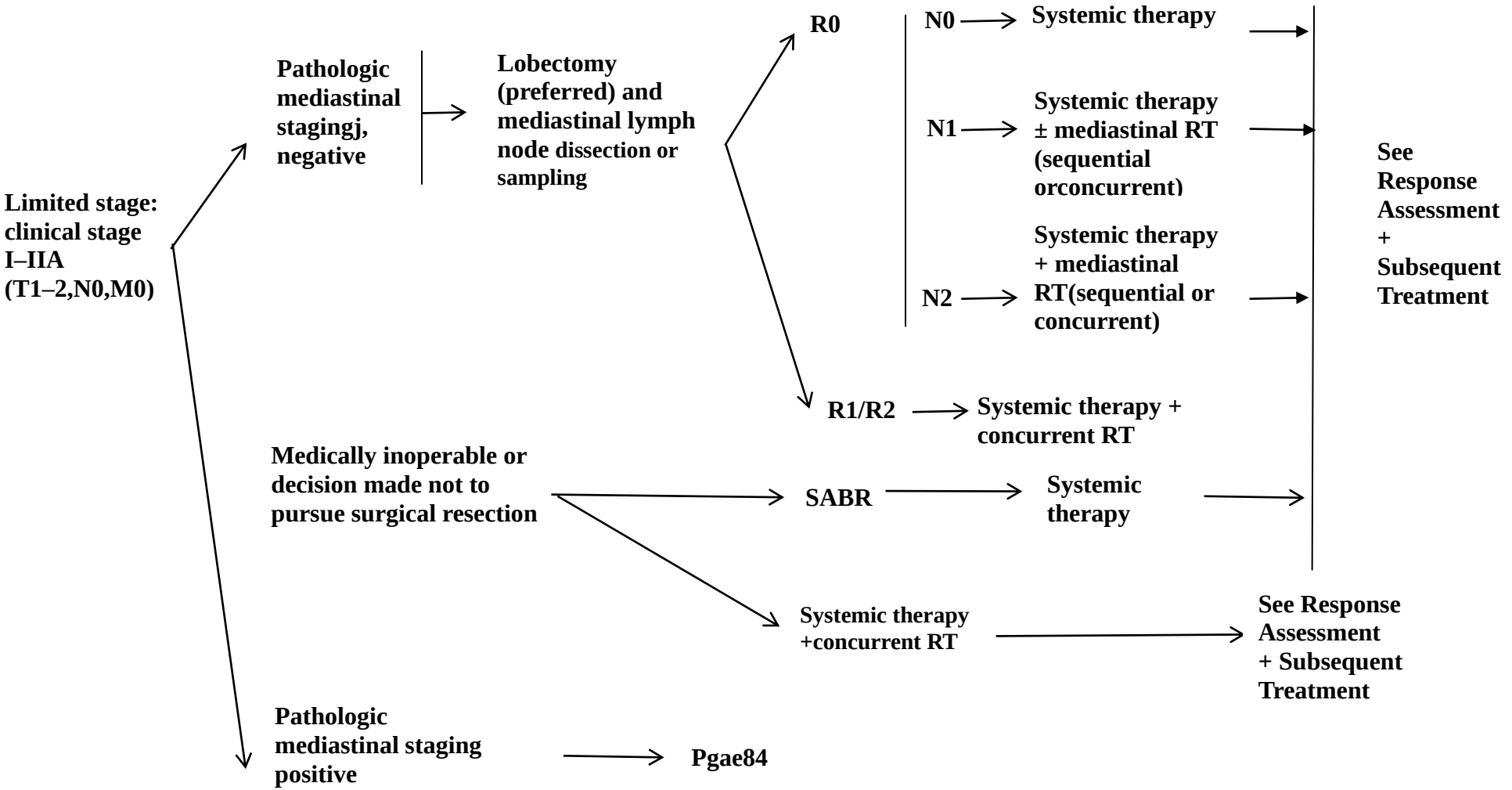
Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

TESTING RESULTS	PRIMARY TREATMENT	ADJUVANT TREATMENT

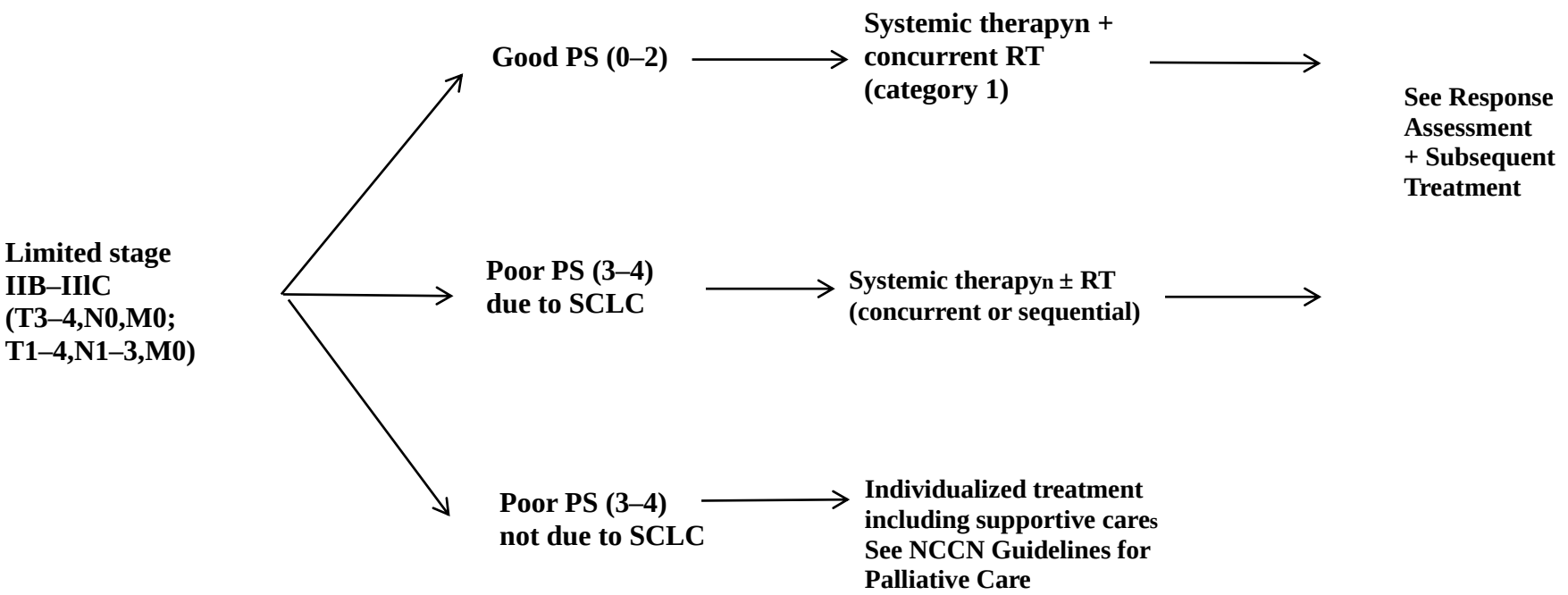


註：實際施打情況及劑量需與醫師討論.並紀錄於病歷上(SDM) 8 1

Note: All recommendations are category 2A unless otherwise indicated.

Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

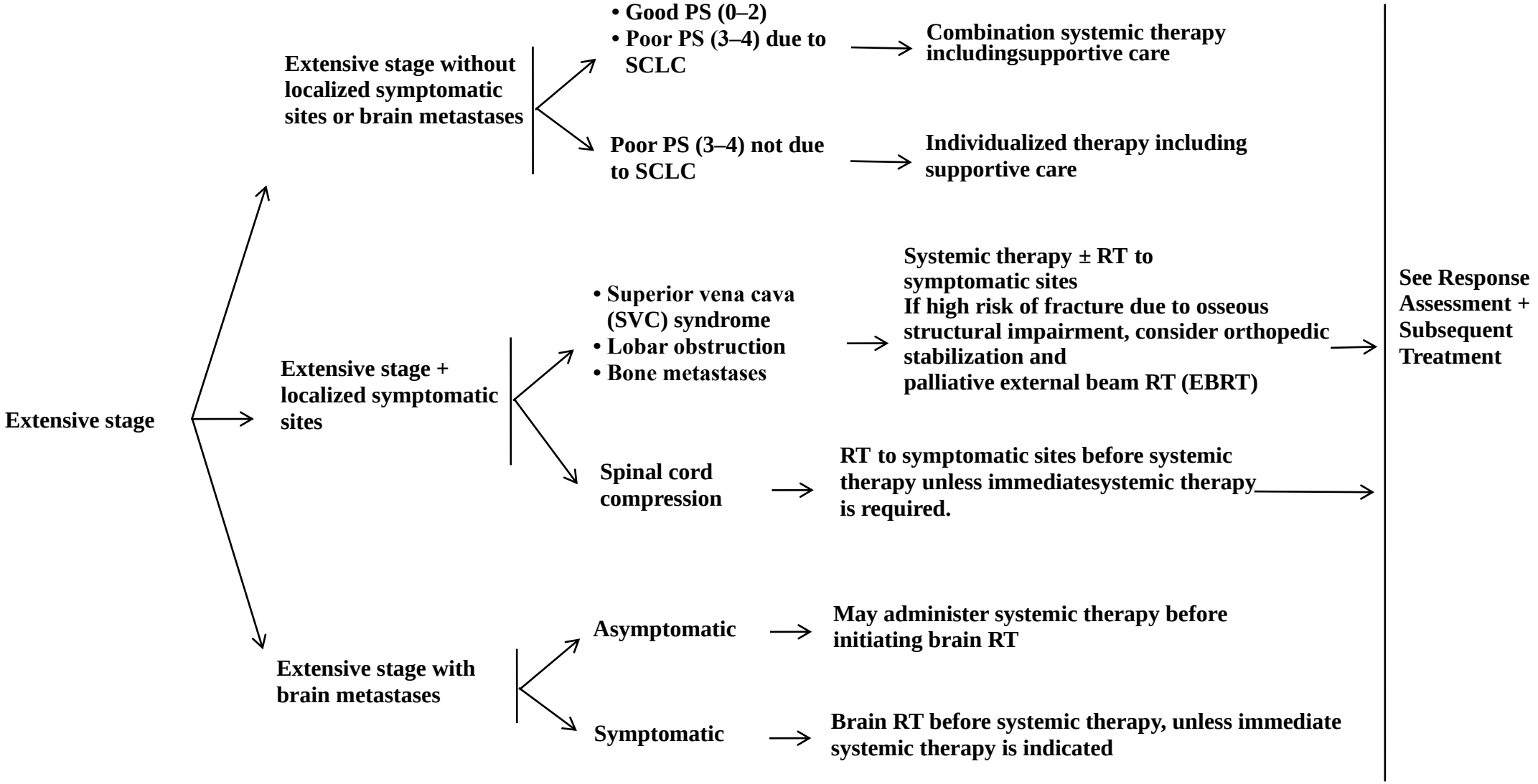
	PRIMARY TREATMENT	



註：實際施打情況及劑量需與醫師討論.並紀錄於病歷上(SDM) 8 2

Note: All recommendations are category 2A unless otherwise indicated.
Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

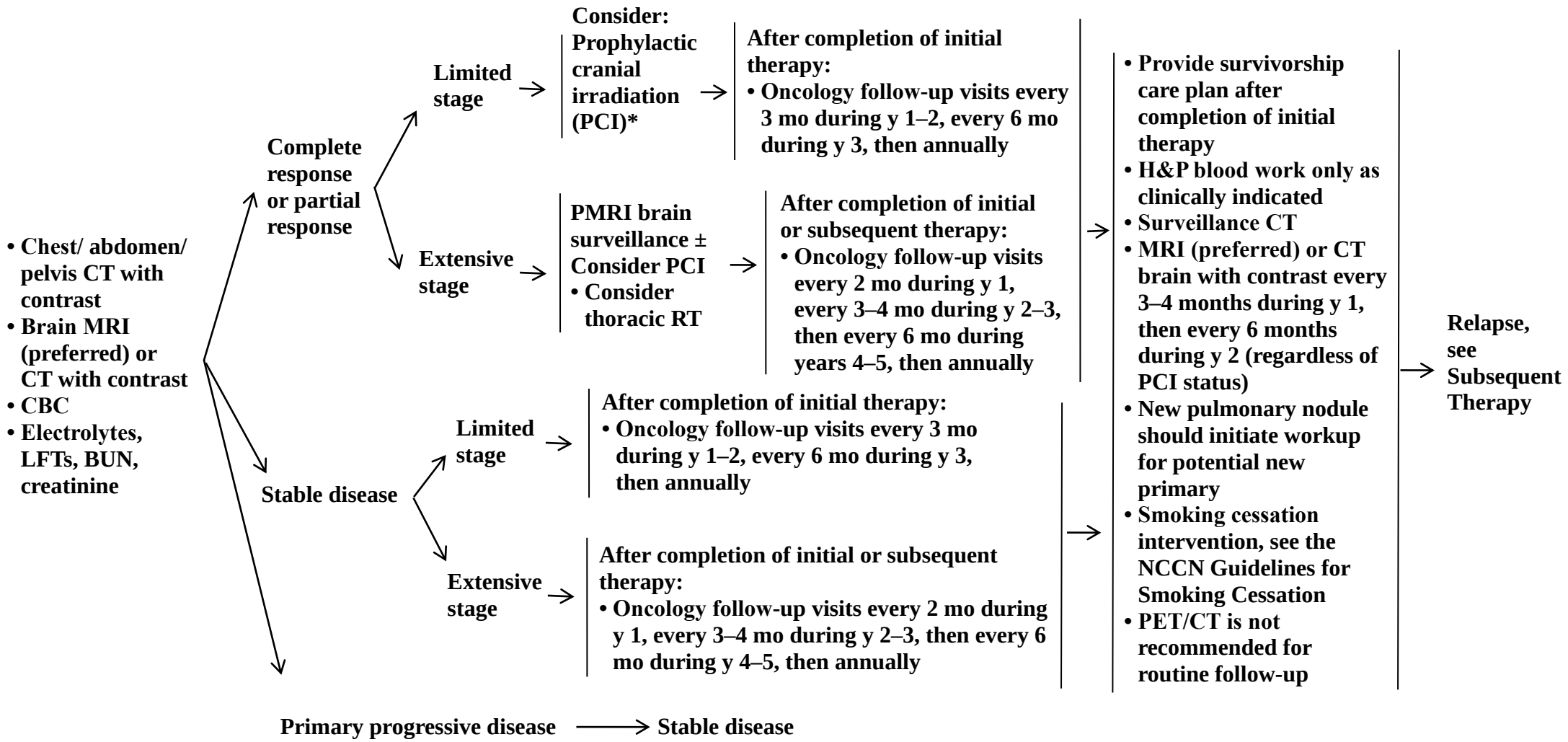
PRIMARY TREATMENT



註：實際施打情況及劑量需與醫師討論.並紀錄於病歷上(SDM) 8 3

Note: All recommendations are category 2A unless otherwise indicated.

Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

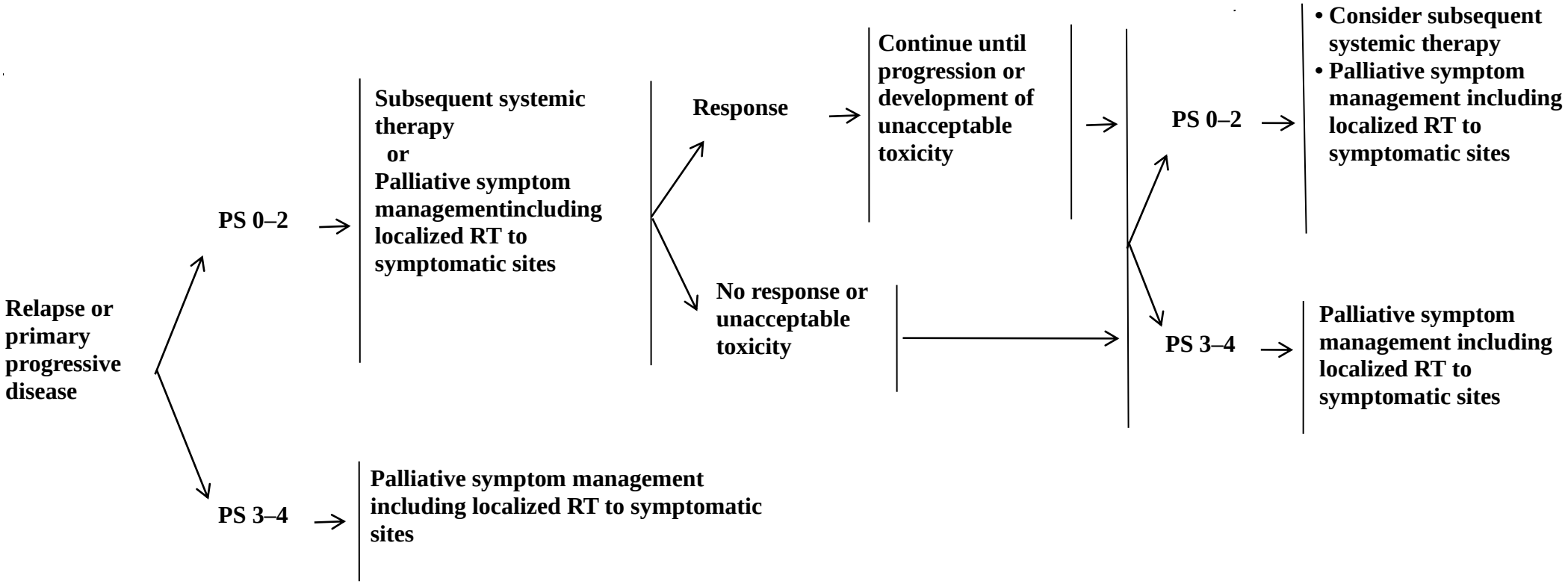


註：實際施打情況及劑量需與醫師討論.並紀錄於病歷上(SDM) 8 4 *:70 歲以上需特別注意

Note: All recommendations are category 2A unless otherwise indicated.

Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

PROGRESSIVE DISEASE	SUBSEQUENT THERAPY/PALLIATIVE THERAPY



註：實際施打情況及劑量需與醫師討論.並紀錄於病歷上(SDM) 8 5

Note: All recommendations are category 2A unless otherwise indicated.

Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

Small Cell Lung Cancer 治療原則-Limited stage (maximum of 4-6 cycles)

- **Etoposide** 50-100mg/m2 IV Day 1-3 or Day 1-5 or Day 1, 8, 15
- **Cisplatin** 50-75mg/m2 (adjusted by Ccr) or
- **Carboplatin** AUC: 3-6 (if Ccr <60ml/min or cisplatin not suitable) IV Day 1 or 15

❖Good PS (ECOG PS≦1) →

concurrent chemoradiotherapy (5000-7000Gy 25-35 fractions)

❖Poor PS (ECOG PS≧2) →

chemotherapy only or sequential chemoradiotherapy (5000-7000Gy 25-35 fractions

註:實際劑量施打劑量若因肝腎功能不佳有調整，需註記於病歷上。

註：實際施打情況及劑量需與醫師討論.並紀錄於病歷上(SDM) 86

Note: All recommendations are category 2A unless otherwise indicated.

Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

Small Cell Lung Cancer 治療原則- Extensive stage (maximum of 4-6 cycles)

- **Etoposide** 50-100mg/ M² IV Day 1-3 or Day 1, 8, 15
- **Cisplatin** 50-75mg/ M² (adjusted by Ccr) or **Carboplatin** AUC: 3-6 (if Ccr <60ml/min or cisplatin not suitable) IV Day 1 or 15
- **Irinotecan** 50-60 mg/ M² IV Day 1, 8, 15
- **Cisplatin** 50-75mg/ M² (adjusted by Ccr) or **Carboplatin** AUC: 3-6 (if Ccr <60ml/min or cisplatin not suitable) IV Day 1 or 15
- **Atezolizumab*: 1200 mg Q3W**

註:
1. 給付期限，自處方用藥起算 2 年。
2. 需事審，每次以 12 週為期限，每 12 週需重新評估

註:實際劑量施打劑量若因肝腎功能不佳有調整，需註記於病歷上。

註：實際施打情況及劑量需與醫師討論.並紀錄於病歷上(SDM) 87

Note: All recommendations are category 2A unless otherwise indicated.
Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

Small Cell Lung Cancer 治療原則-二線治療

Topotecan

Cycle 1.
1.5mg/m2 IV Day 1, 2, 3, (4,5)or Day 1, 8, 15

Subsequent cycle
2.5mg/m2 IV Day 1, 2, 3, (4,5) or Day 1, 8, 15 (maximum 4mg)

- **Lurbinectedin:3.2mg/ M^2 Q3W**

- **Irinotecan: 60mg/ M^2 QW**

其它藥物如 Ifosfamide, Paclitaxyl, Docetaxel, Gemcitabine,亦可建議使用。
若病人接受過 Platinum、Etoposide 及另一線化學治療後，可考慮使用免疫治療。

註：實際施打情況及劑量需與醫師討論.並紀錄於病歷上(SDM) 88

Note: All recommendations are category 2A unless otherwise indicated.
Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

五、放射線治療指引

Non-Small Cell Lung Cancer

Staging	Treatment	Adjuvant treatment
Operable - cT1~3N0~1	**Operation (OP)**	**Postoperative RT if (1) Margin (+) (R1-2) or (2) pN2**
Medically inoperable - cT1~2N0	**1) Definitive radiotherapy (RT) or** **2) Stereotactic ablative radiotherapy (SABR)**	**Chemotherapy (C/T) if high risk**
Medically inoperable - cT1-3N(+)	**1) Definitive chemoradiation (CRT)** **2) RT alone if not suitable for C/T**	**Durvalumab (健保尚未給付)**
Resectable - cT3~4N0~1	**1) OP** **2) Neoadjvant C/T OP**	**Postoperative RT if (1) Margin (+) (R1-2) or (2) pN2**
Unresectable - cT3~4N0~1	**1) Definitive concurrent chemoradiation (CCRT)** **2) RT alone if not suitable for C/T**	**Durvalumab (健保尚未給付)**
Superior Sulcus Tumor - cT3~4N0~1	**1) Neoadjvant CCRT OP** **2) Definitive CCRT**	**Durvalumab (健保尚未給付) if no OP**
- cT1~3N2	**1) Definitive CCRT** **2) Neoadjuvant CT OP** **3) Neoadjuvant CCRT OP** **4) RT alone if not suitable for C/T**	**1) Durvalumab (健保尚未給付) if no OP** **2) PORT if not given**
- cT1~3N2	**1) Definitive CCRT** **2) RT alone if not suitable for C/T**	**Durvalumab (健保尚未給付) if no OP**
Stage IVA, IVB	**1) Systemic therapy** **2) Definitive RT to oligometastases** **3) Palliative RT for symptoms**	

註：實際情況需與醫師討論(SDM)

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Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

Staging	Treatment	Adjuvant treatment
Limited stage (cT1~2N0)	**1.OP** **2. SBRT**	**1. Adjuvant C/T** **2. Mediastinal RT** if pN1/N2 **3. Prophylactic cranial irradiation (PCI)** for responder
Limited stage (cT1~2N0)	**Definitive CCRT**	**PCI** for responder
Limited stage (cT3~4N0, cT1~4N+)	**1. Definitive CCRT** **2. Definitive SCRT** if poor PS	**PCI** for responder
Extensive stage	**1. Systemic therapy** **2. Palliative RT for symptoms**	**1.Brain MRI f/u** for responder **2.Thoracic RT or ConsiderPCI(optional)** for responder
	4) Consolidative RT to primary sites	

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Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

NSCLC RT dose

1. **Definitive RT/ CCRT**: 60~70Gy at (1.8~2Gy/ fraction, 5 times per week)
2. **Neoadjuvant CCRT:** 45~ **54Gy**at (1.8~2Gy/ fraction, 5 times per week)
3. **PORT for (margin (-) and pN2):** 50~54Gy at (1.8~2Gy/ fraction, 5 times per week)
4. **PORT for (ENE or R1):** 54~60Gy at (1.8~2Gy/ fraction, 5 times per week)
5. **PORT for (R2):** 60~70Gy at (1.8~2Gy/ fraction, 5 times per week)
6. 治療天數應由病況決定，合理範圍: 25~63 天。
7. **Palliative RT of metastases :** For patients with oligometastatic disease and good performance status consider higher doses (45–60 Gy) in 1.8–2 Gy daily fractions, or SBRT following principles for treatment of oligometastases

SCLC RT dose

1. **Limited stage Definitive CCRT**: 1) 60~70Gy at (1.8~2Gy/ fraction, 5 times per week), 2**)50**Gy/30fr at (1.5Gy/ fraction, BID)
2. **Extensive stage**: Consolidation thoracic RT w/ 30Gy/10frs ~ 60Gy/ 30fr. 依病人臨床狀況而定。
3. **PCI**: 25Gy/ 10fr at (2.5Gy/ fraction, 5 times per week)

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Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

SBRT dose

經胸腔外科醫師評估過後：(1) 無法接受手術。(2)手術風險高之病患(ex. Age≧75, 肺功能差)。

Commonly Used Doses for SABR

Total Dose	# Fractions	Example Indications
25–34 Gy	1	Peripheral, small (<2 cm) tumors, esp. >1 cm from chest wall
45–60 Gy	3	Peripheral tumors and >1 cm from chest wall
48–50 Gy	4	Central or peripheral tumors <4–5 cm, especially <1 cm from chest wall
50–55 Gy	5	Central or peripheral tumors, especially <1 cm from chest wall
60–70 Gy	8-10	Central tumors

OAR/Regimen	1 Fraction	3 Fractions	4 Fractions	5 Fractions
Spinal cord	14 Gy	18 Gy (6 Gy/fx)	26 Gy (6.5 Gy/fx)	30 Gy (6 Gy/fx)
Esophagus	15.4 Gy	27 Gy (9 Gy/fx)	30 Gy (7.5 Gy/fx)	105% of PTV Prescription^
Brachial plexus	17.5 Gy	24 Gy (8 Gy/fx)	27.2 Gy (6.8 Gy/fx)	32 Gy (6.4 Gy/fx)
Heart / pericardium	22 Gy	30 Gy (10 Gy/fx)	34 Gy (8.5 Gy/fx)	105% of PTV prescription^
Great vessels	37 Gy	NS	49 Gy (12.25 Gy/fx)	105% of PTV prescription^
Trachea & proximal bronchi	20.2 Gy	30 Gy (10 Gy/fx)	34.8 Gy (8.7 Gy/fx)	105% of PTV prescription^
Rib	30 Gy	30 Gy (10 Gy/fx)	40 Gy (10 Gy/fx)	NS
Skin	26 Gy	24 Gy	36 Gy	32 Gy

註：實際情況需與醫師討論(SDM)

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		(8 Gy/fx)	(9 Gy/fx)	(6.4 Gy/fx)
Stomach	12.4 Gy	NS	27.2 Gy (6.8 Gy/fx)	NS

Maximum Dose Constraints for SABR

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Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

Commonly Used Doses for Conventionally Fractionated and Palliative RT

Treatment Type	Total Dose	Fraction Size	Treatment Duration
Definitive RT with or without chemotherapy	60–70 Gy	2 Gy	6–7 weeks
Preoperative RT	45–54 Gy	1.8–2 Gy	5 weeks
Postoperative RT			
▸ Negative margins	50–54 Gy	1.8–2 Gy	5–6 weeks
▸ Extracapsular nodal extension or microscopic positive margins	54–60 Gy	1.8–2 Gy	6 weeks
▸ Gross residual tumor	60–70 Gy	2 Gy	6–7 weeks
Palliative RT			
▸ Obstructive disease (SVC syndrome or obstructive pneumonia)	30–45 Gy	3 Gy	2–3 weeks
▸ Bone metastases with soft tissue mass	20–30 Gy	4–3 Gy	1–2 weeks
▸ Bone metastases without soft tissue mass	8–30 Gy	8–3 Gy	1 day–2 weeks
▸ Brain metastases	CNS GLs*	CNS GLs*	CNS GLs*
▸ Symptomatic chest disease in patients with poor PS	17 Gy	8.5 Gy	1–2 weeks
▸ Any metastasis in patients with poor PS	8–20 Gy	8–4 Gy	1 day–1 week

Normal Tissue Dose-Volume Constraints for Conventionally Fractionated RT with Concurrent Chemotherapy

OAR	Constraints in 30–35 fractions
Spinal cord	Max ≤50 Gy
Lung	V20 ≤35%–40% ; MLD ≤20 Gy
Heart	V50 ≤25%; Mean ≤20 Gy
Esophagus	Mean ≤34 Gy; Max ≤105% of prescription dose; V60 ≤17%; contralateral sparing is desirable
Brachial plexus	Median dose ≤69 Gy

註：實際情況需與醫師討論(SDM)

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六、溫度燒融治療的原則 Thermo-Ablation Therapy (TAT)

包括： 射頻消融治療 Radiofrequency Ablation(RFA)、微波消融治療 Microwave Ablation(MWA)、低溫消融治療 Cryoablation (CA)

1.溫度消融治療(TAT)是局部治療的一種選擇；它可提供原發或轉移性肺部腫瘤的局部消融控制，其治療的併發症與副作用小，費用相對經濟，可適用於心肺功能不良及老年等不宜手術切除之局部控制治療。
2.溫度消融治療(TAT)中 RFA 的有效消融病灶大小為 2 公分以下；腫瘤大小 2-5 公分則以 MWA 或 CA 為宜。
3.對於早期(Stage 1-2) NSCLC 不適合開刀或是拒絕開刀的，TAT 可作為治療的選項（若適合開刀，仍以開刀作為第一治療選項）。
4.對於晚期(Stage 3-4) NSCLC，TAT 可作為局部控制的一個手段，若病情需要，可合併藥物及電療。
5.對於局部控制，TAT 可合併放射治療或免疫治療，可以有加成療效。
6.對於 NSCLC 復發的病人， TAT 可作為局部控制的一個手段，對於小於 5 個的多發性肺部轉移腫瘤，可以重複多次 TAT 治療。
7.若預期的效果不好（如肋膜積水、縱膈腔腫瘤）則不建議使用 TAT 治療。

七、安寧緩和照護原則

1.預期存活率小於六個月
2.所有第四期病患皆需早期會診安寧緩和醫療照護。

八、肺癌完治率定義

癌別	期別		完治定義
肺癌	治療期	0 期 1 期	1. 接受根治性手術為完治日 2. 接受 RFA 或 MWA 為完治日
		2 期	1. 接受根治性手術為完治日
		3A 期	1. C/T → OP 為完治日 2. OP → C/T 4 cycle 為完治日 3. OP → CCRT 為完治日
		3B、3C 期	1. CCRT 為完治日 2.標靶藥物持續 3 個月為完治日 3. C/T 4-6 cycle 為完治日
		4 期	1. Palliative 口服或標靶藥物持續 3 個月為完治日 2. Palliative C/T 4 cycle 為完治日 3. 接受 RFA 或 MWA 為完治日 4. 若療程改變，換藥物治療時為完治日 5. 治療中轉安寧算完治日

註：實際情況需與醫師討論(SDM)

Note: All recommendations are category 2A unless otherwise indicated.
Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

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