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2017/12/14 Version 12.0
2016/12/15 Version 11.0
2015/11/24 Version 10.0
2014/12/09 Version 9.0
2013/12/24 Version 8.0
2012/12/11 Version 7.0
2011/12/06 Version 6.0
2010/12/05 Version 5.0
2009/12/15 Version 4.0
2008/11/04 Version 3.0
2008/02/05 Version 2.0
2007/11/13 Version 1.0

肺 癌 診 療 指 引

本臨床指引參考國家衛生研究院及美國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	抗癌藥物醫師	團隊負責人

修訂內容

頁數	第 20 版	第 20.1 版
Page 10 to Page 25	PRETREATMENT EVALUATION Mediastinal lymph node evaluation(optional) Bullet 5 Brain MRI with contrast	PRETREATMENT EVALUATION Mediastinal removed from lymph node evaluation Bullet modified **Brain MRI with and without contrast**
Page 10、11、17	INITIAL TREATMENT Surgical exploration and resection + mediastinal lymph node dissection or systematic lymph node	INITIAL TREATMENT Surgical exploration and resection changed to **Surgical resection**
Page 12	Finding at Surgery ➢ Stage IB(T2a,N0);Stage IIA(T2b,N0) ➢ Stage IIIA; Stage IIIB Margin negative(R0) pathway adjuvant systemic therapy or Sequential chemotherapy ± RT (N2 only)	Finding at Surgery Stage IIA(T2b,N0) added T1N1 Stage IIIA; Stage IIIB Margin negative(R0) pathway adjuvant systemic therapy or Sequential chemotherapy **revised to and consider RT**
Page 13	Stage IIB(T3 invasion, N0); Stage IIIA(T3 invasion, N1;T4, invasion, N0-1;) PRETREATMENT EVALUATION • PFTs (if not previously done) • Bronchoscopy • Pathologic mediastinal lymph node evaluation(optional) • Brain MRI with contrast • MRI with contrast of spine + thoracic inlet for superior sulcus lesions abutting the spine or subclavian vessels • FDG PET/CT scan(if not previously done)	Stage IIB(T3 invasion, N0); Stage IIIA(T3 invasion, N1;T4, invasion, N0-1;) PRETREATMENT EVALUATION Revised bullet 5 added or brachial plexus • MRI with contrast of spine + thoracic inlet for superior sulcus lesions abutting the spine or subclavian vessels **added or brachial plexus**

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修訂內容

頁數	第 20 版	第 20.1 版
Page 15 to Page 25	Treatment of Chemotherapy	Revised to **Systemic therapy**
Page 17	See Adjuvant treatment	Revised to **Finding at Surgery**
Page 18	T1-T3 N2 nodes Postive, M0 Induction Chemotherapy ± RT No apparent progression Surgery ± RT (if not given)	T1-T3 N2 nodes Postive, M0 Induction Chemotherapy ± RT No apparent progression revised to **Surgery followed by Finding at Surgery or Consider RT**
Page 28	Advanced or metastatic Disease • Establish histologic subtype with adequate tissue for molecular testing-NGS test、IHC test、FISH test、Tumor marker、HBV/HCV titer or plasma testing if appropriate) • Smoking cessation counseling • Integrate palliative care	Advanced or metastatic Disease revised bullet 1 and testing subtype Deleted NGS test、IHC test、FISH test、Tumor marker、HBV/HCV titer **then added consider re-biopsy** • Smoking cessation counseling • Integrate palliative care
Page 28	Biomarker Testing subtype Molecular testing, ex: *EGFR mutation, ALK,ROS1 *BRAF, METex14 * RET, KRAS, NTRK1/2/3, c-Met/MET *ERBB2(HER2) • PD-L1 testing	Biomarker Testing subtype HGFR(MET) replaced with **HGF receptor (c-Met)** and revised METex14 **skipping and added NRG1, HER2(IHC)**

修訂內容

頁數	第 20 版	第 20.1 版
Page 45	ERBB2(HER2) Mutation First line Pathway Systemic therapy	ERBB2(HER2) Mutation **Zongertinib** added as a first-line therapy option for patients with advanced or metastatic NSCLC with ERBB2 (HER2) mutations.
Page 95	nil	Updated reference 1 NCCN Guideline Version 5.2026 (Non-small cell lung cancer) and Ref.103 added *Popat S, et al. Zongertinib as first-line treatment in patients with advanced HER2-mutant NSCLC. Ann Oncol 2025;36:S1616.*
Page 95	nil	Updated reference 104、105 added *Sezer A, et al. Cemiplimab monotherapy for first-line treatment of advanced non-small-cell lung cancer with PD-L1 of at least 50%: a multicentre, open-label, global, phase 3, randomised, controlled trial. Lancet 2021;397:592-604.* *Gogishvili M, et al. Cemiplimab plus chemotherapy versus chemotherapy alone in non-small cell lung cancer: a randomized, controlled, double-blind phase 3 trial. Nat Med 2022;28:2374-2380.*

目錄

一、TNM 分期

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	Tumor ≤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

AJCC 第九版 TNM stage

T Category	T Criteria
TX	Primary tumor cannot be assessed
	Includes tumors 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	Tumor ≤ 3 cm in greatest dimension surrounded by lung or visceral pleura, or in a lobar or more peripheral 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 OR
	Tumor of any size whose invasive component is limited to the bronchial wall and may extend proximal to the main bronchus, this is an uncommon superficial,spreading tumor
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 in greatest dimension OR
	Tumor ≤ 4 cm with one or more of the following features:
	Ÿ Invades visceral pleura
	Ÿ Invades an adjacent lobe
	Ÿ Involves main bronchus (up to but not including the carina) or associated with atelectasis or obstructive pneumonitis, extending to the hilar regions, involving either part of or the entire lung
T2a	Tumor > 3 cm but ≤ 4 cm in greatest dimension OR
	Tumor ≤ 4 cm in greatest dimension with one or more of the following features:
	• Invades visceral pleura
	• Invades an adjacent lobe
	• Involves main bronchus (up to but not including the carina) or associated with atelectasis or obstructive pneumonitis, extending to the hilar regions, involving either part of or the entire lung
T2b	Tumor > 4 cm but ≤ 5 cm in greatest dimension with or without any of the following features:
	• Invades visceral pleura
	• Invades an adjacent lobe
	• Involves main bronchus (up to but not including the carina) or associated with atelectasis or obstructive pneumonitis, extending to the hilar regions, involving either part of or the entire lung
T3	Tumor > 5 cm but ≤ 7 cm in greatest dimension OR
	Tumor ≤ 7 cm with one or more of the following features:
	• Invades parietal pleura or chest wall
	• Invades pericardium, phrenic nerve or azygos vein
	Although these structures lie within the mediastinum, the degree of mediastinal penetration by the tumor needed to invade these structures is not counted as T4
	• Invades thoracic nerve roots (i.e., T1, T2) or stellate ganglion
	• Separate tumor nodule(s) in the same lobe as the primary
T4	Tumor > 7 cm in greatest dimension OR
	Tumor of any size with one or more of the following features:
	• Invades mediastinum (except structures listed in T3), thymus, trachea, carina, recurrent laryngeal nerve, vagus nerve, esophagus or diaphragm
	• Invades heart, great vessels (aorta, superior/inferior vena cava, intrapericardial pulmonary arteries/veins), supra-aortic arteries or brachiocephalic veins
	• Invades subclavian vessels, vertebral body, lamina, spinal canal, cervical nerve roots or brachial plexus (i.e., trunks, divisions, cords or terminal nerves)
	• Separate tumor nodule(s) in a different ipsilateral lobe than that of the primary

Definition of Regional Lymph Node (N)

N Category	N Criteria
NX	Regional lymph nodes cannot be assessed
N0	No tumor involvement of regional lymph node(s)
N1	Tumor involvement of ipsilateral peribronchial and/or ipsilateral hilar and/or ipsilateral intrapulmonary lymph node station(s), including involvement by direct extension
N2	Tumor involvement of ipsilateral mediastinal nodal station(s) and/or subcarinal lymph node station
N2a	Tumor involvement of a single ipsilateral mediastinal nodal station or of the subcarinal nodal station
N2b	Tumor involvement of multiple ipsilateral mediastinal nodal stations with or without involvement of the subcarinal nodal station
N3	Tumor involvement of contralateral mediastinal, contralateral hilar, ipsilateral/ contralateral scalene, or ipsilateral/contralateral supraclavicular lymph node station(s)

Definition of Distant Metastasis (M)

M Category	M Criteria
cM0	No distant metastasis
cM1	Distant metastasis
cM1a	Metastasis in pleural or pericardial nodules, and/or malignant pleural or pericardial effusions, and/or separate tumor nodule(s) in a contralateral lobe Note: Most pleural (pericardial) effusions with lung cancer are a result of the tumor. In a few patients, however, multiple microscopic examinations of pleural (pericardial) fluid are negative for tumor, and the fluid is non-bloody and not an exudate. If these elements and clinical judgment dictate that the effusion is not related to the tumor, the effusion should be excluded as a staging descriptor
cM1b	Single extrathoracic metastasis in a single organ system (including involvement of a single non-regional node)
cM1c	Multiple extrathoracic metastases in a single or multiple organ system(s)
cM1c1	Multiple extrathoracic metastases in a single organ system For example, the skeleton is considered one organ. Several metastases in a single bone or several metastases in several bones are classified as M1c1
cM1c2	Multiple extrathoracic metastases in multiple organ systems
pM1	Microscopic confirmation of distant metastasis
pM1a	Microscopic confirmation of metastasis in pleural or pericardial nodules, and/or malignant pleural or pericardial effusions, and/or separate tumor nodule(s) in a contralateral lobe Note: Most pleural (pericardial) effusions with lung cancer are a result of the tumor. In a few patients, however, multiple microscopic examinations of pleural (pericardial) fluid are negative for tumor, and the fluid is non-bloody and not an exudate. If these elements and clinical judgment dictate that the effusion is not related to the tumor, the effusion should be excluded as a staging descriptor
pM1b	Microscopic confirmation of single extrathoracic metastasis in a single organ system (including involvement of a single non-regional node)
pM1c	Microscopic confirmation of multiple extrathoracic metastases in a single or multiple organ system(s)
pM1c1	Microscopic confirmation of multiple extrathoracic metastases in a single organ system For example, the skeleton is considered one organ. Several metastases in a single bone or several metastases in several bones are classified as M1c1
pM1c2	Microscopic confirmation of multiple extrathoracic metastases in multiple organ systems

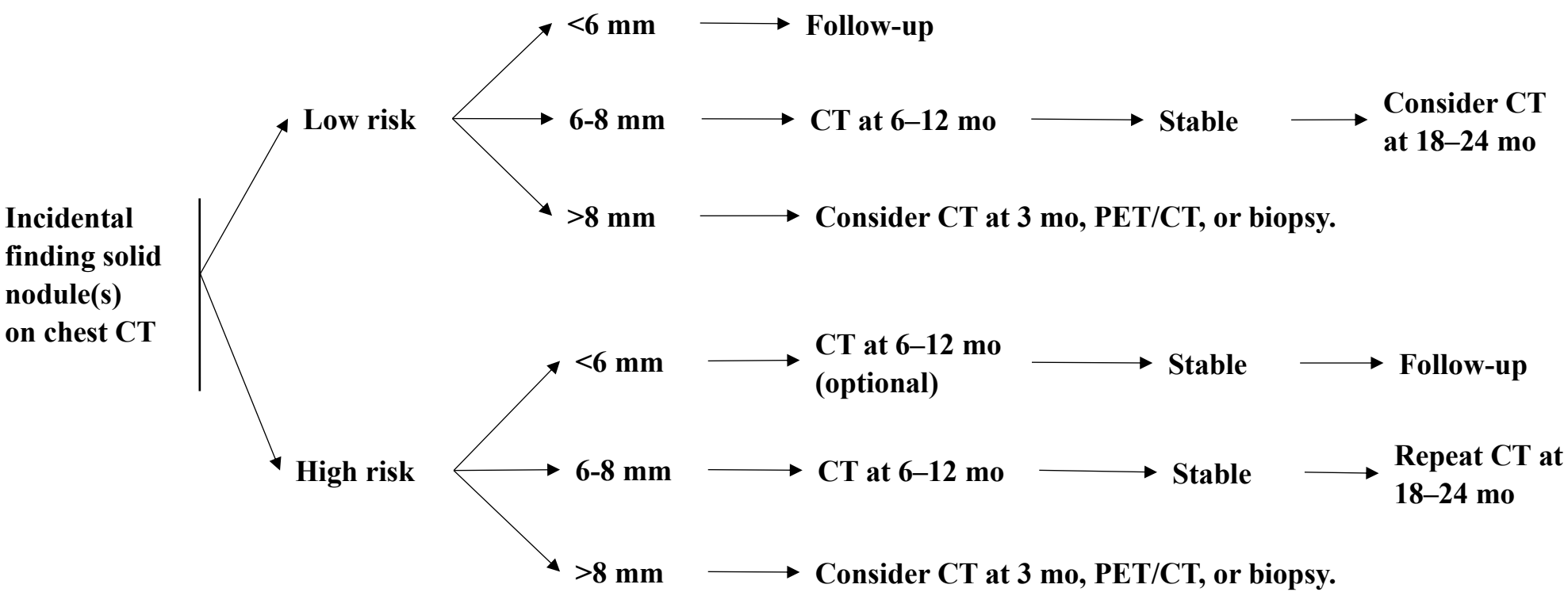
AJCC Prognostic Stage Groups

T	N	M	The stage group
TX	N0	M0	Occult carcinoma
Tis	N0	M0	0
T1mi-T1a	N0	M0	IA1
T1b	N0	M0	IA2
T1c	N0	M0	IA3
T2a	N0	M0	IB
T2b	N0	M0	IIA
T1	N1	M0	IIA
T1	N2a	M0	IIB
T2a-T2b	N1	M0	IIB
T3	N0	M0	IIB
T4	N0	M0	IIIA
T3-T4	N1	M0	IIIA
T1	N2b	M0	IIIA
T2-T3	N2a	M0	IIIA
T2-T3	N2b	M0	IIIB
T4	N2a-N2b	M0	IIIB
T1-T2	N3	M0	IIIB
T3-T4	N3	M0	IIIC
Any T	Any N	M1a-M1b	IVA
Any T	Any N	M1c1-M1c2	IVB

T/M	Description	N0	N1	N2		N3
				N2a	N2b	
T1	T1a ≦ 1cm	IA1	IIA	IIB	IIIA	IIIB
	T1b > 1 to ≦ 2 cm	IA2	IIA	IIB	IIIA	IIIB
	T1c > 2 to ≦ 3 cm	IA3	IIA	IIB	IIIA	IIIB
T2	T2a Visceral pleura / central invasion	IB	IIB	IIIA	IIIB	IIIB
	T2a > 3 to ≦ 4 cm	IB	IIB	IIIA	IIIB	IIIB
	T2b > 4 to ≦ 5 cm	IIA	IIB	IIIA	IIIB	IIIB
T3	T3 > 5 to ≦ 7 cm	IIB	IIIA	IIIA	IIIB	IIIC
	T3 invasion	IIB	IIIA	IIIA	IIIB	IIIC
	T3 Same lobe tumor nodule	IIB	IIIA	IIIA	IIIB	IIIC
T4	T4 > 7 cm	IIIA	IIIA	IIIB	IIIB	IIIC
	T4 invasion	IIIA	IIIA	IIIB	IIIB	IIIC
	T4 Ipsilateral tumor nodule	IIIA	IIIA	IIIB	IIIB	IIIC
M1	M1a Pleural / Pericardial dissemination	IVA	IVA	IVA	IVA	IVA
	M1a Contralateral tumor nodule	IVA	IVA	IVA	IVA	IVA
	M1b Single extrathoracic lesion	IVA	IVA	IVA	IVA	IVA
	M1c1 Multiple lesions, 1 organ system	IVB	IVB	IVB	IVB	IVB
	M1c2 Multiple lesions, >1 organ system	IVB	IVB	IVB	IVB	IVB

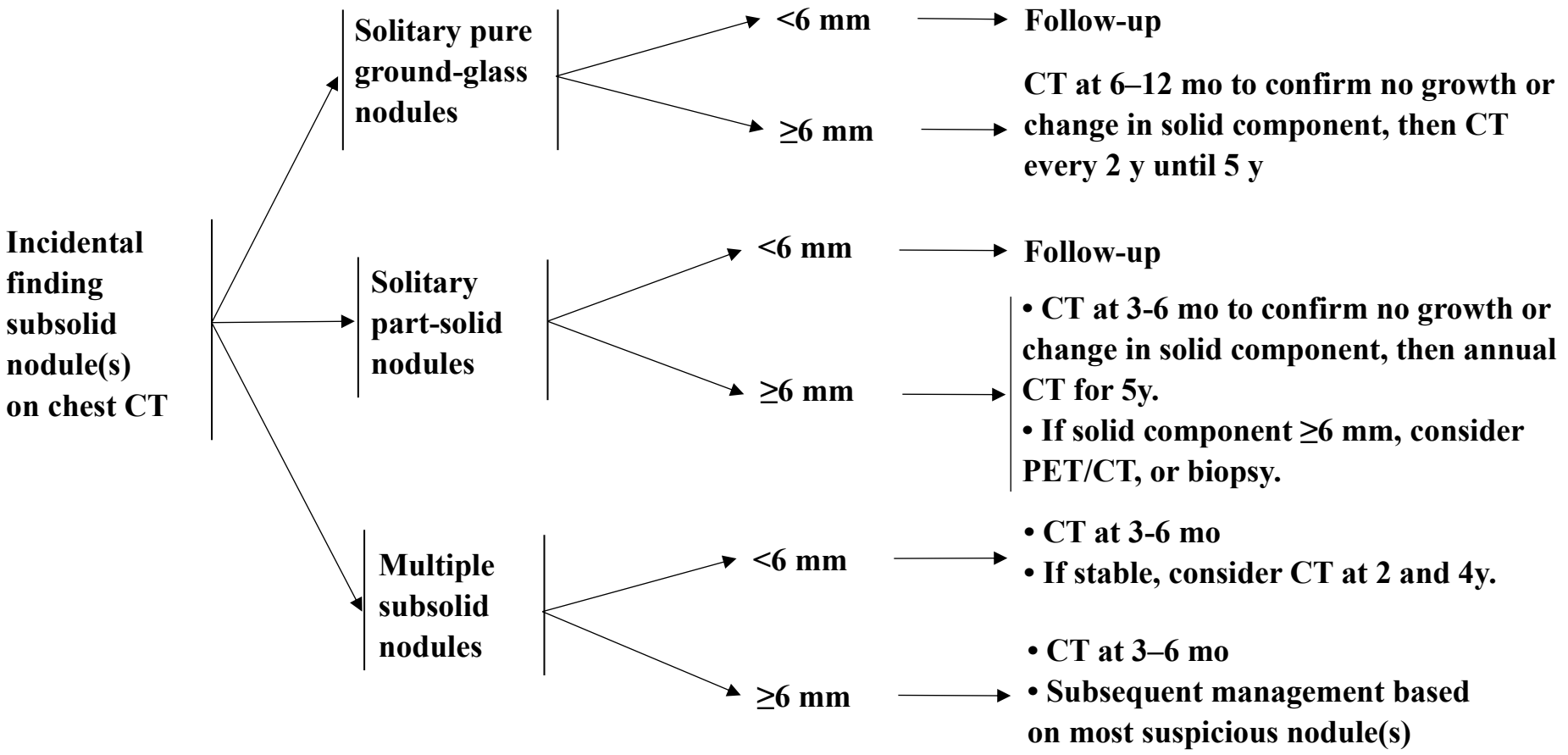
二、檢查

FINDINGS	FOLLOW-UP



註:
Low risk = minimal or absent history of smoking or other known risk factors.
High risk = history of smoking or other known risk factors. Known risk factors include history of lung cancer in a first-degree relative or exposure to asbestos, radon, or uranium.

FINDINGS	FOLLOW-UP



三、非小細胞肺癌治療指引

WORK-UP	CLINICAL STAGE

主要檢查(Major Examination)
- ✓ Pathology review
- ✓ H＆P (include performance status + weight loss)
- ✓ CT chest and upper abdomen with contrast, including adrenals
- ✓ Brain MRI
- ✓ FDG-PET/CT scan or Bone scan

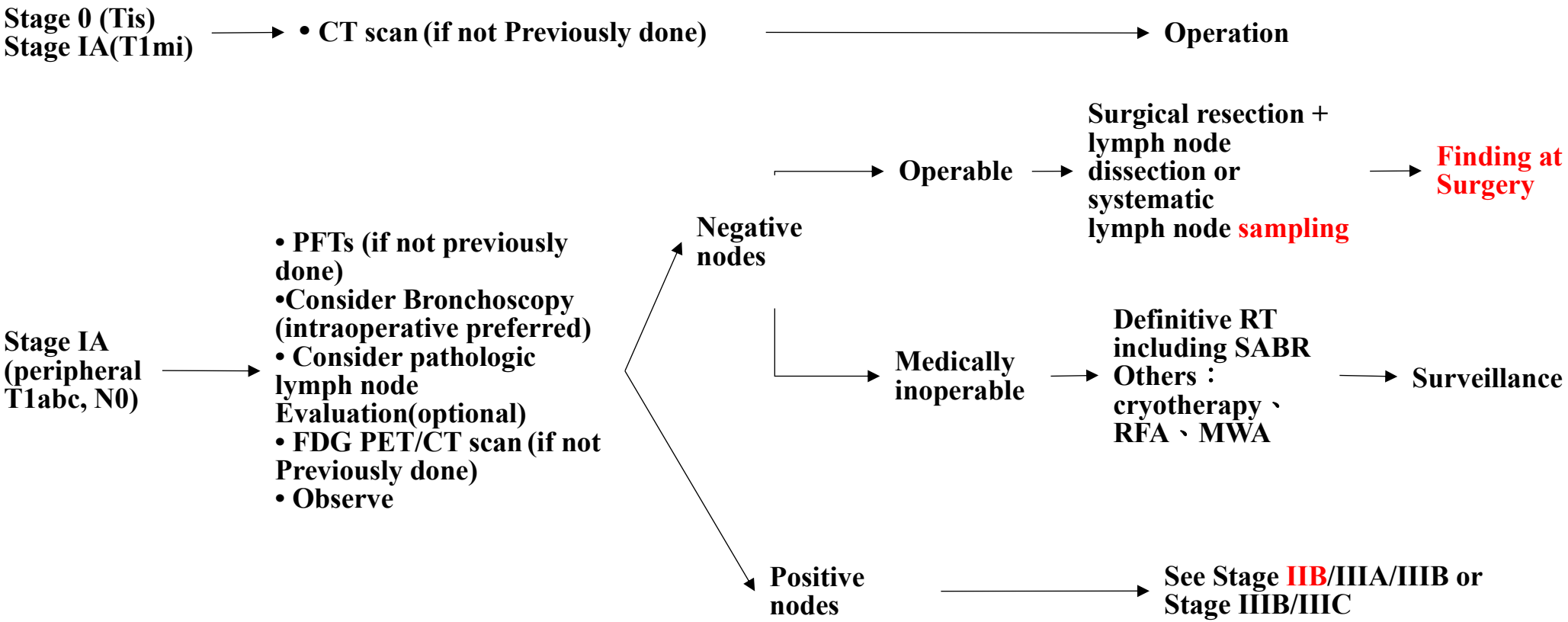
其他(Others)
- CBC, platelets
- Chemistry profile
- For stage IB-IIIA
  1) PDL-1 testing
  2) Molecular testing for EGFR, ALK(especially adenocarcinoma prefer);
  3) Evaluate for perioperative therapy

• Smoking cessation advice, counseling, and pharmacotherapy
• Integrate palliative care
• For tools to aid in the optimal assessment and management of older adults, see the NCCN Guidelines for Older Adult Oncology

Stage 0 (Tis), Stage IA (T1mi) → See Pretreatment Evaluation (Page 10)
Stage IA, peripheral (T1abc,N0) → See Pretreatment Evaluation (Page 10)
Stage IB, peripheral (T2a,N0);
Stage I central (T1-T2a, N0);
Stage II (T1-T2ab, N1;T2b, N0);
Stage IIB (T1,N2a;T3,N0) ; Stage IIIA (T3, N1) → See Pretreatment Evaluation (Page 11)
Stage IIB (T3 invasion, N0) ;
Stage IIIA (T3, N1;T4 invasion, N0-1) → See Pretreatment Evaluation (Page 13)
Stage IIB-IIIA (T1-3, N2ab);Stage IIIB(T2-3, N2b) → See Pretreatment Evaluation (Page 16)
Separate pulmonary nodule(s)(Stage IIB, IIIA, IV)
Stage IIIA(T4,N0-1);Stagge IV(contralateral Lung) → See Pretreatment Evaluation (Page 16)
Multiple Lung Cancers → See Pretreatment Evaluation (Page 19)
Stage IIIB (T1-2, N3) ;Stage IIIC (T3, N3) → See Pretreatment Evaluation (Page 21)
Stage IIIB (T4, N2) ; Stage IIIC (T4, N3) → See Pretreatment Evaluation (Page 22)
Stage IVA (M1a) (pleural or pericardial effusion) → See Pretreatment Evaluation (Page 22)
Stage IVA (M1b) and IVB (M1c) → See Pretreatment Evaluation (Page 23)
Pleural metastases or disseminated metastasis → Advanced/metastatic disease (Page 28)

註 1：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.
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.

CLINICAL ASSESSMENT	PRETREATMENT EVALUATION	INITIAL TREATMENT



註 1：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)
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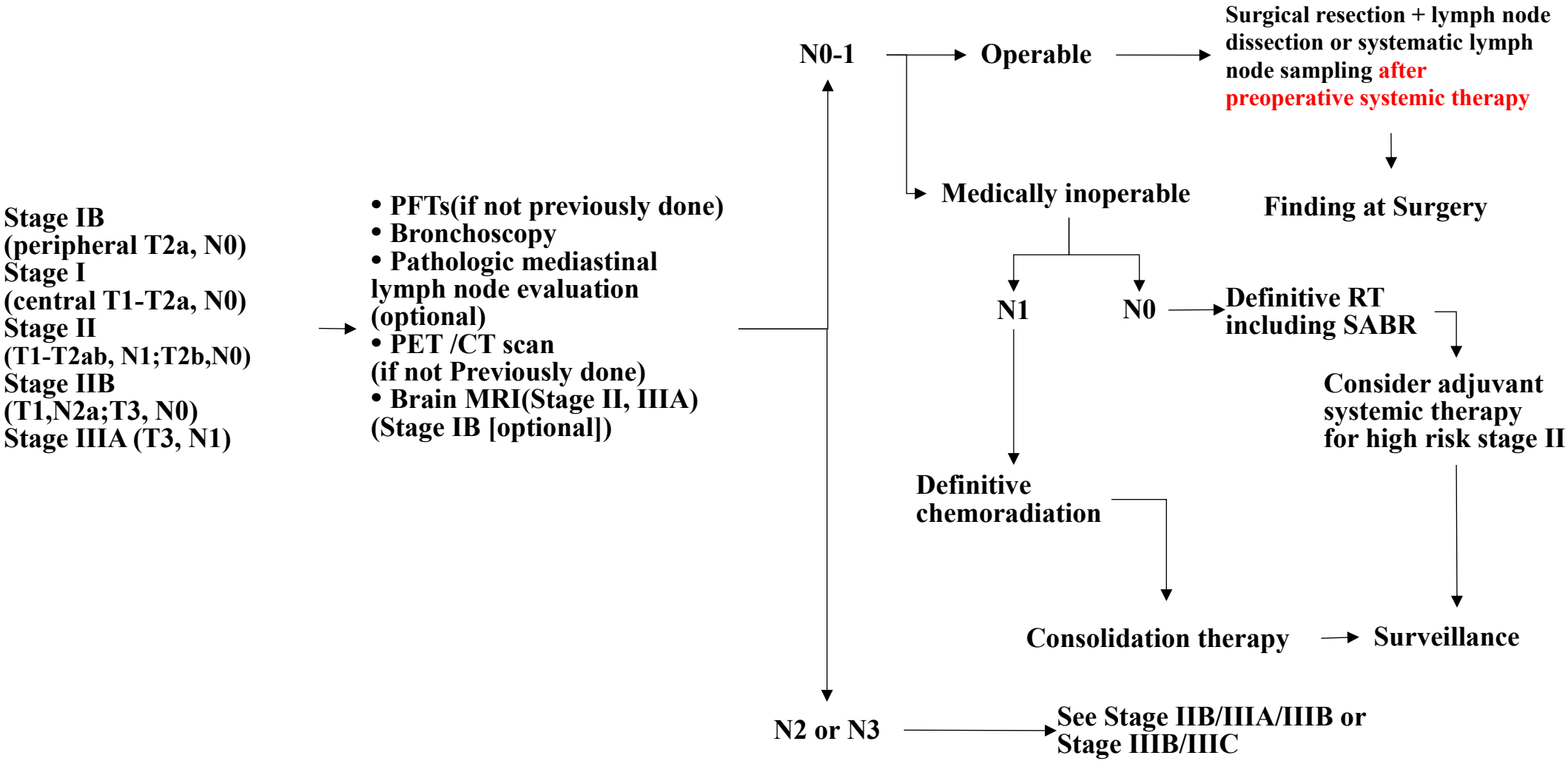
CLINICAL ASSESSMENT	PRETREATMENT EVALUATION	INITIAL TREATMENT



註 1：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)
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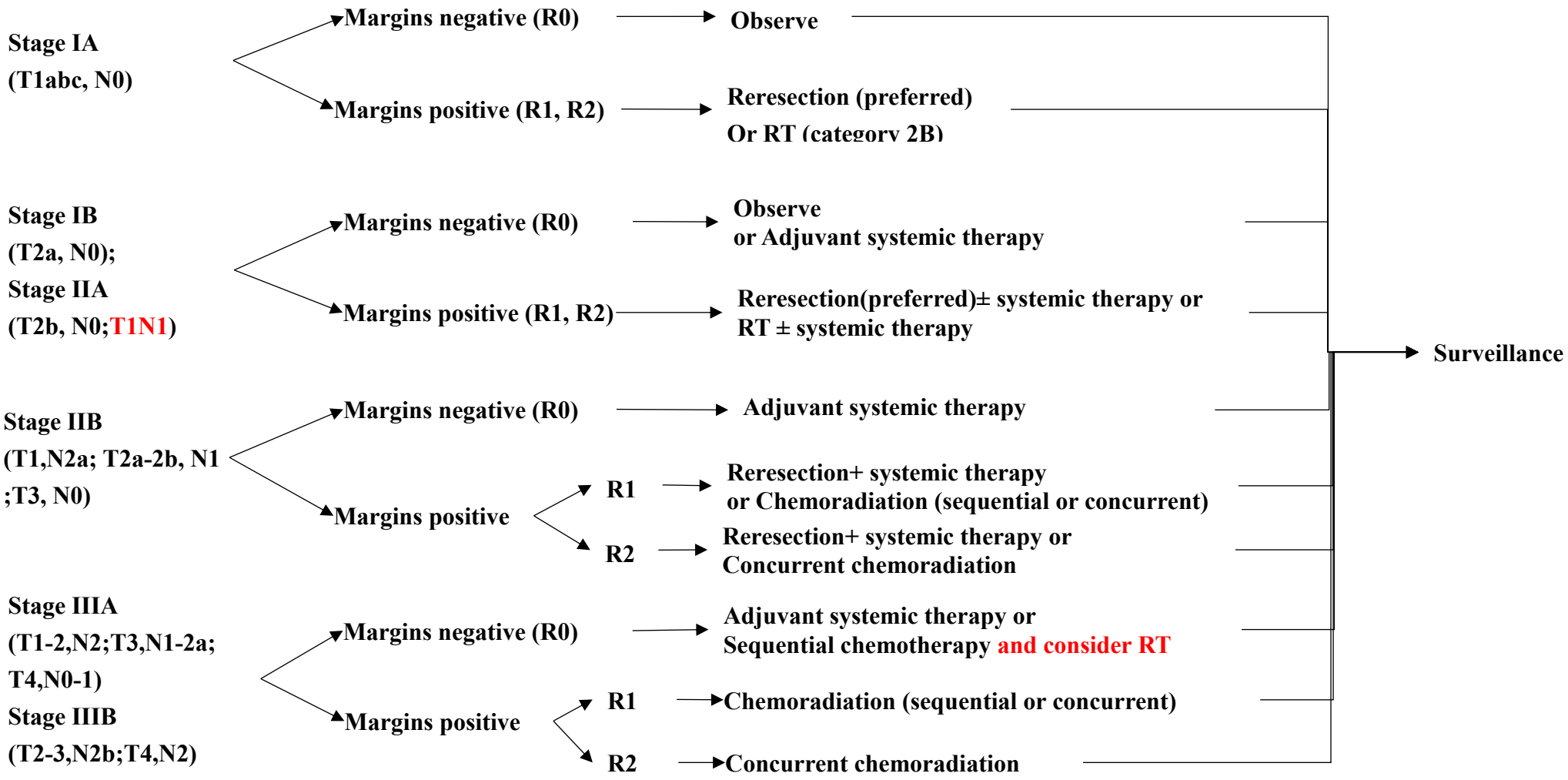
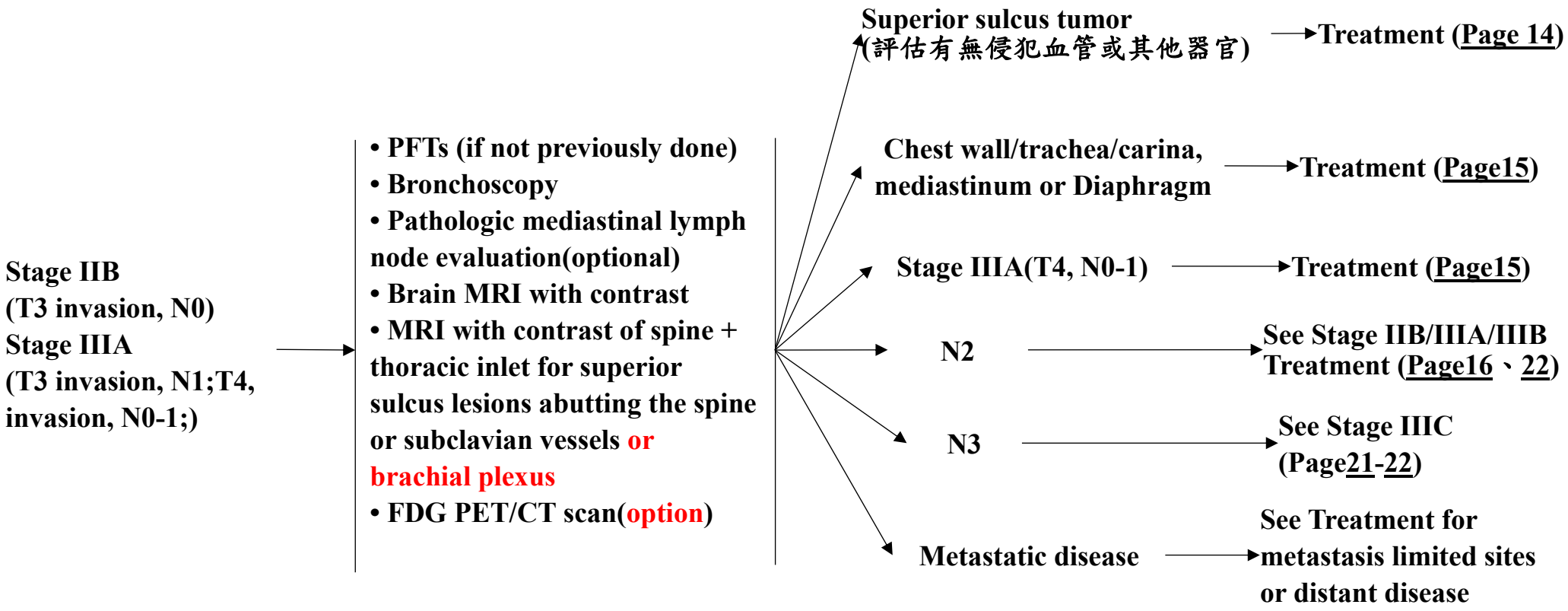
Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

FIDINGS AT SURGERY	ADJUVANT TREATMENT



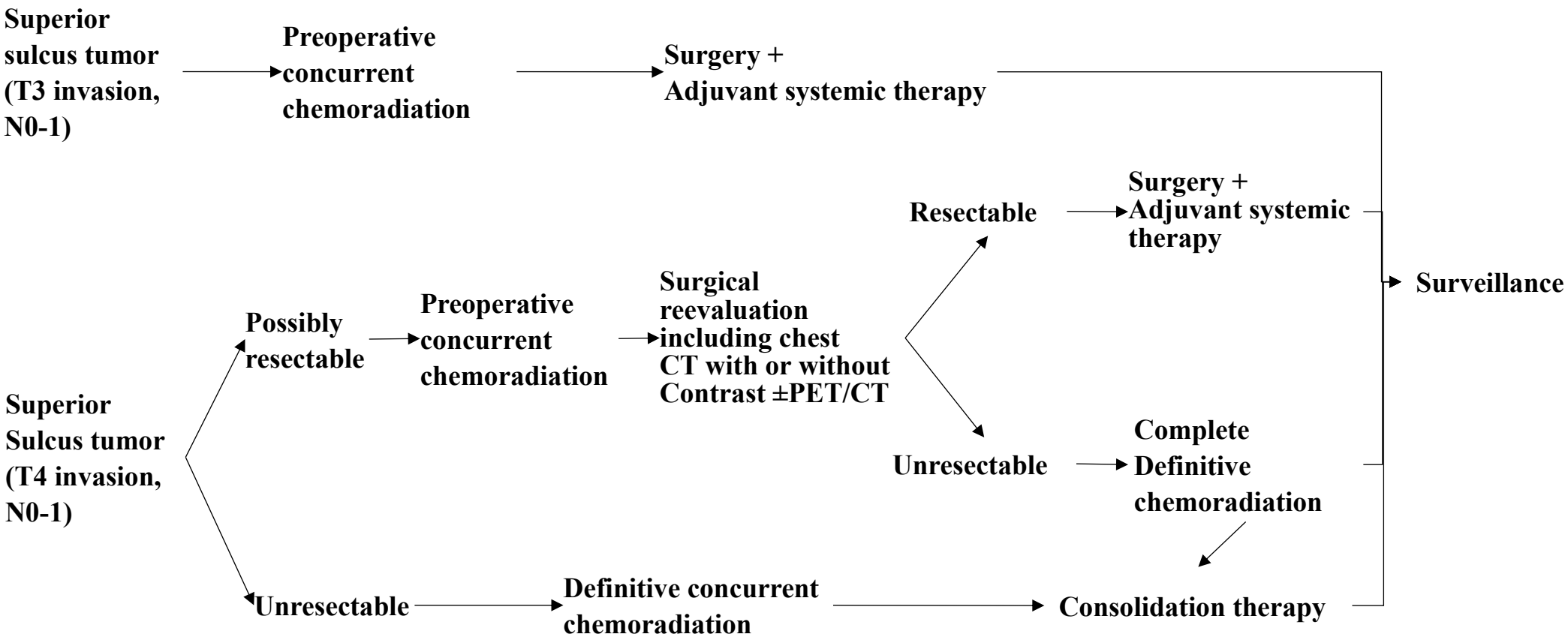
註 1：實際情況及手術與否需與胸腔內科/外科及放射腫瘤科等多專科團隊討論(SDM)
Note: All recommendations are category 2A unless otherwise indicated.
Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

LINICAL ASSESSMENT	PRETREATMENT EVALUATION	CLINICAL EVALUATION



註 1：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.
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.

CLINICAL PRESENTATION	INITIAL TREATMENT	ADJUVANT TREATMENT



#: osimertinib :建議治療 3 年以上

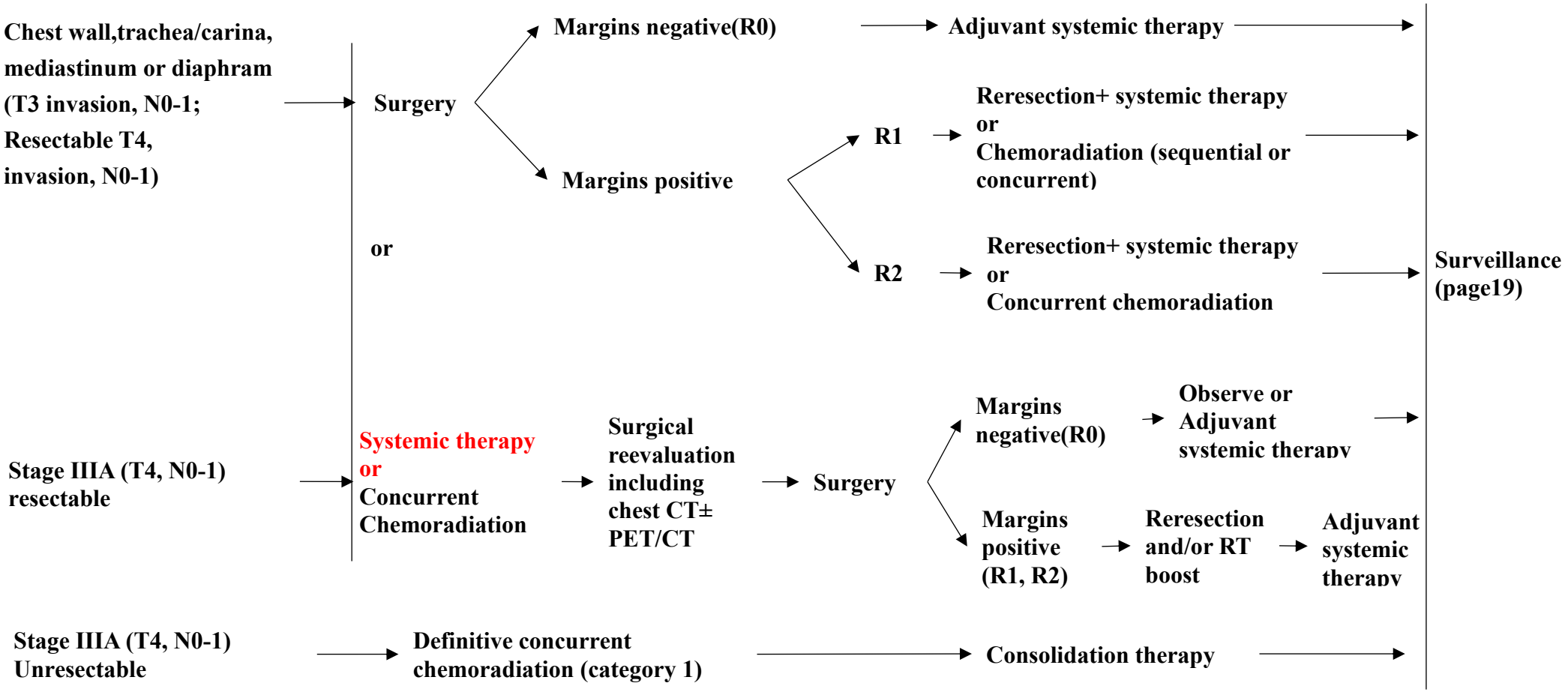
註: pembrolizumab (keytruda)適合 II-IIIB(ACJJ8th)或 IB 且 Tumor>4cm,PDL1>1%,可考慮自費使用 from the phase 3 KEYNOTE-091 trial。

註 1：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.

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.

CLINICAL PRESENTATION	INITIAL TREATMENT	ADJUVANT TREATMENT



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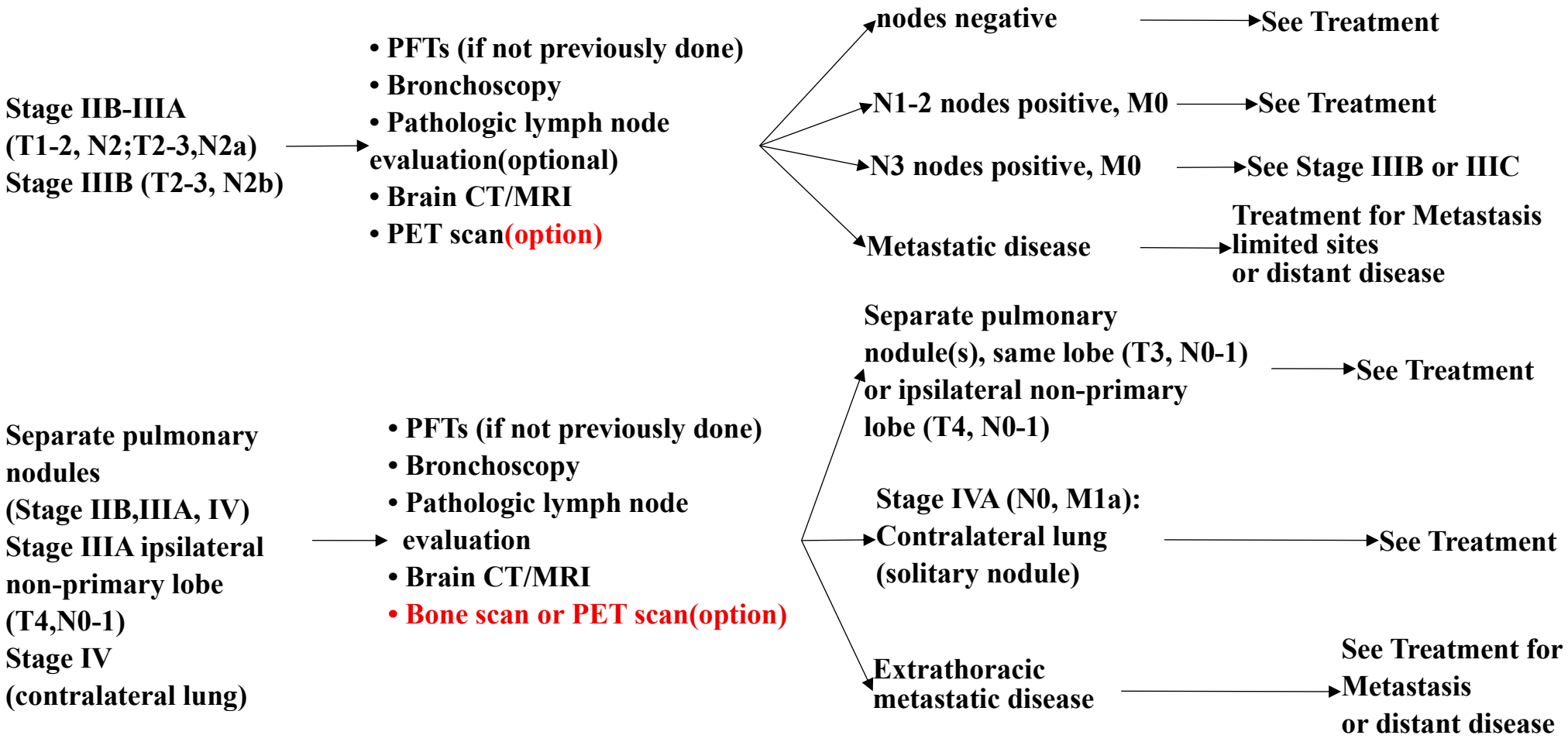
CLINICAL ASSESSMENT	PRETREATMENT EVALUATION	MEDIASTINAL BIOPSY FINDINGS AND RESECTABILITY



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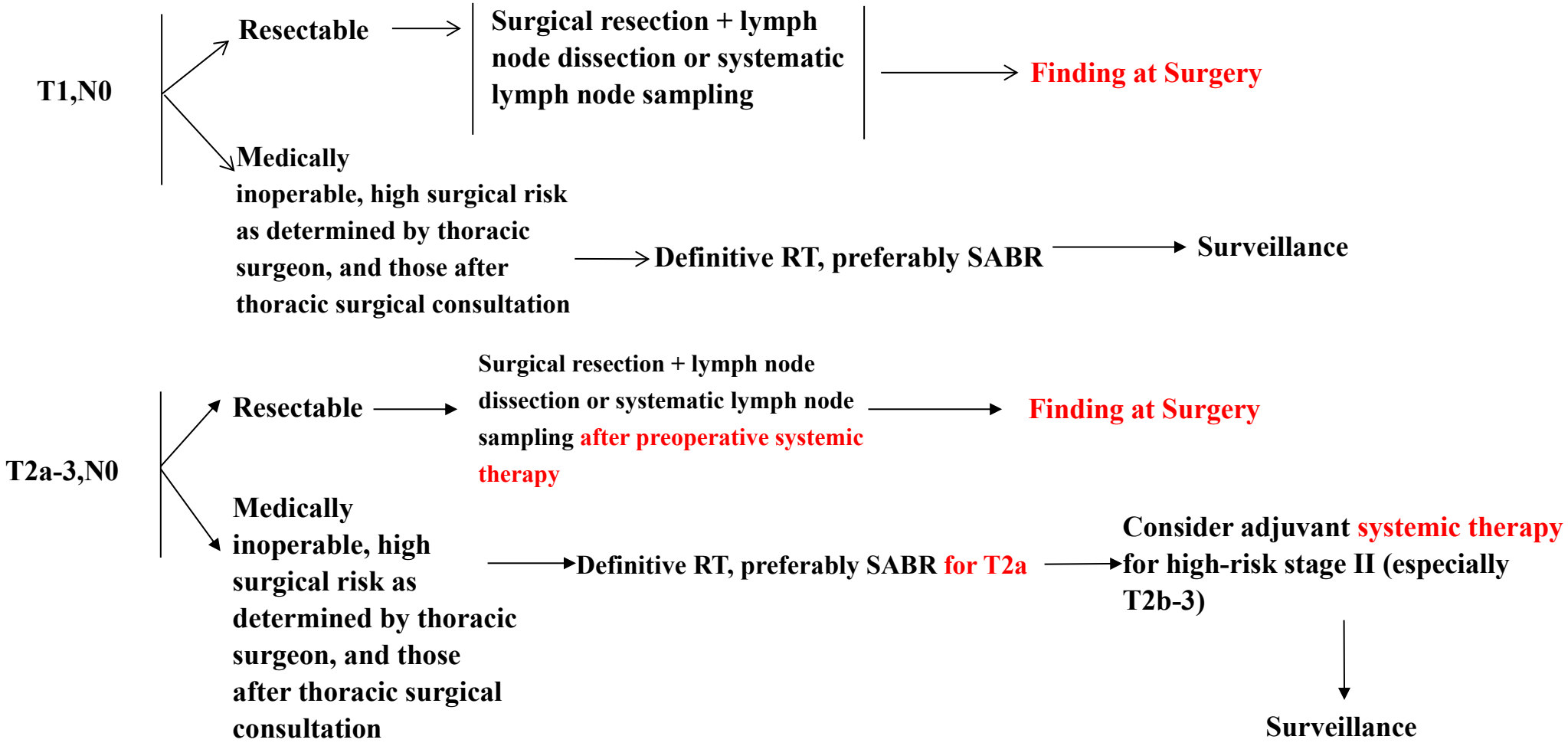
MEDIASTINAL BIOPSY FINDINGS	INITIAL TREATMENT	ADJUVANT TREATMENT



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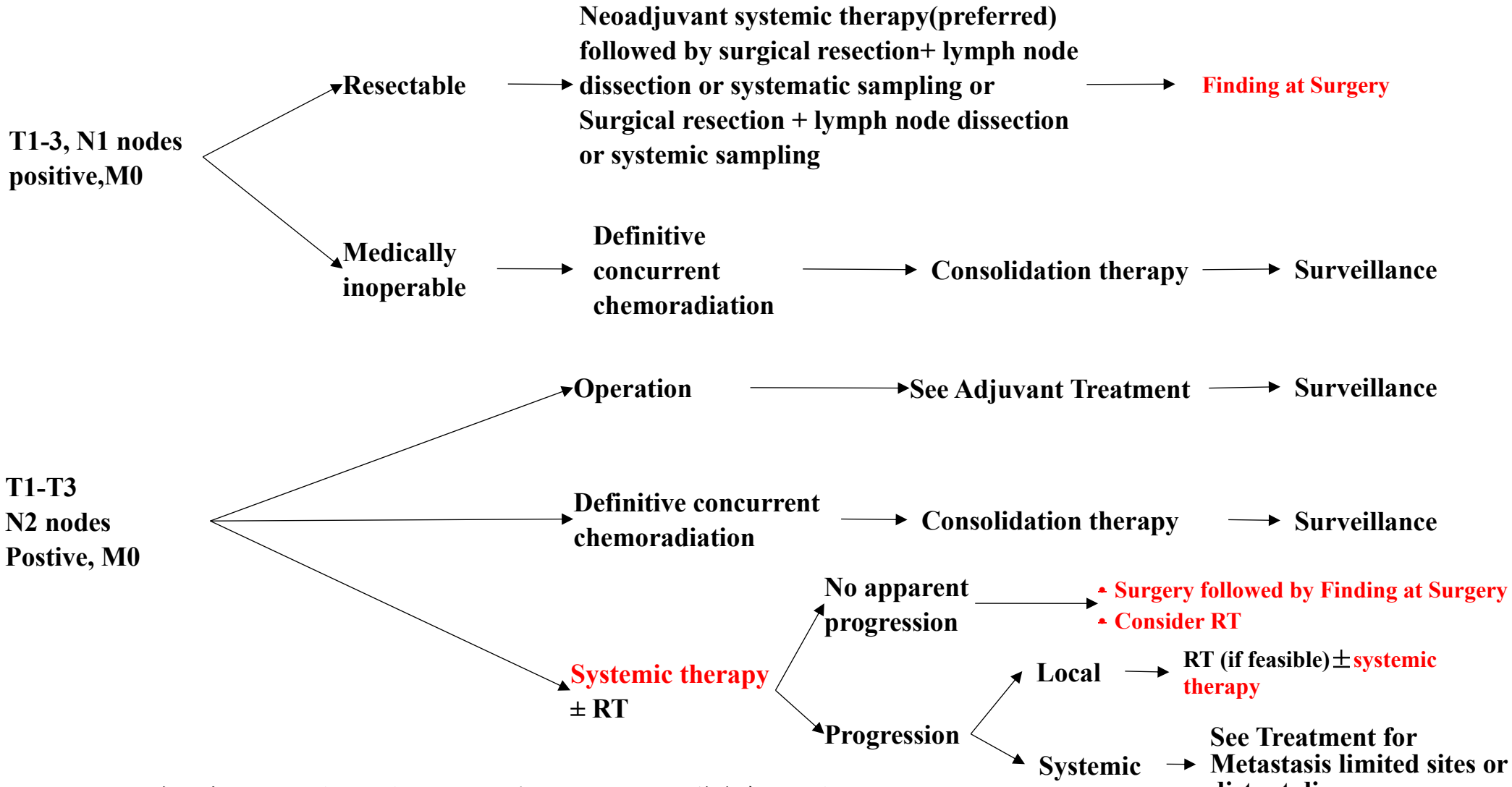

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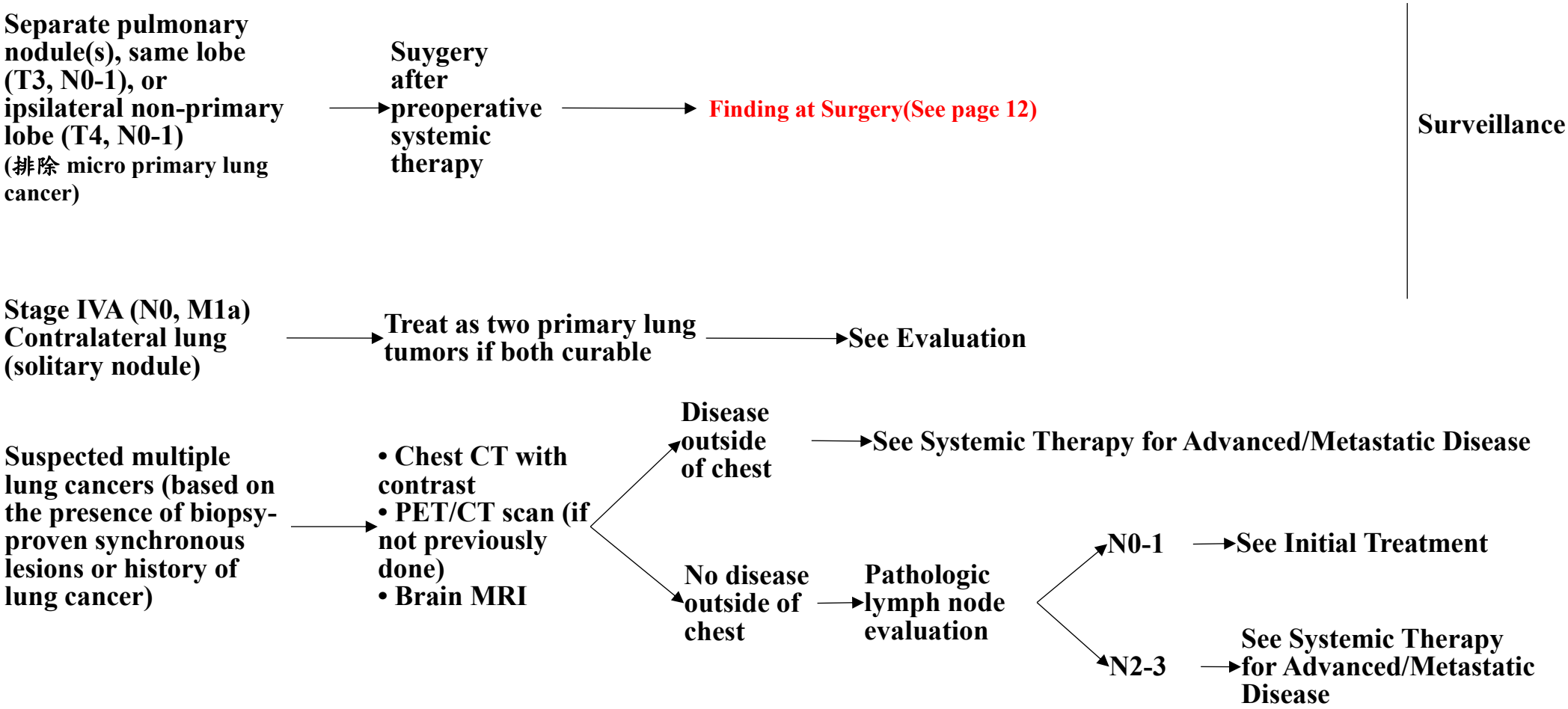
CLINICAL PRESENTATION	ADJUVANT TRETMENT



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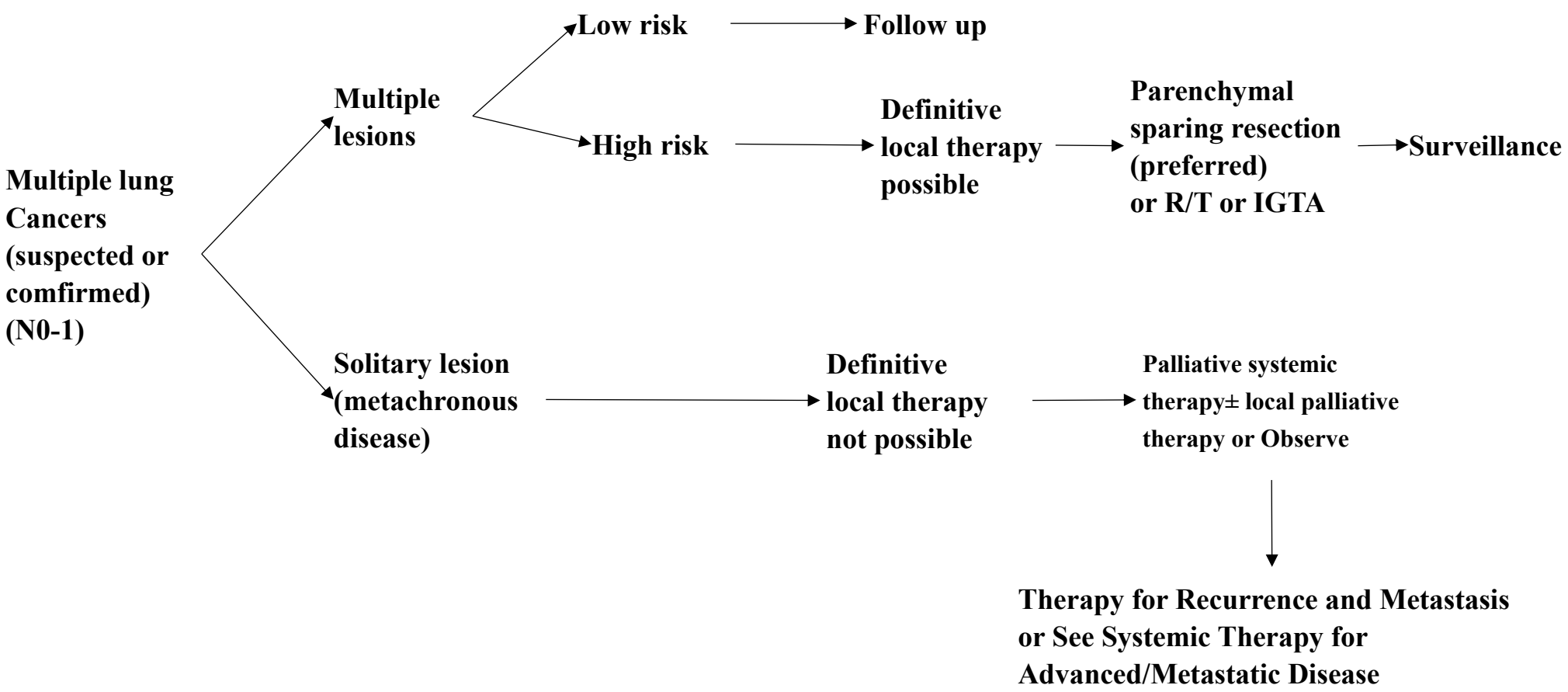

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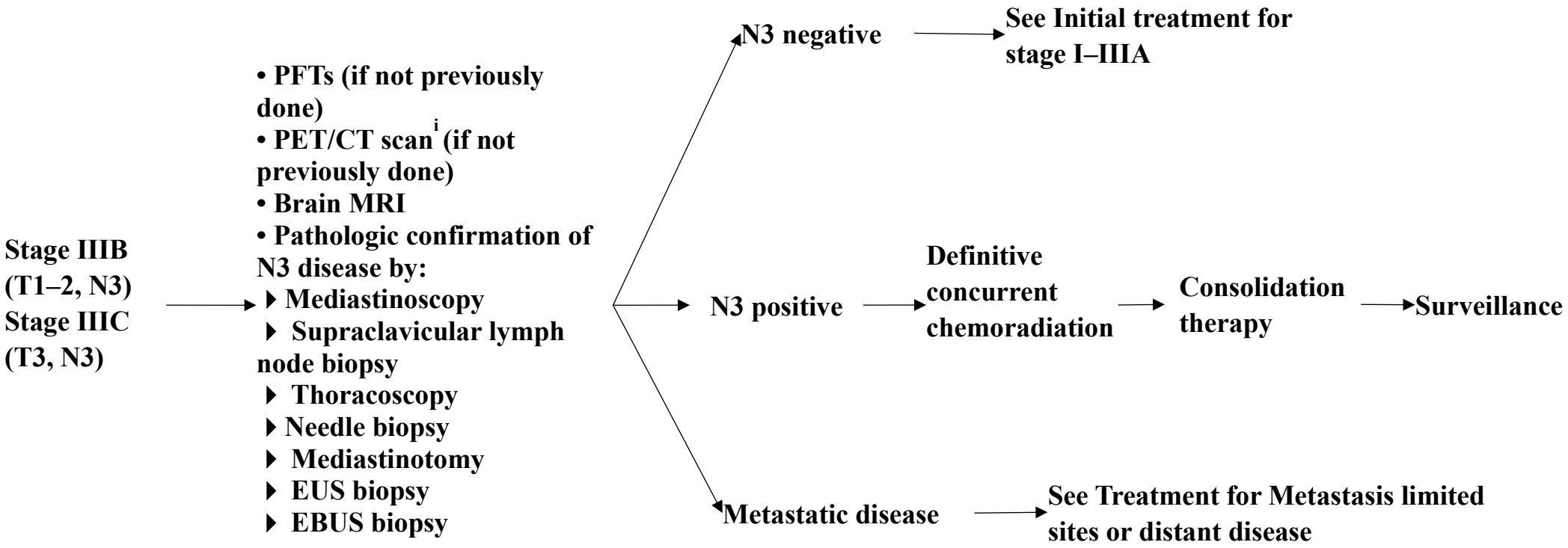
CLINICAL ASSESSMENT	PRETREATMENT EVALUATION	INITIAL TREATMENT



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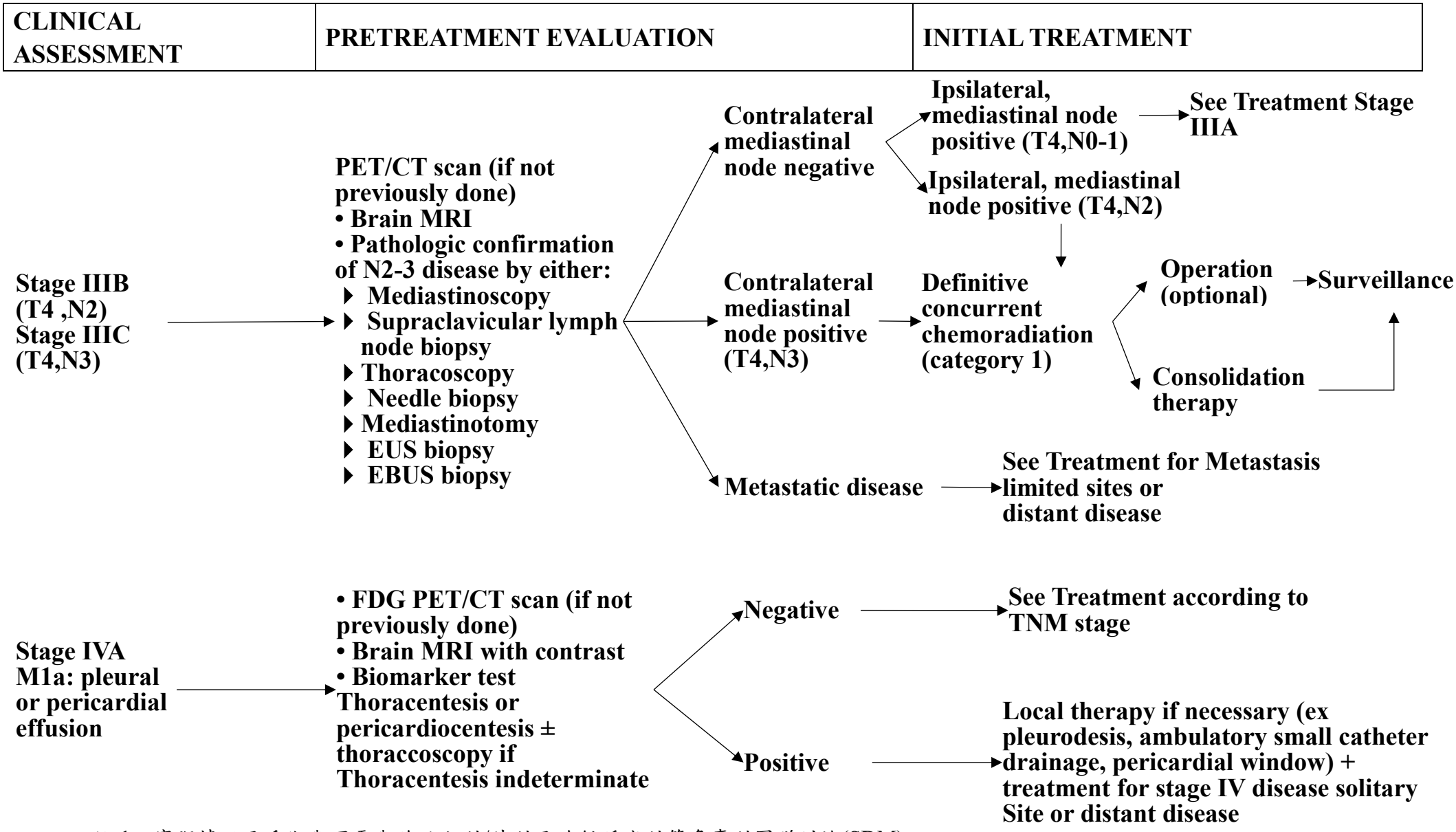

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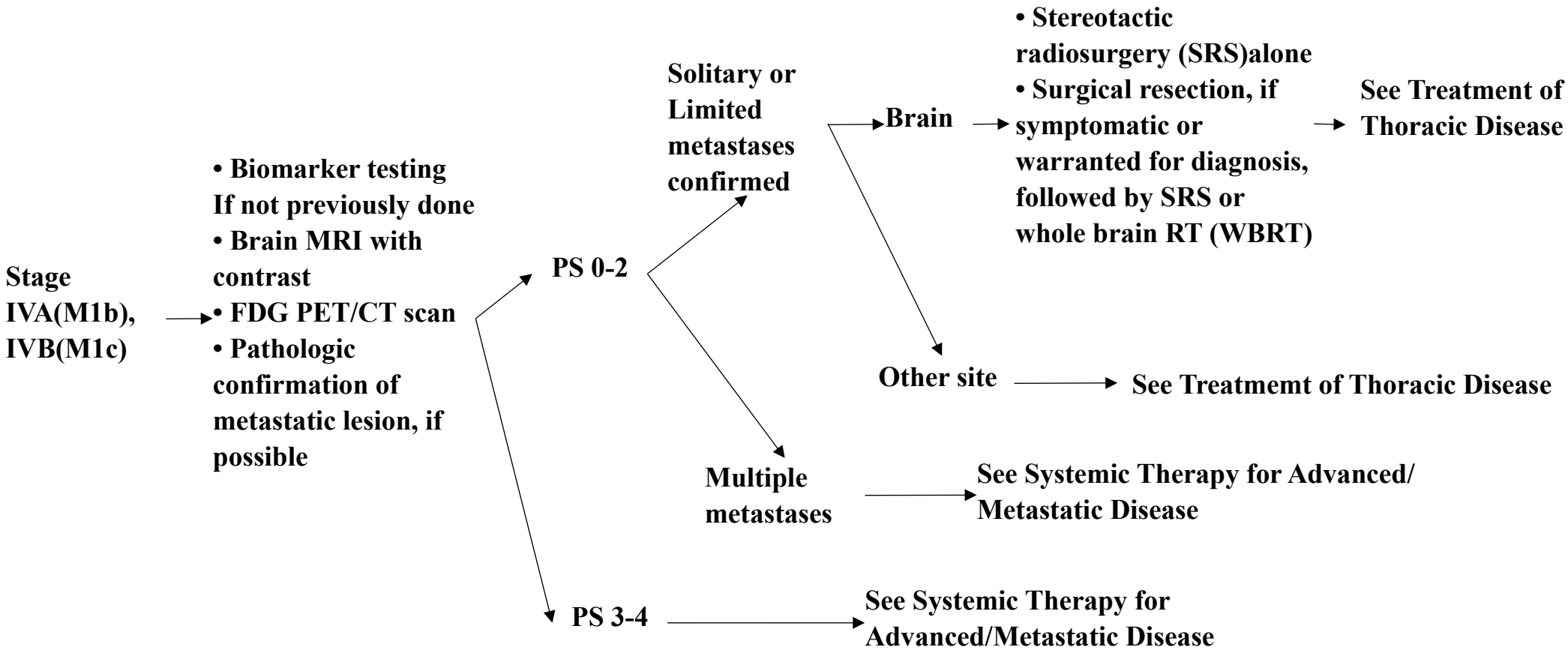
CLINICAL ASSESSMENT	PRETREATMENT EVALUATION	INITIAL TREATMENT



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

註 1：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)

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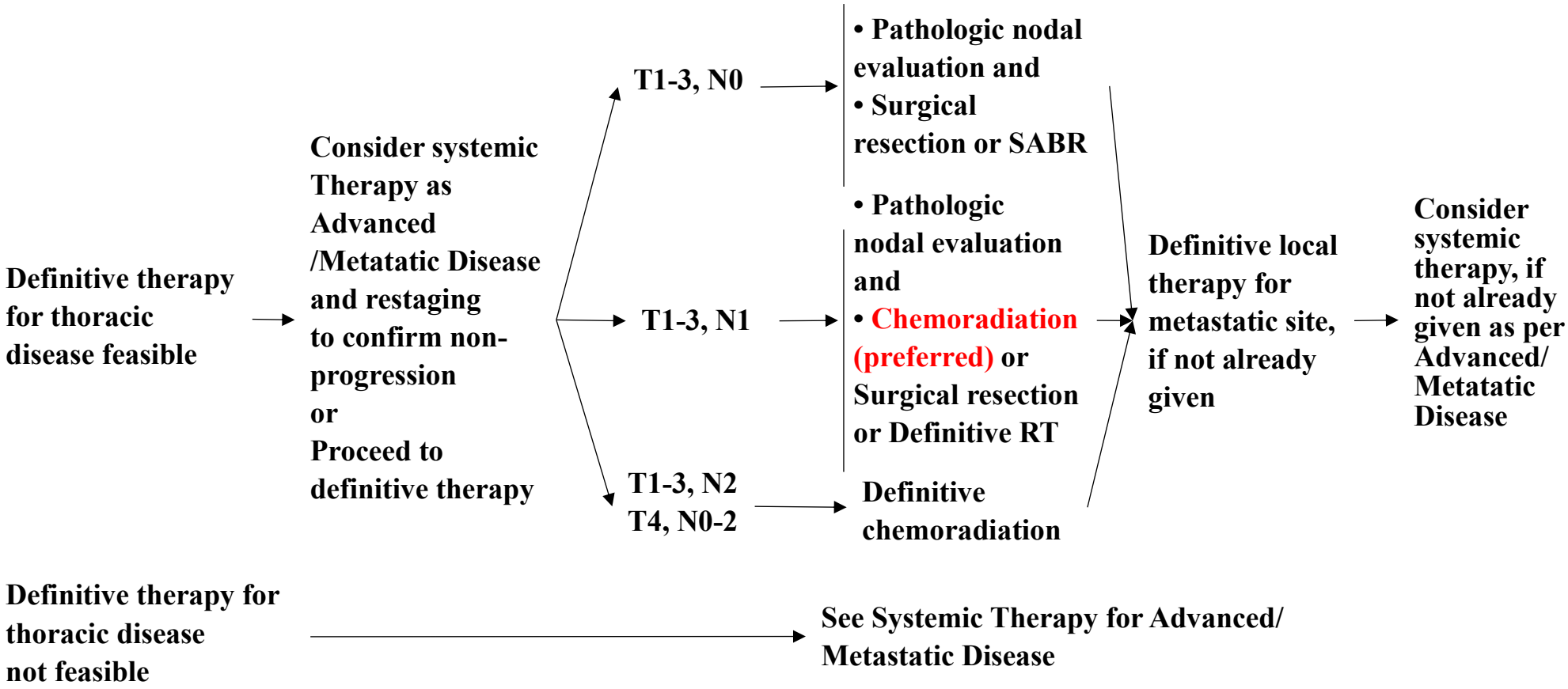
TREATMENT OF THORACIC DISEASE



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SURVEILLANCE AFTER COMPLETION OF DEFINITIVE THERAPY

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 annually**
- **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 annually**
  - ➢ **Residual or new radiographic abnormalities may require more frequent imaging**
- **Smoking cessation advice, counseling, and pharmacotherapy**
- **PET/CT is not routinely indicated**
- **Brain MRI as clinically indicated based on risk assessment**

→ **Recurrence** →
- **PET/CT**
- **Brain MRI**

→ **Locoregional Recurrence** **(see page 26-27)**

→ **Distant metastases** **(see page 26-27)**

註 1：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)

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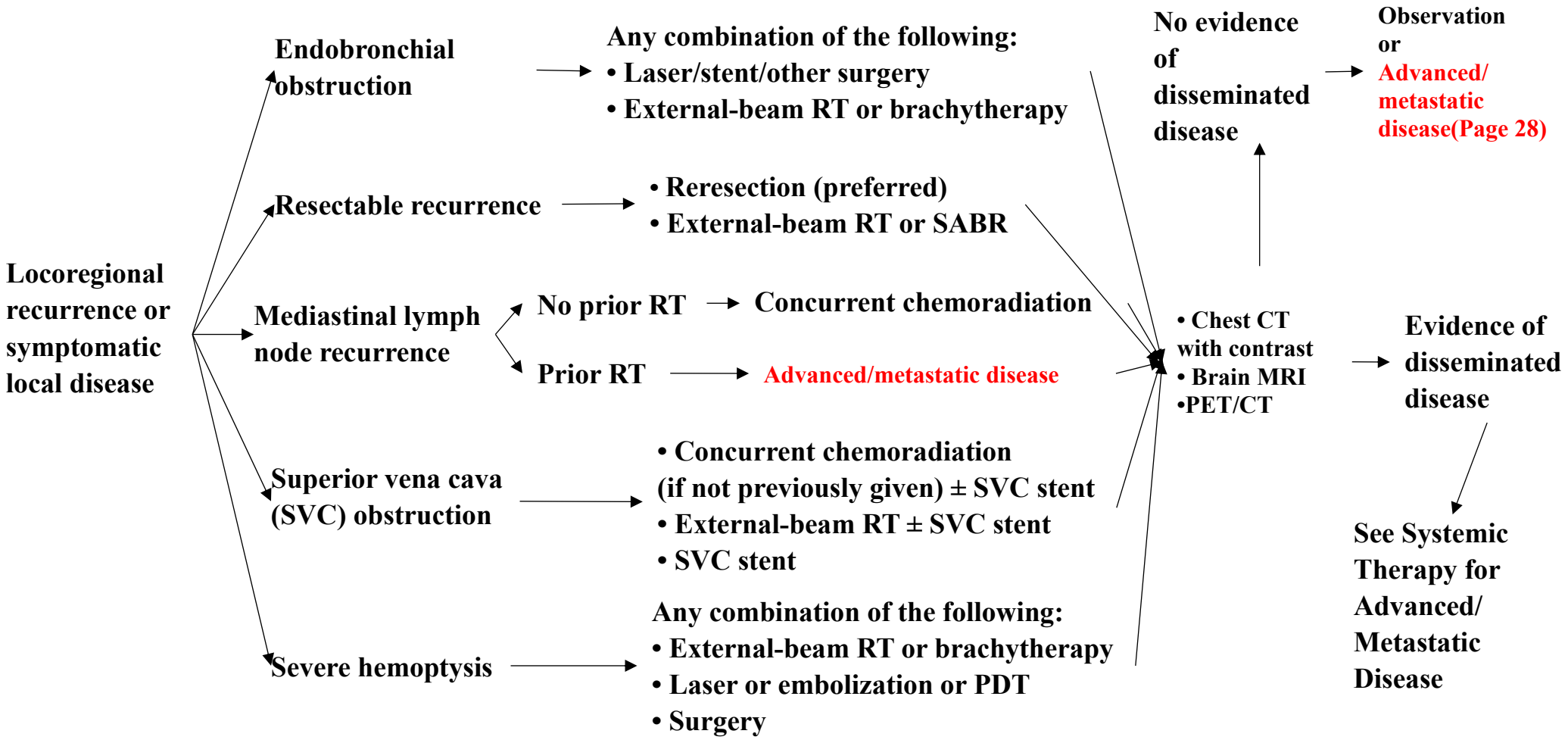
THERAPY FOR RECURRENCE AND METASIS



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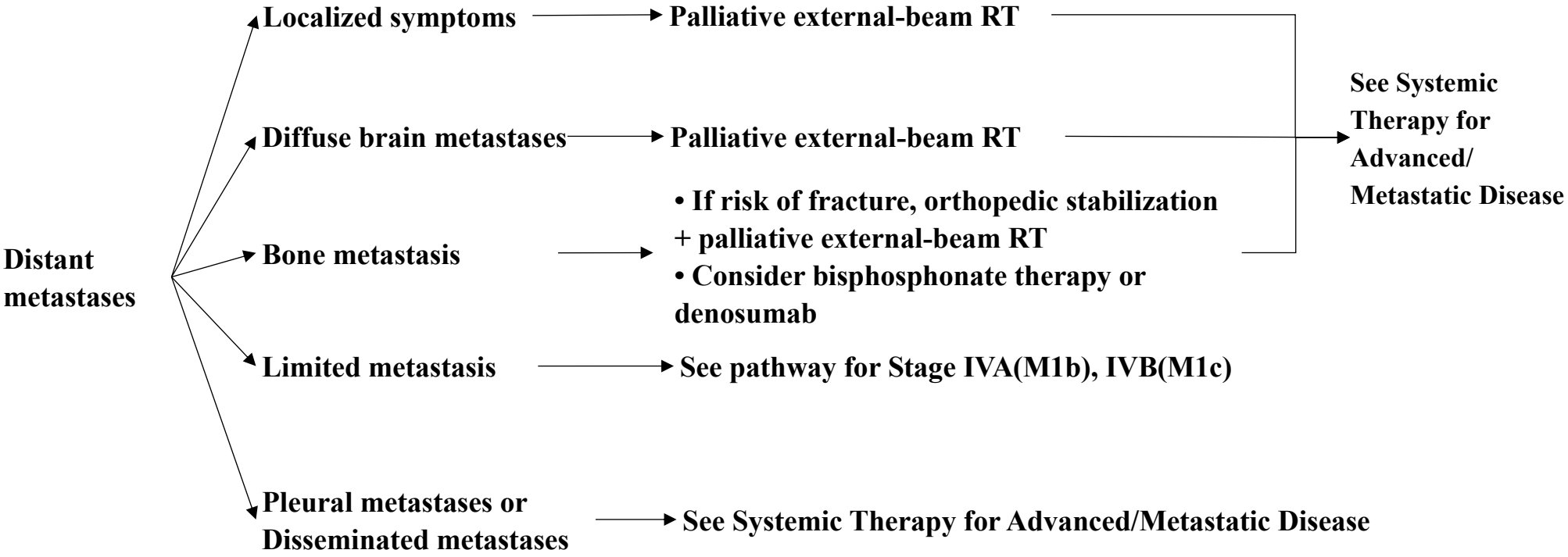

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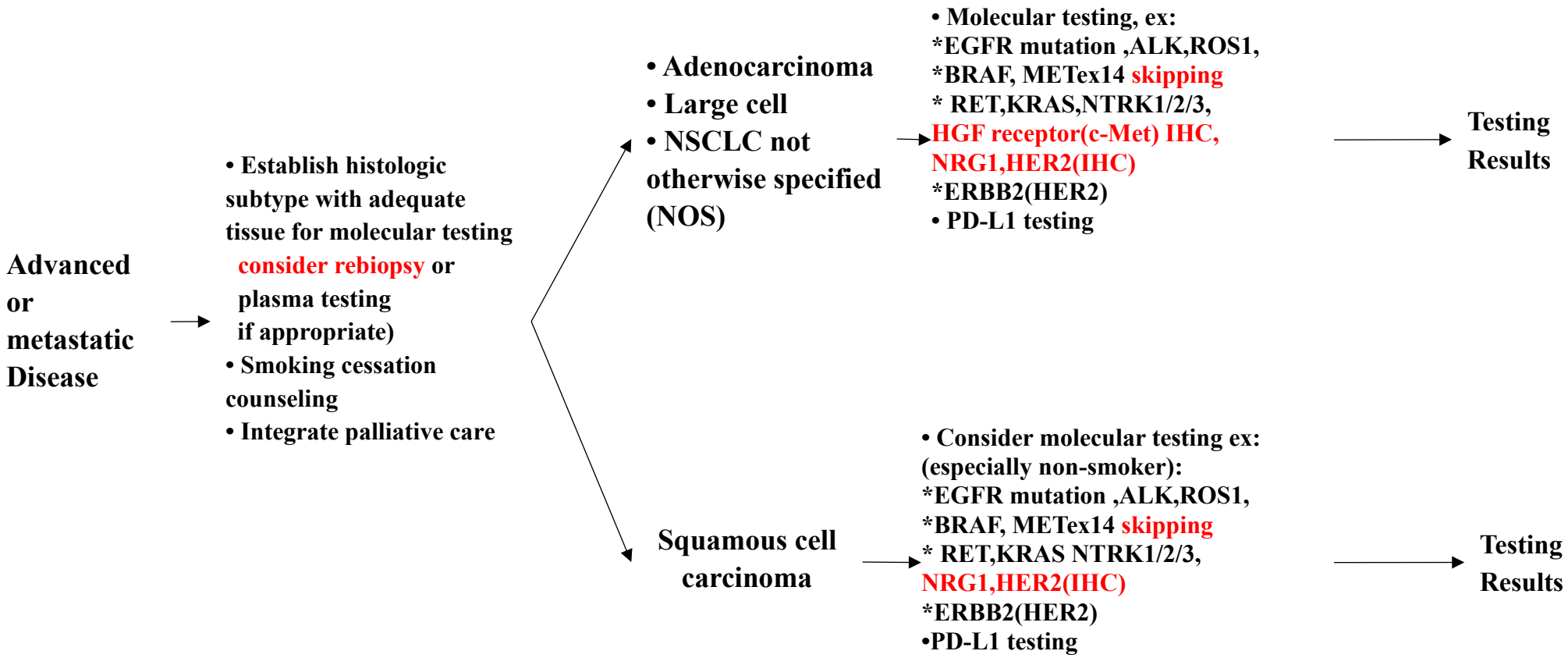
CLINICAL PRESENTATION	HISTOLOGIC	TESTING SUBTYPE	TESTING RESULTS



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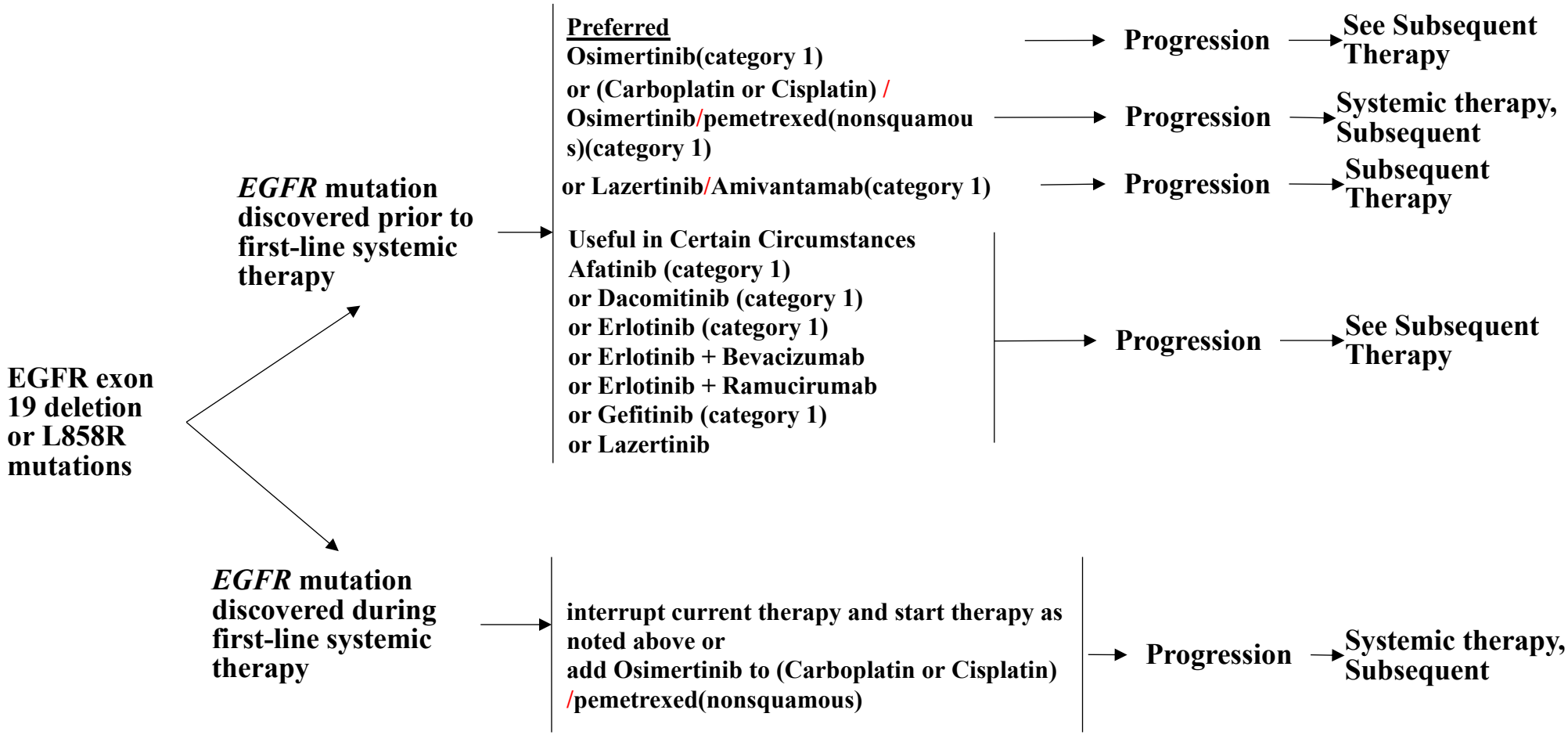
EGFR EXON 19 DELETION OR L858R MUTATIONS	FIRST-LINE THERAPY



Stage IV 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

[a]Clinical Trials

[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 1：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)

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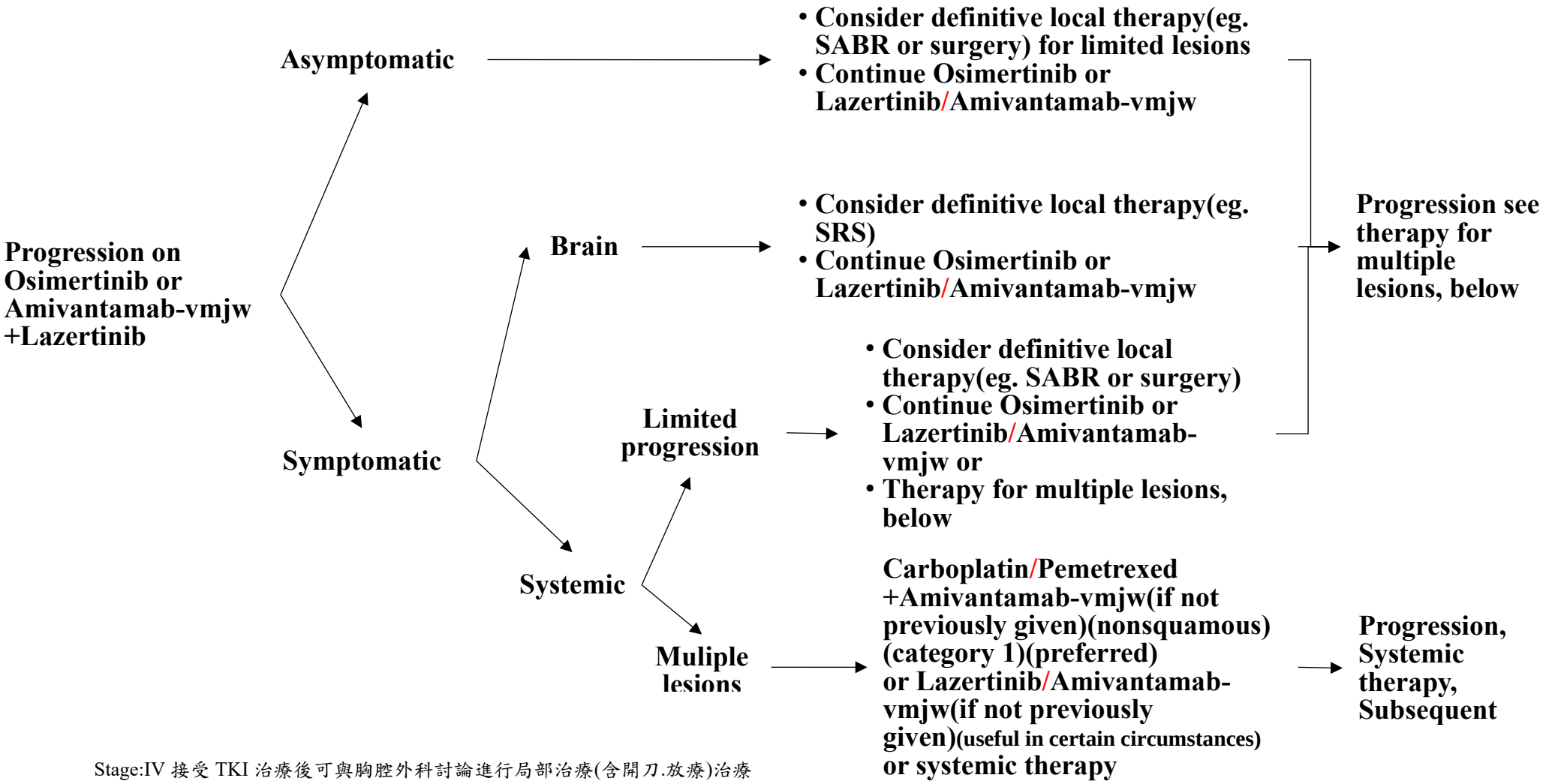
EGFR EXON 19 DELETION OR L858R MUTATIONS	SUBSEQUENT THERAPY



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

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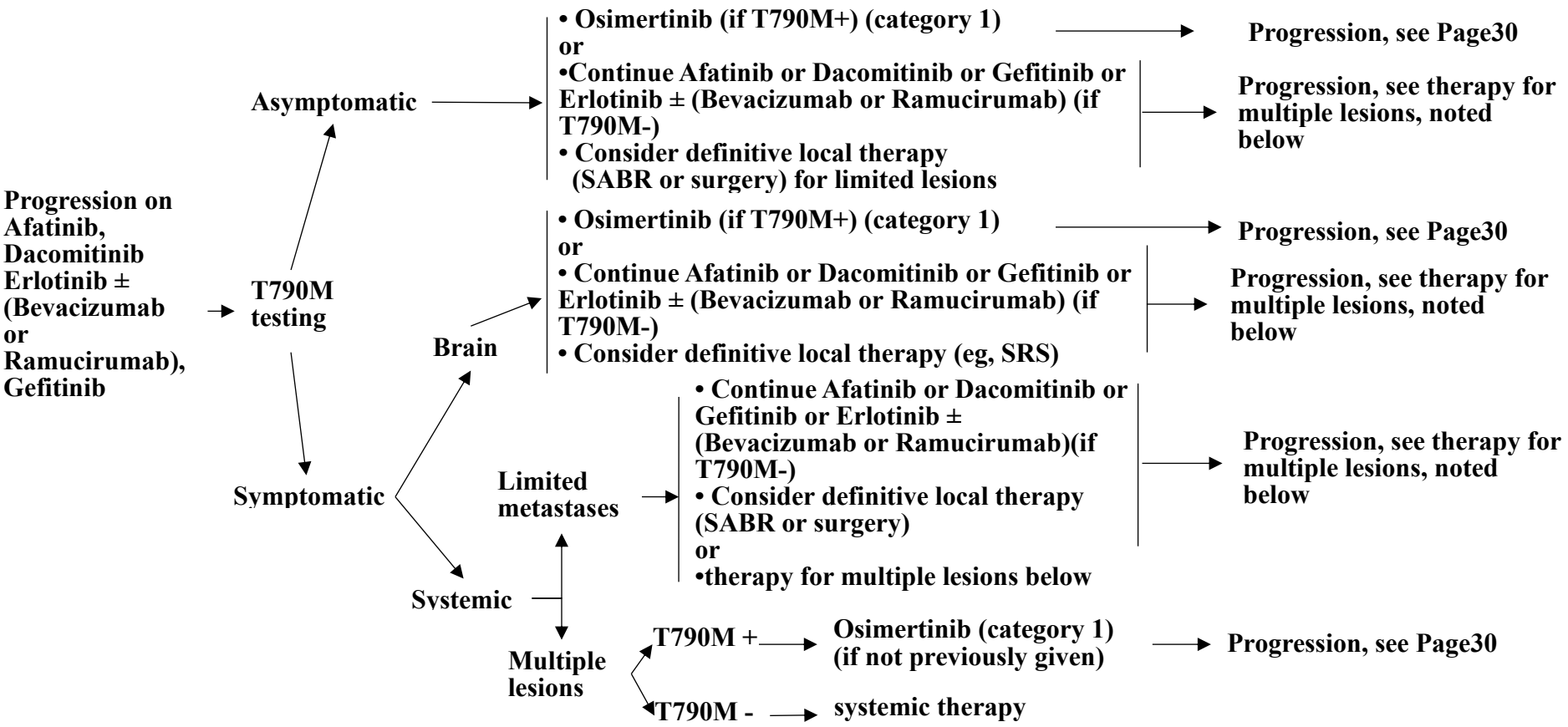
EXON 19 DELETION OR L858R MUTATION)	SUBSEQUENT THERAPY



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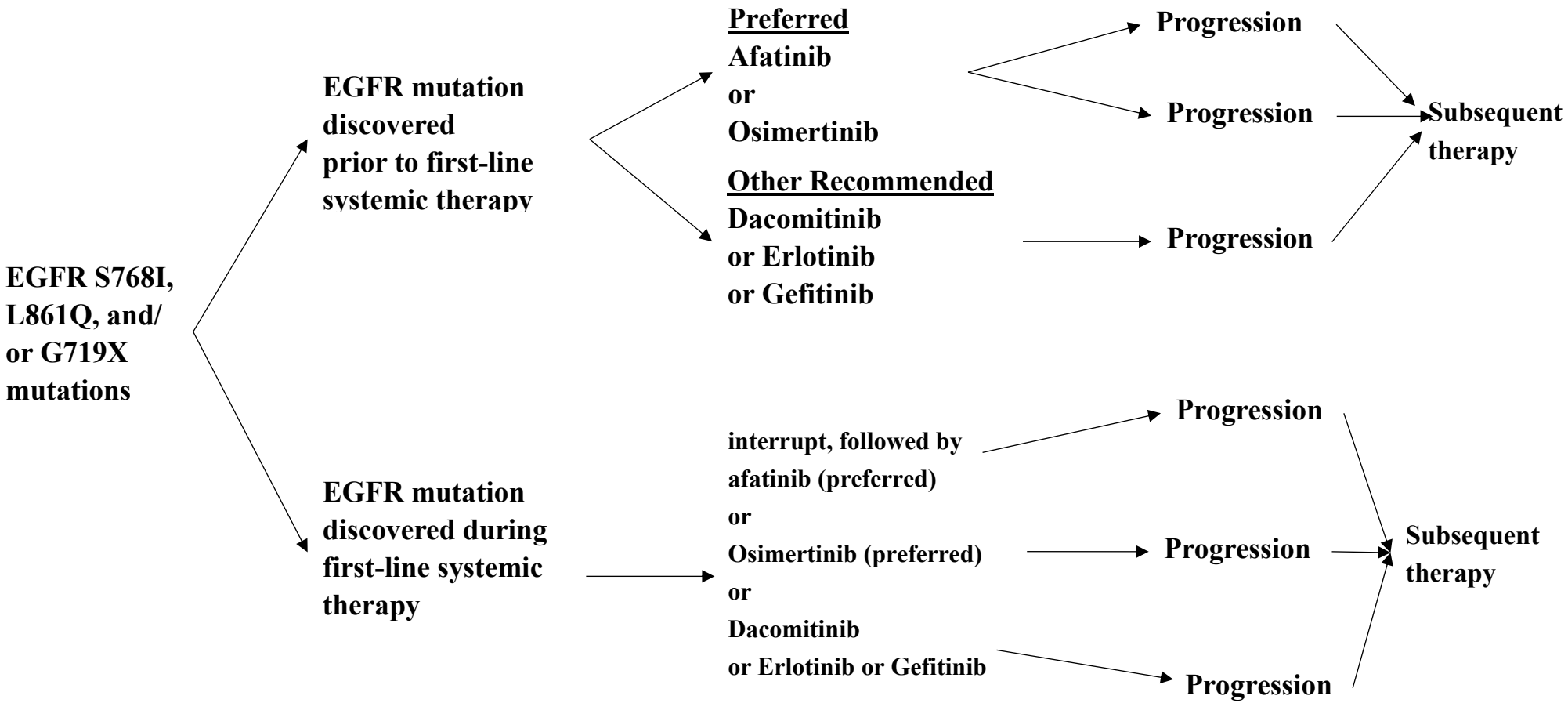
EGFR S768I, L861Q, and/or *G719X* MUTATIONS	FIRST-LINE THERAPY



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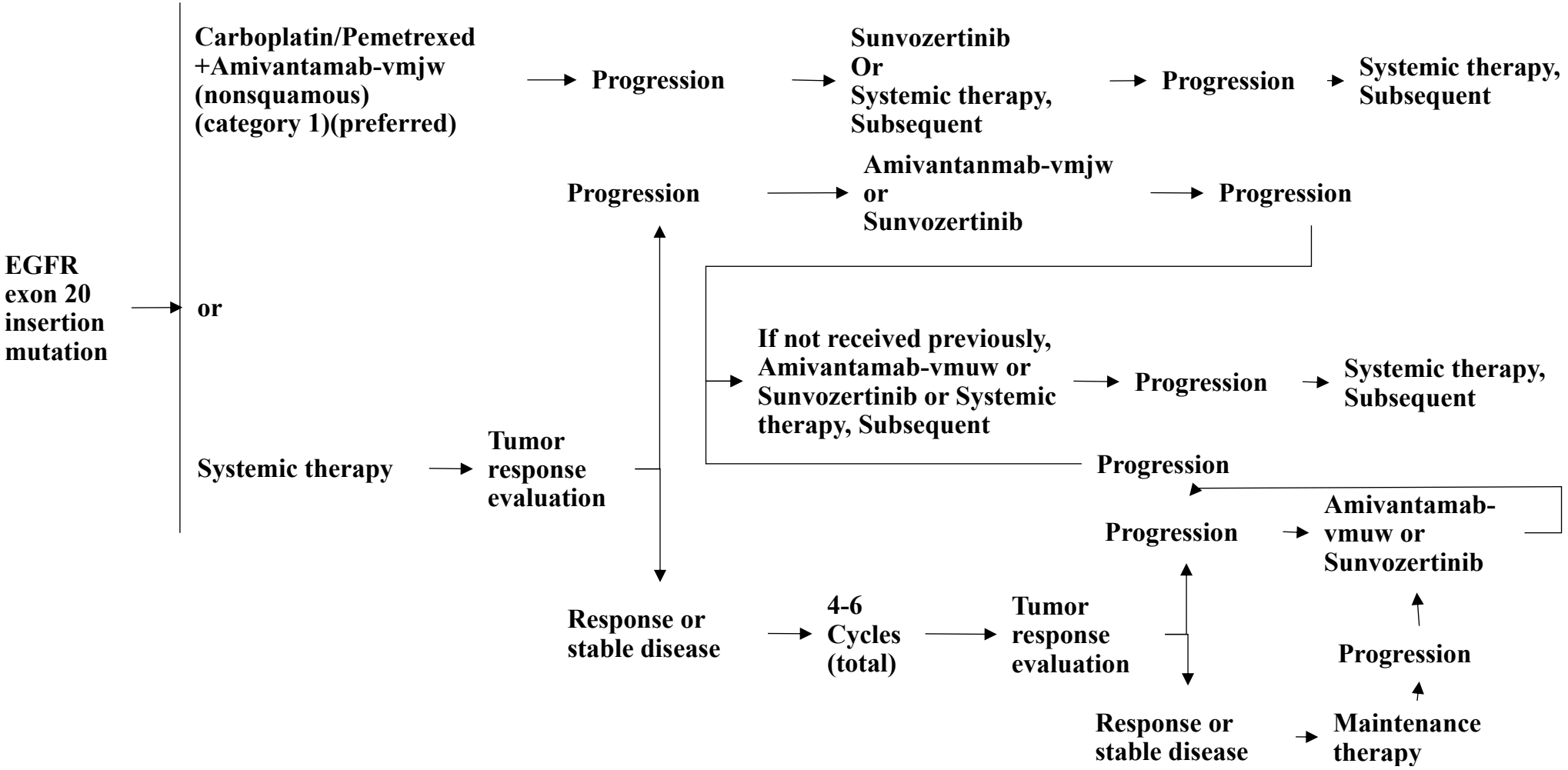
EGFR MUTATION POSITIVE (EXON 20 INSERTION)	FIRST-LINE THERAPY	SUBSEQUENT THERAPY



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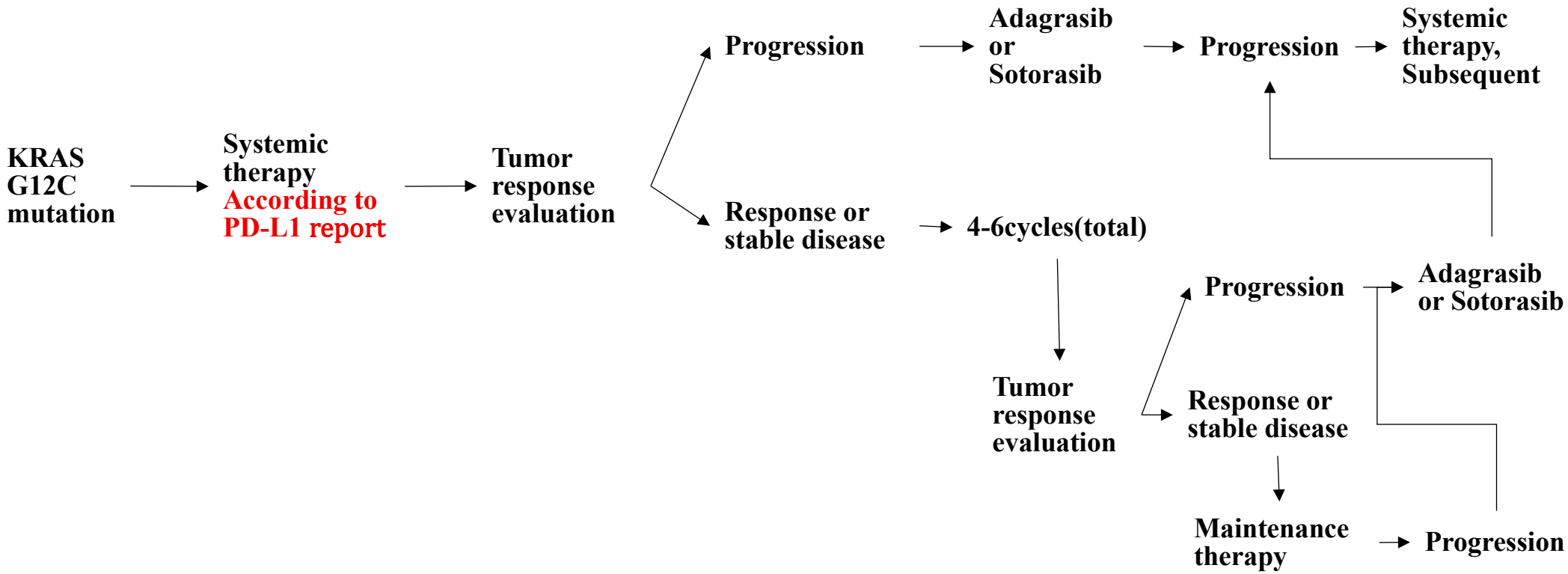
KRAS G12C MUTATION POSITIVE FIRST-LINE THERAPY	SUBSEQUENT THERAPY



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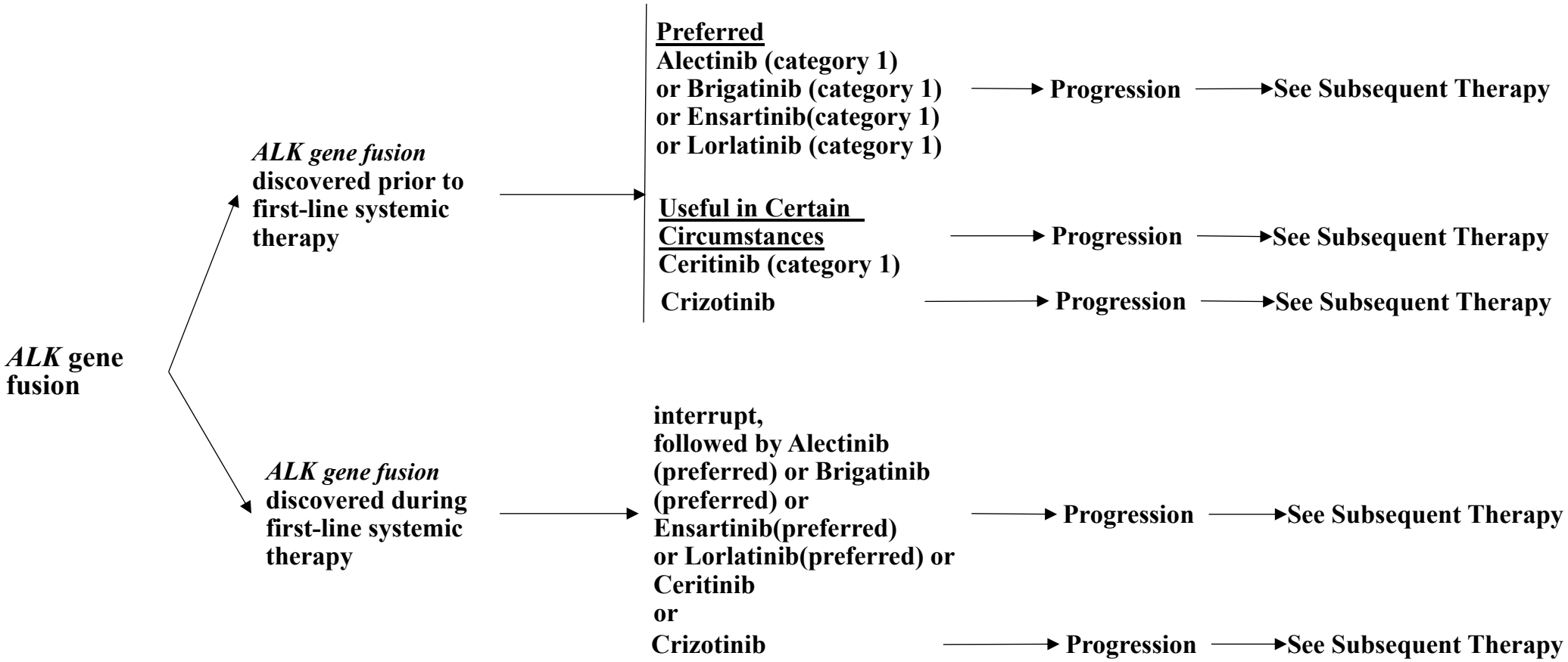
ALK GENE FUSION	FIRST-LINE THERAPY



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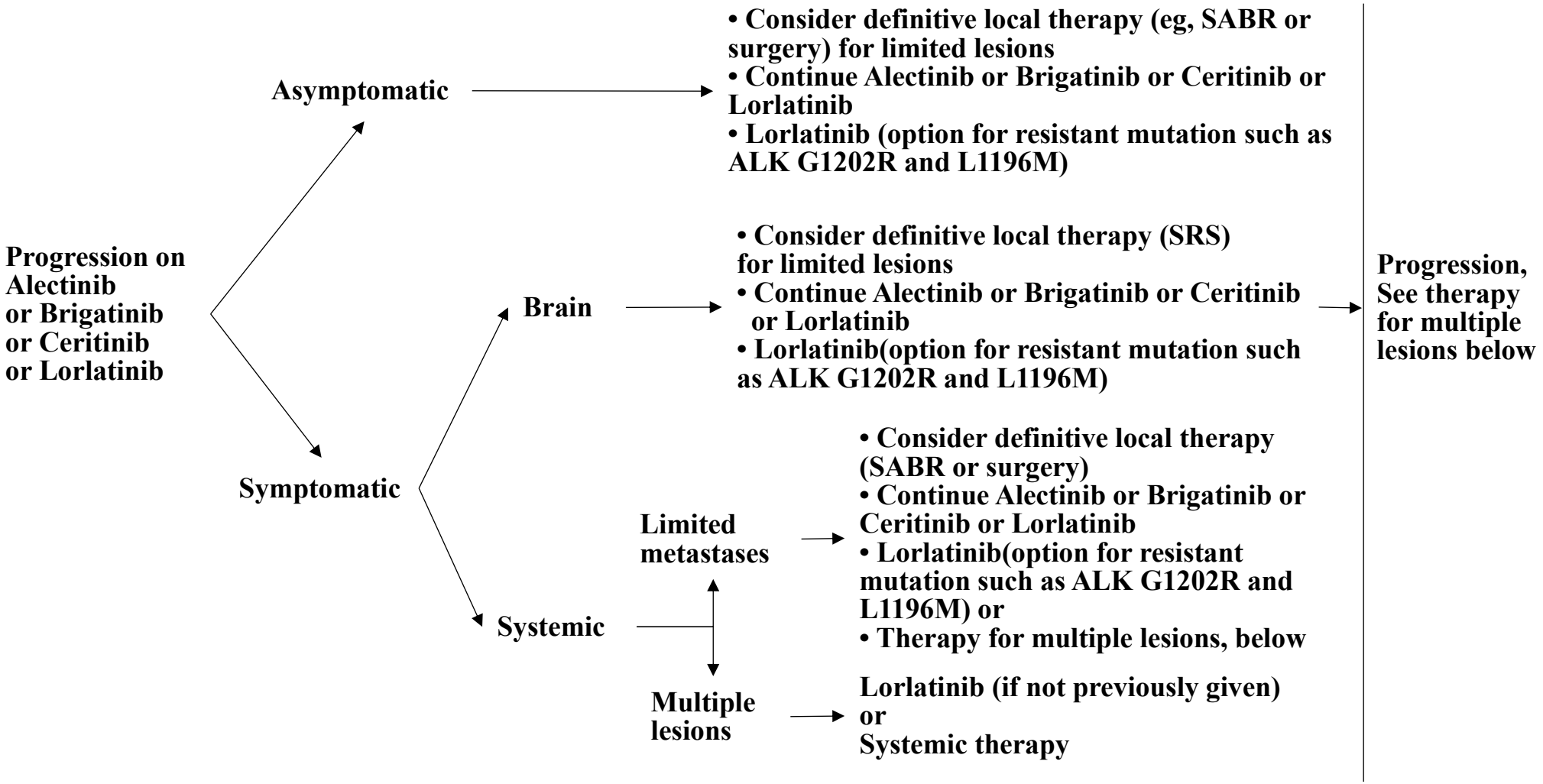
ALK GENE FUSION	SUBSEQUENT THERAPY



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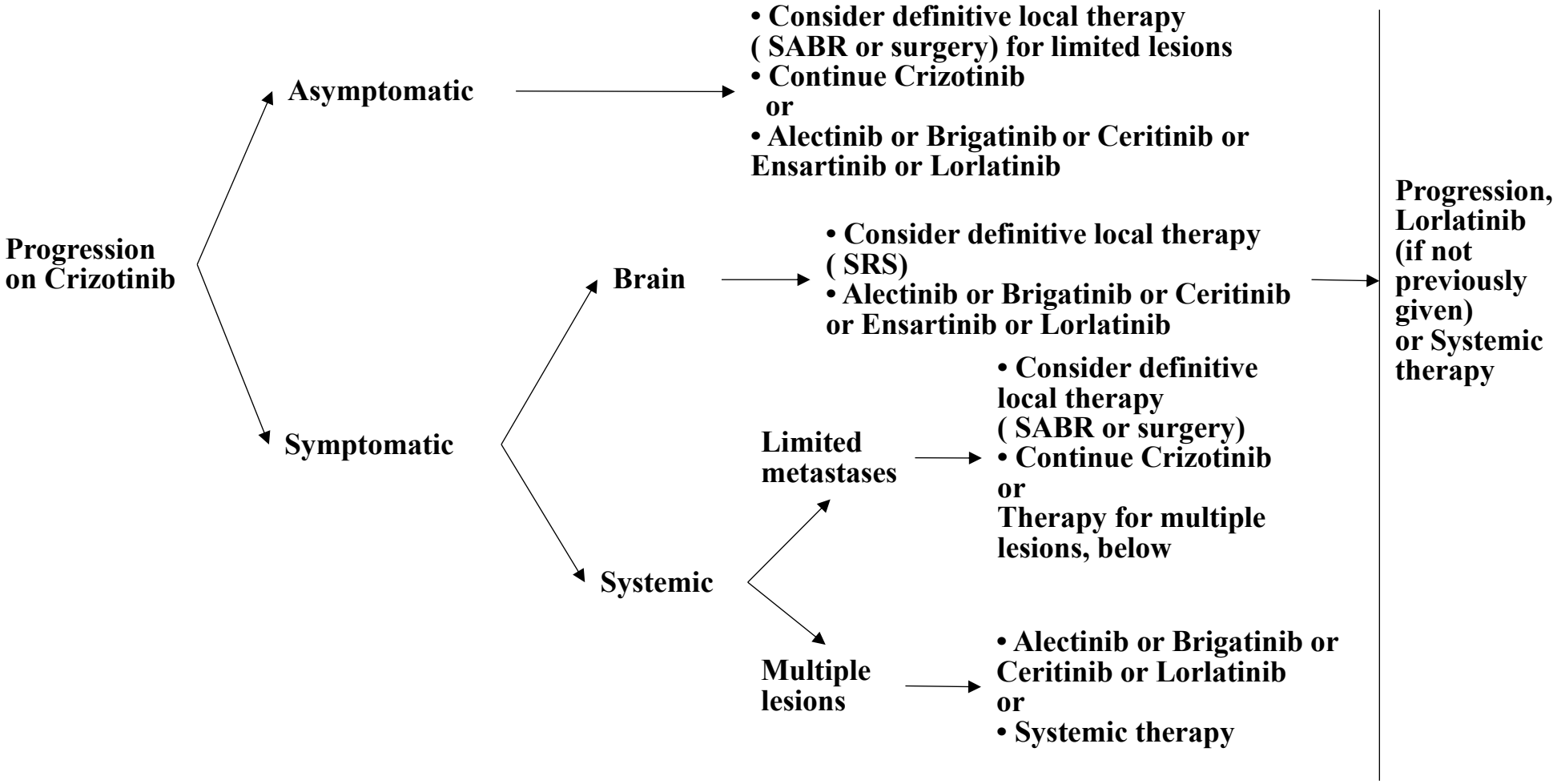

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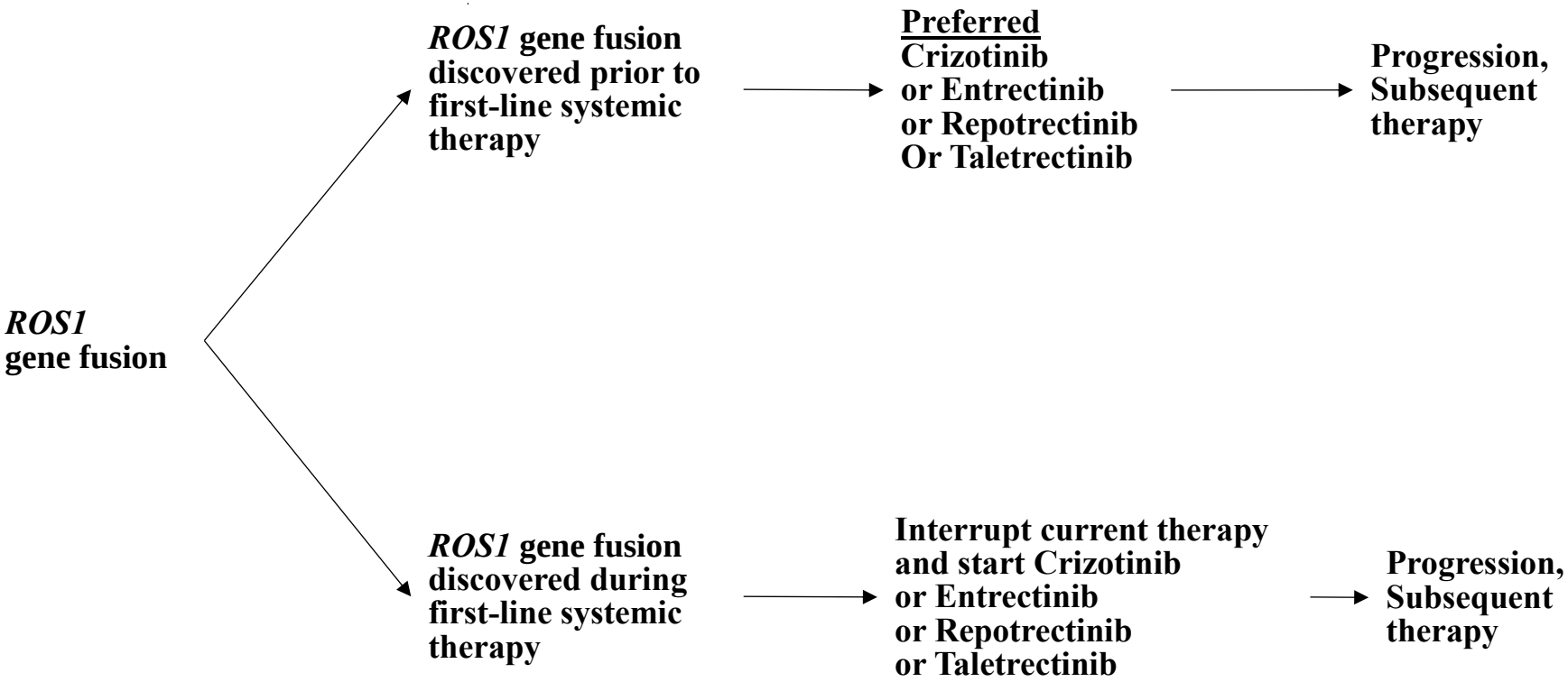
ROS1 GENE FUSION	FIRST-LINE THERAPY	SUBSEQUENT THERAPY



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 1：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)

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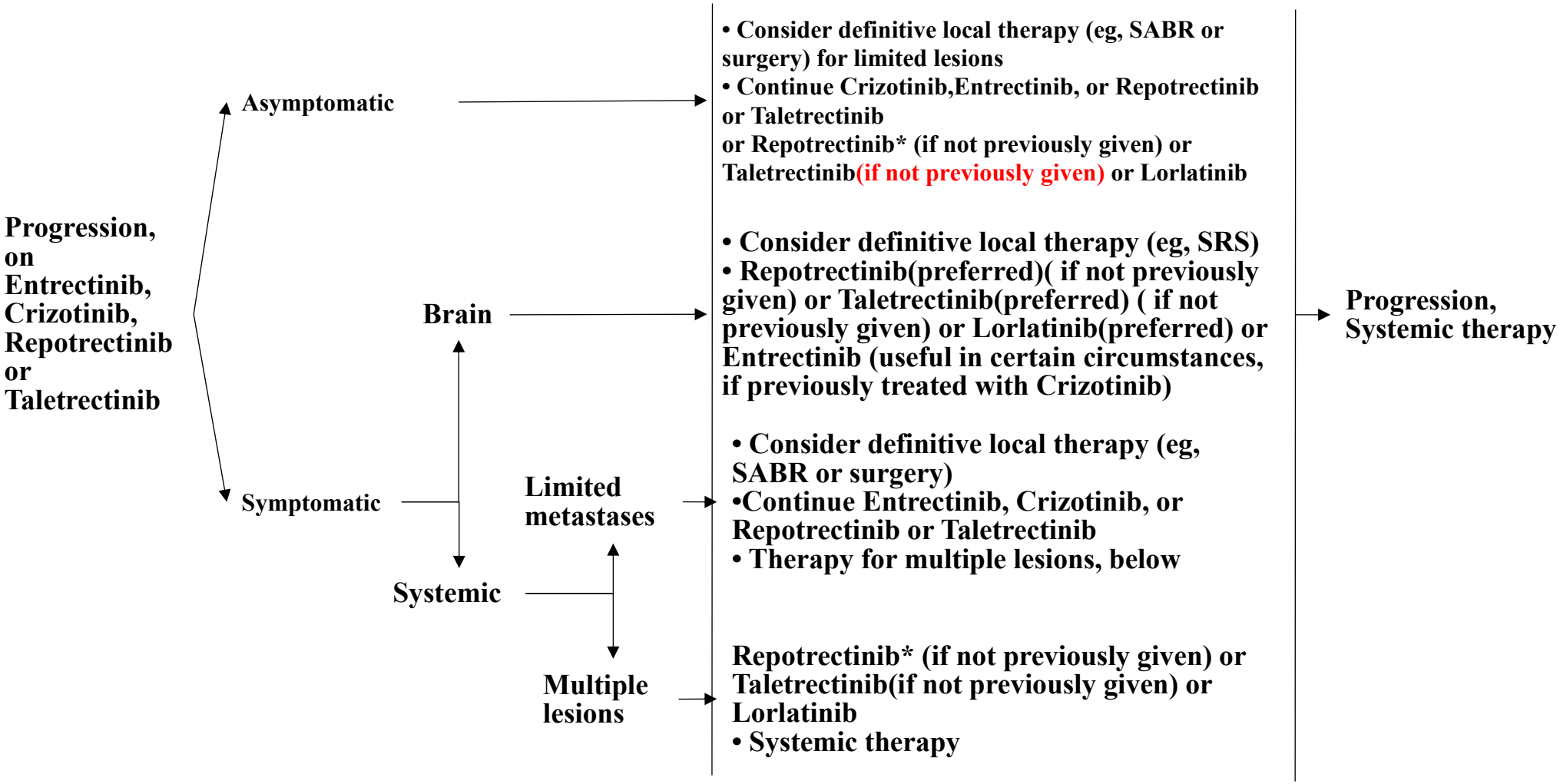
ROS1 GENE FUSION	SUBSEQUENT THERAPY



*此藥物未健保給付.需評估是否加入 Clinical Trials
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

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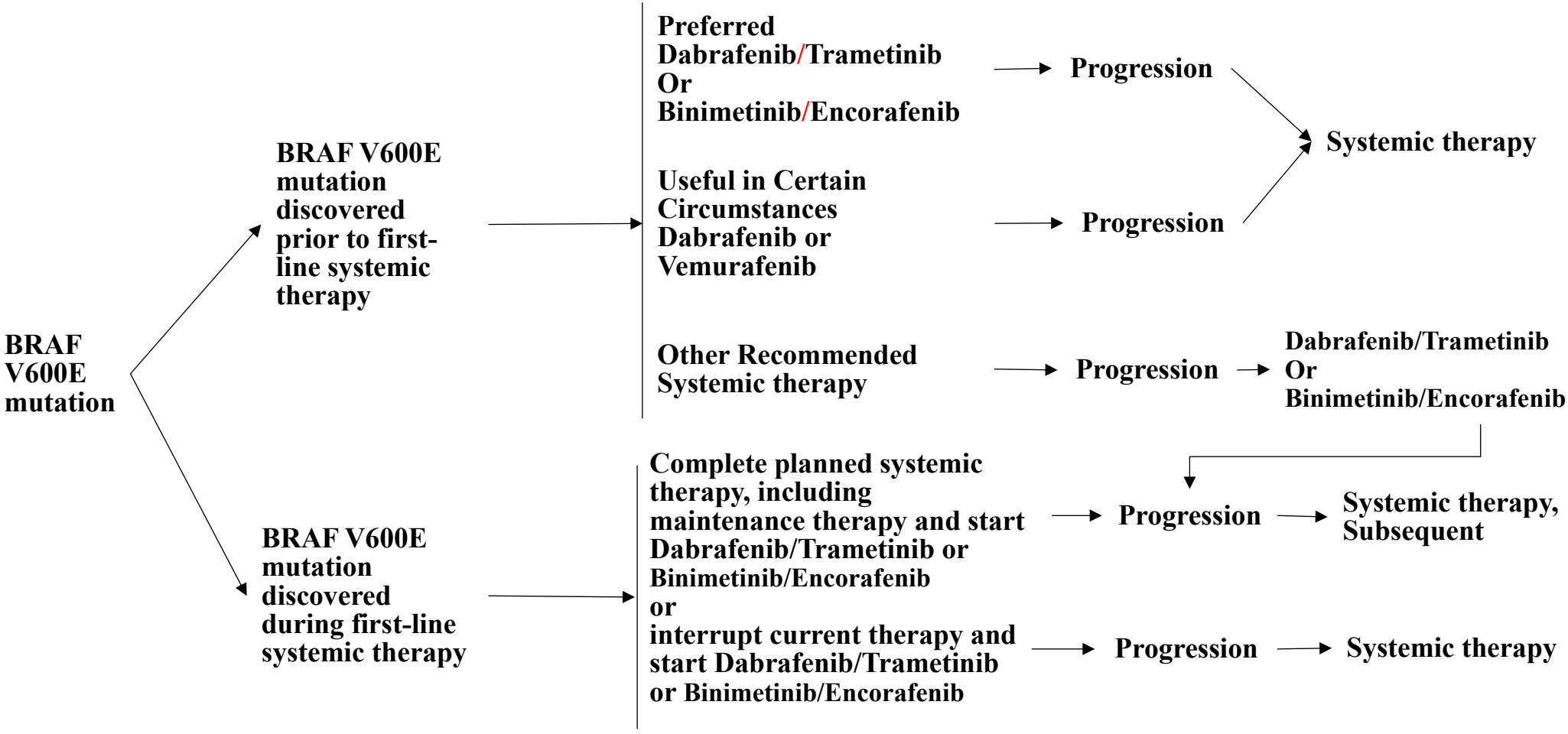
Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

BRAF V600E MUTATION	FIRST-LINE THERAPY	SUBSEQUENT THERAPY



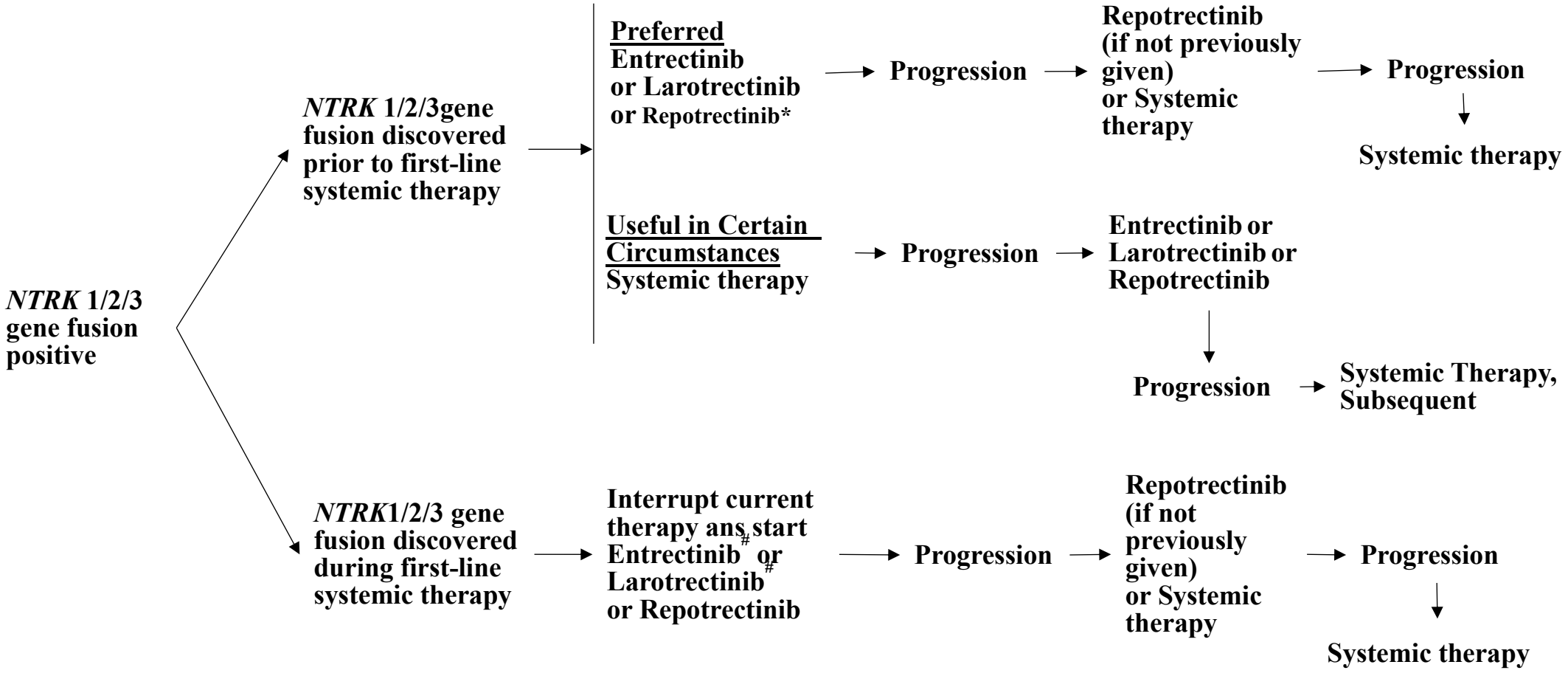
Stage:IV 接受 TKI 治療後可與胸腔外科討論進行局部治療(含開刀.放療)治療

註 1：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.

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.

NTRK GENE FUSION	FIRST-LINE THERAPY	SUBSEQUENT THERAPY



*此藥物未健保給付.需評估是否加入 Clinical Trials
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

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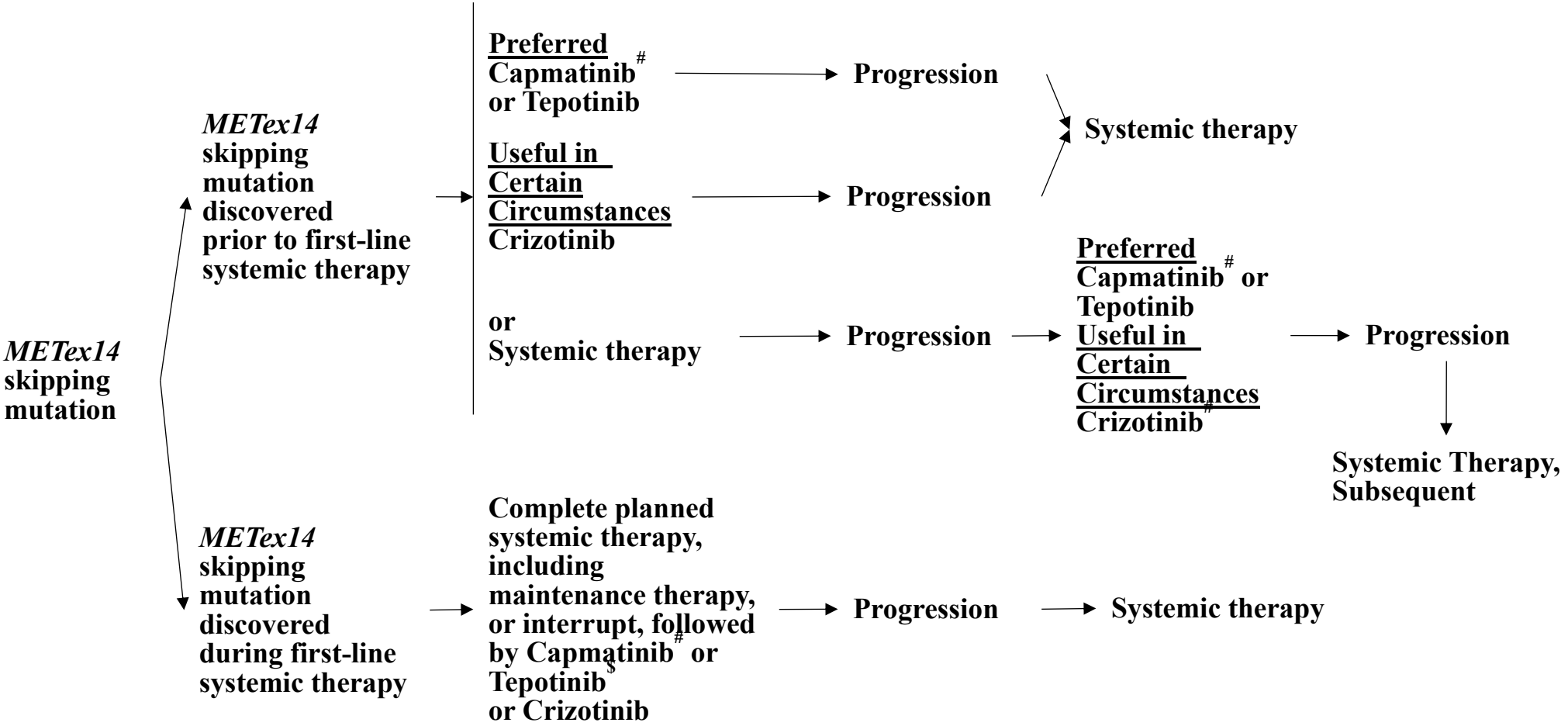
METex14 SKIPPING MUTATION	FIRST-LINE THERAPY	SUBSEQUENT THERAPY



#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

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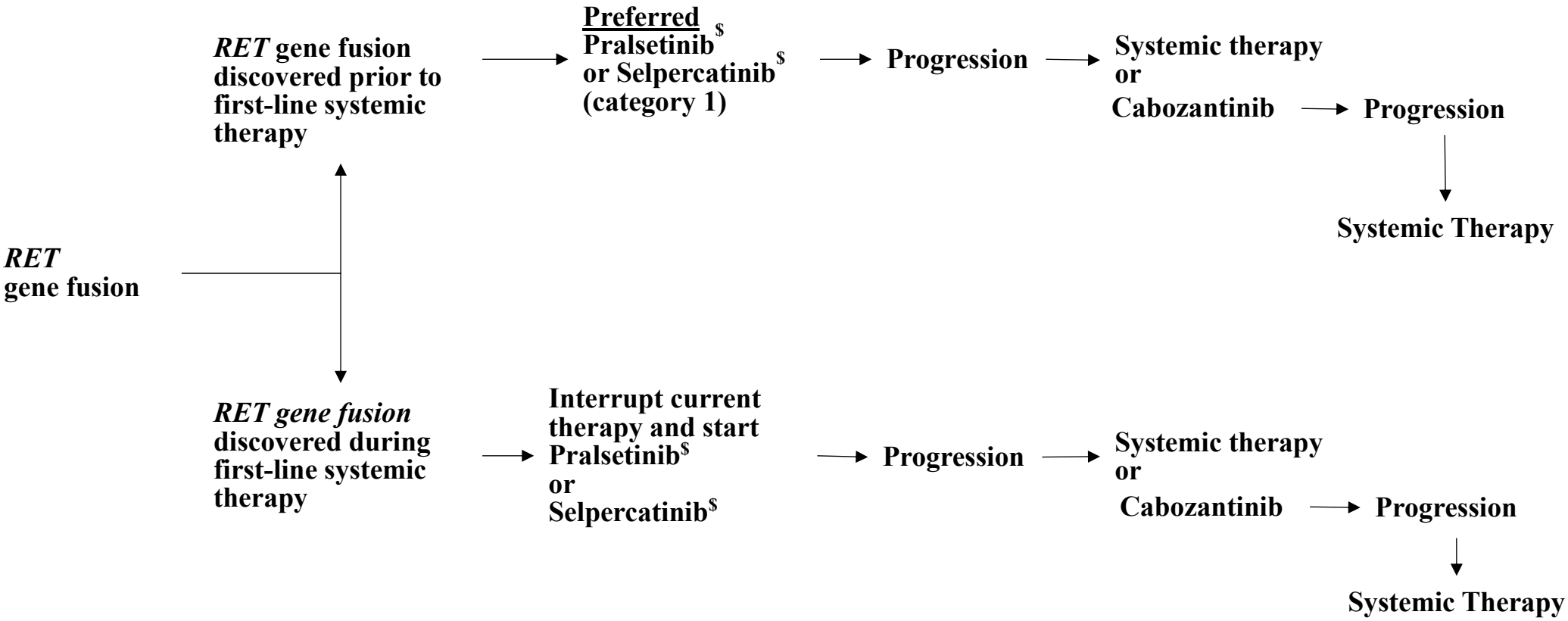
RET GENE FUSION	FIRST-LINE THERAPY	SUBSEQUENT THERAPY



#本院有藥但健保未給付
$健保尚未給付

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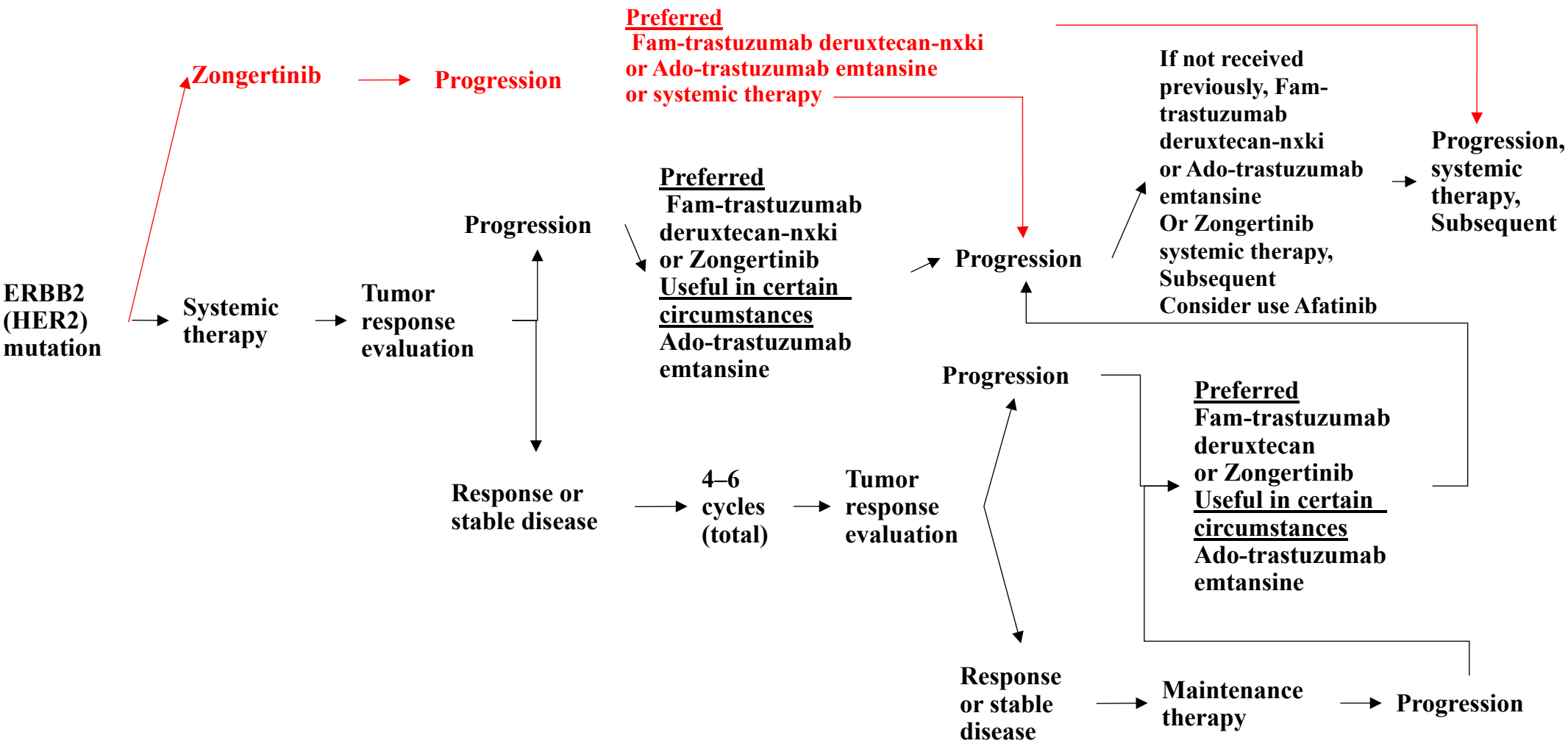
FIRST-LINE THERAPY	SUBSEQUENT THERAPY



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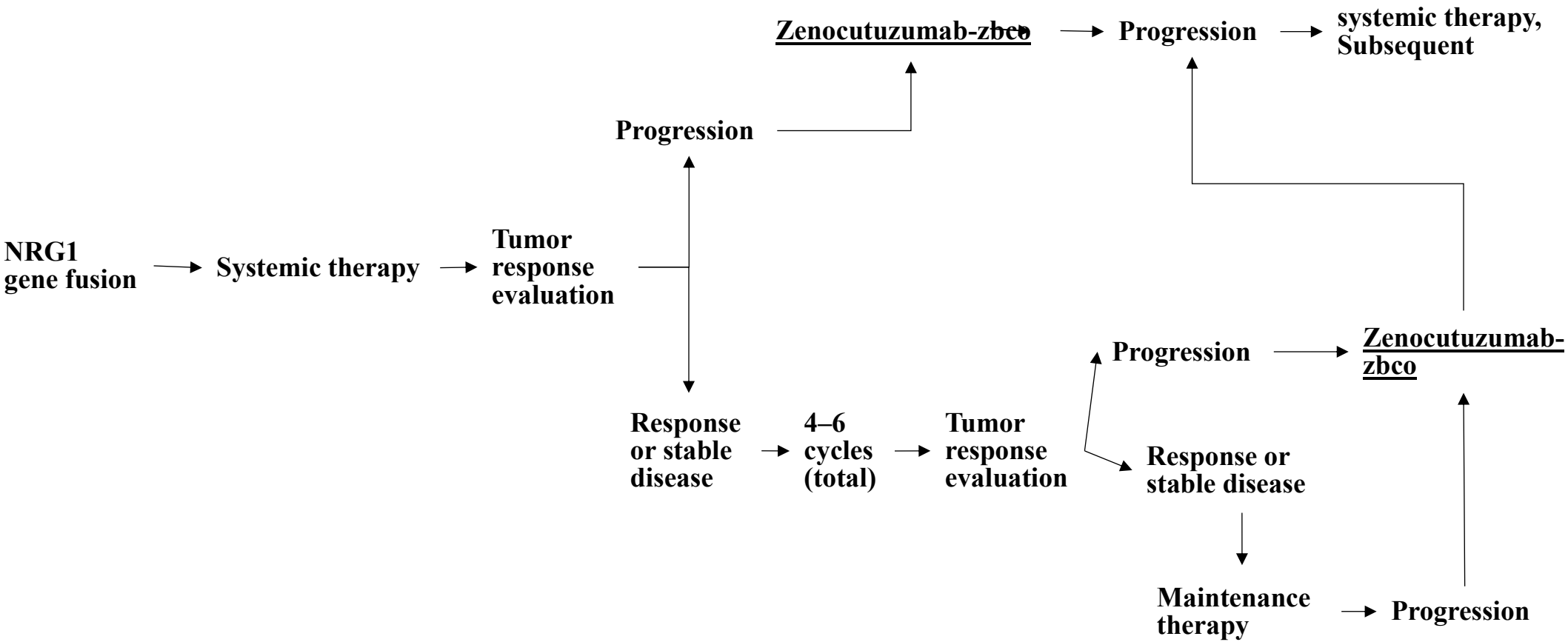
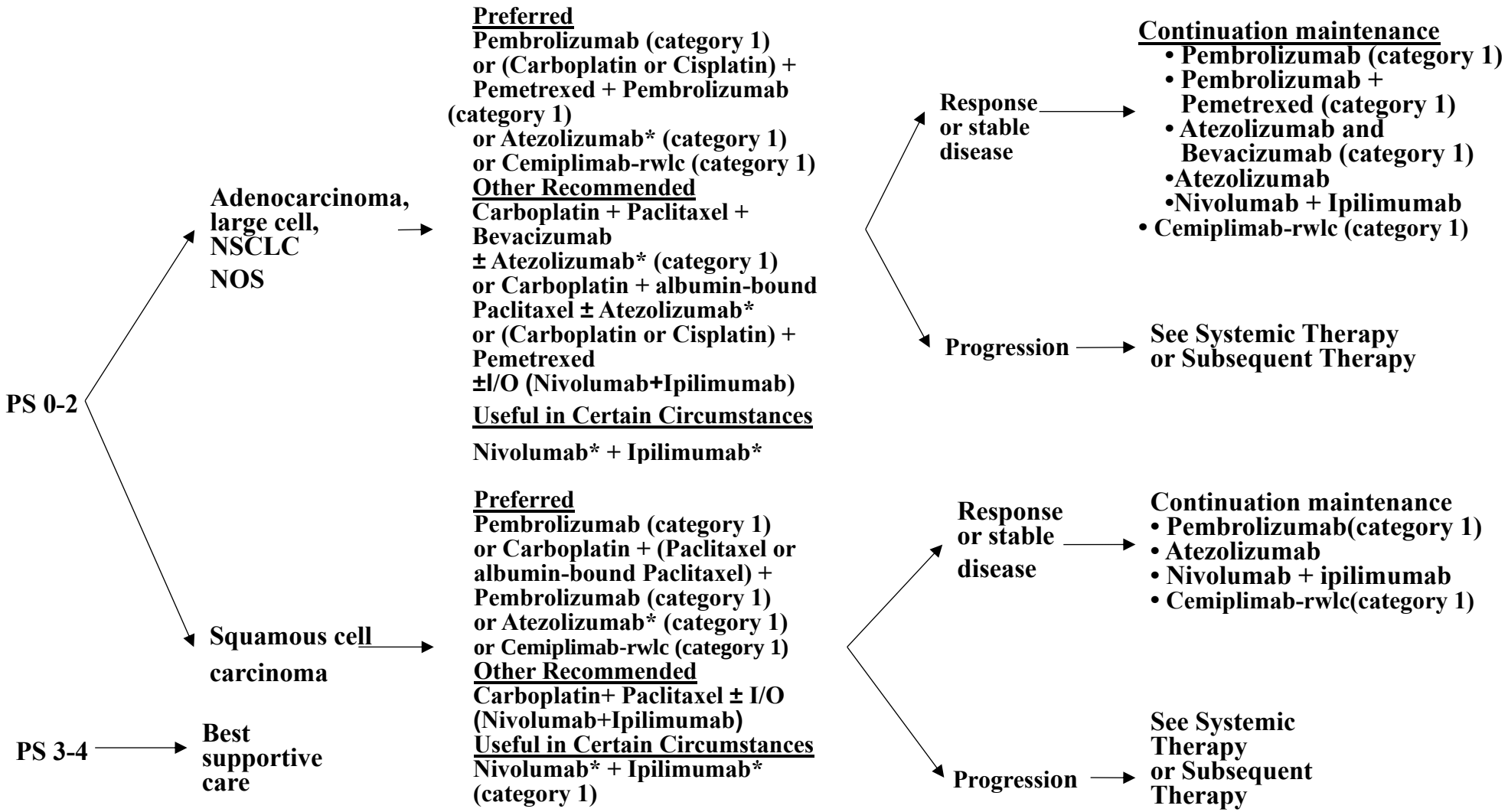
Note: All recommendations are category 2A unless otherwise indicated.
Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

NRG1 GENE FUSION	FIRST-LINE THERAPY	SUBSEQUENT THERAPY



註 1：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.
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 biomarkers



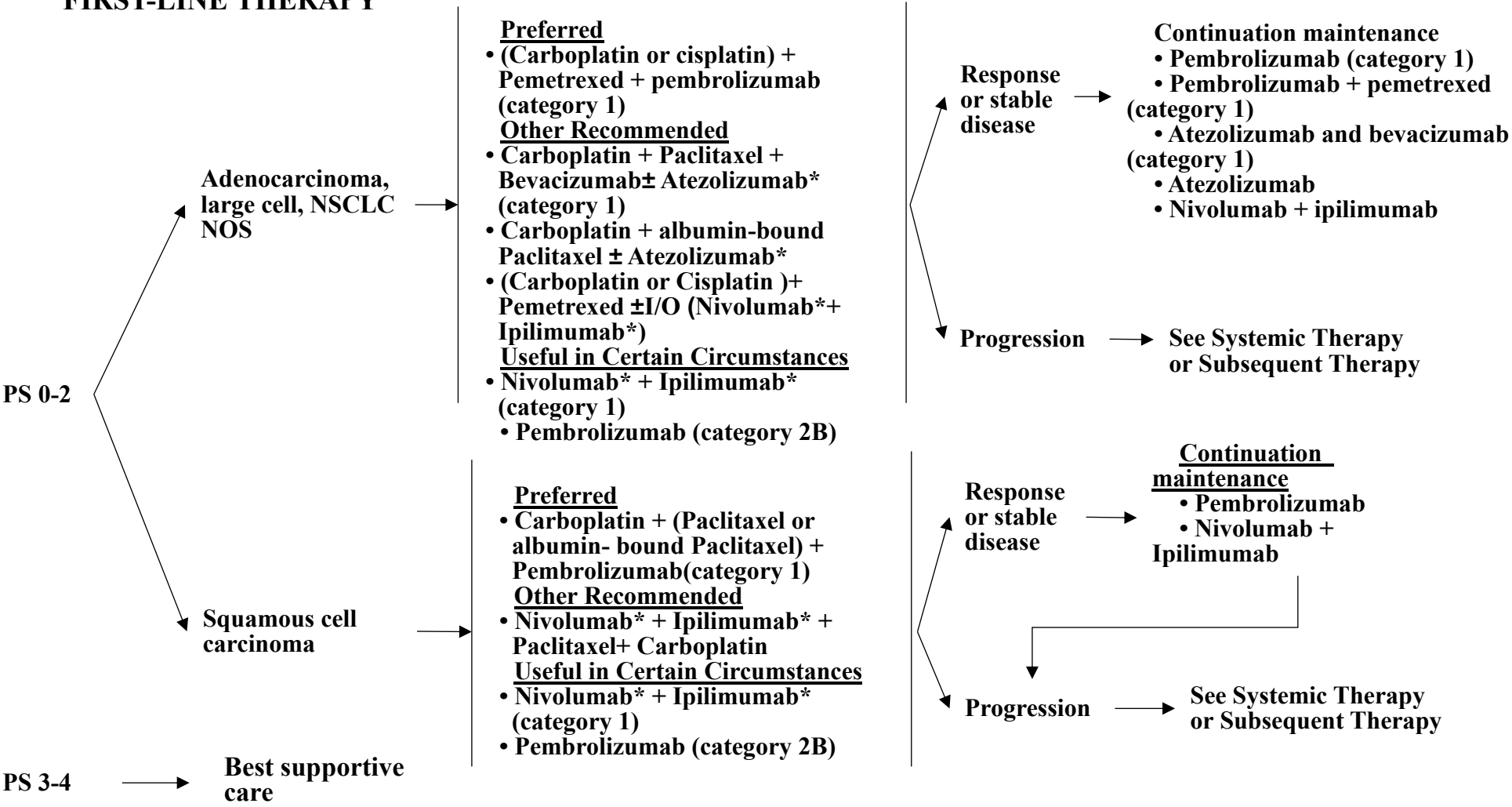
註 1：實際情況及手術與否需與胸腔內科/外科及放射腫瘤科等多專科團隊討論(SDM)

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

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



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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.

四、非小細胞肺癌化學治療原則

➢ Neoadjuvant Chemotherapy with Immunotherapy

***Patients with ≧ 4 cm or node-positive tumors should be evaluated for the following treatment options:**

- **Nivolumab and platinum-based doublet chemotherapy with the option of continuing single-agent nivolumab as adjuvant treatment after surgery (for patients with no known EGFR mutations or ALK gene fusions) (category 1)** and Other Adjuvant Systemic Therapy

Nivolumab 360mg day 1 and Platinum-doublet chemotherapy options include:

1. **Carboplatin/Paclitaxel(any histology)**

Carboplatin AUC 4.5-6 day 1, Paclitaxel 180 mg/m² day 1 every 21 days for 4 cycles

2. **Cisplatin/Docetaxel (any histology)**

Cisplatin 50-75 mg/m² day 1(adjusted by Ccr), Docetaxel 60 mg/m² day 1 every 21 days for 4 cycles

3. **Cisplatin/Pemetrexed (nonsquamous)**

Cisplatin 50-75 mg/m² day 1(adjusted by Ccr), Pemetrexed 500 mg/m² day 1 every 21 days for 4 cycles

4. **Carboplatin/Pemetrexed (nonsquamous)**

Carboplatin AUC 4.5-6 day 1, Pemetrexed 500 mg/m² day 1 every 21 days for 4 cycles

5. **Cisplatin/Gemcitabine (squamous)**

Cisplatin 50-75 mg/m² day 1(adjusted by Ccr), Gemcitabine 1000 mg/m² mg/m² days 1 and 8 every 21 days for 4 cycles

6. **Carboplatin/Gemcitabine (squamous)**

Carboplatin AUC 4.5-6 day 1, Gemcitabine 1000 mg/m² days 1 and 8 every 21 days for 4 cycles

7. **Cisplatin/ Paclitaxel**

Cisplatin 50-75 mg/m² day 1(adjusted by Ccr), Paclitaxel 180 mg/m² day 1 every 21 days for 4 cycles

- **Pembrolizumab and cisplatin-based doublet chemotherapy** then continued as single-agent pembrolizumab as adjuvant treatment after surgery (category 1) and Other Adjuvant Systemic Therapy

Pembrolizumab 200mg day 1 and Platinum-doublet chemotherapy options include:

1. Cisplatin/Pemetrexed (nonsquamous)

Cisplatin 50-75 mg/m² day 1(adjusted by Ccr), Pemetrexed 500 mg/m² day 1 every 21 days for 4 cycles

2. Cisplatin/Gemcitabine (squamous)

Cisplatin 50-75 mg/m² day 1(adjusted by Ccr), Gemcitabine 1000 mg/m² mg/m² days 1 and 8 every 21 days for 4 cycles

- **Durvalumab and platinum-based doublet chemotherapy** then continued as single-agent Durvalumab as adjuvant treatment after surgery (for patients with no known EGFR mutations or ALK gene fusions) (category 1) and Other Adjuvant Systemic Therapy

Durvalumab 1500mg day 1 and Platinum-doublet chemotherapy options include:

1. Cisplatin/Pemetrexed (nonsquamous)

Cisplatin 50-75 mg/m² day 1(adjusted by Ccr), Pemetrexed 500 mg/m² day 1 every 21 days for 4 cycles

2. Carboplatin/Pemetrexed (nonsquamous)

Carboplatin AUC 4.5-6 day 1, Pemetrexed 500 mg/m² day 1 every 21 days for 4 cycles

3. Cisplatin/Gemcitabine (squamous)

Cisplatin 50-75 mg/m² day 1(adjusted by Ccr), Gemcitabine 1000 mg/m² days 1 and 8 every 21 days for 4 cycles

4. Carboplatin/Gemcitabine (squamous)

Carboplatin AUC 4.5-6 day 1, Gemcitabine 1000 mg/m² days 1 and 8 every 21 days for 4 cycles

5. Carboplatin/Paclitaxel (squamous)

Carboplatin AUC 4.5-6 day 1, Paclitaxel 180 mg/m² day 1 every 21 days for 4 cycles
or Carboplatin AUC 4.5-6 day 1, Paclitaxel 90 mg/m² day 1 and 15 every 28 days for 4 cycles
or Carboplatin AUC 4.5-6 day 1, Paclitaxel 60 mg/m² day 1,8 and 15 every 28 days for 4 cycles

6. Cisplatin/Paclitaxel

Cisplatin 50-75 mg/m² day 1, Paclitaxel 180 mg/m² day 1 every 21 days for 4 cycles
or Cisplatin 50-75 mg/m² day 1, Paclitaxel 90 mg/m² day 1 and 15 every 28 days for 4 cycles
or Cisplatin 50-75 mg/m² day 1, Paclitaxel 60 mg/m² day 1,8 and 15 every 28 days for 4 cycles

Neoadjuvant Systemic Therapy

- **Targeted Therapy Options**

After surgical evaluation, consider Osimertinib ± chemotherapy, with the option of single-agent Osimertinib as adjuvant therapy after surgery, for patients with stage II–IIIA, IIIB (T2–T3, N2b; T4, N2) NSCLC that is positive for EGFR exon 19 deletion or L858R mutation

Chemotherapy options with osimertinib include:

1. Cisplatin/Pemetrexed (nonsquamous)

Cisplatin 50-75 mg/m² day 1(adjusted by Ccr), pemetrexed 500 mg/m² day 1 every 21 days for 4 cycles

2. Carboplatin/Pemetrexed (nonsquamous)

Carboplatin AUC 4.5-6 day 1, pemetrexed 500 mg/m² day 1 every 21 days for 4 cycles

- **Chemotherapy Options**

After surgical evaluation, patients with the following disease stages can be evaluated for the neoadjuvant chemotherapy regimens listed below if ineligible for immunotherapy or targeted therapy and are likely to receive adjuvant chemotherapy: Stage IB, IIA (if high-risk features are present)；Stage IIB, IIIA, IIIB (T2–T3, N2b; T4, N2)

✧ **Preferred (nonsquamous)**

Cisplatin/Pemetrexed

Cisplatin 50-75 mg/m² day 1(adjusted by Ccr), Pemetrexed 500 mg/m² day 1 every 21 days for 4 cycles

✧ **Preferred (squamous)**

Cisplatin/Gemcitabine

Cisplatin 50-75 mg/m² day 1(adjusted by Ccr), Gemcitabine 1000 mg/m² days 1 and 8 every 21 days for 4 cycles

Cisplatin/Docetaxel

Cisplatin 50-75 mg/m² day 1(adjusted by Ccr), Docetaxel 60 mg/m² day 1 every 21 days for 4 cycles

✧ **Other Recommended**

Cisplatin/Vinorelbine

Cisplatin 50-75 mg/m² day 1(adjusted by Ccr), Vinorelbine 60-80 mg/m² po days 1, 8, 15 and 22, every 28 days for 4 cycles

✧ **Useful in Certain Circumstances**

Chemotherapy regimens for patients who are not candidates for cisplatin-based therapy

Cisplatin /Paclitaxel

Cisplatin 50-75 mg/m² day 1(adjusted by Ccr), Paclitaxel 60 mg/m² day 1, 8 and 15 every 28 days for 4 cycles

or

Cisplatin 50-75 mg/m² day 1(adjusted by Ccr), Paclitaxel 90 mg/m² day 1 and 15 every 28 days for 4 cycles

or

Cisplatin 50-75 mg/m² day 1(adjusted by Ccr), Paclitaxel 180 mg/m² day 1, every 21 days for 4 cycles

Carboplatin/Paclitaxel

Carboplatin AUC 4.5-6 day 1, Paclitaxel 60 mg/m² day 1, 8 and 15 every 28 days for 4 cycles

or

Carboplatin AUC 4.5-6 day 1, Paclitaxel 90 mg/m² day 1, 15 every 28 days for 4 cycles

or

Carboplatin AUC 4.5-6 day 1, Paclitaxel 180 mg/m² day 1 every 28 days for 4 cycles

Carboplatin/Gemcitabine(squamous)

Carboplatin AUC 4.5-6 day 1, gemcitabine 1000 mg/m² days 1 and 8, every 21 days for 4 cycles

Carboplatin/Pemetrexed(nonsquamous)

Carboplatin AUC 4.5-6 day 1, pemetrexed 500 mg/m² day 1 every 21 days for 4 cycles

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

Adjuvant Chemotherapy

For stage IB and IIA (T2b, N0; T1, N1), adjuvant chemotherapy is recommended for high-risk features.a
For stage IIB (T1, N2a; T2, N1; T3, N0), stage IIIA (T1, N2b; T2–T3, N2a; T3, N1; T4, N0–1),stage IIIB (T2–T3, N2b; T4, N2), adjuvant chemotherapy is recommended.
Adjuvant chemotherapy can be considered regardless of biomarker testing results.
If patient received chemotherapy as part of neoadjuvant therapy, then adjuvant chemotherapy should not be given.

✧ **Preferred (nonsquamous)**

Cisplatin+Pemetrexed

Cisplatin 50-75 mg/m² day 1(adjusted by Ccr), Pemetrexed 500 mg/m² day 1 every 21 days for 4 cycles

✧ **Preferred (squamous)**

Cisplatin +Gemcitabine

Cisplatin 50-75 mg/m² day 1(adjusted by Ccr), Gemcitabine 1000 mg/m² days 1 and 8, every 21 days for 4 cycles

Cisplatin+Docetaxel

Cisplatin 50-75 mg/m² day 1(adjusted by Ccr), Docetaxel 25-35 mg/m² day 1 and 8, every 21 days for 4 cycles
Cisplatin 50-75 mg/m² day 1(adjusted by Ccr), Docetaxel 60 mg/m² day 1 every 21 days for 4 cycles

✧ **Other Recommended**

Cisplatin+Vinorelbine

Cisplatin 50-75 mg/m² days 1 and 8(adjusted by Ccr); Vinorelbine 60-80 mg/m² day 1, 8, (15) PO, every 28 days for 4 cycles

Carboplatin +Vinorelbine

Carboplatin AUC 4.5-6 days 1; Vinorelbine 60-80 mg/m² Day 1, 8, (15) PO, every 28 days for 4 cycles

Cisplatin +Etoposide

Cisplatin 50-75 mg/m^2 day 1(adjusted by Ccr), Etoposide 80-100 mg/m^2 day 1-3 every 21 days for 4 cycles

✧ **Useful in Certain Circumstances**

Chemotherapy regimens for patients who are not candidates for cisplatin-based therapy

Caboplatin+Paclitaxel

Carboplatin AUC 4.5-6 day 1(if Ccr <60ml/min or cisplatin not suitable), Paclitaxel 180 mg/m² Day 1, every 21 Days for 4 cycles

Carboplatin AUC 4.5-6 Day 1(if Ccr <60ml/min or cisplatin not suitable), Paclitaxel 90 mg/m² Day 1,15 every 21 Days for 4 cycles

Carboplatin AUC 4.5-6 Day 1(if Ccr <60ml/min or cisplatin not suitable), Paclitaxel 60 mg/m² Day 1,8,15 every 21 Days for 4 cycles

Carboplatin+Gemcitabine

Carboplatin AUC 4.5-6 Day 1(if Ccr <60ml/min or cisplatin not suitable), Gemcitabine 1000 mg/m² Days 1 and 8 every 21 Days for 4 cycles(squamous histology)

Carboplatin+ Pemetrexed(nonsquamous histology)

Carboplatin AUC 4.5-6 Day 1(if Ccr <60ml/min or cisplatin not suitable), Pemetrexed 500 mg/m² Day 1 every 21 Days for 4 cycles

Cisplatin /Paclitaxel

Cisplatin 50-75 mg/m² day 1(adjusted by Ccr), Paclitaxel 60 mg/m² day 1, 8 and 15 every 28 days for 4 cycles

or

Cisplatin 50-75 mg/m² day 1(adjusted by Ccr), Paclitaxel 90 mg/m² day 1 and 15 every 28 days for 4 cycles

or

Cisplatin 50-75 mg/m² day 1(adjusted by Ccr), Paclitaxel 180 mg/m² day 1, every 21 days for 4 cycles

Ufur

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。

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

Other Adjuvant Systemic Therapy

Targeted Therapy Options for Patients with Resected NSCLC

Alectinib

for patients with ≥4 cm or node-positive NSCLC stages IB–IIIA, IIIB [T2–T3, N2b; T4, N2], and positive for ALK gene fusions) (category 1).

Osimertinib

for patients with NSCLC positive for EGFR exon 19 deletion or L858R mutation).

For patients with stage IB–IIIA, IIIB (T2–T3, N2b; T4, N2) NSCLC who received previous adjuvant chemotherapy or are ineligible to receive platinum-based chemotherapy (category 1)

For patients who received previous neoadjuvant Osimertinib ± chemotherapy

Immune Checkpoint Inhibitor Options for Patients with Resected NSCLC Tumors

Atezolizumab

for patients with ≥4 cm or node-positive NSCLC stages IB–IIIA, IIIB [T2–T3, N2b; T4, N2] who received previous adjuvant chemotherapy with NSCLC PD-L1 ≥1% and no known EGFR mutations or ALK gene fusions(category 1).

Pembrolizumab

For up to a year for patients with ≥4 cm or node-positive NSCLC stages IB–IIIA, IIIB (T2–T3, N2b; T4, N2) who received previous adjuvant chemotherapy and no known EGFR mutations or ALK gene fusions (category 1).18 The benefit for patients with PD-L1 <1% is unclear.

For up to 39 weeks for patients who received previous neoadjuvant chemotherapy + Pembrolizumab (category 1).3

Durvalumab

for patients who received previous neoadjuvant chemotherapy + Durvalumab and no known EGFR mutations or ALK gene fusions(category 1).

Nivolumab

for patients who received previous neoadjuvant chemotherapy + Nivolumab and no known EGFR mutations or ALK gene fusions(category 1).

➢ Concurrent Chemoradiation Regimens

✧ **Preferred**

Carboplatin+ Pemetrexed

Carboplatin AUC 4.5-6 on Day 1 (if Ccr <60ml/min or cisplatin not suitable), Pemetrexed 500 mg/m² on Day 1 every 21 Days for 4 cycles; concurrent thoracic RT

Cisplatin+ Pemetrexed

Cisplatin 50-75 mg/m² on Day 1(adjusted by Ccr), 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+ Carboplatin

Paclitaxel 45-50 mg/m² weekly; carboplatin AUC 2 (if Ccr <60ml/min or Cisplatin not suitable) weekly, concurrent thoracic RT ± additional 2 cycles every 21 Days of Paclitaxel 180 mg/m^2 and Carboplatin AUC 6(if Ccr <60ml/min or Cisplatin not suitable) monsly

Cisplatin+Etoposide

Cisplatin 50 mg/m² on Days 1, 8, 29, and 36(adjusted by Ccr); Etoposide 50 mg/m² Days 1–5 and 29–33; concurrent thoracic RT at least 1cycle

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

Durvalumab

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) (except tumors that are positive for EGFR exon 19 deletion or exon 21 L858R mutations)

Osimertinib

Osimertinib 80 mg once daily until disease progression (category 1 for stage III; category 2A for stage II) if EGFR exon 19 deletion or L858R

➢ Molecular and Biomarker-directed therapy for advanced or metastatic disease

EGFR Exon 19 Deletion or Exon 21 L858R	***EGFR* S768I, L861Q, and/or G719X Mutations**	***EGFR* Exon 20 Insertion Mutation**	***KRAS* G12C Mutation**
● **First-line therapy** Afatinib Erlotinib Dacomitinib Gefitinib Osimertinib (Carboplatin or Cisplatin)/ Osimertinib/Pemetrexed (nonsquamous) Erlotinib + Ramucirumab Erlotinib + Bevacizumab (nonsquamous) Lazertinib + Amivantamab-vmjw Lazertinib ● **Subsequent therapy** Osimertinib Carboplatin/Pemetrexed + Amivantamab-vmjw (nonsquamous) Datopotamab deruxtecan-dlnk (nonsquamous) Lazertinib + Amivantamab-vmjw	● **First-line therapy** Afatinib Erlotinib Dacomitinib Gefitinib Osimertinib ● **Subsequent therapy** Osimertinib Datopotamab deruxtecan-dlnk (nonsquamous)	● **First-line therapy** Carboplatin/Pemetrexed + Amivantamab-vmjw (nonsquamous) ● **Subsequent therapy** Amivantamab-vmjw Sunvozertinib Datopotamab deruxtecan-dlnk (nonsquamous)	● **Subsequent therapy** Sotorasib Adagrasib

➢ Molecular and Biomarker-directed therapy for advanced or metastatic disease

<u>*ALK* Gene Fusion</u> ● **First-line therapy** Alectinib Brigatinib Ceritinib Crizotinib Ensartinib Lorlatinib ● **Subsequent therapy** Alectinib Brigatinib Ceritinib Ensartinib Lorlatinib	**<u>*ROS1* Gene Fusion</u>** ● **First-line therapy** Crizotinib Entrectinib Repotrectinib Taletrectinib ● **Subsequent therapy** Lorlatinib Entrectinib Repotrectinib Taletrectini	**<u>*BRAF* V600E Mutation</u>** ● **First-line therapy** Dabrafenib/Trametinib Binimetinib/Encorafenib Dabrafenib Vemurafenib ● **Subsequent therapy** Dabrafenib/Trametinib Binimetinib/Encorafenib	**<u>*NTRK1/2/3* Gene Fusion</u>** ● **First-line/Subsequent therapy** Larotrectinib Entrectinib Repotrectinib
<u>*MET* Exon 14 Skipping Mutation</u> ● **First-line therapy/ Subsequent therapy** Capmatinib Crizotinib Tepotinib	**<u>*RET* Gene Fusion</u>** ● **First-line therapy** Selpercatinib Pralsetinib ● **Subsequent therapy** Cabozantinib	**<u>*ERBB2 (HER2)* Mutation</u>** ● **Subsequent therapy** Fam-trastuzumab deruxtecan-nxki Ado-trastuzumab emtansine Zongertinib	**<u>*NRG1* Gene Fusion</u>** ● **Subsequent therapy** Zenocutuzumab-zbco
<u>HER2-positive IHC 3+</u> ● **Subsequent therapy** Fam-trastuzumab deruxtecan-nxki	**<u>HGFR (*MET*) (≥50% IHC 3+ and *EGFR* wild-type)</u>** ● **Subsequent therapy** Telisotuzumab vedotin-tllv (nonsquamous)		

➢ Advanced or Metastatic disease

Principles of biomarker-directed therapy for advanced or metastatic disease

◆ PD-L1 ≥50% FIRST-LINE THERAPY (PS 0–2)

Preferred

A. Pembrolizumab followed by maintenance Pembrolizumab(category 1)
Pembrolizumab 200 mg, day 1, every 3 weeks followed by maintenance Pembrolizumab

B. (Carboplatin or Cisplatin) + Pemetrexed + Pembrolizumab followed by maintenance Pemetrexed + Pembrolizumab, then Pemetrexed (category 1)
(Carboplatin AUC 4.5-6 , day 1 or Cisplatin 60-75 mg/m^2 , day 1) + Pemetrexed 500 mg/m^2 , day 1+ Pembrolizumab 200 mg, day 1, every 3 weeks followed by maintenance Pemetrexed + Pembrolizumab, then Pemetrexed

C. Carboplatin + (Paclitaxel or Albumin-bound Paclitaxel) +Pembrolizumab followed by maintenance Pembrolizumab (category 1) (for Squamous Cell Carcinoma)
Carboplatin AUC 4.5-6 , day 1 + (Paclitaxel 180 mg/m^2 , day 1 or Albumin-bound Paclitaxel 100 mg/m^2) , day 1 + Pembrolizumab 200mg , day 1, every 3 weeks

D. Atezolizumab 1200 mg followed by maintenance Atezolizumab (category 1)
Atezolizumab 1200 mg Day 1, every 3 weeks

E. Cemiplimab-rwlc followed by maintenance Cemiplimab (category 1)
Cemiplimab-rwlc 350 mg Day 1, every 3 weeks followed by maintenance Cemiplimab

F. (Carboplatin or Cisplatin)/Pemetrexed + Cemiplimab-rwlc followed by maintenance Cemiplimab ± Pemetrexed (category 1)
(Carboplatin AUC 4.5-6 , day 1 or Cisplatin 60-75mg/m^2 , day 1) + Pemetrexed 500 mg/m^2 , day 1+ Cemiplimab-rwlc 350 mg , Day 1 every 3 weeks followed by maintenance Cemiplimab 350 mg Day 1± Pemetrexed 500 mg/m^2 every 3 weeks

Other Recommended

A. **Carboplatin + Paclitaxel + Bevacizumab + Atezolizumab followed by maintenance Bevacizumab ± Atezolizumab (category 1) (for Adenocarcinoma, Large Cell, NSCLC NOS)**
Carboplatin AUC 4.5-6, day 1 + Paclitaxel 180 mg/m^2 , day 1+ Bevacizumab 7.5 mg/kg , day 1+ Atezolizumab 1200mg , day 1, every 3 weeks

B. **Carboplatin + Albumin-bound Paclitaxel + Atezolizumab followed by maintenance Atezolizumab**
Carboplatin AUC 4.5-6 , day 1 + Albumin-bound Paclitaxel 100 mg/m^2 , day 1 + Atezolizumab 1200 mg , day 1, every 3 weeks

C. **Nivolumab + Ipilimumab + Pemetrexed + (Carboplatin or Cisplatin) followed by maintenance Ipilimumab + Nivolumab (category 1)**
Nivolumab 360 mg , day 1+ Ipilimumab 50 mg , day 1+ Pemetrexed 500 mg/m^2+ (Carboplatin AUC 4.5-6, day 1 or Cisplatin 60-75mg/m^2) , day 1, every 3 weeks

D. **Tremelimumab-actl + Durvalumab + Carboplatin + Albumin-bound Paclitaxel(category 2B)**
Tremelimumab-actl 75mg, day 1 + Durvalumab 1500 mg , day 1 + Carboplatin AUC 4.5-6, day 1 + Albumin-bound Paclitaxel 100mg/m^2 , day 11, every 3 weeks

E. **Tremelimumab-actl + Durvalumab + (Carboplatin or Cisplatin) + Pemetrexed(category 2B)**
Tremelimumab-actl 75 mg , day 1 + Durvalumab 1500 mg , day 1 + (Carboplatin AUC 4.5-6, day 1 or Cisplatin 60-75 mg/m^2 , day 1)+ Pemetrexed 500 mg/m^2 , day 1, every 3 weeks

F. **Nivolumab + Ipilimumab + Paclitaxel + Carboplatin followed by maintenance Ipilimumab + Nivolumab (category 1) for Squamous Cell Carcinoma**
Nivolumab 360 mg , day 1+ Ipilimumab 50 mg, day 1+ Paclitaxel 180 mg/m^2+ Carboplatin AUC 4.5-6, day 1, every 3 weeks

G. **Tremelimumab-actl + Durvalumab + Carboplatin + Albumin-bound Paclitaxel followed by maintenance Durvalumab (category 2B) for Squamous Cell Carcinoma**
Tremelimumab-actl 75mg , day 1 + Durvalumab 1500mg , day 1 + Carboplatin AUC 4.5-6, day 1 + Albumin-bound Paclitaxel 100mg/m^2 Day 1, every 3 weeks

H. **Tremelimumab-actl + Durvalumab + (Carboplatin or Cisplatin) + Gemcitabine followed by maintenance**

Durvalumab (category 2B) for Squamous Cell Carcinoma

Tremelimumab-actl 75mg , day 1 + Durvalumab 1500mg , day 1 +(Carboplatin AUC 4.5-6 , day 1 or Cisplatin 50-75mg/m^2)+ Gemcitabine 1000mg/m2, day 1, every 3 weeks

G. (Carboplatin or Cisplatin) + Paclitaxel + Cemiplimab-rwlc followed by maintenance Cemiplimab(category 1)

(Carboplatin AUC 4.5-6 , day 1 or Cisplatin 60-75mg/m^2 , day 1) + Paclitaxel 180 mg/m^2 , day 1+ Cemiplimab-rwlc 350 mg , Day 1 every 3 weeks followed by maintenance Cemiplimab 350 mg Day 1 every 3 weeks

Useful in Certain Circumstances

A. Nivolumab + Ipilimumab followed by maintenance Ipilimumab + Nivolumab (category 1)

Nivolumab 360mg , day 1+ Ipilimumab 50mg , day 1, every 3 weeks

◆ PD-L1 ≥1%–49% FIRST-LINE THERAPY (PS 0–2)

Preferred

A. (Carboplatin or Cisplatin) + Pemetrexed + Pembrolizumab followed by maintenance Pemetrexed + Pembrolizumab then Pemetrexed (category 1)

(Carboplatin AUC 4.5-6, day 1 or Cisplatin 60-75mg/m^2, day 1) + Pemetrexed 500mg/m^2 , day 1+ Pembrolizumab 200mg, day 1, every 3 weeks

B. Carboplatin + (Paclitaxel or Albumin-bound Paclitaxel) + Pembrolizumab followed by maintenance Pembrolizumab (category 1)

Carboplatin AUC 4.5-6 , day 1 + (Paclitaxel 180mg/m^2 or Albumin-bound Paclitaxel 100mg/m^2) , day 1 + Pembrolizumab 200mg , day 1, every 3 weeks

C. (Carboplatin or Cisplatin)/Pemetrexed + Cemiplimab-rwlc followed by maintenance Cemiplimab ± Pemetrexed (category 1)

(Carboplatin AUC 4.5-6 , day 1 or Cisplatin 60-75mg/m2 , day 1) + Pemetrexed 500 mg/m2 , day 1+ Cemiplimab-rwlc 350 mg , Day 1 every 3 weeks followed by maintenance Cemiplimab 350 mg Day 1± Pemetrexed 500 mg/m2 every 3 weeks

Other Recommended

A. Carboplatin + Paclitaxel + Bevacizumab+ Atezolizumab followed by maintenance Bevacizumab ± Atezolizumab (category 1)

Carboplatin AUC 4.5-6, day 1 + Paclitaxel 180mg/m^2 , day 1+ Bevacizumab 7.5mg/kg , day 1+ Atezolizumab 1200mg , day 1, every 3 weeks

B. Carboplatin + Albumin-bound Paclitaxel + Atezolizumab followed by maintenance Atezolizumab

Carboplatin AUC 4.5-6 , day 1 + Albumin-bound Paclitaxel 100mg/m^2 , day 1 + Atezolizumab 1200mg , day 1, every 3 weeks

C. Nivolumab + Ipilimumab + Pemetrexed + (Carboplatin or Cisplatin) followed by maintenance Ipilimumab + Nivolumab(category 1)

Nivolumab 360mg, day 1+ Ipilimumab 50mg , day 1+ Pemetrexed 500mg/m^2+ (Carboplatin AUC 4.5-6, day 1 or Cisplatin 60-75mg/m^2) , day 1, every 3 weeks

D. Nivolumab + Ipilimumab followed by maintenance Ipilimumab + Nivolumab (category 1)

Nivolumab 360mg , day 1+ Ipilimumab 50mg, day 1+ Pembrolizumab 200mg , day 1, every 3 weeks

E. Tremelimumab-actl + Durvalumab + Carboplatin + Albumin-bound Paclitaxel followed by maintenance Durvalumab (category 1)

Tremelimumab-actl 75mg, day 1 + Durvalumab 1500mg , day 1+ Carboplatin AUC 4.5-6 , day 1 + Albumin-bound Paclitaxel 100mg/m^2 , day 1, every 3 weeks

F. Tremelimumab-actl + Durvalumab + (Carboplatin or Cisplatin) + Pemetrexed followed by maintenance Durvalumab ± Pemetrexed (category 1) for Adenocarcinoma, Large Cell, NSCLC NOS

Tremelimumab-actl 75mg, day 1 + Durvalumab 1500mg , day 1 +(Carboplatin AUC 4.5-6 , day 1 or Cisplatin 60-75mg/m^2)+ Pemetrexed 500mg/m^2 , day 1, every 3 weeks

G. Nivolumab +Ipilimumab + Paclitaxel + Carboplatin followed by maintenance Ipilimumab + Nivolumab (category 1) (for Squamous Cell Carcinoma)

Nivolumab 240 mg , day 1+ Ipilimumab 1 mg/kg, day 1+ Carboplatin AUC 4.5-6, day 1+ Paclitaxel 180 mg/m^2 , day 1, every 3 weeks

H. **Tremelimumab-actl + Durvalumab + (Carboplatin or Cisplatin) +Gemcitabine followed by maintenance Durvalumab(for Squamous Cell Carcinoma)**
Tremelimumab-actl 75 mg, day 1+ Durvalumab 1500 mg, day 1+ Carboplatin AUC 4.5-6, day 1+ Gemcitabine 1000 mg/m^2 , day 1every 21 days followed by maintenance Durvalumab
Tremelimumab-actl 75 mg , day 1+ Durvalumab 1500 mg, day 1+ Cisplatin 60 mg/m^2 , day 1+ Gemcitabine 1000 mg/m^2 , day 1every 21 days followed by maintenance Durvalumab

I. **(Carboplatin or Cisplatin) + Paclitaxel + Cemiplimab-rwlc followed by maintenance Cemiplimab(category 1)**
(Carboplatin AUC 4.5-6 , day 1 or Cisplatin 60-75mg/m^2 , day 1) + Paclitaxel 180 mg/m^2 , day 1+ Cemiplimab-rwlc 350 mg , Day 1 every 3 weeks followed by maintenance Cemiplimab 350 mg Day 1 every 3 weeks

Useful in Certain Circumstances

A. **Pembrolizumab followed by maintenance Pembrolizumab (category 2B)**
Pembrolizumab 200mg , day 1, every 3 weeks

◆ **NO contraindications to PD-1 or PD-L1 inhibitors AND NO *EGFR* exon 19 deletion or L858R; *ALK*, *RET*, or *ROS1* rearrangements**

Preferred

A. **Carboplatin/Pemetrexed + Pembrolizumab (category 1)**
Carboplatin AUC 4.5-6 day 1 or 8+Pemetrexed 500 mg/m^2 , day 1+Pembrolizumab 200 mg every 21 days

B. **Cisplatin/Pemetrexed + Pembrolizumab (category 1)**
Cisplatin 50-75 mg/m^2 day 1+Pemetrexed 500 mg/m^2 , day 1+Pembrolizumab 200 mg , day 1every 21 days

C. **Carboplatin/Paclitaxel + Pembrolizumab (category 1)Squamous Cell Carcinoma**
Carboplatin AUC 4.5-6 day 1 + Paclitaxel 180 mg/m^2 day 1+Pembrolizumab 200 mg, day 1 every 21 days

D. **Albumin-bound Paclitaxel/Carboplatin + Pembrolizumab (category 1)Squamous Cell Carcinoma**
Carboplatin AUC 4.5-6 day 1 + Albumin-bound Paclitaxel 100 mg/m^2 day 1,8,15+Pembrolizumab 200 mg, day 1 every 21 days

Other Recommended

A. Carboplatin/Paclitaxel + Atezolizumab + Bevacizumab(category 1) for Adenocarcinoma
Carboplatin AUC 4.5-6 day 1 + Paclitaxel 180 mg/m² day 1+ Atezolizumab 1200 mg ,day 1 every 21 days

B. **Albumin-bound Paclitaxel/Carboplatin + Atezolizumab for Adenocarcinoma**
Albumin-bound Paclitaxel 100 mg/m^2 , day 1+ Carboplatin AUC 4.5-6 day 1 + Atezolizumab 1200 mg ,day 1 every 21 days

C. Ipilimumab+ Nivolumab
Nivolumab 240 mg, day 1+ Ipilimumab 1 mg/kg, day 1 every 21 days

D. (Carboplatin or Cisplatin)/Pemetrexed + Ipilimumab + Nivolumab (category 1) for Adenocarcinoma
Carboplatin AUC 4.5-6 day 1 + Pemetrexed 500 mg/m^2 , day 1+Nivolumab 240 mg, day 1+ Ipilimumab 1 mg/kg, day 1 every 21 days
Cisplatin 50-75 mg/m^2 day 1+ Pemetrexed 500 mg/m^2 , day 1+Nivolumab 240 mg+ Ipilimumab 1 mg/kg, day 1 every 21 days

E. Albumin-bound Paclitaxel/Carboplatin+ Durvalumab+ Tremelimumab-actl (category 1)
Albumin-bound Paclitaxel 100 mg/m^2, day 1 + Carboplatin AUC 4.5-6 , day 1+ Durvalumab 1500 mg, day 1+ Tremelimumab-actl 75 mg, day 1 every 21 days

F. (Carboplatin or Cisplatin)/Pemetrexed+ Durvalumab+ Tremelimumab-actl (category 1)
Carboplatin AUC 4.5-6 day 1 + Pemetrexed 500 mg/m^2, day 1+Durvalumab 1500 mg+ Tremelimumab-actl 75 mg day 1 every 21 days
Cisplatin 50-75 mg/m^2, day 1+ Pemetrexed 500 mg/m^2, day 1 +Durvalumab 1500 mg, day 1+ Tremelimumab-actl 75 mg day 1,every 21 days

G. Carboplatin/Paclitaxel + Ipilimumab + Nivolumab (category 1)
Carboplatin AUC 4.5-6 day 1 + Paclitaxel 180 mg/m^2 ,day 1+ Nivolumab 240 mg, day 1+ Ipilimumab 1 mg/kg, day 1 every 21 days

H. (Carboplatin or Cisplatin)/Gemcitabine+ Durvalumab+ Tremelimumab-actl(category 1)
Carboplatin AUC 4.5-6, day 1 + Gemcitabine 1000 mg/m^2,day1+Durvalumab 1500 mg, day 1+ Tremelimumab-actl 75 mg day 1 every 21 days

Cisplatin 50-75 mg/m^2, day 1+ Gemcitabine 1000 mg/m^2, day 1+Durvalumab 1500 mg, day 1+ Tremelimumab-actl 75 mg day 1 every 21 days

◆ Other Chemotherapy Regimens

A. Cisplatin + Gemcitabine

Cisplatin 50-75 mg/m² day 1(adjusted by Ccr), Gemcitabine 1000 mg/m^2, days 1 and 8, every 21 days

B. Carboplatin + Gemcitabine

Carboplatin AUC 4.5-6 day 1, Gemcitabine 1000 mg/m^2, days 1 and 8, every 21 days

C. Cisplatin + Paclitaxel

Cisplatin 50-75 mg/m² day 1(adjusted by Ccr), Paclitaxel 60 mg/m^2, days 1,8 and 15, every 21 days
Cisplatin 50-75 mg/m² day 1(adjusted by Ccr), Paclitaxel 90 mg/m^2, days 1 and 15, every 21 days
Cisplatin 50-75 mg/m² day 1(adjusted by Ccr), Paclitaxel 180 mg/m^2, days, every 21 days

D. Carboplatin + Paclitaxel

Carboplatin AUC 4.5-6 day 1, Paclitaxel 60 mg/m^2, days 1,8 and 15, every 21 days
Carboplatin AUC 4.5-6 day 1, Paclitaxel 90 mg/m^2, days 1 and 15, every 21 days
Carboplatin AUC 4.5-6 day 1, Paclitaxel 180 mg/m^2, days 1, every 21 days

E. Cisplatin+Vinorelbine

Cisplatin 50-75 mg/m^2, day 1(adjusted by Ccr), Vinorelbine 60-80 mg/m^2, PO Day 1 or 8, 15, every 21 days

F. Carboplatin +Vinorelbine

Carboplatin AUC 4.5-6 day 1, Vinorelbine 60-80 mg/m^2 ,PO Day 1 or 8, 15, every 21 days

G. Cisplatin+Docetaxel

Cisplatin 50-75 mg/m^2, day 1(adjusted by Ccr), Docetaxel 25-35 mg/m^2, days 1,8, every 21 days

H. Carboplatin +Docetaxel

Carboplatin AUC 4.5-6 day 1, Docetaxel 25-35 mg/m^2, days 1,8, every 21 days
Carboplatin AUC 4.5-6 day 1, Docetaxel 60 mg/m^2, days 1, every 21 days

I. Cisplatin + Pemetrexed(non-squamous)

Cisplatin 50-75 mg/m^2, day 1(adjusted by Ccr), Pemetrexed 500 mg/m^2, days 1, every 21 days

J. Carboplatin + Pemetrexed(non-squamous)
Carboplatin AUC 4.5-6 day 1, Pemetrexed 500 mg/m^2, days 1, every 21 days

K. Cisplatin+Etoposide
Cisplatin 50-75 mg/m^2 ,day 1(adjusted by Ccr), Etoposide 100 mg/m^2, days 1–3, every 28 days

L. Carboplatin +Etoposide
Carboplatin AUC 4.5-6 day 1, Etoposide 100 mg/m^2, days 1–3, every 28 days

M. TS-1
TS-1 80mg~120mg PO (adjusted by BSA) 休息 14 天 or Day1~14, 休息 7 天。

N. Weekly Docetaxel
Docetaxel 25-35 mg/m^2 ,days 1,8,15, every 21 days

O. Docetaxel
Docetaxel 60 mg/m^2 ,days 1, every 21 days

P. Pemetrexed
Pemetrexed 500 mg/m^2 ,days 1, every 21 days

Q. Gemcitabine
Gemcitabine 1000 mg/m^2 ,days 1 and 8, every 21 days

R. Docetaxel + Ramucirumab
Docetaxel 60 mg/m^2, days 1, Ramucirumab 8 mg/kg ,days 1, every 21 days

S. Albumin-bound Paclitaxel
Albumin-bound Paclitaxel 100 mg/m^2 ,day 1,8,15, every 21 days

◆ Systemic therapy for advanced or metastatic disease-Subsequent

Systemic ICIs

A. Nivolumab (category 1)
Nivolumab 360 mg ,day 1, every 21 days

B. Pembrolizumab (category 1)
Pembrolizumab 200 mg, day 1, every 21 days

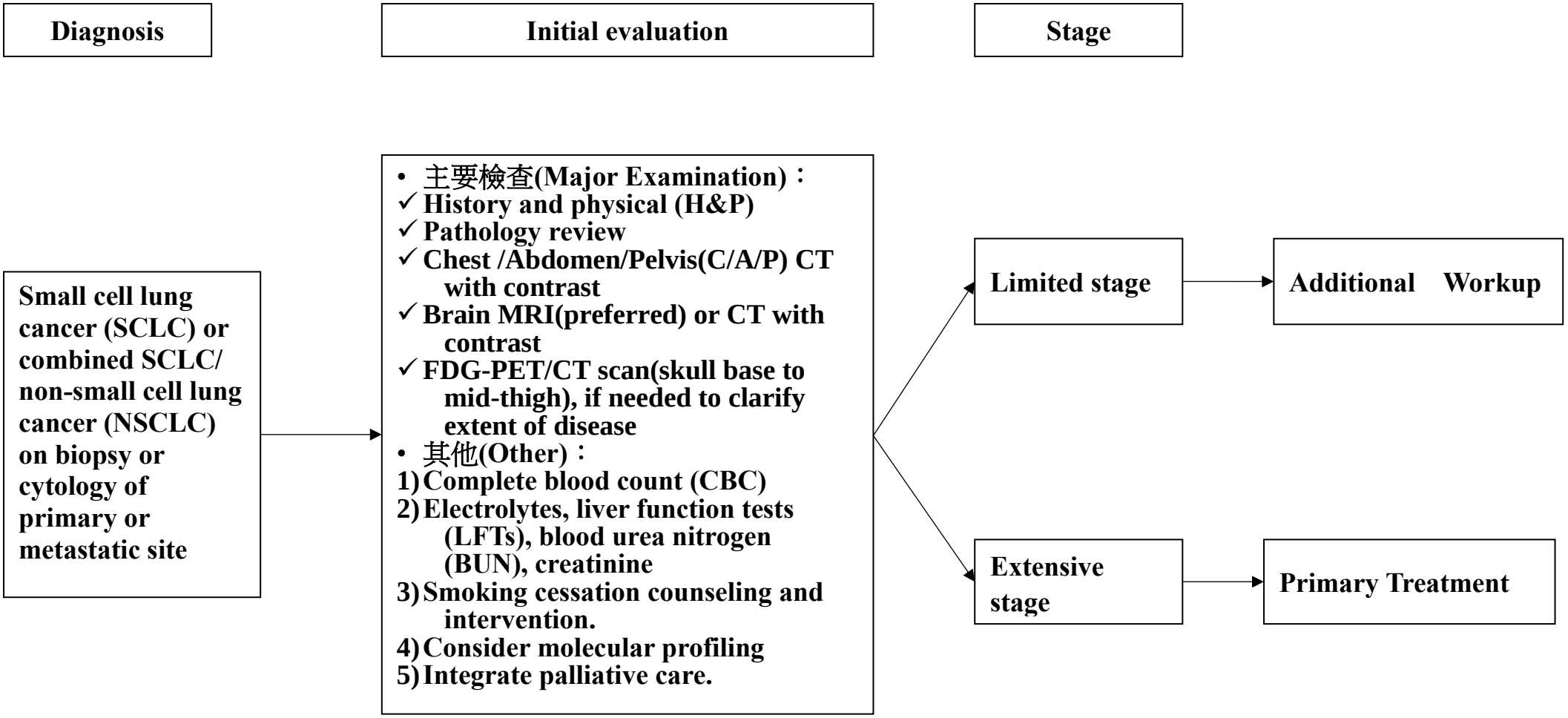
C. Atezolizumab (category 1)

Atezolizumab 1200 mg, day 1, every 21 days

SYSTEMIC THERAPY FOR ADVANCED OR METASTATIC DISEASE – PROGRESSION

ADENOCARCINOMA, LARGE CELL, NSCLC NOS	SQUAMOUS CELL CARCINOMA
Options for PS 0–2: Nivolumab, Pembrolizumab, or Atezolizumab; Datopotamab deruxtecan-dlnk (*EGFR* mutations); Lazertinib + Amivantamab-vmjw (*EGFR* exon 19 deletion or L858R mutation); Fam-trastuzumab deruxtecan-nxki (HER2 IHC 3+); Telisotuzumab vedotin-tllv (HGFR [*MET*] ≥50% IHC 3+ and *EGFR* wild-type); Docetaxel (category 2B); Pemetrexed (category 2B); Gemcitabine (category 2B); Docetaxel + Ramucirumab (category 2B); or Albumin-bound Paclitaxel (category 2B) **PS 3–4:** Best supportive care	**Options for PS 0–2:** Nivolumab, Pembrolizumab, or Atezolizumab; Fam-trastuzumab deruxtecan-nxki (HER2 IHC 3+); Docetaxel (category 2B); Gemcitabine (category 2B); Docetaxel + Ramucirumab (category 2B); or Albumin-bound Paclitaxel (category 2B) **PS 3–4:** Best supportive care

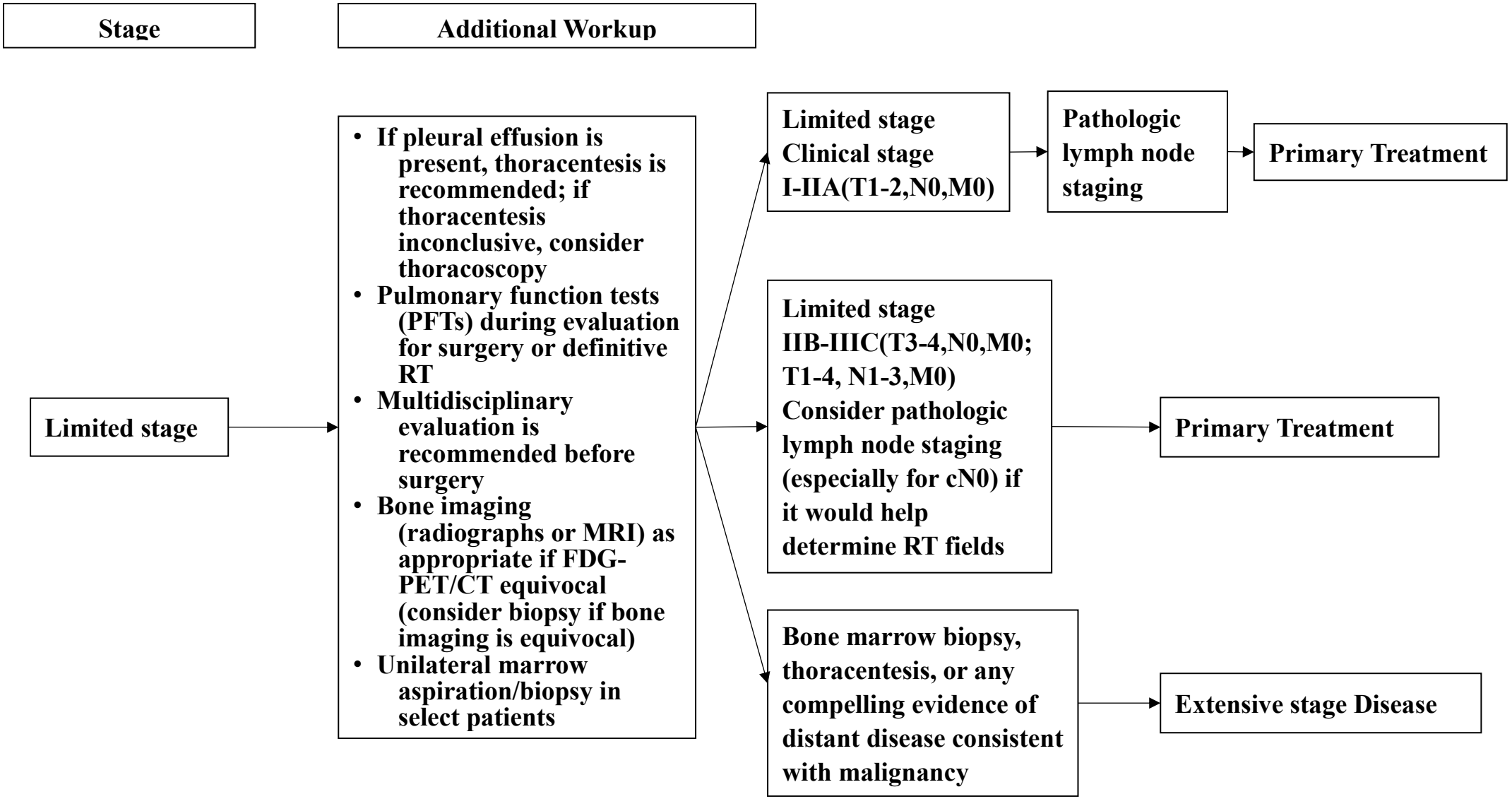
五、小細胞肺癌治療指引



註 1：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.

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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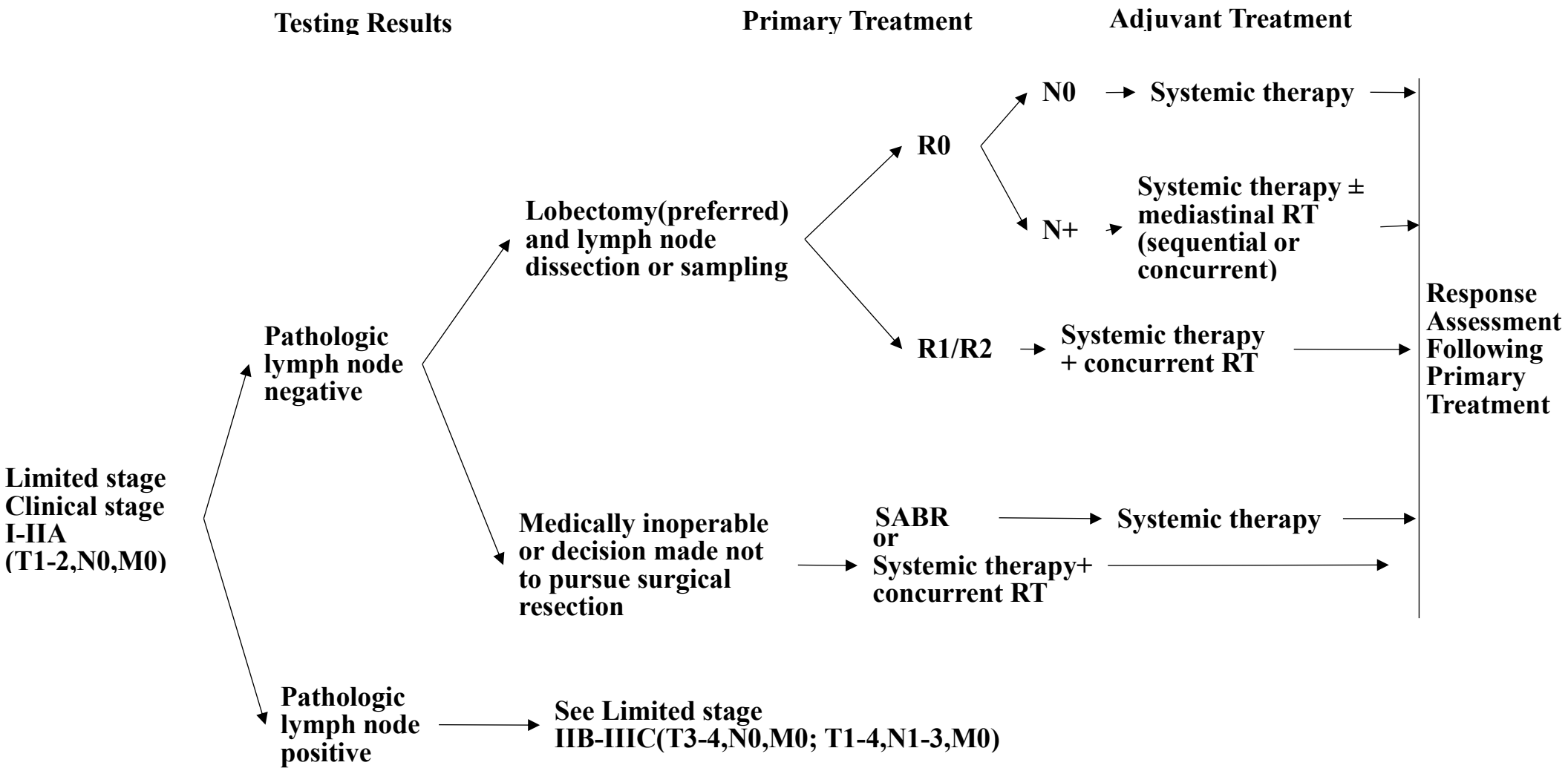

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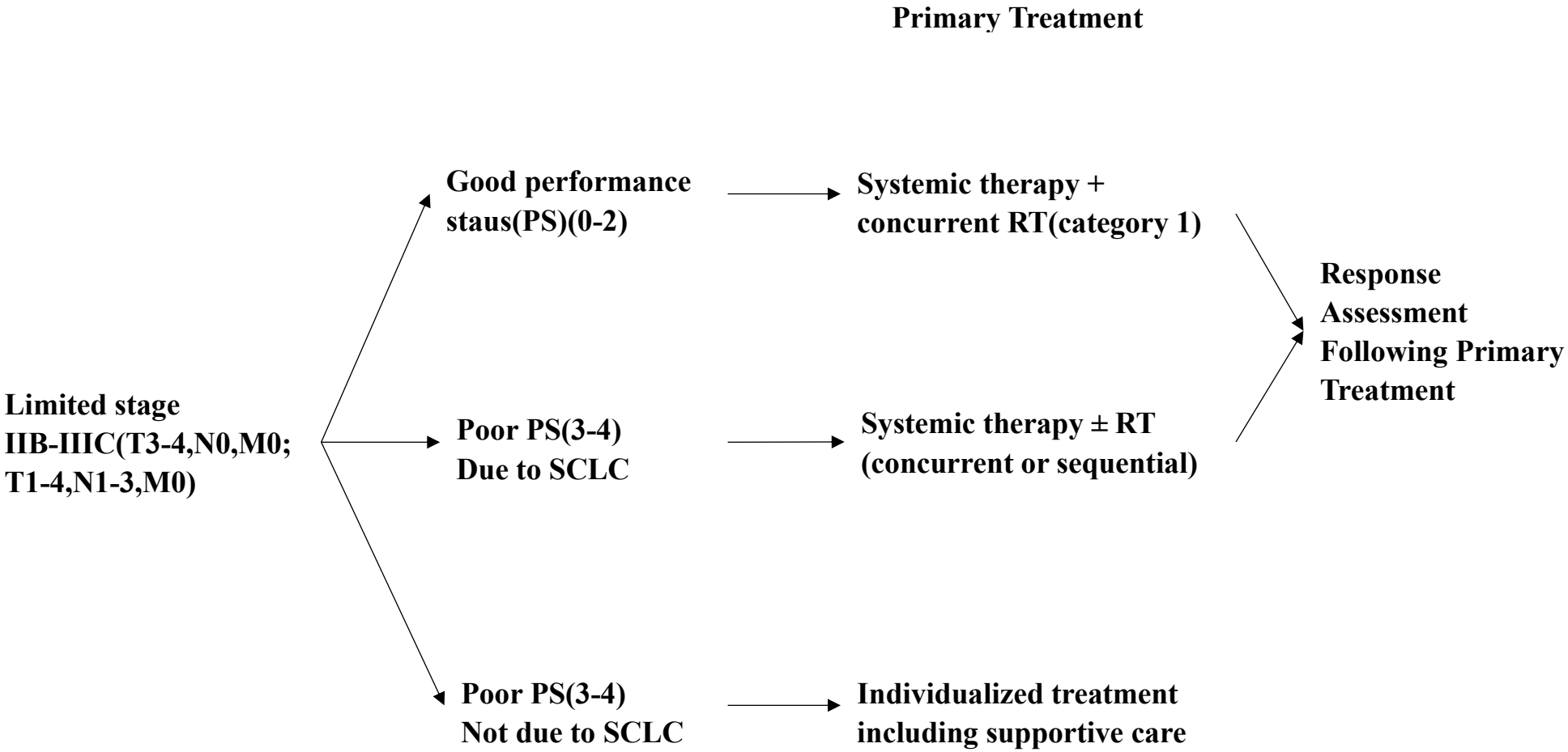

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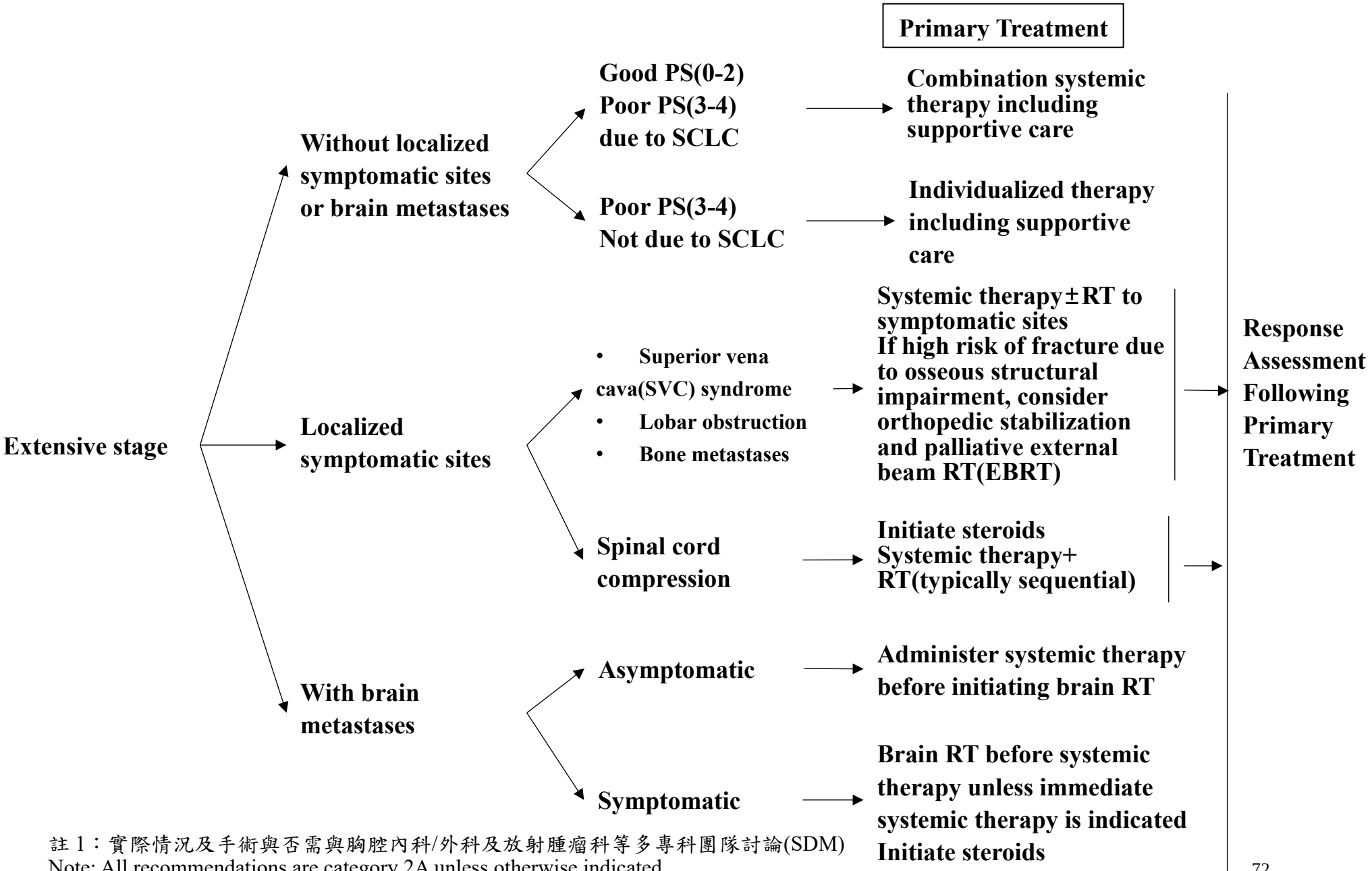

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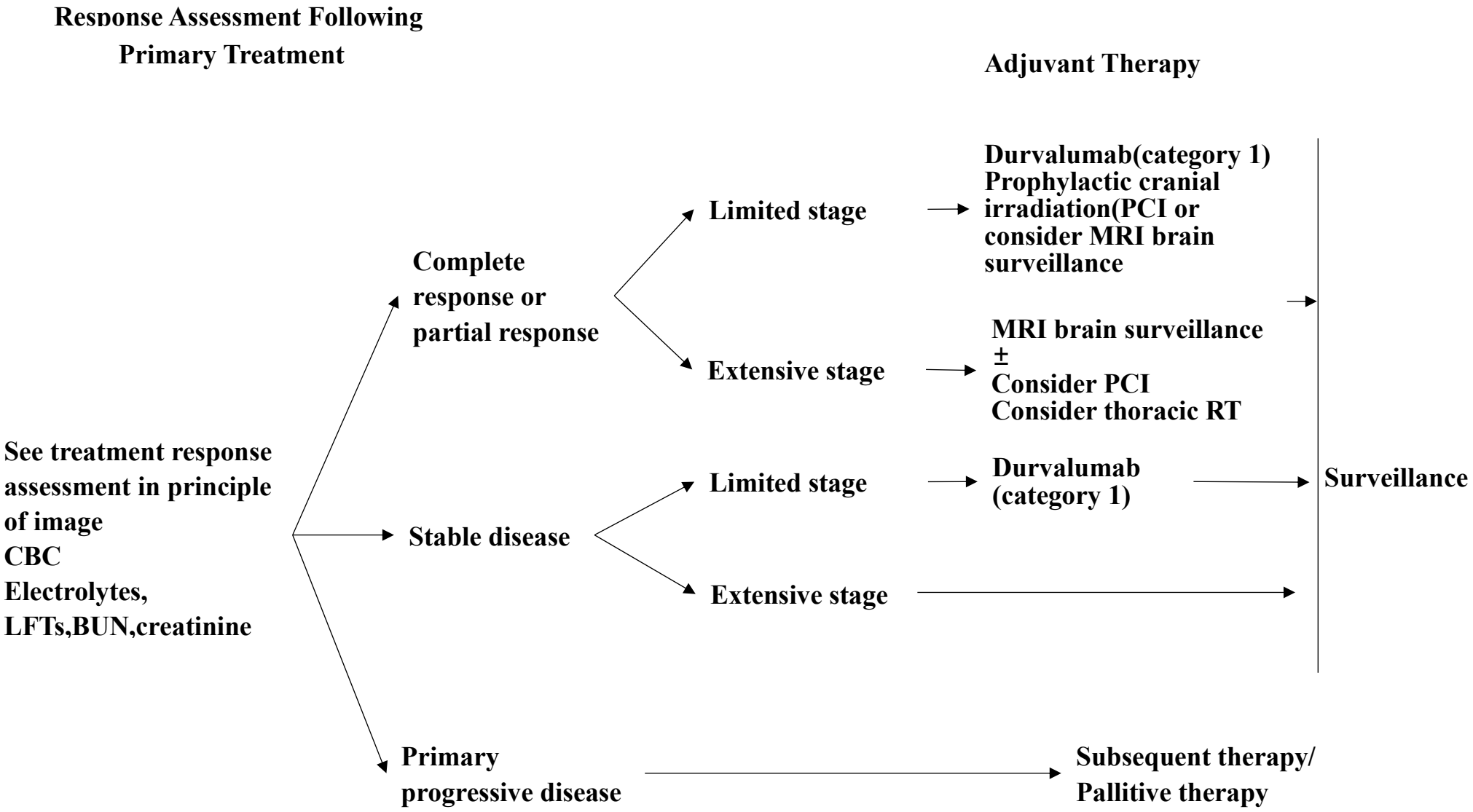

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Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

Surveillance

Limited stage →

After completion of initial therapy

- **Oncology follow up visits every 3 mo during y 1-2, every 6 mo during y3, then annually**

Extensive stage →

After completion of initial or subsequent therapy

- **Oncology follow up visits every 2 mo during y 1, every 3-4 mo during y 2-3, then every 6mo during y4-5, then annually**

→

- **Provide survivorship care plan after completion of initial therapy**
- **H&P, blood work only as clinically indicated**
- **Surveillance CT, Brain MRI (preferred) or CT with contrast every 3-4 mo during y 1, then every 6mo afterwards, then as clinically indicated(regardless of PCI status)**
- **New pulmonary nodule should initiate workup for potential new primary**
- **Smoking cessation intervention**
- **FDG-PET/CT is not recommended for routine follow-up unless a contrast CT or MRI is contraindicated**

→ **Relapse, See Subsequent therapy**

註 1：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)

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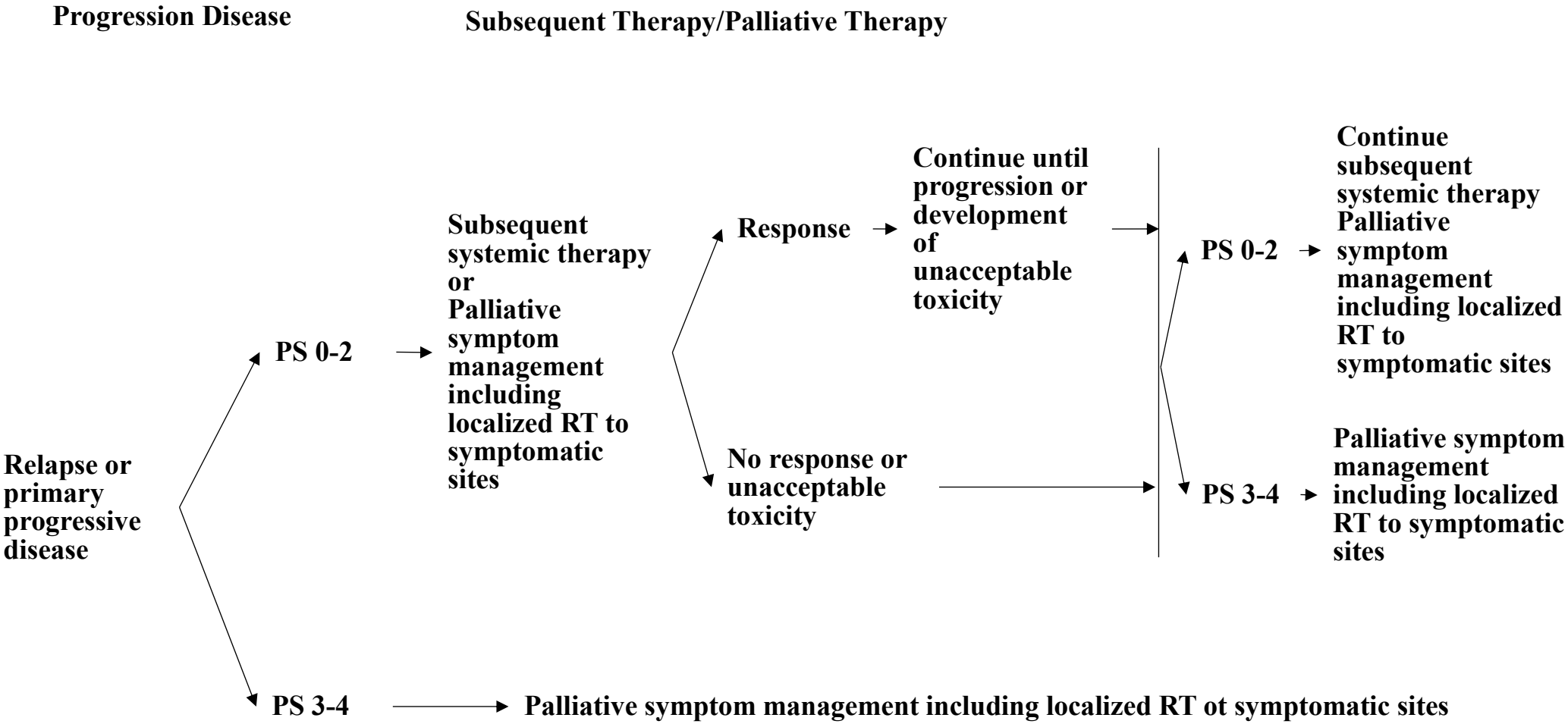

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Clinical Trials: NCCN believes that the best management of any patient with cancer is in a clinical trial. Participation in clinical trials is especially encouraged.

六、小細胞肺癌化學治療原則

Limited stage (maximum of 4-6 cycles)

➢ Primary or Adjuvant Therapy

Preferred

Cisplatin 50-75 mg/m^2 Day 1 and Etoposide 100 mg/m^2 Days 1, 2, 3 every 21 Days for 4-6 cycles (adjusted by Ccr)

Carboplatin (AUC) 4.5–6 Day 1 and Etoposide 100 mg/m^2 Days 1, 2, 3 every 21 Days for 4-6 cycles (adjusted by Ccr)

Consolidation Therapy

Durvalumab 1500 mg Day 1 every 28 Days for up to 12 months(category 1)

Other Recommended

Cisplatin 25 mg/m^2 Days 1, 2, 3 and Etoposide 100 mg/m^2 Days 1, 2, 3 every 21 Days for 4-6 cycles

註 1：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.

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.

➢ Extensive stage (maximum of 4-6 cycles)

Preferred

Carboplatin AUC 4.5-6 Day 1 and Etoposide 100 mg/m^2 Days 1, 2, 3 and Atezolizumab 1200 mg Day 1 every 21 Days x 4 cycles followed by maintenance Atezolizumab 1200 mg Day 1, every 21 Days (category 1 for all)

Carboplatin AUC 4.5-6 Day 1 and Etoposide 100 mg/m² Days 1, 2, 3 and Atezolizumab 1200 mg Day 1 every 21 Days x 4 cycles followed by maintenance Atezolizumab 1680 mg Day 1, every 28 Days

Carboplatin AUC 4.5-6 Day 1 and Etoposide 100 mg/m^2 Days 1, 2, 3 and Atezolizumab 1200 mg Day 1 every 21 Days x 4 cycles followed by maintenance Lurbinectedin 3.2 mg/m^2 and Atezolizumab 1200 mg Day 1, every 21 Days

Carboplatin AUC 4.5–6 Day 1 and Etoposide 80–100 mg/m^2 Days 1, 2, 3 and Durvalumab 1500 mg Day 1 every 21 Days x 4 cycles followed by maintenance Durvalumab 1500 mg Day 1 every 28 Days (category 1 for all)

Cisplatin 50-75 mg/m^2 Day 1 and Etoposide 80–100 mg/m^2 Days 1, 2, 3 and Durvalumab 1500 mg Day 1 every 21 Days x 4 cycles followed by maintenance Durvalumab 1500 mg Day 1 every 28 Days (category 1 for all)

Other Recommended

Carboplatin AUC 4.5–6 Day 1 and Etoposide 100 mg/m^2 Days 1, 2, 3 every 21 Days

Cisplatin 50-75 mg/m^2 Day 1 and Etoposide 100 mg/m^2 Days 1, 2, 3 every 21 Days

Cisplatin 50-75 mg/m^2 Day 1 and Etoposide 80 mg/m^2 Days 1, 2, 3 every 21 Days

Cisplatin 25 mg/m^2 Days 1, 2, 3 and Etoposide 100 mg/m^2 Days 1, 2, 3 every 21 Days

Useful in Certain Circumstances

Carboplatin AUC 4.5-6 Day 1 and Irinotecan 50 mg/m^2 Days 1, 8, 15 every 21 Days

Cisplatin 60 mg/m^2 Day 1 and Irinotecan 50 mg/m^2 Days 1, 8, 15 every 21 Days

註 1：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.

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.

SCLC SUBSEQUENT SYSTEMIC THERAPY (PS 0–2)

Preferred

Tarlatamab-dlle(category 1) step-up dose of 1 mg on Day 1 of cycle 1, followed by 10 mg on Days 8 and 15 of cycle 1 and then 10 mg every 2 weeks thereafter in 28-Day cycles Day 1 every 28 Days
Irinotecan 50 mg/m^2 Days 1, 8, 15 every 21 Days
Lurbinectedin (if not previously used) 3.2 mg/m^2 Day 1, every 21 Days

If prolonged disease free time, re-treatment with platinum-based doublet with or without immunotherapy
Topotecan Oral (PO) or Intravenous (IV)

Other Recommended

CAV (Cyclophosphamide/Doxorubicin/ Vincristine)
Cyclophosphamide 1000 mg/m^2 Day 1 and Doxorubicin 45 mg/m^2 Day 1 and Vincristine 2 mg/m^2 Day 1
Docetaxel 100 mg/m^2 Day 1 every 21 Days
Gemcitabine 1000 mg/m^2 Day 1,8 every 21 Days
Nivolumab 3 mg/kg Day 1 every 14 Days or
Pembrolizumab 200 mg/m^2 Day 1 every 21 Days (if not previously treated with an ICI)
Oral Etoposide 50 mg/m^2 Day 1-21 every 28 Days
Paclitaxel 175 mg/m^2 Day 1 every 21 Days
Temozolomide 75 mg/m^2 Day 1 every 21 Days
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 1：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.
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.

七、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
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
Superior Sulcus Tumor - cT3~4N0~1	1) Neoadjvant CCRT OP 2) Definitive CCRT	Durvalumab 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 if no OP 2) PORT if not given
- cT1~3N2	1) Definitive CCRT 2) RT alone if not suitable for C/T	Durvalumab if no OP
Stage IVA, IVB	1) Systemic therapy 2) Definitive RT to oligometastases 3) Palliative RT for symptoms 4) Consolidative RT to primary sites	

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 Consider PCI(optional)for responder

NSCLC RT dose

1. **Definitive RT/ CCRT: 60~70Gy at (1.8~2Gy/ fraction, 5 times per week)**
2. **Neoadjuvant CCRT: 45~ 54Gyat (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) **45-60Gy/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)**

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
50–60 Gy	5	Peripheral tumors
60–70 Gy	8-10	Central tumors

Maximum Dose Constraints for SABR

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(8 Gy/fx)	36 Gy(9 Gy/fx)	32 Gy(6.4 Gy/fx)
Stomach	12.4 Gy	NS	27.2 Gy(6.8 Gy/fx)	NS

^For central tumor location. NS = not specified.

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	V40 ≤20%; Mean ≤20 Gy
Esophagus	Mean ≤34 Gy; Max ≤105% of prescription dose; V60 ≤17%; contralateral sparing is desirable
Brachial plexus	Median dose ≤69 Gy

八、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。

九、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。

十、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

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