中山醫學大學附設醫院

皮膚癌診療指引

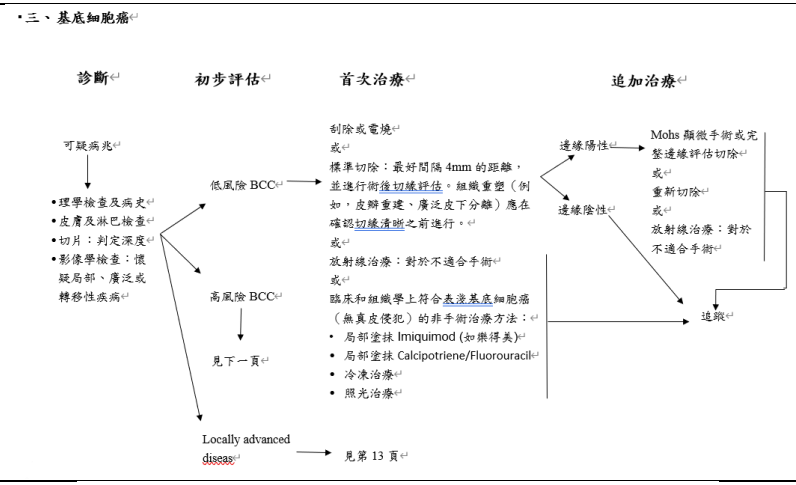
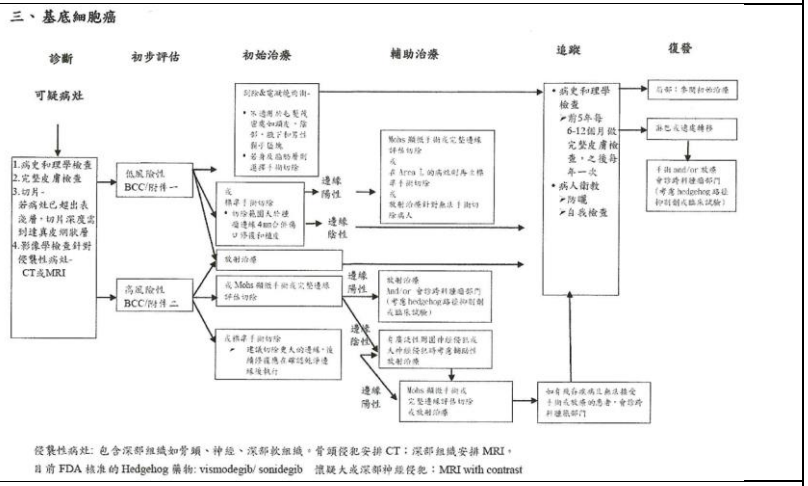
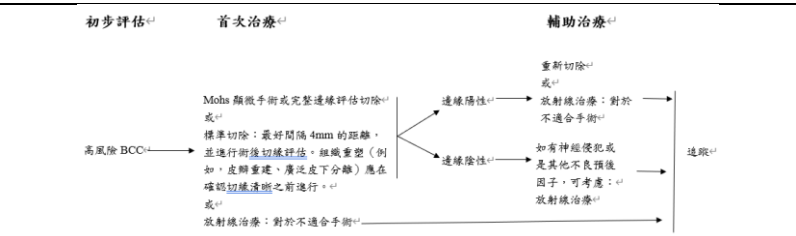
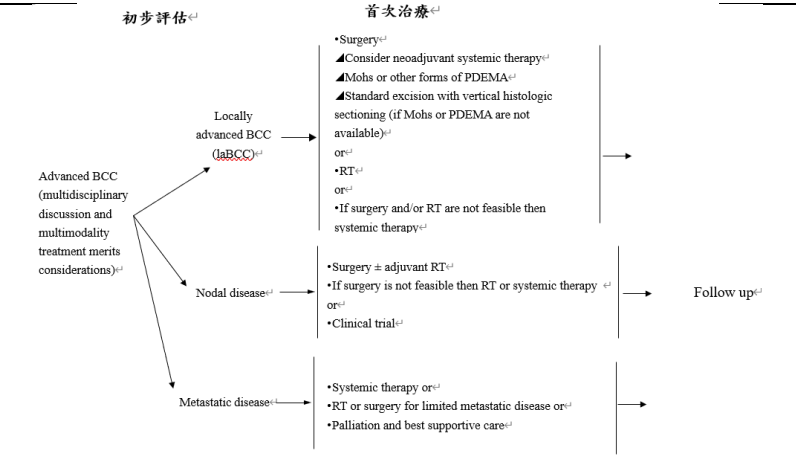
2026/01/23 Version7.0
2025/01/17 Version6.0
2024/11/25 Version5.0
2023/11/23 Version5.0
2022/12/27 Version5.0
2021/01/11 Version4.0
2020/12/06 Version3.0
2019/01/18 Version2.0
2018/12/21 Version1.0

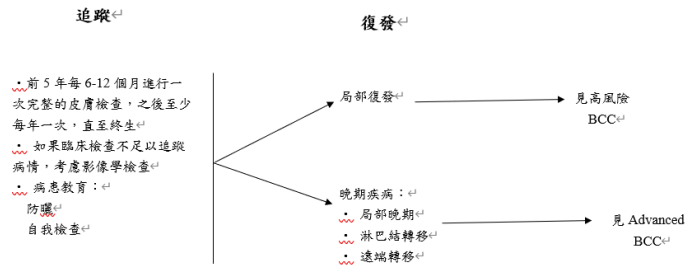
本臨床指引參考美國NCCN及台灣皮膚科醫學會共識版本

皮膚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	抗癌藥物安全小組	團隊負責人

修訂內容

頁數	修訂/增修 2026 version 7.0	原文 2025 version 6.0
		
		
		



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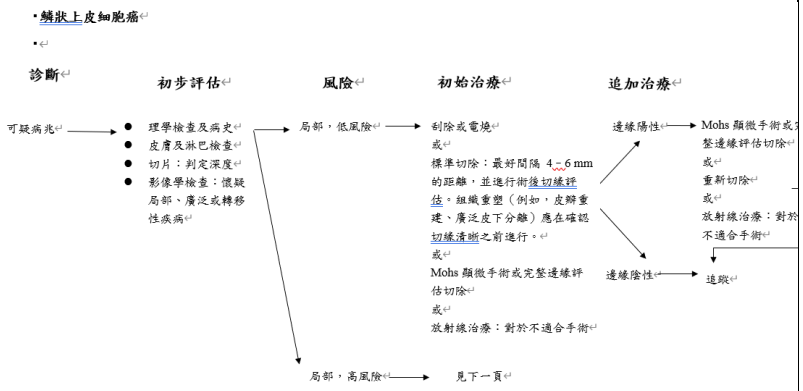
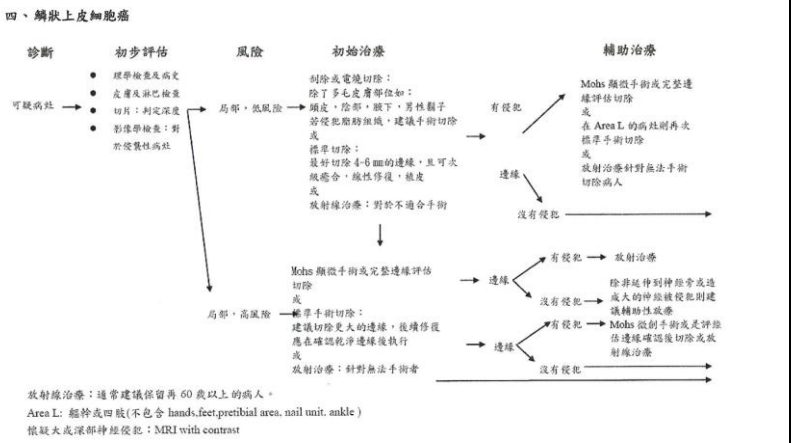
增修基底細胞瘤放射線治療指引

Primary Tumor	RT Dosing	Common Examples
Adjuvant RT		
• **Conventional fractionation (1.8–2 Gy/fraction)**	BED10 of 60–79 Gy	• 60–66 Gy in 2 Gy/fraction • 60–66 Gy in 1.8 Gy/fraction (reserved for areas with poor wound healing, [eg, lower extremity])
• **Hypofractionation**	BED10 of 48–70 Gy	• 2.5 Gy x 20 fractions • 3 Gy x 15–17 fractions to 45–51 Gy • 6 Gy x 5 fractions (non-consecutive days)
Definitive EBRT		
• **Conventional fractionation (1.8–2 Gy/fraction)**	BED10 of 70–84 Gy	• 60 Gy (for cosmetically sensitive areas) • 66–70 Gy (for locally advanced tumors involving bone or cartilage)
• **Hypofractionation**	BED10 of 48–72 Gy	• Tumors <2 cm: 2.5 Gy x 20 fractions • Tumors ≥2 cm: 2.5–3 Gy x 20–22 fractions • 3 Gy x 17–18 fractions to 51–54 Gy • 4.4 Gy x 10 fractions, 4 fractions per week • 6–7 Gy x 5 fractions, 2 treatments per week
Regional Disease		
• **Conventional fractionation (1.8–2 Gy/fraction)** Macroscopic/gross residual lymph nodes Lymph node + dissected nodal basins PNTS	66–70 Gy 60 Gy 50–66 Gy	

附件三、PRINCIPLES OF RADIATION THERAPY FOR BASAL CELL SKIN CANCER

Primary Tumor		Dose Time Fractionation Schedule
Tumor Diameter	Margins	Examples of Dose Fractionation and Treatment Duration
<2 cm	1 – 1.5 cm	64 Gy in 32 fractions over 6 – 6.4 weeks 55 Gy in 20 fractions over 4 weeks 50 Gy in 15 fractions over 3 weeks 35 Gy in 5 fractions over 5 days
≥2 cm	1.5 – 2 cm	66 Gy in 33 fractions over 6–6.6 weeks 55 Gy in 20 fractions over 4 weeks
Postoperative adjuvant		50 Gy in 20 fractions over 4 weeks 60 Gy in 30 fractions over 6 weeks


•鱗狀上皮細胞癌
診斷
初步評估
風險
初始治療
追加治療
可疑病兆
理學檢查及病史
皮膚及淋巴檢查
切片：判定深度
影像學檢查：懷疑局部、廣泛或轉移性疾病
局部，低風險
刮除或電燒
或
標準切除：最好間隔 4–6 mm的距離，並進行術後切緣評估。組織重塑（例如，皮瓣重建、廣泛皮下分離）應在確認切緣清晰之前進行。
或
Mohs 顯微手術或完整邊緣評估切除
或
放射線治療：對於不適合手術
邊緣陽性
Mohs 顯微手術或完整邊緣評估切除
或
重新切除
或
放射線治療：對於不適合手術
邊緣陰性
追蹤
局部，高風險
見下一頁


四、鱗狀上皮細胞癌
診斷
初步評估
風險
初始治療
輔助治療
可疑病灶
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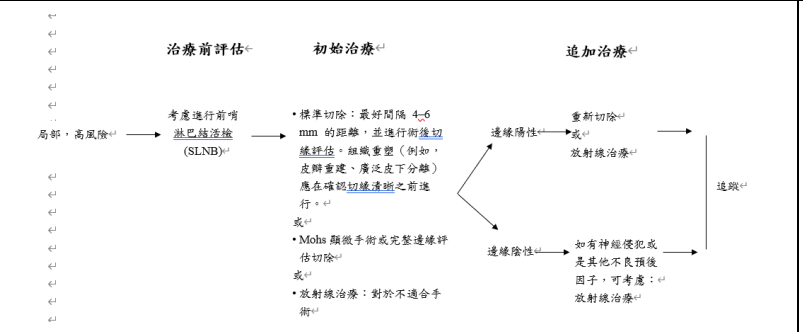
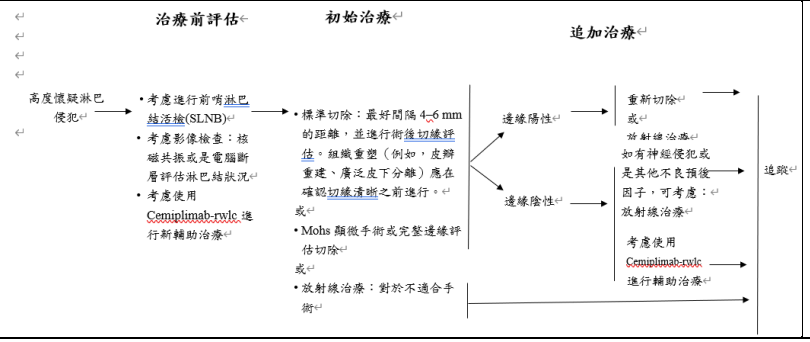
皮膚及淋巴檢查
切片：判定深度
影像學檢查：對於發贅性病灶
局部，低風險
刮除或電燒切除：
除了多毛皮膚部位如：
頭皮，除部，腹下，男性龜子
若侵犯磨肺組織，建議手術切除
或
搾單切除：
最好切除 4-6 mm的邊緣，且可次組癌合，縫性修復，植皮
或
放射線治療：對於不適合手術
有侵犯
Mohs 顯微手術或完整邊緣評估切除
或
在 Area L 的病灶則再次標準手術切除
或
放射治療針對無法手術切除病人
邊緣
沒有侵犯
局部，高風險
Mohs 顯微手術或完整邊緣評估切除
或
範圍手術切除：
建議切除更大的邊緣，後續修復
應在確認乾淨邊緣後執行
或
放射治療：針對無法手術者
邊緣
有侵犯
放射治療
沒有侵犯
除非延伸到神經旁或造成大的神經被侵犯則建議輔助性放療
邊緣
有侵犯
Mohs 做創手術或是評估邊緣確認後切除或放射線治療
沒有侵犯
放射線治療：通常建議保留再 60 歲以上的病人。
Area L: 超於或四肢(不包含 hands,feet,pretibial area, nail unit, ankle)
懷疑大或深部神經侵犯：MRI with contrast


治療前評估
初始治療
追加治療
局部，高風險
考慮進行前哨淋巴結活檢(SLNB)
•標準切除：最好間隔 4–6 mm 的距離，並進行術後切緣評估。組織重塑（例如，皮瓣重建、廣泛皮下分離）應在確認切緣清晰之前進行。
或
•Mohs 顯微手術或完整邊緣評估切除
或
•放射線治療：對於不適合手術
邊緣陽性
重新切除
或
放射線治療
邊緣陰性
如有神經侵犯或是其他不良預後因子，可考慮：
放射線治療
追蹤


治療前評估
初始治療
追加治療
高度懷疑淋巴侵犯
•考慮進行前哨淋巴結活檢(SLNB)
•考慮影像檢查：核磁共振或是電腦斷層評估淋巴結狀況
•考慮使用 Cemiplimab-rwlc 進行新輔助治療
•標準切除：最好間隔 4–6 mm 的距離，並進行術後切緣評估。組織重塑（例如，皮瓣重建、廣泛皮下分離）應在確認切緣清晰之前進行。
或
•Mohs 顯微手術或完整邊緣評估切除
或
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邊緣陽性
重新切除
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邊緣陰性
如有神經侵犯或是其他不良預後因子，可考慮：
放射線治療
考慮使用 Cemiplimab-rwlc 進行輔助治療
追蹤

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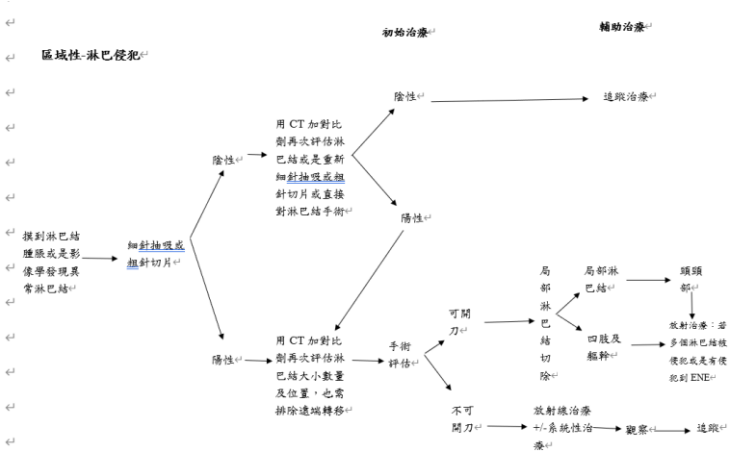
<td> 
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<td>26</td>
<td>增修鱗狀細胞癌放射線治療指引
附件二、PRINCIPLES OF RADIATION THERAPY FOR SQUAMOUS CELL SKIN CANCER
<table>
<tr><th>Primary Tumor</th><th>RT Dosing</th><th>Common examples</th></tr>
<tr><td colspan="3">Adjuvant RT</td></tr>
<tr><td>• Conventional fractionation (1.8–2 Gy/fraction)</td><td>BED10 of 60–79 Gy</td><td>• 60–66 Gy in 2 Gy/fraction
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• 4.4 Gy x 10 fractions, 4 fractions per week
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<tr><td colspan="3">Regional Disease</td></tr>
<tr><td>• Conventional fractionation (1.8–2 Gy/fraction)
Macroscopic/gross residual lymph nodes
Lymph node + dissected nodal basins
PNTS</td><td>
66–70 Gy
60 Gy
50–66 Gy</td><td></td></tr>
<tr><td>• Undissected at-risk nodal basins</td><td>1.8–2 Gy x 25–30 fractions</td><td></td></tr>
<tr><td colspan="3">Satellitosis/In-Transit Metastasis (S-ITM)</td></tr>
<tr><td>• Resected
• Unresected</td><td>50–60 Gy over 5 to 6 weeks
60–70 Gy over 6 to 7 weeks</td><td></td></tr>
</table>
Conventionally fractionated radiotherapy consists of five daily treatments per week.
Hypofractionated radiotherapy consists of fewer treatments with larger fraction size.</td>
<td>附件二、PRINCIPLES OF RADIATION THERAPY FOR SQUAMOUS CELL SKIN CANCER
<table>
<tr><th colspan="2">Primary Tumor</th><th>Dose Time Fractionation Schedule</th></tr>
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<tr><td colspan="2">Postoperative adjuvant</td><td>50 Gy in 20 fractions over 4 weeks
60 Gy in 30 fractions over 6 weeks</td></tr>
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<tr>
<td>28~45</td>
<td>增修黑色素細胞瘤藥物治療</td>
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目錄

一、前言

常見的皮膚癌有基底細胞癌(Basal Cell Carcinoma)、鱗狀細胞癌(Squamous Cell Carcinoma)、黑色素細胞癌(Melanoma)。基底細胞癌源自於皮膚表皮底層的柱狀基底細胞，是人類最常見的癌症，臨床可見 Pearly border 與微血管擴張，少數有 Rodent ulcer，基底細胞癌侵襲性與轉移性皆低，通常手術切除乾淨與定期追蹤，預後通常都不錯並且有極高的生存率。鱗狀細胞癌源自於皮膚表皮層的棘狀細胞，臨床常見有角化與色澤形狀不一的腫瘤，有時有 Marjolin's ulcer，預後與腫瘤大小、位置、是否有神經侵犯、是否有淋巴與遠端器官轉移有關。黑色素癌是轉移性高且死亡率也高的皮膚癌，在臺灣的發生率約為十萬分之零點八。東方人的黑色素癌好發在手指尖或是腳掌，稱為肢端型黑色素癌（acral lentiginous type of melanoma）。警覺心不足或忽略檢查腳底有無異常黑點，常會延誤診斷而耽誤治療。黑色素癌的厚度與是否有淋巴結或器官轉移，影響了患者的預後，早期黑色素癌，以手術與前哨淋巴結檢查切除，為最佳治療方式，然而，轉移型黑色素癌的治療則相當不容易，黑色素癌容易轉移到肺部，腦部，骨頭，肝臟等。傳統藥物化療藥物 Dacarbazine 對第四期轉移性黑色素癌的療效有限，平均存活時間大約只有 6 至 7 個月。而傳統免疫藥物 IFNα2b 與高劑量 IL-2 的副作用多，包括高燒、寒顫、低血壓、心跳過速等等不舒服的症狀，往往讓患者難以承受而放棄治療。

然而，自人類基因解序幫助科學家對疾病致病機轉更加地瞭解，轉移型黑色素癌治療在 2010 年有了新的突破。整個癌症治療指引也有了重大改變。發展中的新治療主要分成兩個部分，一個是標靶治療，另一個則是新型的免疫治療，並以合併治療為趨勢。標靶治療主要是針對黑色素癌細胞生長所需的訊息傳遞因子(標的)給予抑制，例如 BRAF 基因 V600E 的突變對黑色素癌細胞生長非常重要，標靶治療針對 BRAF 抑制的藥物有日沛樂/Zelboraf (Vemurafenib)以及泰伏樂/Tafinlar (Dabrafenib)，日沛樂於 2014 年在台灣上市，有健保給付，用於治療 BRAF V600E 突變陽性 WHO 體能狀態小於等於二，且罹患無法切除(第ⅢC 期)或轉移性(第Ⅳ期)黑色素癌之病人。在 BRAF 基因 V600E 突變陽性的轉移型黑色素癌病患，標靶治療可以讓腫瘤快速地縮小，但對生存率的延長沒有顯著幫忙。

在腫瘤微環境研究發現，癌細胞為了能逃避免疫細胞的追殺，會用各種方法去干擾身體的免疫系統。其中一種方式就是藉由活化免疫系統的控制因子(免疫檢查點蛋白)，進而讓免疫系統失能，無法攻擊黑色素癌細胞。新的免疫療法就是想辦法去抑制這些控制因子，減弱免疫檢查點蛋白的抑制能力，讓免疫系統能夠恢復原本的功能，去攻擊黑色素癌細胞。臺灣有抑制 CTLA-4 的益伏/Yervoy (ipilimumab)與抑制 PD-l 的吉舒達 Keytruda (Pembrolizumab)及抑制 PD-l 的保疾伏 Opdivo (Nivolumab)。對於轉移性黑色素癌的新進展，著實另人振奮，但仍有許多待解決的問題例

如亞洲病患標靶基因突變比率偏低、抗藥性、副作用、健保給付、昂貴藥費等等。如何結合目前所有的各種標靶治療，免疫治療，找出病人最適合的治療藥物組合，成了當前最大挑戰。

二、皮膚癌分期

(1) 基底細胞癌(Basal cell carcinoma)

Stage 0: Cancer involves only the epidermis and has not spread to the dermis
Stage I: Cancer is not large (ie, < 2 cm) and has not spread to the lymph nodes or other organs
Stage II: Cancer is large (ie, >2 cm) but has not spread to lymph nodes or other organs
Stage III: Cancer has spread to tissues beneath the skin (eg, muscle, bone, cartilage), and/or to regional lymph nodes but not to other organs.
Stage IV: Cancer can be any size and has spread to other organs

(2) 鱗狀上皮細胞癌(TNM Staging Classification for Cutaneous Carcinoma of the Head and Neck (8th ed., 2017))

T	**Primary Tumor**	
TX		Primary tumor cannot be assessed
Tis		Carcinoma *in situ*
T1		Tumor smaller than or equal to 2 cm in greatest dimension
T2		Tumor larger than 2 cm, but smaller than or equal to 4 cm in greatest dimension
T3		Tumor larger than 4 cm in maximum dimension or minor bone erosion or perineural invasion or deep invasion*
T4		Tumor with gross cortical bone/marrow, skull base invasion and/or skull base foramen invasion
	T4a	Tumor with gross cortical bone/marrow invasion
	T4b	Tumor with skull base invasion and/or skull base foramen involvement
*Deep invasion is defined as invasion beyond the subcutaneous fat or >6 mm (as measured from the granular layer of adjacent normal epidermis to the base of the tumor); perineural invasion for T3 classification is defined as tumor cells within the nerve sheath of a nerve lying deeper than the dermis or measuring 0.1 mm or larger in caliber, or presenting with clinical or radiographic involvement of named nerves without skull base invasion or transgression.		

Clinical N (cN)

cN	**Regional Lymph Nodes**	
NX		Regional lymph nodes cannot be assessed
N0		No regional lymph node metastasis
N1		Metastasis in a single ipsilateral lymph node, 3 cm or smaller in greatest dimension and ENE(−)
N2		Metastasis in a single ipsilateral node larger than 3 cm but not larger than 6 cm in greatest dimension and ENE(−);

		or metastases in multiple ipsilateral lymph nodes, none larger than 6 cm in greatest dimension and ENE(−);*or* in bilateral or contralateral lymph nodes, none larger than 6 cm in greatest dimension and ENE(−)
	N2a	Metastasis in a single ipsilateral node larger than 3 cm but not larger than 6 cm in greatest dimension and ENE(−)
	N2b	Metastases in multiple ipsilateral nodes, none larger than 6 cm in greatest dimension and ENE(−)
	N2c	Metastases in bilateral or contralateral lymph nodes, none larger than 6 cm in greatest dimension and ENE(−)
N3		Metastasis in a lymph node larger than 6 cm in greatest dimension and ENE(−);*or* metastasis in any node(s) and clinically overt ENE [ENE(+)]
	N3a	Metastasis in a lymph node larger than 6 cm in greatest dimension and ENE(−)
	N3b	Metastasis in any node(s) and ENE (+)
Note: A designation of “U” or “L” may be used for any N category to indicate metastasis above the lower border of the cricoid (U) or below the lower border of the cricoid (L). Similarly, clinical and pathological extranodal extension (ENE) should be recorded as ENE(−) or ENE(+).		

Pathological N (pN)

pN	**Regional Lymph Nodes**	
NX		Regional lymph nodes cannot be assessed
N0		No regional lymph node metastasis
N1		Metastasis in a single ipsilateral lymph node, 3 cm or smaller in greatest dimension and ENE(−)
N2		Metastasis in a single ipsilateral lymph node, 3 cm or smaller in greatest dimension and ENE(+); *or* larger than 3 cm but not larger than 6 cm in greatest dimension and ENE(−); *or* metastases in multiple ipsilateral lymph nodes, none larger than 6 cm in greatest dimension and ENE(−); *or* in bilateral or contralateral lymph node(s), none larger than 6 cm in greatest dimension, ENE(−)
	N2a	Metastasis in single ipsilateral node 3 cm or smaller in greatest dimension and ENE(+); *or* a single ipsilateral node larger than 3 cm but not larger than 6 cm in greatest dimension and ENE(−)
	N2b	Metastases in multiple ipsilateral nodes, none larger than 6 cm in greatest dimension and ENE(−)
	N2c	Metastases in bilateral or contralateral lymph node(s), none larger than 6 cm in greatest dimension andENE(−)
N3		Metastasis in a lymph node larger than 6 cm in greatest dimension and ENE(−); *or* in a single psilateral node larger than 3 cm in greatest dimension and ENE(+); *or* multiple ipsilateral, contralateral, or bilateral nodes, any with ENE(+);

		or a single contralateral node of any size and ENE(+)
	N3a	Metastasis in a lymph node larger than 6 cm in greatest dimension and ENE(−)
	N3b	Metastasis in a single ipsilateral node larger than 3 cm in greatest dimension and ENE(+); *or* multiple ipsilateral, contralateral, or bilateral nodes, any with ENE(+); *or* a single contralateral node of any size and ENE(+)
Note: A designation of "U" or "L" may be used for any N category to indicate metastasis above the lower border of the cricoid (U) or below the lower border of the cricoid (L). Similarly, clinical and pathological extranodal extension (ENE) should be recorded as ENE(−) or ENE(+).		

M	**Distant Metastasis**
M0	No distant metastasis
M1	Distant metastasis

G	**Histologic Grade**
GX	Grade cannot be assessed
G1	Well differentiated
G2	Moderately differentiated
G3	Poorly differentiated
G4	Undifferentiated

	T	N	M
Stage 0	Tis	N0	M0
Stage I	T1	N0	M0
Stage II	T2	N0	M0
Stage III	T3	N0	M0
	T1	N1	M0

	T2	N1	M0
	T3	N1	M0
Stage IV	T1	N2	M0
	T2	N2	M0
	T3	N2	M0
	Any T	N3	M0
	T4	Any N	M0
	Any T	Any N	M1

(3) 黑色素細胞癌(Melanoma)

Definition of Primary Tumor (T)

T Category	**Thickness**	**Ulceration status**
TX:primary tumor thickness cannot be assessed(e.g., diagnosis by curettage)	Not applicable	Not applicable
T0:no evidence of primary tumor(e.g.,unknown primary or completely regressed melanoma)	Not applicable	Not applicable
Tis(melanoma *in situ*)	Not applicable	Not applicable
T1	≦1.0mm	Unknown or unspecified
T1a	<0.8mm	Without ulceration
T1b	<0.8mm 0.8-1.0mm	With ulceration With or without ulceration
T2	>1.0-2.0mm	Unknown or unspecified
T2a	>1.0-2.0mm	Without ulceration
T2b	>1.0-2.0mm	With ulceration
T3	>2.0-4.0mm	Unknown or unspecified
T3a	>2.0-4.0mm	Without ulceration
T3b	>2.0-4.0mm	With ulceration

T4	>4.0mm	Unknown or unspecified
T4a	>4.0mm	Without ulceration
T4b	>4.0mm	With ulceration

Definition of Reginal Lymph Node(N)

Extent of regional lymph node and/or lymphatic metastasis		
N category	Number of tumor-involved regional lymph node	Presence of in-transit, satellite, and /or microsatellite metastases
NX	Regional nodes not assessed(e.g., SLN biopsy not performed, regional nodes previously removed for another reason) Exception: pathological N category is not required for T1 melanomas ,use cN.	No
N0	No regional metastases detected	No
N1	One tumor-involved node or in-transit, satellite, and/or microsatellite metastases with no tumor-involved nodes	No
N1a	One clinically occult (i.e.,detected by SLN biopsy)	No
N1b	One clinically detected	No
N1c	No regional lymph node disease	Yes
N2	Two or three tumor-involved nodes or in-transit, satellite, and/or microsatellite metastases with one tumor-involved node	
N2a	Two or three clinically occult(i.e.,detected by SLN biopsy)	No
N2b	Two or three, at least one of which was clinically detected	No
N2c	One clinically occult or clinically detected	Yes
N3	Four or more tumor-involved nodes or in-transit, satellite, and/or microsatellite metastases with two or more tumor-involved nodes, or any number of matted nodes without or with in-transit, satellite, and/or microsatellite metastases	
N3a	Four or more clinically occult (i.e., detected by SLN biopsy)	No
N3b	Four or more, at least one of which was clinically detected, or presence of any number of matted nodes	No
N3c	Two or more clinically occult or clinically detected and/or presence of any number of matted	Yes

	nodes	

Definition of Distant Metastasis(M)

M Category	**M Criteria**	
	Anatomic site	**LDH level**
M0	No evidence of distant metastasis	Not applicable
M1	Evidence of distant metastasis	See below
M1a	Distant metastasis to skin, soft tissue including muscle, and/or nonregional lymph node	Not recorded or unspecified
M1a(0)		Not elevated
M1a(1)		Elevated
M1b	Distant metastasis to lung with or without M1a sites of disease	Not recorded or unspecified
M1b(0)		Not elevated
M1b(1)		Elevated
M1c	Distant metastasis to non-CNS visceral sites with or without M1a or M1b sites of disease	Not recorded or unspecified
M1c(0)		Not elevated
M1c(1)		Elevated
M1d	Distant metastasis to CNS with or without M1a, M1b, or M1c sites of disease	Not recorded or unspecified
M1d(0)		Normal
M1d(1)		Elevated

AJCC Prognostic Stage Groups

Clinical Staging (cTNM)*

	T	N	M
Stage 0	Tis	N0	M0
Stage IA	T1a	N0	M0
Stage IB	T1b	N0	M0
	T2a	N0	M0
Stage IIA	T2b	N0	M0
	T3a	N0	M0
Stage IIB	T3b	N0	M0
	T4a	N0	M0
Stage IIC	T4b	N0	M0
Stage III	Any T, Tis	≥N1	M0
Stage IV	Any T	Any N	M1

*Clinical staging includes microstaging of the primary melanoma and clinical/radiologic/biopsy evaluation for metastases. By convention, clinical staging should be used after biopsy of the primary melanoma, with clinical assessment for regional and distant metastases. Note that pathological assessment of the primary melanoma is used for both clinical and pathological classification. Diagnostic biopsies to evaluate possible regional and/or distant metastasis also are included. Note there is only one stage group for clinical Stage III melanoma.

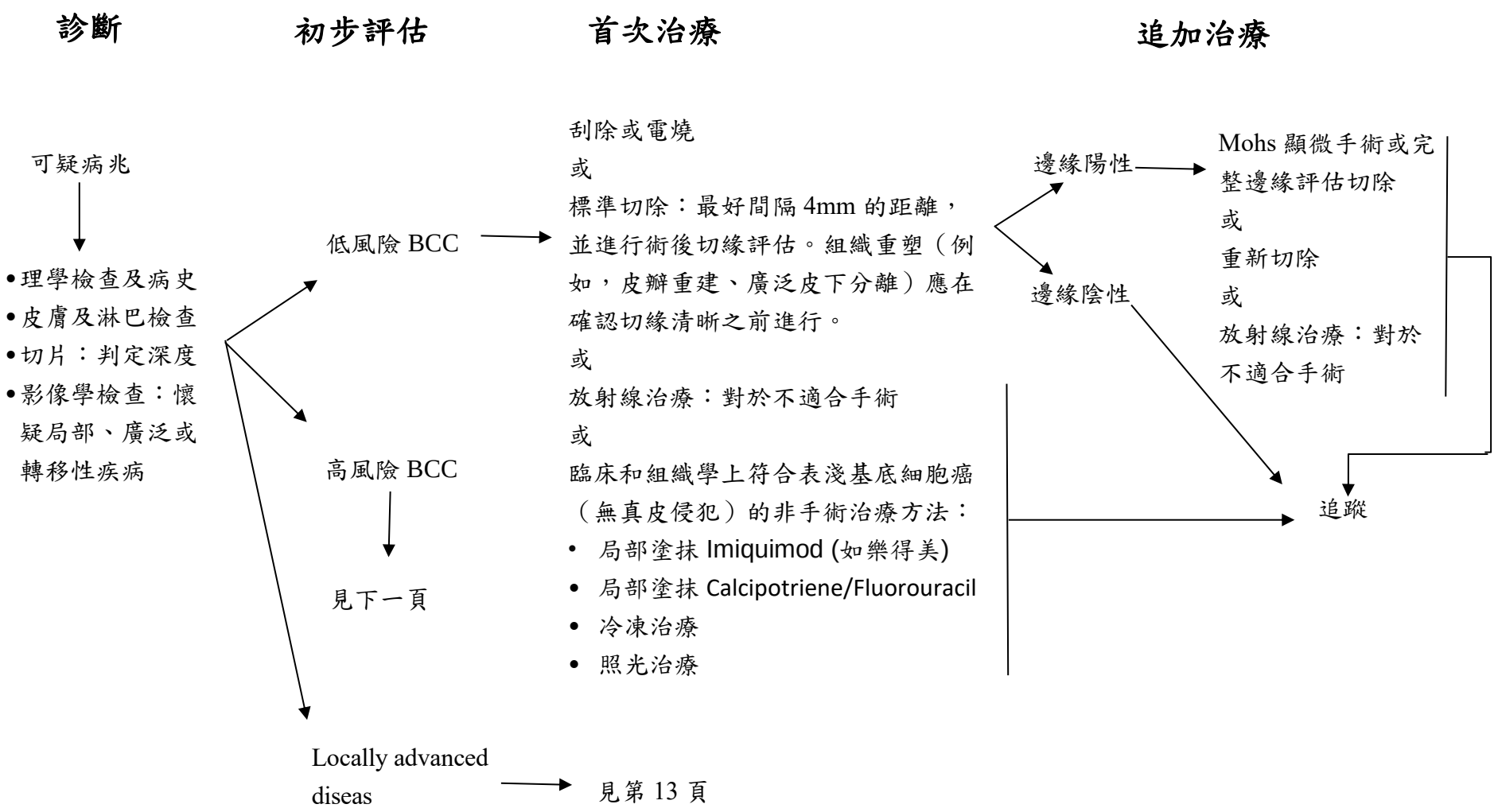
Pathological Staging (pTNM)**

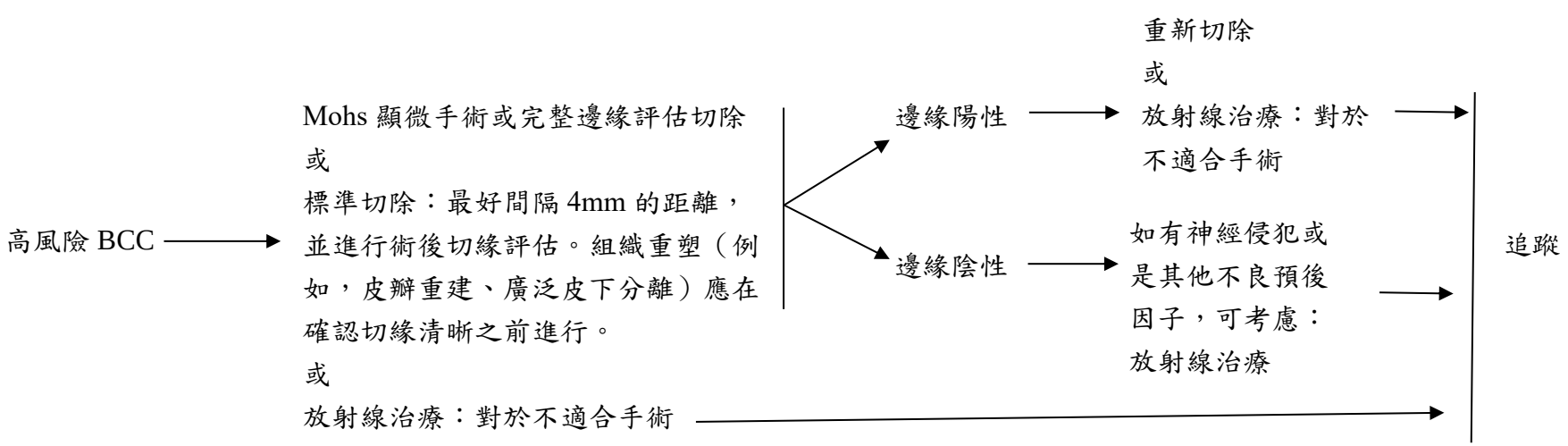
	T	N	M
Stage 0†	Tis	N0	M0
Stage IA	T1a	N0	M0
	T1b	N0	M0
Stage IB	T2a	N0	M0
Stage IIA	T2b	N0	M0
	T3a	N0	M0
Stage IIB	T3b	N0	M0
	T4a	N0	M0
Stage IIC	T4b	N0	M0
Stage IIIA	T1a/b, T2a	N1a, N2a	M0
Stage IIIB	T0	N1b, N1c	M0
	T1a/b, T2a	N1b/c, N2b	M0
	T2b, T3a	N1a/b/c, N2a/b	M0
Stage IIIC	T0	N2b/c, N3b/c	M0
	T1a/b, T2a/b, T3a	N2c, N3a/b/c	M0
	T3b, T4a	Any N ≥ N1	M0
	T4b	N1a/b/c, N2a/b/c	M0
Stage IIID	T4b	N3a/b/c	M0
Stage IV	Any T, Tis	Any N	M1

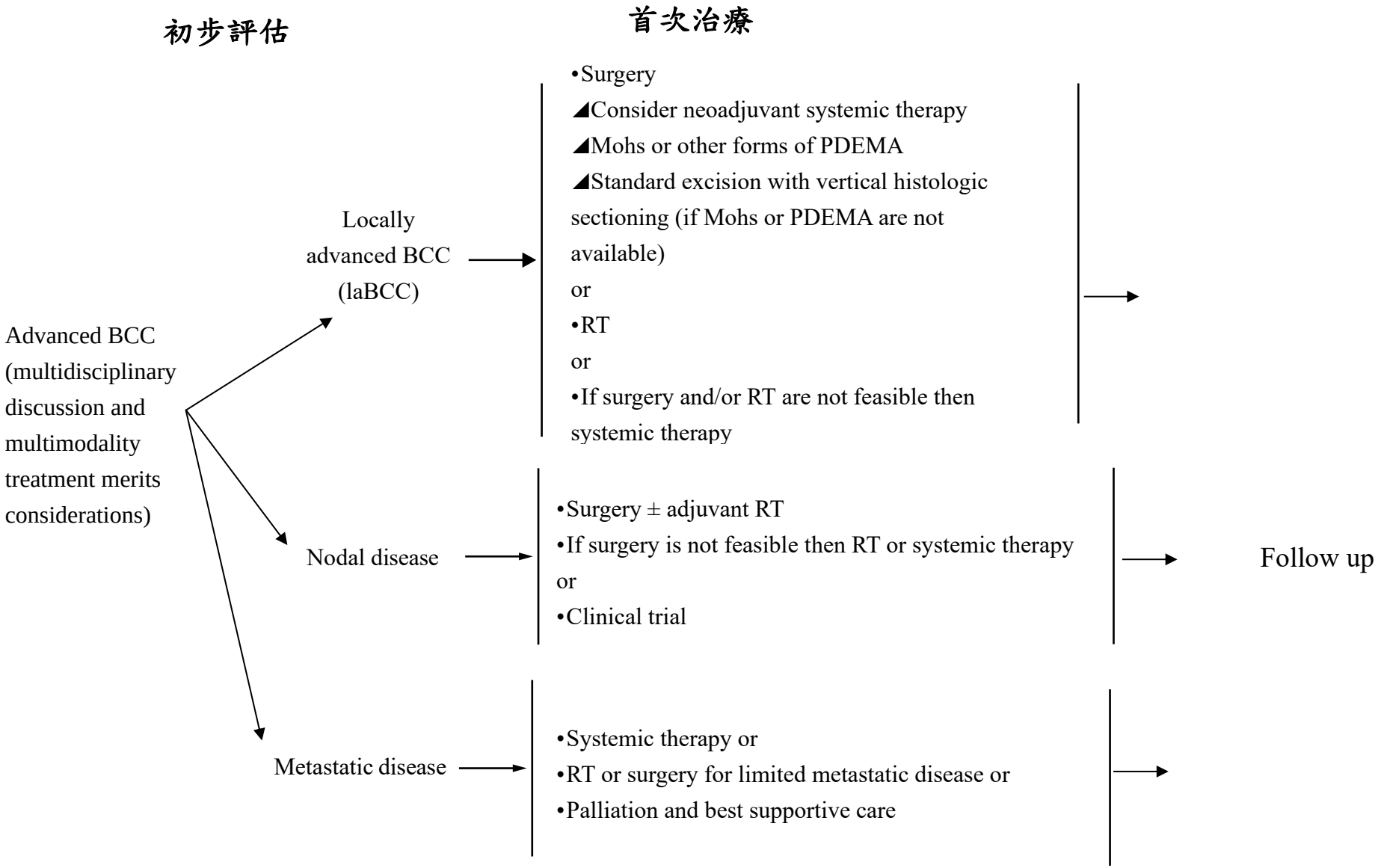
**Pathological staging includes microstaging of the primary melanoma, including any additional staging information from the wide-excision (surgical) specimen that constitutes primary tumor surgical treatment and pathological information about the regional lymph nodes after SLN biopsy or therapeutic lymph node dissection for clinically evident regional lymph node disease.

†Pathological Stage 0 (melanoma in situ) and T1 do not require pathological evaluation of lymph nodes to complete pathological staging; use cN information to assign their pathological stage.

三、基底細胞癌


診斷
初步評估
首次治療
追加治療
可疑病兆
•理學檢查及病史
•皮膚及淋巴檢查
•切片：判定深度
•影像學檢查：懷疑局部、廣泛或轉移性疾病
低風險 BCC
高風險 BCC
見下一頁
Locally advanced diseas
見第 13 頁
刮除或電燒
或
標準切除：最好間隔 4mm 的距離，並進行術後切緣評估。組織重塑（例如，皮瓣重建、廣泛皮下分離）應在確認切緣清晰之前進行。
或
放射線治療：對於不適合手術
或
臨床和組織學上符合表淺基底細胞癌（無真皮侵犯）的非手術治療方法：
• 局部塗抹 Imiquimod (如樂得美)
• 局部塗抹 Calcipotriene/Fluorouracil
• 冷凍治療
• 照光治療
邊緣陽性
邊緣陰性
Mohs 顯微手術或完整邊緣評估切除
或
重新切除
或
放射線治療：對於不適合手術
追蹤

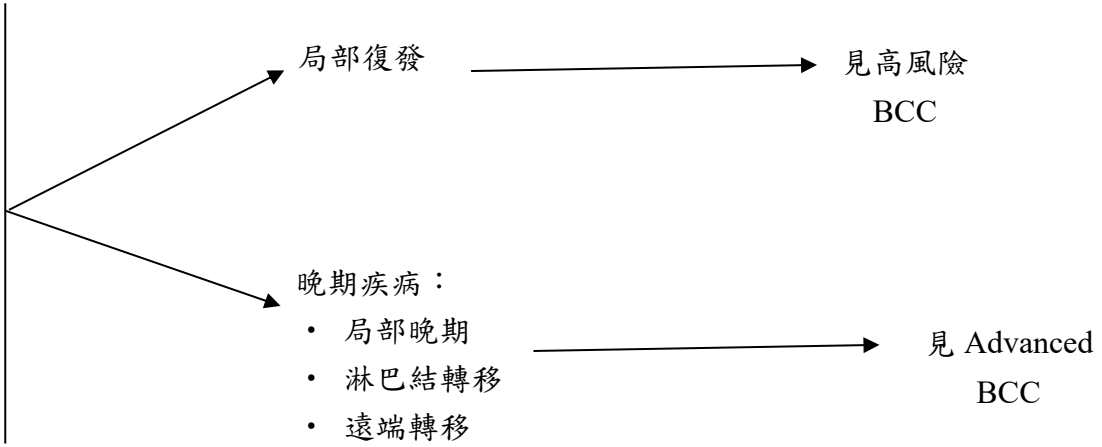

初步評估
首次治療
輔助治療
高風險 BCC
Mohs 顯微手術或完整邊緣評估切除
或
標準切除：最好間隔 4mm 的距離，
並進行術後切緣評估。組織重塑（例
如，皮瓣重建、廣泛皮下分離）應在
確認切緣清晰之前進行。
或
放射線治療：對於不適合手術
邊緣陽性
重新切除
或
放射線治療：對於
不適合手術
邊緣陰性
如有神經侵犯或
是其他不良預後
因子，可考慮：
放射線治療
追蹤


初步評估
首次治療
Advanced BCC (multidisciplinary discussion and multimodality treatment merits considerations)
Locally advanced BCC (laBCC)
•Surgery
◢Consider neoadjuvant systemic therapy
◢Mohs or other forms of PDEMA
◢Standard excision with vertical histologic sectioning (if Mohs or PDEMA are not available)
or
•RT
or
•If surgery and/or RT are not feasible then systemic therapy
Nodal disease
•Surgery ± adjuvant RT
•If surgery is not feasible then RT or systemic therapy
or
•Clinical trial
Metastatic disease
•Systemic therapy or
•RT or surgery for limited metastatic disease or
•Palliation and best supportive care
Follow up

追蹤

- 前 5 年每 6-12 個月進行一次完整的皮膚檢查，之後至少每年一次，直至終生
- 如果臨床檢查不足以追蹤病情，考慮影像學檢查
- 病患教育：
  防曬
  自我檢查

復發



附件一、局部復發的危險因子

病史及理學檢查	低風險	高風險
位置/大小	Area L＜20 ㎜ Area M＜10 ㎜	Area L ≥20 ㎜ Area M ≥10 ㎜ Area H 任何大小
邊緣	界限分明	界線模糊
原發/續發	原發	續發
免疫抑制	無	有
病灶位置曾接受過放射治療	無	有
神經侵犯	無	有
病理分類	Nodular , superficial keratotic , infundibulocystic , fibroepithelioma of Pinkus ,	Morpheaform , basosquamous (metatyoical) ,sclerosing , Mixed infiltrative , micronodular

Area Low risk: trunk and extremities(excluding hands, feet, pretibial area)
Area Medium risk: pretibial area, face other than mask area (cheek, forehead, scalp, neck)
Area High risk: face mask area+ hands+feet+genitalia (mask area: central face, eyelid, eyebrow, nose, lips-cutaneous and vermilion, chin, mandible, preauricular/postauricular skin sulci, temple, ear)

Area H 的腫瘤不論大小都屬於高風險。這些地方通常為了美觀，margin 不夠大，易造成復發。建議使用 Mohs micrographic surgery 可達到邊緣乾淨，且最小切除範圍。對於<6mm 的腫瘤，沒有其他危險因子，建議至少要切除 4mm 的 margin。
Area H 的腫瘤不論大小都屬於高風險。這些地方通常為了美觀，margin 不夠大，易造成復發。建議使用 Mohs micrographic surgery 可達到邊緣乾淨，且最小切除範圍。對於<6mm 的腫瘤，沒有其他危險因子，建議至少要切除 4mm 的 margin。

附件二、PRINCIPLES OF TREATMENT FOR BASAL CELL SKIN CANCER

•The primary treatment goals of BCC is the complete removal of the tumor and the maximal preservation of function and cosmesis. All treatment decisions should be customized to account for the particular factors present in the individual case and for the patient's preference.
基底細胞癌 (BCC) 的主要治療目標是徹底切除腫瘤，並最大限度地保留功能和外觀。所有治療計畫應根據個別病例的具體情況和患者意願進行個人化製定

•Surgical approaches often offer the most effective and efficient means for accomplishing cure, but considerations of function, cosmesis, and patient preference may lead to choosing RT/topical therapy/systemic therapy as primary treatment in order to achieve optimal overall results.
手術通常是根治性治療最有效的方式，但考慮到功能、外觀和患者意願，可能會選擇放射治療/局部治療/全身治療作為主要治療方式，以達到最佳的整體療效。

•In certain patients at high risk for multiple primary tumors (eg, basal cell nevus syndrome [Gorlin syndrome], xeroderma pigmentosum, history of RT), increased surveillance and consideration of prophylactic measures may be indicated. Refer patients with suspected basal cell nevus syndrome or xeroderma pigmentosum for genetic evaluation.
對於某些有多發性原發性腫瘤高風險的患者（例如，basal cell nevus syndrome [Gorlin syndrome], xeroderma pigmentosum,、有放射治療史），可能需要加強監測並考慮採取預防措施。疑似 basal cell nevus syndrome 或 xeroderma pigmentosum 的患者應進行基因檢測。

•In patients with superficial basal cell skin cancer, nonsurgical modalities may be considered. (See 低風險 BCC)
對於表淺性基底細胞皮膚癌患者，可以考慮非手術治療。（參見 低風險 BCC）

附件三、PRINCIPLES OF RADIATION THERAPY FOR BASAL CELL SKIN CANCER

Primary Tumor	RT Dosing	Common Examples
Adjuvant RT		
• **Conventional fractionation (1.8–2 Gy/fraction)**	BED10 of 60–79 Gy	• 60–66 Gy in 2 Gy/fraction • 60–66 Gy in 1.8 Gy/fraction (reserved for areas with poor wound healing, [eg, lower extremity])
• **Hypofractionation**	BED10 of 48–70 Gy	• 2.5 Gy x 20 fractions • 3 Gy x 15–17 fractions to 45–51 Gy • 6 Gy x 5 fractions (non-consecutive days)
Definitive EBRT		
• **Conventional fractionation (1.8–2 Gy/fraction)**	BED10 of 70–84 Gy	• 60 Gy (for cosmetically sensitive areas) • 66–70 Gy (for locally advanced tumors involving bone or cartilage)

• **Hypofractionation**	BED10 of 48–72 Gy	• Tumors <2 cm: 2.5 Gy x 20 fractions • Tumors ≥2 cm: 2.5–3 Gy x 20–22 fractions • 3 Gy x 17–18 fractions to 51–54 Gy • 4.4 Gy x 10 fractions, 4 fractions per week • 6–7 Gy x 5 fractions, 2 treatments per week
Regional Disease		
• **Conventional fractionation (1.8–2 Gy/fraction)** Macroscopic/gross residual lymph nodes Lymph node + dissected nodal basins PNTS	66–70 Gy 60 Gy 50–66 Gy	

• Conventionally fractionated radiotherapy consists of five daily treatments per week.

•Hypofractionated radiotherapy consists of fewer treatments with larger fraction size

附件四、藥物治療

1.Inductions and Usage for Erivedge

Erivedge capsule is indicated for the treatment of adults with metastatic basal carcinoma, or with locally advanced basal cell carcinoma that has recurred following surgery or who are not candidates for surgery, and who are not candidates for radiation.

Erivedge Dosage nad Administration

The recommended dose of Erivedge is150mg taken orally once daily until disease progression or until unacceptable toxicity.

Erivedge may be taken with or without food.Swallow capsules wholes. Do not open or crush capsules.

If a dose of Erivedge is missed, do not make up that dose.

Dosage Forms and Strengths

Erivedge (vismodegib) capsules, 150mg. The capsule has a pink opaque body and a gery opaque cap, with “150mg”printed on the capsule body and “VISMO” printed on the capsule cap in black ink.

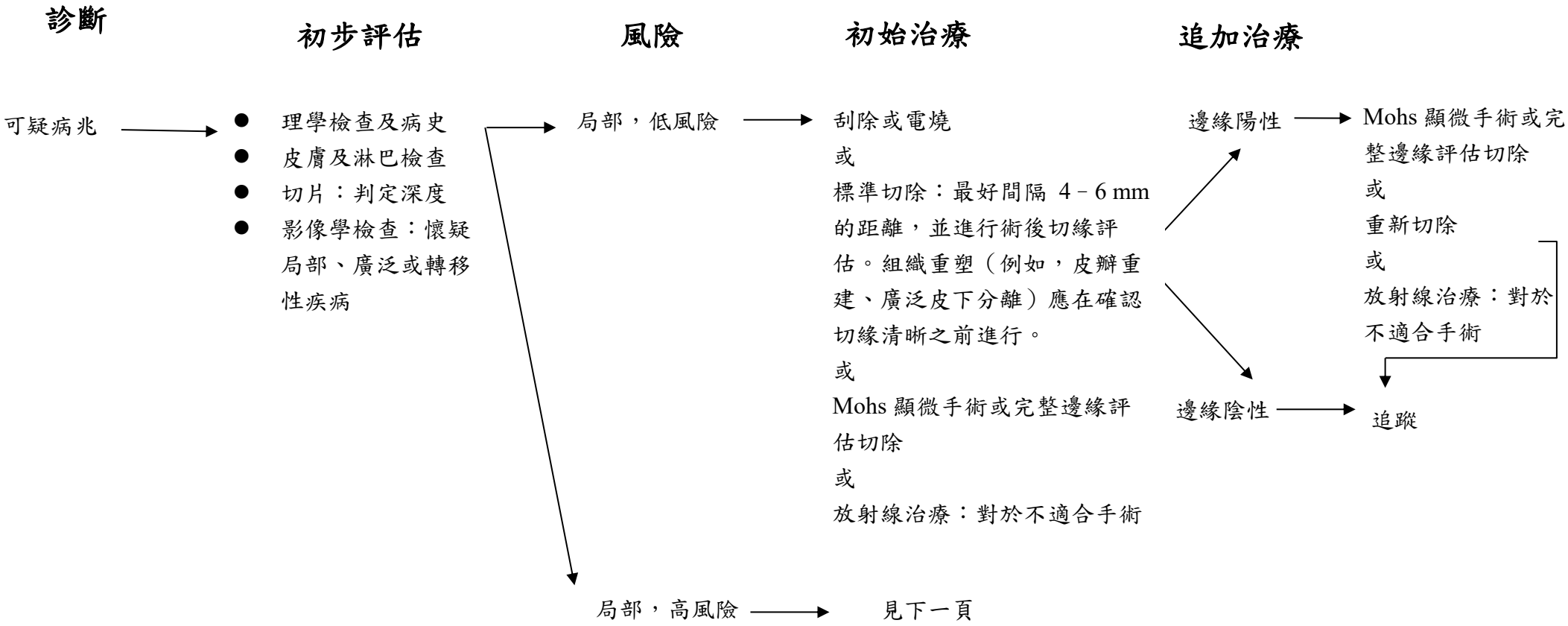
2. Clinical trial

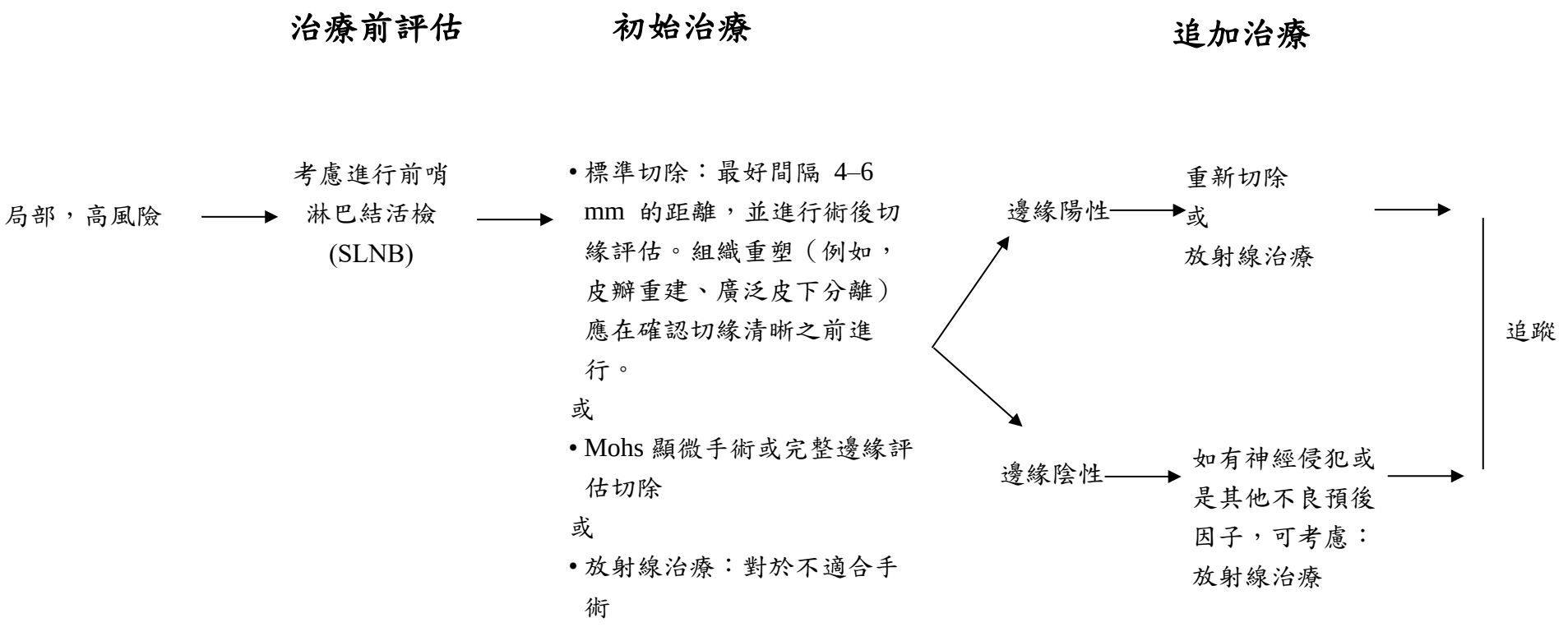
3. Cisplatin + paclitaxol (self pay)
   cisplatin (75 mg/m2) and paclitaxel (135 mg/m2, 3 h infusion) every 3 weeks

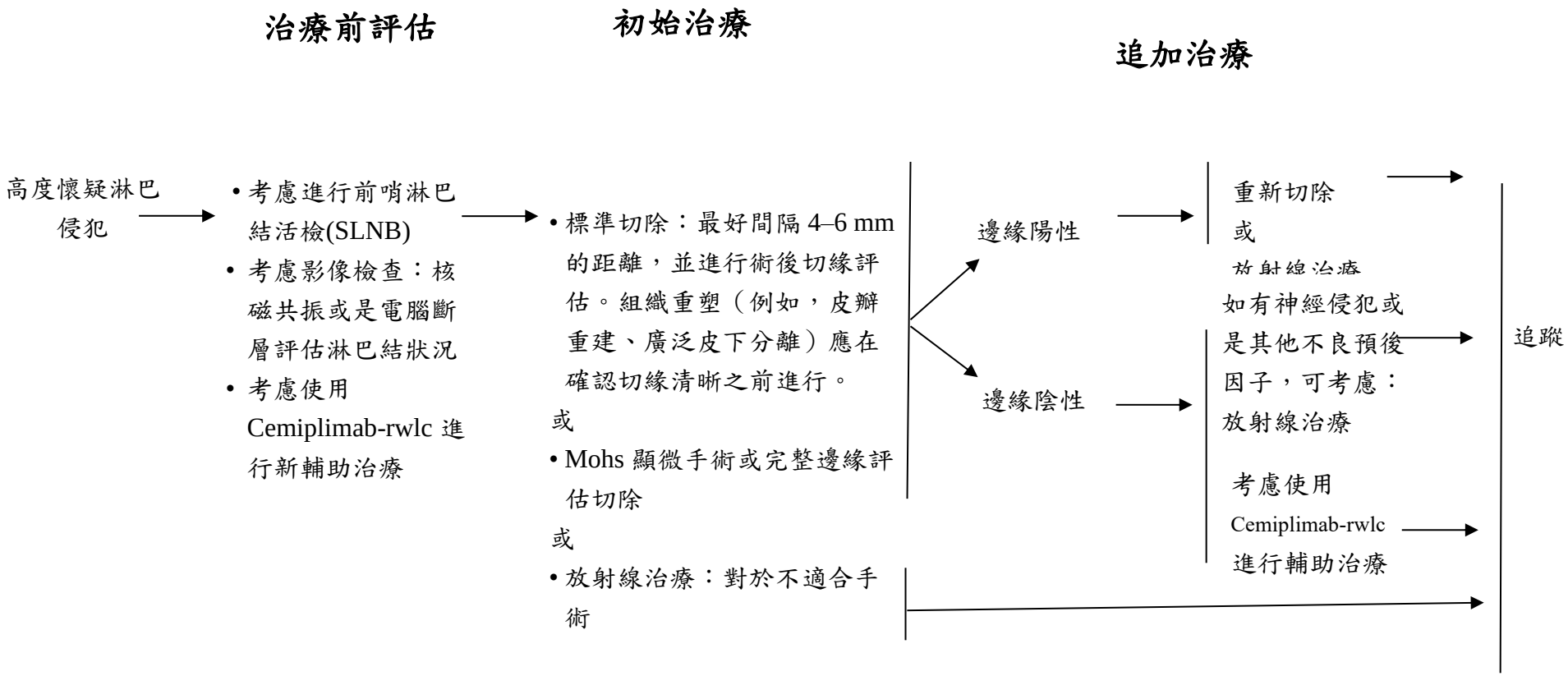
Ref: Metastatic basal cell carcinoma: rapid symptomatic response to cisplatin and paclitaxel. ANZ J Surg. 2004 Aug;74(8):704-5.

4. Treat as recurrent/metastatic head and neck squamous cell carcinoma

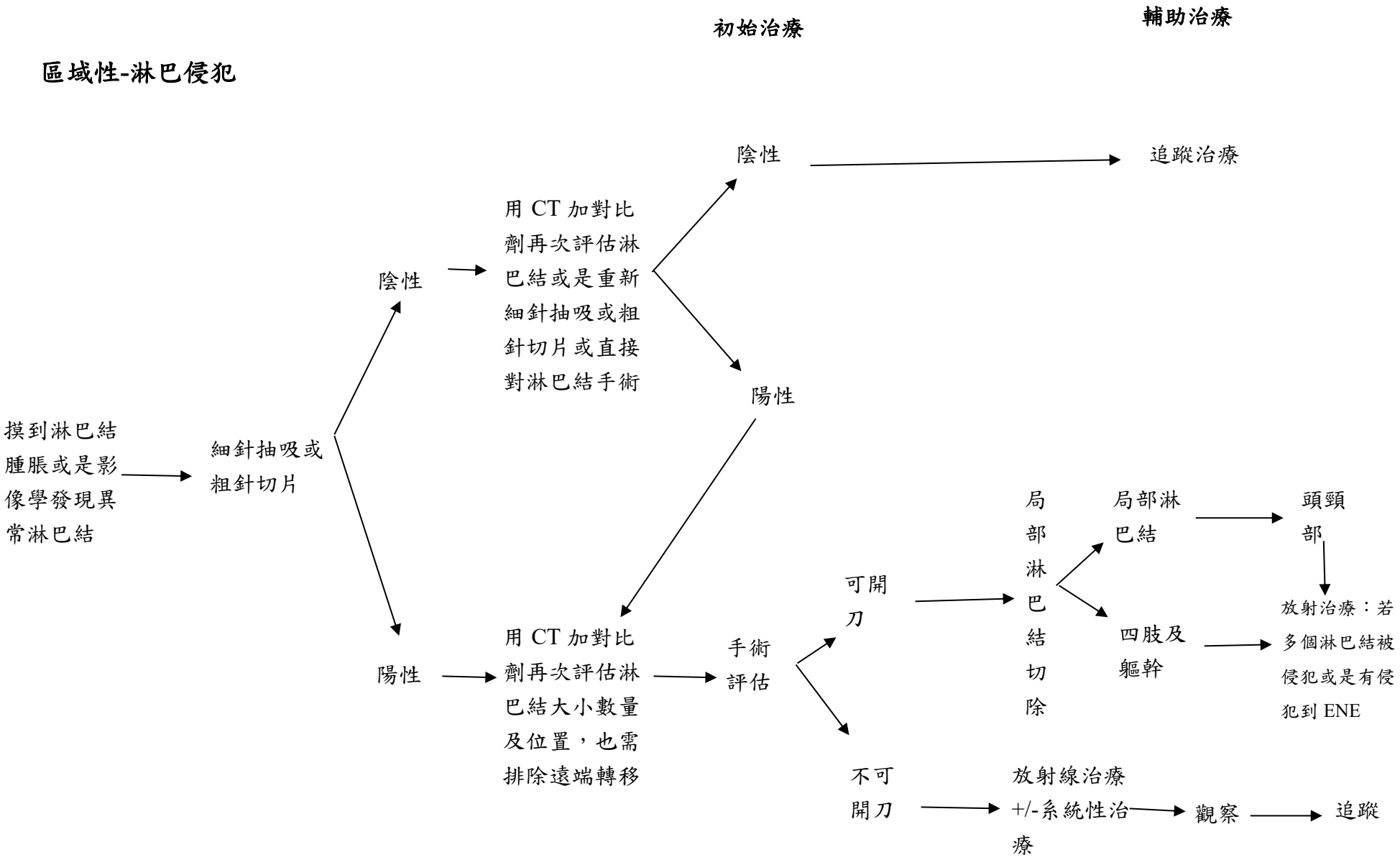
鱗狀上皮細胞癌

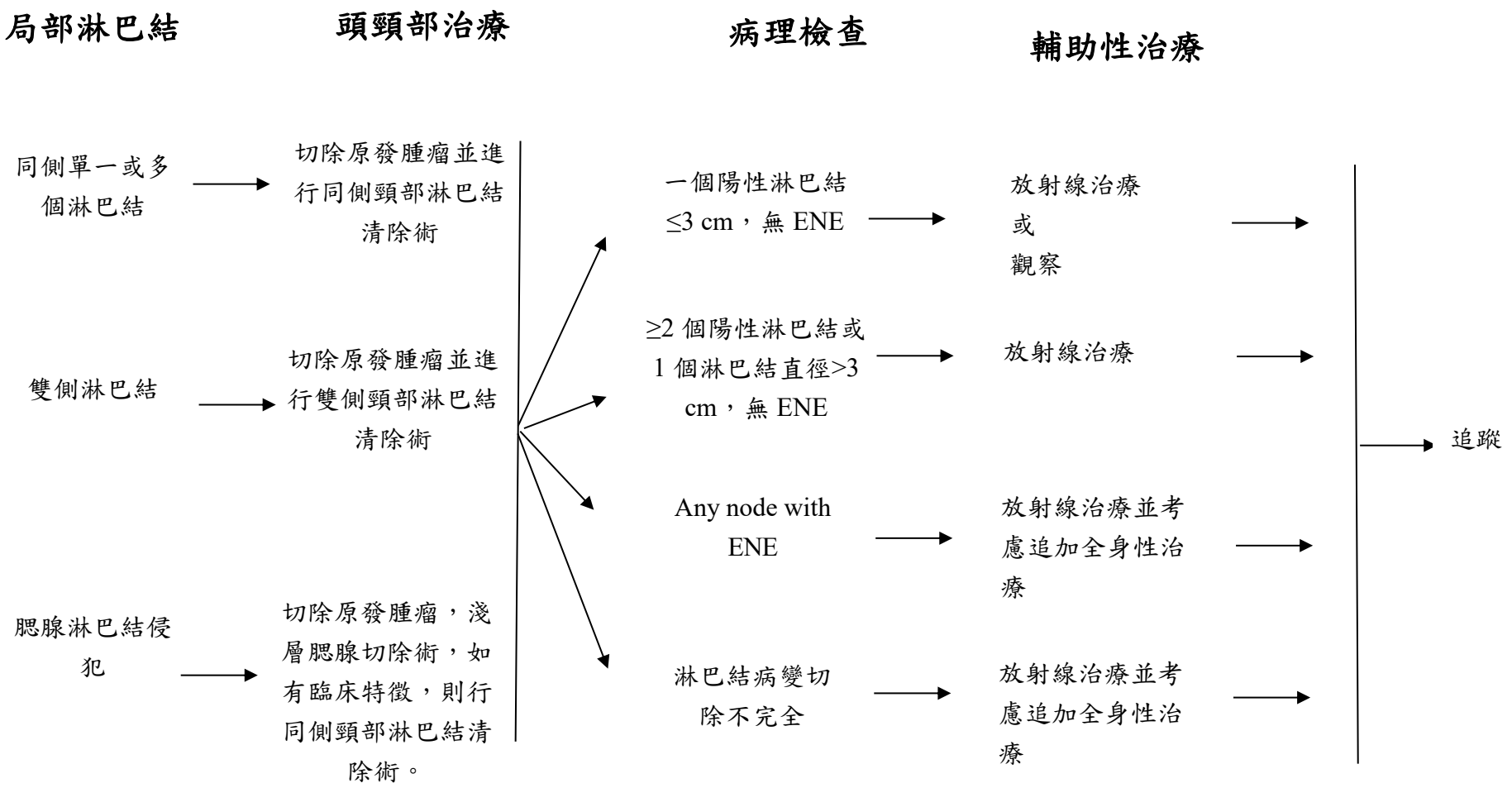

診斷
初步評估
風險
初始治療
追加治療
可疑病兆
理學檢查及病史
皮膚及淋巴檢查
切片：判定深度
影像學檢查：懷疑局部、廣泛或轉移性疾病
局部，低風險
刮除或電燒
或
標準切除：最好間隔 4－6 mm 的距離，並進行術後切緣評估。組織重塑（例如，皮瓣重建、廣泛皮下分離）應在確認切緣清晰之前進行。
或
Mohs 顯微手術或完整邊緣評估切除
或
放射線治療：對於不適合手術
邊緣陽性
Mohs 顯微手術或完整邊緣評估切除
或
重新切除
或
放射線治療：對於不適合手術
邊緣陰性
追蹤
局部，高風險
見下一頁


治療前評估
初始治療
追加治療
局部，高風險
考慮進行前哨淋巴結活檢 (SLNB)
• 標準切除：最好間隔 4–6 mm 的距離，並進行術後切緣評估。組織重塑（例如，皮瓣重建、廣泛皮下分離）應在確認切緣清晰之前進行。
或
• Mohs 顯微手術或完整邊緣評估切除
或
• 放射線治療：對於不適合手術
邊緣陽性
重新切除
或
放射線治療
邊緣陰性
如有神經侵犯或是其他不良預後因子，可考慮：
放射線治療
追蹤


治療前評估
初始治療
追加治療
高度懷疑淋巴侵犯
• 考慮進行前哨淋巴結活檢(SLNB)
• 考慮影像檢查：核磁共振或是電腦斷層評估淋巴結狀況
• 考慮使用 Cemiplimab-rwlc 進行新輔助治療
• 標準切除：最好間隔 4–6 mm 的距離，並進行術後切緣評估。組織重塑（例如，皮瓣重建、廣泛皮下分離）應在確認切緣清晰之前進行。
或
• Mohs 顯微手術或完整邊緣評估切除
或
• 放射線治療：對於不適合手術
邊緣陽性
重新切除
或
放射線治療
邊緣陰性
如有神經侵犯或是其他不良預後因子，可考慮：
放射線治療
考慮使用 Cemiplimab-rwlc 進行輔助治療
追蹤

區域性-淋巴侵犯


初始治療
輔助治療
摸到淋巴結腫脹或是影像學發現異常淋巴結
細針抽吸或粗針切片
陰性
用 CT 加對比劑再次評估淋巴結或是重新細針抽吸或粗針切片或直接對淋巴結手術
陰性
追蹤治療
陽性
陽性
用 CT 加對比劑再次評估淋巴結大小數量及位置，也需排除遠端轉移
手術評估
可開刀
局部淋巴結切除
局部淋巴結
頭頸部
放射治療：若多個淋巴結被侵犯或是有侵犯到 ENE
四肢及軀幹
不可開刀
放射線治療 +/-系統性治療
觀察
追蹤


局部淋巴結
頭頸部治療
病理檢查
輔助性治療
同側單一或多個淋巴結
切除原發腫瘤並進行同側頸部淋巴結清除術
雙側淋巴結
切除原發腫瘤並進行雙側頸部淋巴結清除術
腮腺淋巴結侵犯
切除原發腫瘤，淺層腮腺切除術，如有臨床特徵，則行同側頸部淋巴結清除術。
一個陽性淋巴結 ≤3 cm，無 ENE
放射線治療 或 觀察
≥2 個陽性淋巴結或 1 個淋巴結直徑>3 cm，無 ENE
放射線治療
Any node with ENE
放射線治療並考慮追加全身性治療
淋巴結病變切除不完全
放射線治療並考慮追加全身性治療
追蹤

追蹤

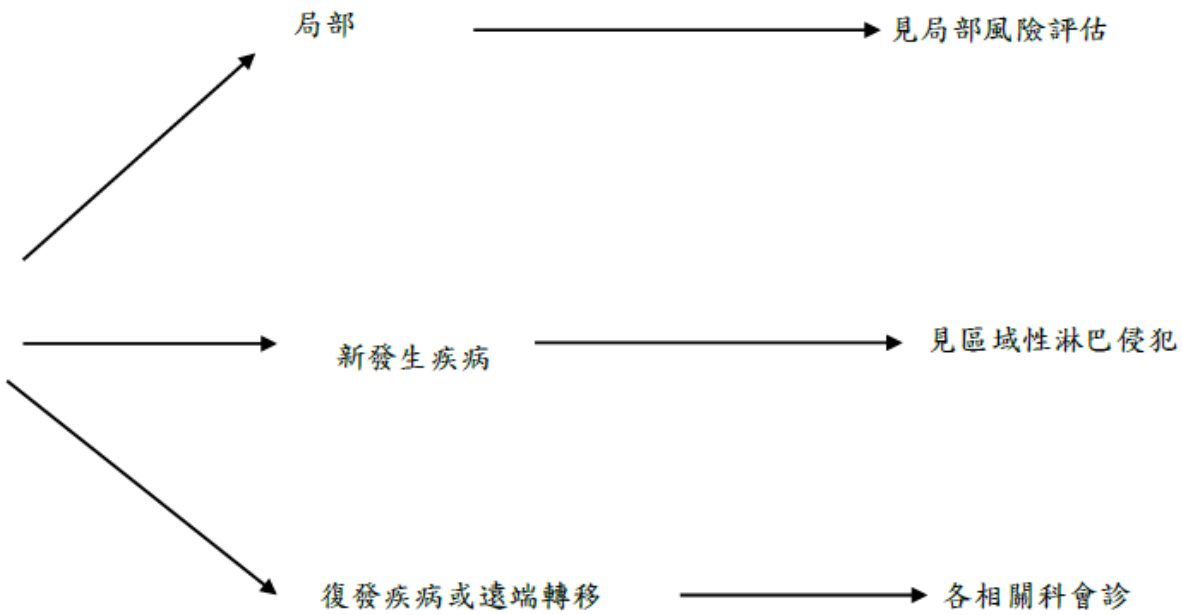
Local disease：

- 前2年：3-12個月追蹤
- 第3年：6-12個月追蹤
  之後每年追蹤一次
- 病人衛教
  - 防曬
  - 自我皮膚檢測

Regional disease：

- 第1年：1-3個月追蹤
- 第2年：2-4個月追蹤
- 第3年：4-6個月追蹤
  之後每年6-12個月追蹤一次
- 病人衛教
  - 防曬
  - 自我皮膚及淋巴結檢測

復發及病程進展



附件一、局部，高低風險判斷標準

病史及理學檢查	低風險	高風險
位置/大小	Area L < 20mm Area M < 10mm	Area L ≥ 20mm Area M ≥ 10mm Area H 任何大小
邊緣	界限分明	界線模糊
原發/續發	原發	續發
免疫抑制	無	有
病灶位置曾接受過放射線治療或慢性發炎狀態	無	有
生長快速	無	有
神經、血管、淋巴侵犯	無	有
神經學症狀	無	有
病理分類	分化良好	分化不良 (Adenoid-acantholytic, adenosquamous-mucin production, desmoplastic, metaplastic-carcinosarcomatous type)
深度	<2mm or Clark level I II III	≥2mm or Clark level IV V

Area Low risk: trunk and extremities(excluding hands, feet, pretibial area)

Area Medium risk: pretibial area, face other than mask area (cheek, forehead, scalp, neck)

Area High risk: face mask area+ hands+feet+genitalia (mask area: central face, eyelid, eyebrow, nose, lips-cutaneous and vermilion, chin, mandible, preauricular/postauricular skin sulci, temple, ear)

Area H 的腫瘤不論大小都屬於高風險。這些地方通常為了美觀，margin 不夠大，易造成復發。建議使用 Mohs micrographic surgery 可達到邊緣乾淨，且最小切除範圍。對於<6mm 的腫瘤，沒有其他危險因子，建議至少要切除 4mm 的 margin。

附件二、PRINCIPLES OF RADIATION THERAPY FOR SQUAMOUS CELL SKIN CANCER

Primary Tumor	RT Dosing	Common examples
Adjuvant RT		
• **Conventional fractionation (1.8–2 Gy/fraction)**	BED10 of 60–79 Gy	• 60–66 Gy in 2 Gy/fraction • 60–66 Gy in 1.8 Gy/fraction (reserved for areas with poor wound healing [eg, lower extremity])
• **Hypofractionation**	BED10 of 48–70 Gy	• 2.5 Gy x 20 fractions • 3 Gy x 15–17 fractions to 45–51 Gy • 6 Gy x 5 fractions (non-consecutive days)
Definitive EBRT		
• **Conventional fractionation (1.8–2 Gy/fraction)**	BED10 of 70–84 Gy	• 60 Gy (for small tumors in cosmetically sensitive areas) • 66–70 Gy (for locally advanced tumors involving bone or cartilage)
• **Hypofractionation**	BED10 of 48–72 Gy	• Tumors <2 cm: 2.5 Gy x 20 fractions • Tumors ≥2 cm: 2.5-3 Gy x 20–22 fractions • 3 Gy x 17–18 fractions to 51–54 Gy • 4.4 Gy x 10 fractions, 4 fractions per week • 6–7 Gy x 5 fractions, 2 treatments per week
Regional Disease		
• **Conventional fractionation (1.8–2 Gy/fraction)** Macroscopic/gross residual lymph nodes Lymph node + dissected nodal basins PNTS	 66–70 Gy 60 Gy 50–66 Gy	
• **Undissected at-risk nodal basins**	1.8–2 Gy x 25–30 fractions	
Satellitosis/In-Transit Metastasis (S-ITM)		
• **Resected** • **Unresected**	50–60 Gy over 5 to 6 weeks 60–70 Gy over 6 to 7 weeks	

Conventionally fractionated radiotherapy consists of five daily treatments per week.
Hypofractionated radiotherapy consists of fewer treatments with larger fraction size.

附件三、藥物治療

Chemotherapy regimen & EGFR inhibitors	
Published C/T regimens	schedule
Cisplatin 100mg/m^2 IV D1	Q21 days *6cucles
5-FU 1g/m^2 IV D1-4	Q21 days *6cucles
Cetuximab,400mg/m2 IV Week1 , then 250mg/m2 QW	Till IV or unacceptable toxicity

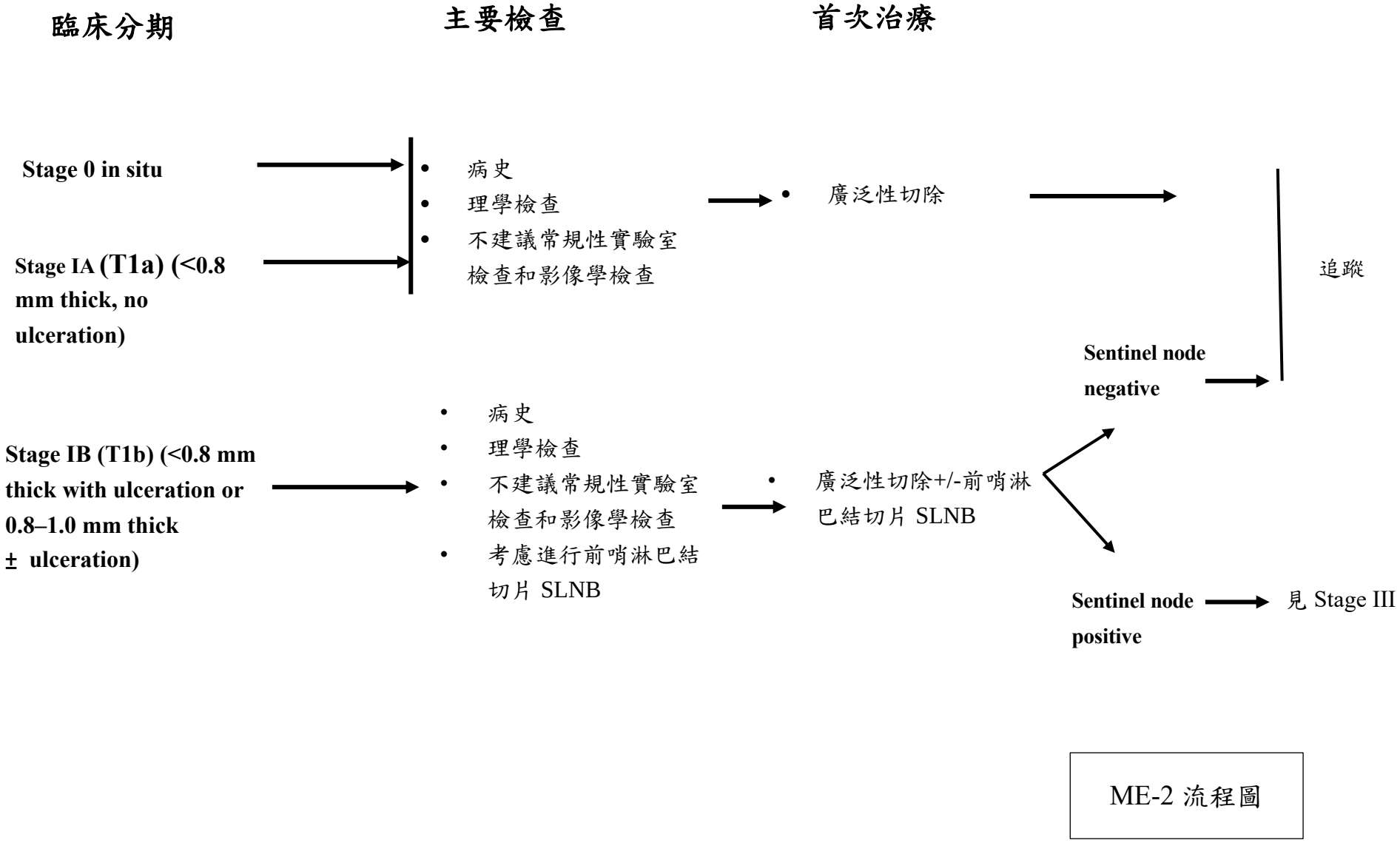
四、黑色素細胞癌

可疑病兆	切片	確診	初步評估	臨床分期
1. 可疑的色素病兆 2. 黑色素細胞瘤危險因子評估	• 切片 • 切片組織若不足，則再切片一次	確診黑色素細胞瘤	1. 病史 2. 理學檢查 (1) 完整皮膚檢查 (2) 淋巴結檢查	Stage 0 Stage I Stage II Stage III Stage IV

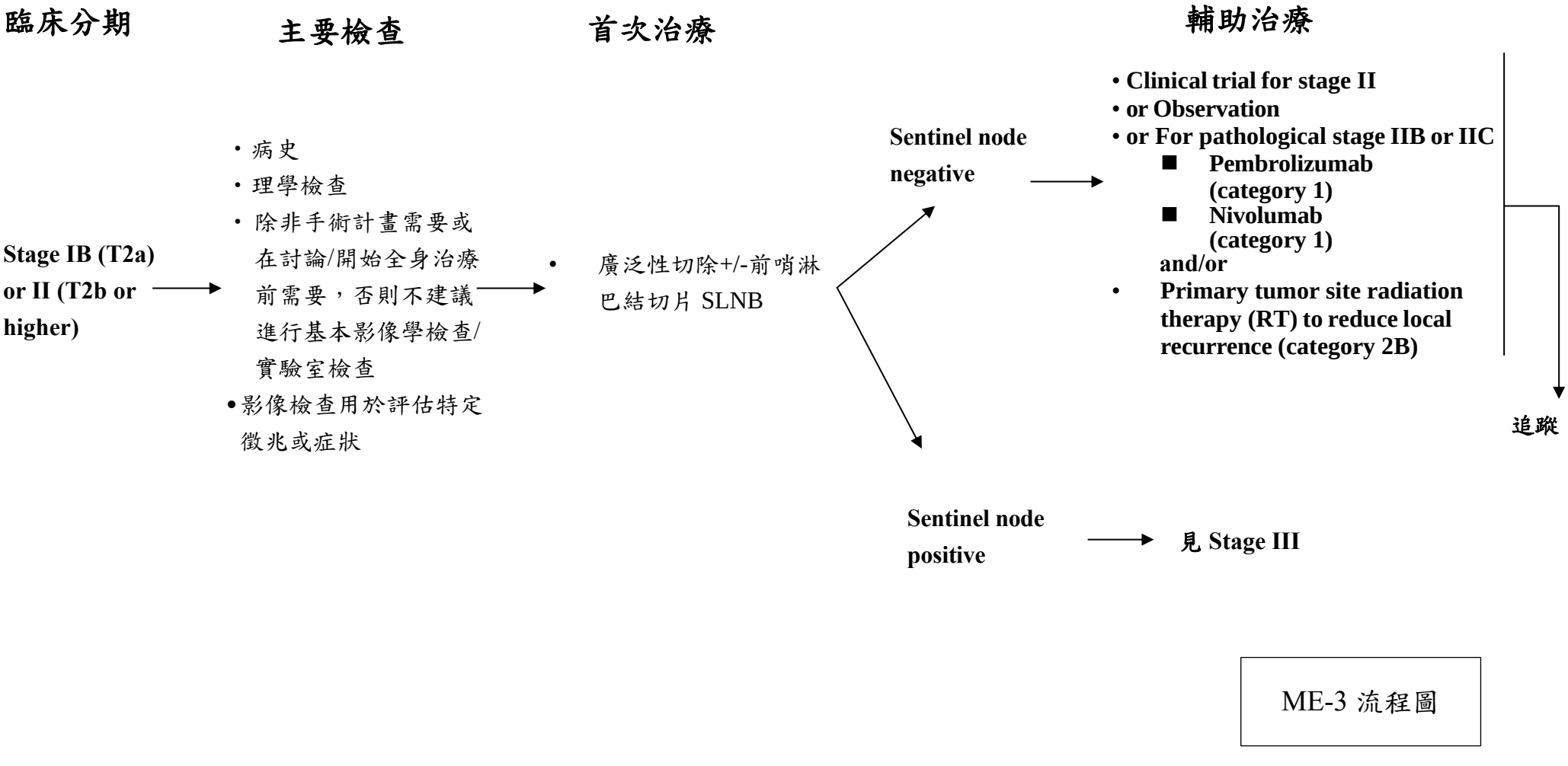
切片病理組織學證實：

- **Breslow thickness**
- **Ulceration status (present or absent)**
- **Dermal mitotic rate (#/mm^2)**
- **Assess deep and peripheral margin status**
- **Microsatellitosis (present or absent)**
- **Pure desmoplasial if present**
- **Lymphovascular/ angiolymphatic invasion**
- **Neurotropism/perineural invasion**

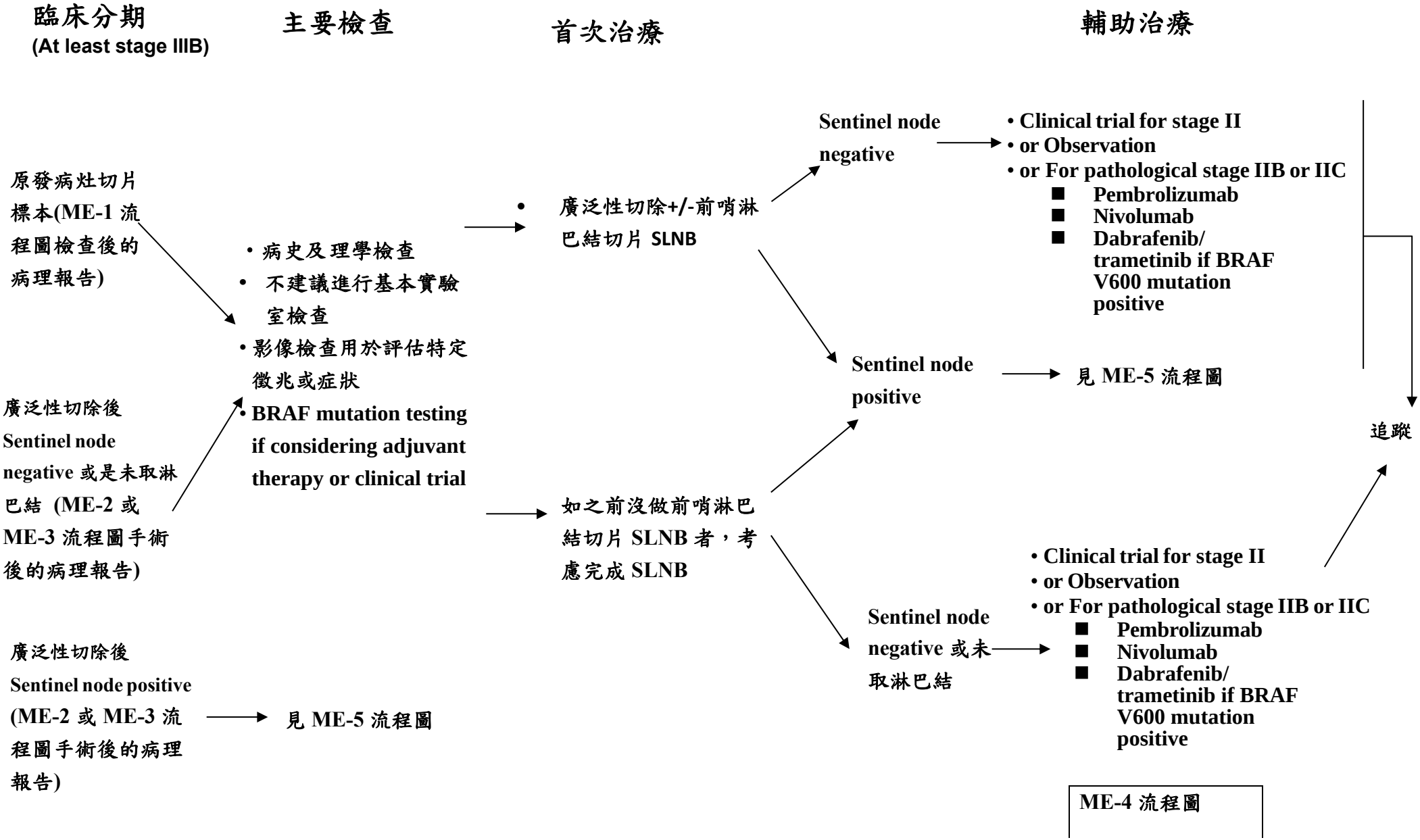
ME-1 流程圖

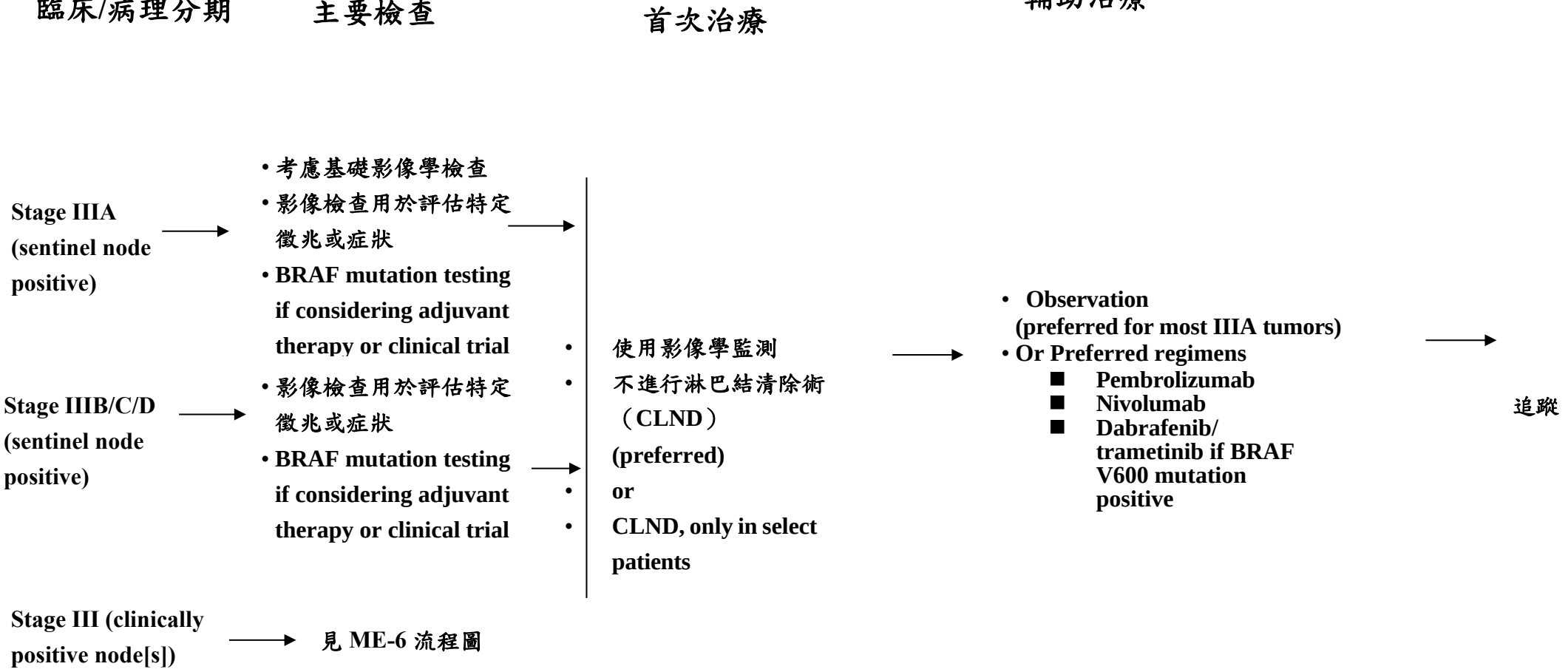

臨床分期
主要檢查
首次治療
Stage 0 in situ
Stage IA (T1a) (<0.8 mm thick, no ulceration)
病史
理學檢查
不建議常規性實驗室檢查和影像學檢查
廣泛性切除
追蹤
Stage IB (T1b) (<0.8 mm thick with ulceration or 0.8–1.0 mm thick ± ulceration)
病史
理學檢查
不建議常規性實驗室檢查和影像學檢查
考慮進行前哨淋巴結切片 SLNB
廣泛性切除+/-前哨淋巴結切片 SLNB
Sentinel node negative
Sentinel node positive
見 Stage III

ME-2 流程圖

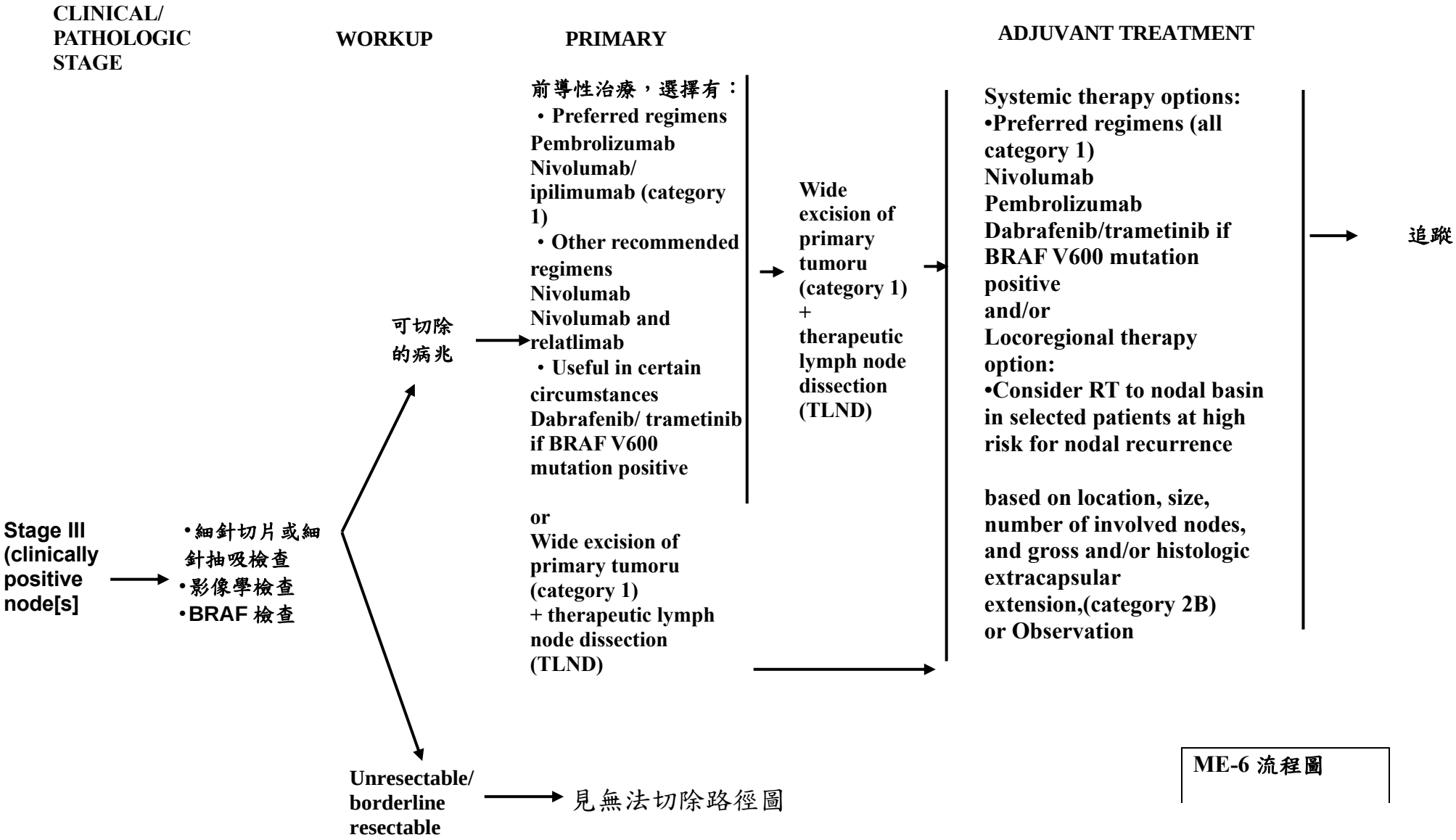

臨床分期
主要檢查
首次治療
輔助治療
Stage IB (T2a) or II (T2b or higher)
• 病史
• 理學檢查
• 除非手術計畫需要或在討論/開始全身治療前需要，否則不建議進行基本影像學檢查/實驗室檢查
• 影像檢查用於評估特定徵兆或症狀
• 廣泛性切除+/-前哨淋巴結切片 SLNB
Sentinel node negative
• Clinical trial for stage II
• or Observation
• or For pathological stage IIB or IIC
■ Pembrolizumab (category 1)
■ Nivolumab (category 1)
and/or
• Primary tumor site radiation therapy (RT) to reduce local recurrence (category 2B)
追蹤
Sentinel node positive
見 Stage III

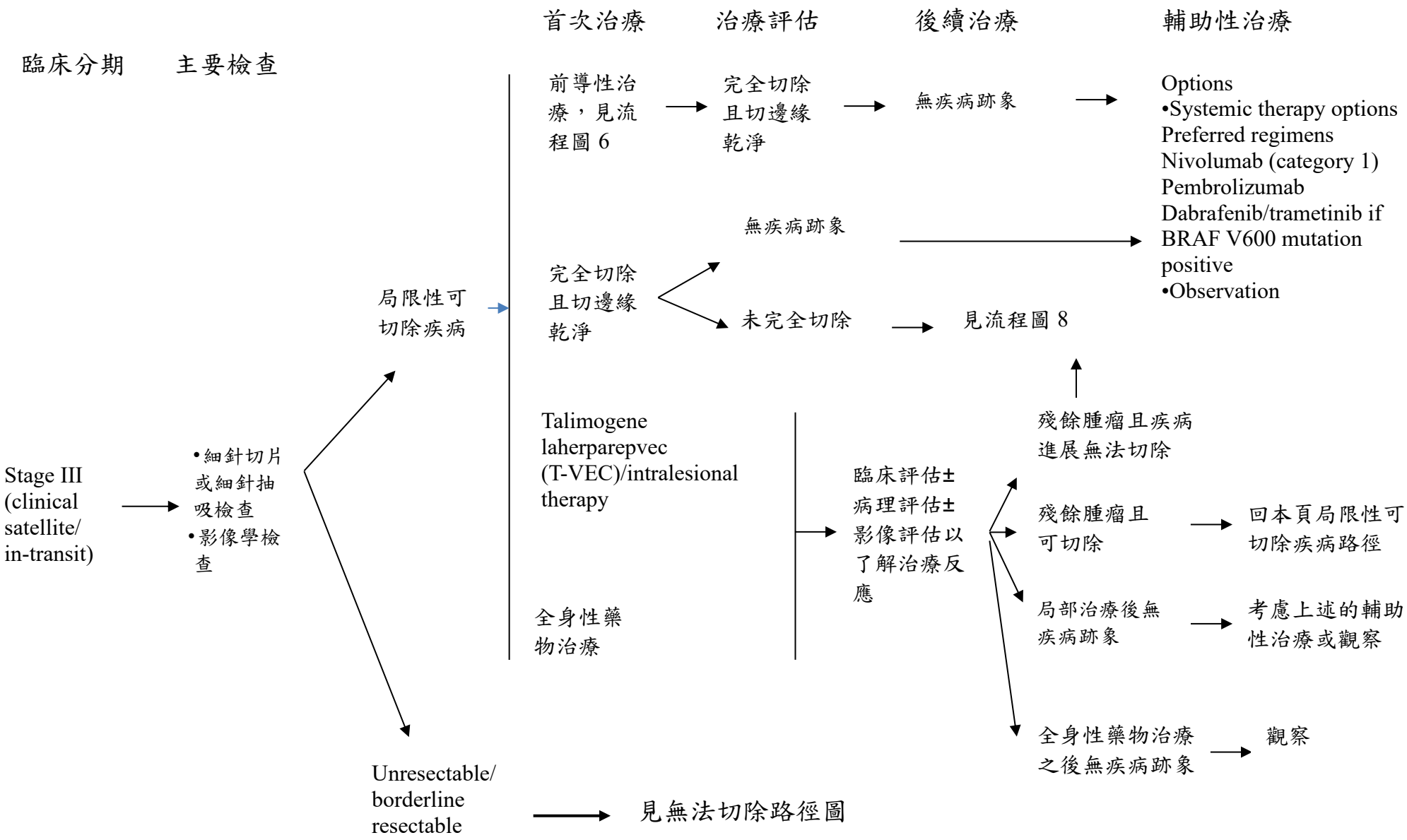
ME-3 流程圖


臨床分期
(At least stage IIIB)
主要檢查
首次治療
輔助治療
原發病灶切片標本(ME-1 流程圖檢查後的病理報告)
廣泛性切除後 Sentinel node negative 或是未取淋巴結 (ME-2 或 ME-3 流程圖手術後的病理報告)
廣泛性切除後 Sentinel node positive (ME-2 或 ME-3 流程圖手術後的病理報告)
見 ME-5 流程圖
• 病史及理學檢查
• 不建議進行基本實驗室檢查
• 影像檢查用於評估特定徵兆或症狀
• BRAF mutation testing if considering adjuvant therapy or clinical trial
• 廣泛性切除+/-前哨淋巴結切片 SLNB
如之前沒做前哨淋巴結切片 SLNB 者，考慮完成 SLNB
Sentinel node negative
• Clinical trial for stage II
• or Observation
• or For pathological stage IIB or IIC
■ Pembrolizumab
■ Nivolumab
■ Dabrafenib/ trametinib if BRAF V600 mutation positive
Sentinel node positive
見 ME-5 流程圖
Sentinel node negative 或未取淋巴結
• Clinical trial for stage II
• or Observation
• or For pathological stage IIB or IIC
■ Pembrolizumab
■ Nivolumab
■ Dabrafenib/ trametinib if BRAF V600 mutation positive
追蹤
ME-4 流程圖

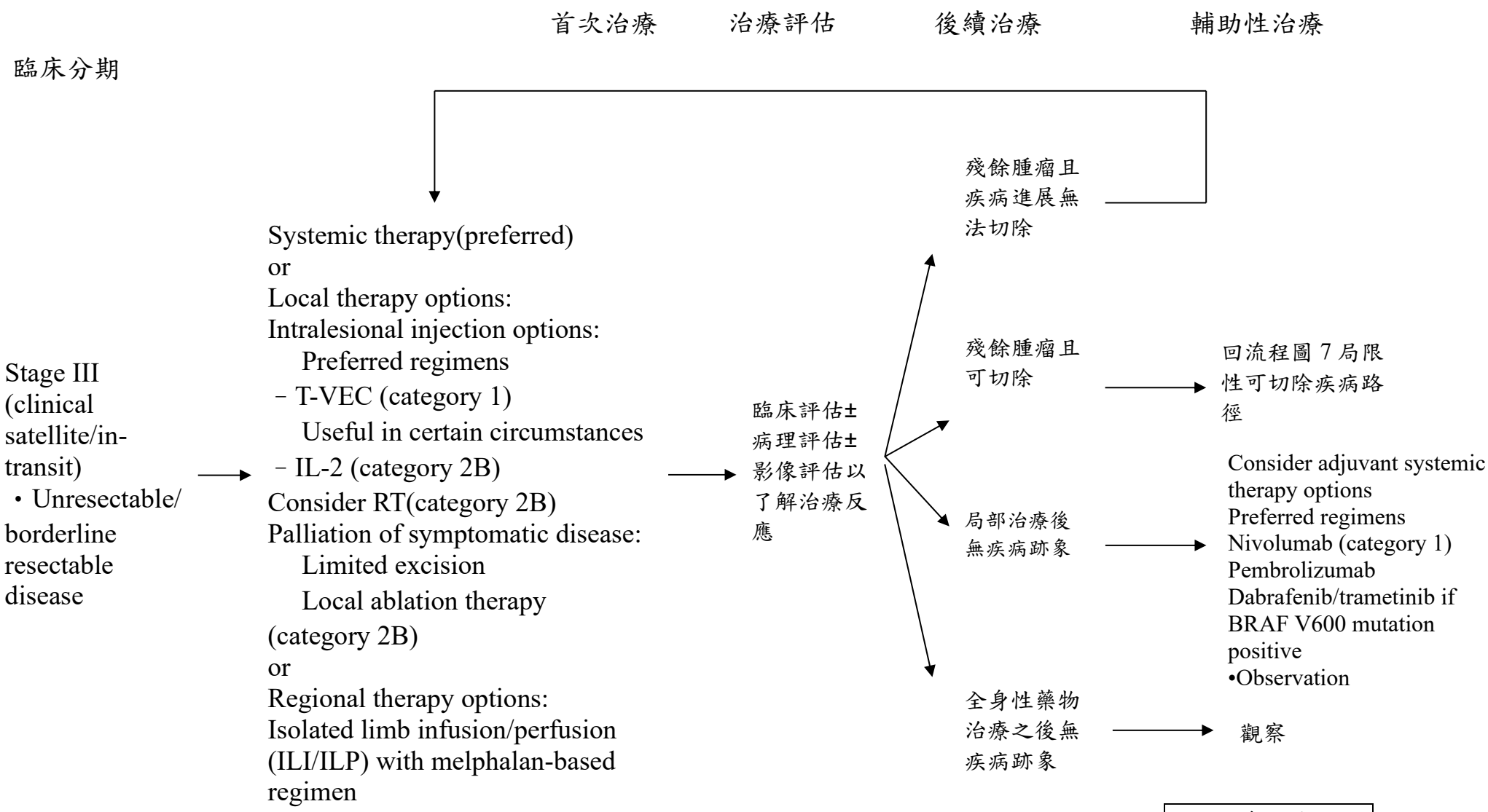

臨床/病理分期
主要檢查
首次治療
輔助治療
Stage IIIA (sentinel node positive)
• 考慮基礎影像學檢查
• 影像檢查用於評估特定徵兆或症狀
• BRAF mutation testing if considering adjuvant therapy or clinical trial
Stage IIIB/C/D (sentinel node positive)
• 影像檢查用於評估特定徵兆或症狀
• BRAF mutation testing if considering adjuvant therapy or clinical trial
使用影像學監測
不進行淋巴結清除術（CLND）
(preferred)
or
CLND, only in select patients
• Observation (preferred for most IIIA tumors)
• Or Preferred regimens
■ Pembrolizumab
■ Nivolumab
■ Dabrafenib/ trametinib if BRAF V600 mutation positive
追蹤
Stage III (clinically positive node[s])
見 ME-6 流程圖

ME-5 流程圖


CLINICAL/ PATHOLOGIC STAGE
WORKUP
PRIMARY
ADJUVANT TREATMENT
Stage III (clinically positive node[s])
•細針切片或細針抽吸檢查
•影像學檢查
•BRAF 檢查
可切除的病兆
前導性治療，選擇有：
• Preferred regimens
Pembrolizumab
Nivolumab/ ipilimumab (category 1)
• Other recommended regimens
Nivolumab
Nivolumab and relatlimab
• Useful in certain circumstances
Dabrafenib/ trametinib if BRAF V600 mutation positive
or
Wide excision of primary tumoru (category 1) + therapeutic lymph node dissection (TLND)
Wide excision of primary tumoru (category 1) + therapeutic lymph node dissection (TLND)
Systemic therapy options:
•Preferred regimens (all category 1)
Nivolumab
Pembrolizumab
Dabrafenib/trametinib if BRAF V600 mutation positive
and/or
Locoregional therapy option:
•Consider RT to nodal basin in selected patients at high risk for nodal recurrence
based on location, size, number of involved nodes, and gross and/or histologic extracapsular extension,(category 2B)
or Observation
追蹤
Unresectable/ borderline resectable
見無法切除路徑圖
ME-6 流程圖


首次治療
治療評估
後續治療
輔助性治療
臨床分期
主要檢查
Stage III (clinical satellite/ in-transit)
•細針切片或細針抽吸檢查
•影像學檢查
局限性可切除疾病
前導性治療，見流程圖 6
完全切除且切邊緣乾淨
無疾病跡象
Options
•Systemic therapy options
Preferred regimens
Nivolumab (category 1)
Pembrolizumab
Dabrafenib/trametinib if BRAF V600 mutation positive
•Observation
完全切除且切邊緣乾淨
無疾病跡象
未完全切除
見流程圖 8
Talimogene laherparepvec (T-VEC)/intralesional therapy
全身性藥物治療
臨床評估±病理評估±影像評估以了解治療反應
殘餘腫瘤且疾病進展無法切除
殘餘腫瘤且可切除
回本頁局限性可切除疾病路徑
局部治療後無疾病跡象
考慮上述的輔助性治療或觀察
全身性藥物治療之後無疾病跡象
觀察
Unresectable/ borderline resectable
見無法切除路徑圖

ME-7 流程圖


首次治療
治療評估
後續治療
輔助性治療
臨床分期
Stage III (clinical satellite/in-transit)
• Unresectable/ borderline resectable disease
Systemic therapy(preferred)
or
Local therapy options:
Intralesional injection options:
Preferred regimens
– T-VEC (category 1)
Useful in certain circumstances
– IL-2 (category 2B)
Consider RT(category 2B)
Palliation of symptomatic disease:
Limited excision
Local ablation therapy (category 2B)
or
Regional therapy options:
Isolated limb infusion/perfusion (ILI/ILP) with melphalan-based regimen
臨床評估± 病理評估± 影像評估以了解治療反應
殘餘腫瘤且疾病進展無法切除
殘餘腫瘤且可切除
回流程圖 7 局限性可切除疾病路徑
局部治療後無疾病跡象
Consider adjuvant systemic therapy options
Preferred regimens
Nivolumab (category 1)
Pembrolizumab
Dabrafenib/trametinib if BRAF V600 mutation positive
•Observation
全身性藥物治療之後無疾病跡象
觀察

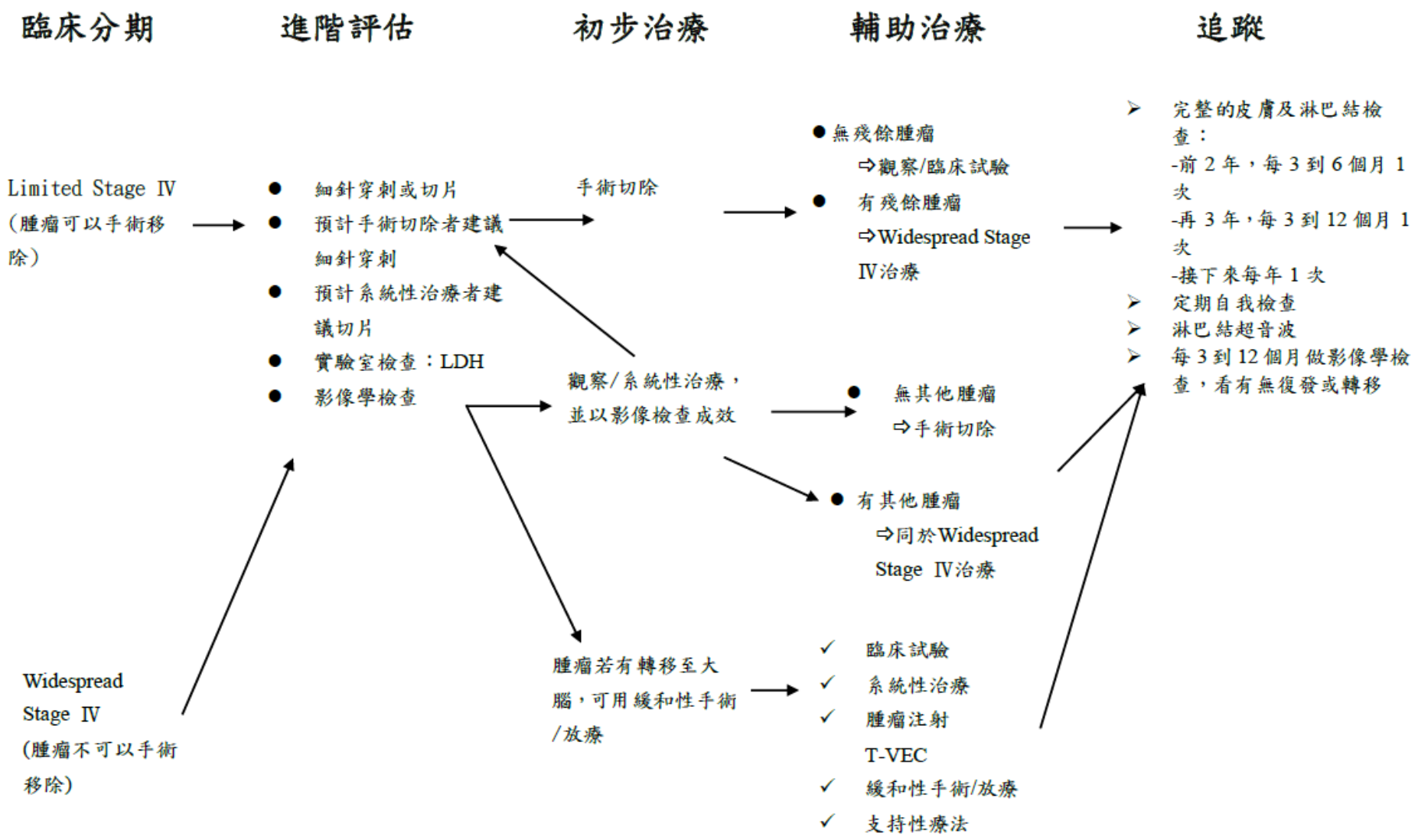
ME-8 流程圖

Stage IV metastatic → • Biopsy to confirm
• Lactate dehydrogenase (LDH)
• Imagingq for baseline staging and to evaluate
specific signs and symptoms → Treatment for Oligometastatic or Widely Disseminated Disease

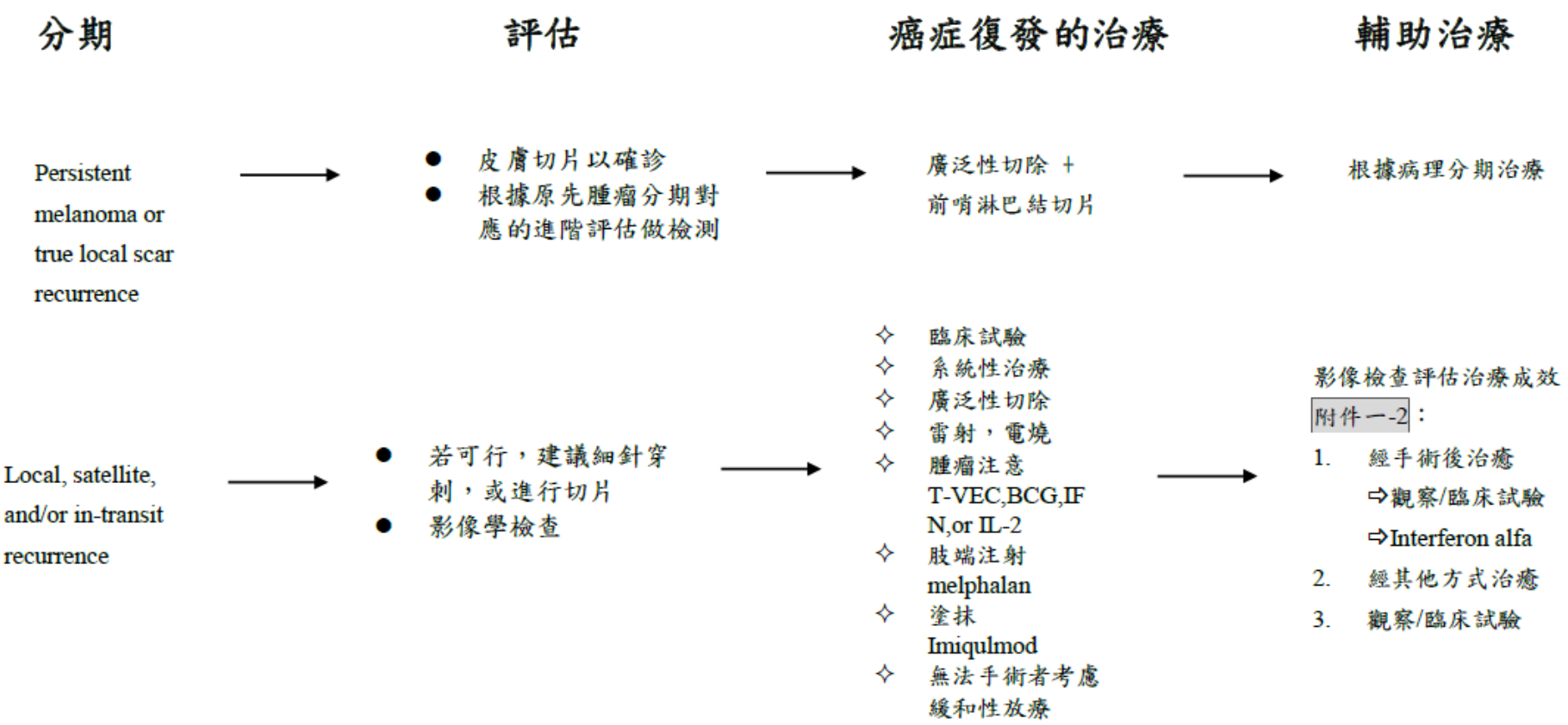
ME-9 流程圖

追蹤

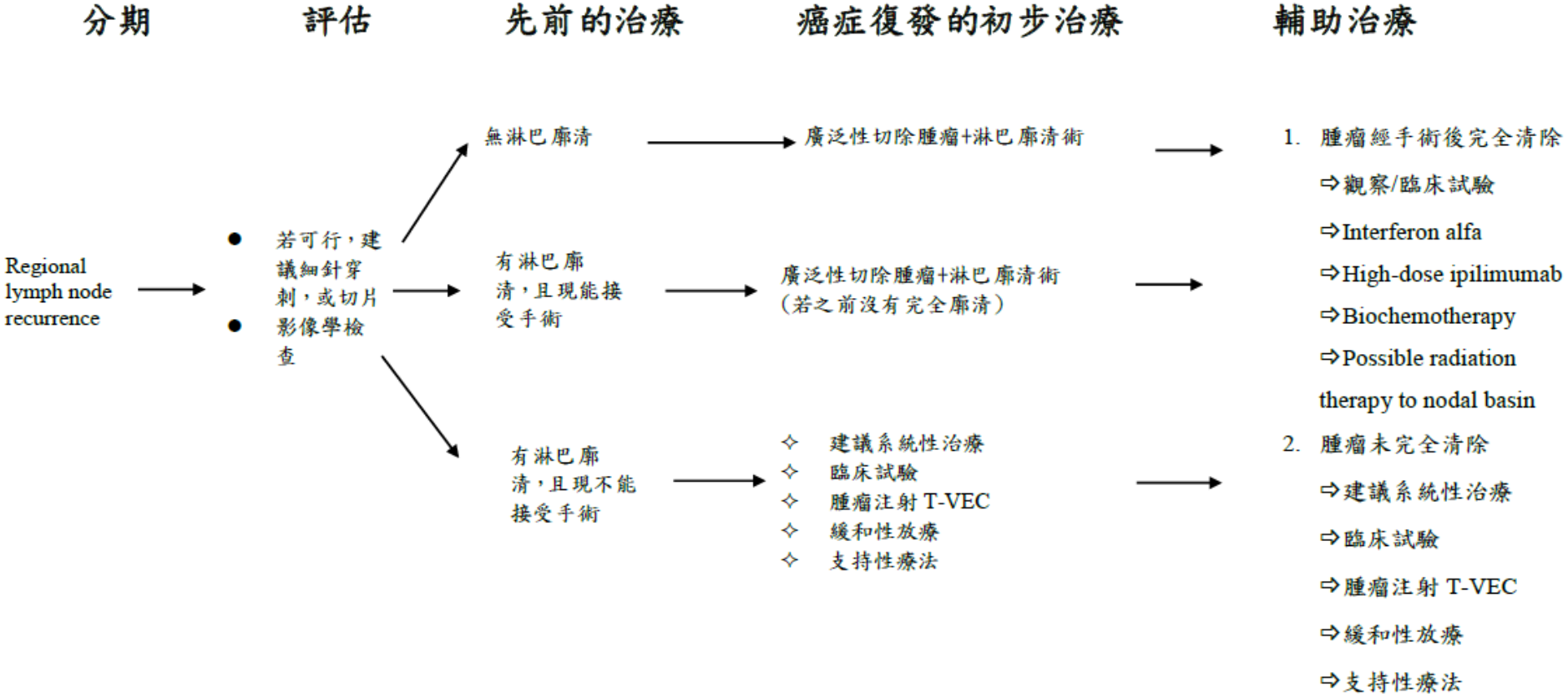
Stage 0 in situ	Stage IA–IIA NED	Stage IIB–IV NED
• See Common Follow-up Recommendations for All Patients • H&P (with emphasis on skin) at least annually • Routine blood tests are not recommended • Routine imaging to screen for asymptomatic recurrence or metastatic disease is not recommended	• See Common Follow-up Recommendations for All Patients • H&P (with emphasis on nodes and skin) every 6–12 mo for 5 y, then annually as clinically indicated • Routine blood tests are not recommended • Routine imaging to screen for asymptomatic recurrence or metastatic disease is not recommended • Imaging as indicated to investigate specific signs or symptoms	• See Common Follow-up Recommendations for All Patients • H&P (with emphasis on nodes and skin) every 3–6 mo for 2 y, then every 3–12 mo for 3 y, then annually as clinically indicated • Routine blood tests are not recommended, unless indicated for post- treatment monitoring • Imaging as indicated to investigate specific signs or symptoms • Consider imaginguuu every 3–12 months for 2 years, then every 6–12 months for another 3 yearsxxx (unless otherwise mandated by clinical trial participation) to screen for recurrence or metastatic disease (category 2B) • Routine imaging to screen for asymptomatic recurrence or metastatic disease is not recommended after 3–5 years, depending on risk of relapse


臨床分期
進階評估
初步治療
輔助治療
追蹤
Limited Stage Ⅳ
(腫瘤可以手術移除)
細針穿刺或切片
預計手術切除者建議細針穿刺
預計系統性治療者建議切片
實驗室檢查：LDH
影像學檢查
手術切除
觀察/系統性治療，並以影像檢查成效
腫瘤若有轉移至大腦，可用緩和性手術/放療
無殘餘腫瘤
⇨觀察/臨床試驗
有殘餘腫瘤
⇨Widespread Stage Ⅳ治療
無其他腫瘤
⇨手術切除
有其他腫瘤
⇨同於Widespread Stage Ⅳ治療
臨床試驗
系統性治療
腫瘤注射
T-VEC
緩和性手術/放療
支持性療法
Widespread Stage Ⅳ
(腫瘤不可以手術移除)
完整的皮膚及淋巴結檢查：
-前2年，每3到6個月1次
-再3年，每3到12個月1次
-接下來每年1次
定期自我檢查
淋巴結超音波
每3到12個月做影像學檢查，看有無復發或轉移

Node-negative recurrence treatment



Regional lymph node recurrence treatment



PRINCIPLES OF RADIATION THERAPY FOR MELANOMA

- Consider RT in the following situations:

  Interactions between radiation therapy and systemic therapies (eg, BRAF inhibitors, interferon alfa-2b, immunotherapies, checkpoint inhibitors) need to be very carefully considered as there is potential for increased toxicity

- PRIMARY DISEASE

  Adjuvant treatment in selected patients with factors including, but not limited to deep desmoplastic melanoma with narrow margins, extensive neurotropism, or locally recurrent disease.

- REGIONAL DISEASE
  - Adjuvant treatment in selected patients following resection of clinically appreciable nodes (category 2B) If Extranodal tumor extension AND/OR
    - Parotid: ≥1 involved node, any size of involvement
    - Cervical: ≥2 involved nodes and/or ≥3 cm tumor within a node
    - Axillary: ≥2 involved nodes and/or ≥4 cm tumor within a node
    - Inguinal: ≥3 involved nodes and/or ≥4 cm tumor within a node
  - Palliative

    Unresectable nodal, satellite, or in-transit disease

- METASTATIC DISEASE
  - Brain metastases
    - Stereotactic radiosurgery as primary treatment
    - Stereotactic radiosurgery as adjuvant treatment
    - Whole brain radiation therapy as primary treatment
    - Whole brain radiation therapy as adjuvant treatment (category 3)
  - Other symptomatic or potentially symptomatic soft tissue and/or bone metastases

附件三、系統性治療

ADJUVANT Chemotherapy

Pembrolizumab

Drug Combination	Dosage	Route of adminsistration	Times	Frequency/Duration
Pembrolizumab	200 mg	IV	drip 30 mins, Day 1of a21-day	cycle for 2cycle(up to 6 weeks) prior to surgery
Ref.	1.Robert C, Hamid O, Daud A, Hodi FS, et al. Five-year survival outcomes for patients with advanced melanoma treated with pembrolizumab in KEYNOTE-001. Ann Oncol. 2019;30(4):582–588. 2.Pembrolizumab in Chinese patients with advanced melanoma: 3-year follow-up of the KEYNOTE-151 study. PubMed. 2022; (NCT02821000). 3.Pembrolizumab (Keytruda) in advanced melanoma: a review of efficacy evidence. PubMed. 2023. 4.Efficacy of pembrolizumab for advanced/metastatic melanoma: a meta-analysis. PubMed. 2021. 5.Pembrolizumab: A Review in Advanced Melanoma. PubMed. 2016.			

Nivolumab

Drug Combination	Dosage	Route of adminsistration	Times	Frequency/Duration
Nivolumab	200 mg fix	IVD	drip 60 mis, d1	Q2W
Ref.	1.Weber JS, D'Angelo SP, Minor D, et al. Nivolumab versus chemotherapy in patients with advanced melanoma who progressed after anti-CTLA-4 treatment (CheckMate 037): a randomised, controlled, open-label, phase 3 trial. Lancet Oncol. 2015;16(4):375–384.			

	2.Wolchok JD, Chiarion-Sileni V, Gonzalez R, et al. Overall survival with combined nivolumab and ipilimumab in advanced melanoma (CheckMate 067): 10-year follow-up results. N Engl J Med. 2024; doi:10.1056/NEJMoa2208661. 3.National Cancer Institute. Nivolumab-based treatments for advanced melanoma: Summary of efficacy and survival data from CheckMate trials. Cancer.gov.

For BRAF V600E-mutated tumors

Dabrafenib and Trametinib

藥名	Dabrafenib 150 mg PO twice daily Trametinib 2 mg PO daily
Ref.	1. Long GV, Stroyakovskiy D, Gogas H, et al. *Dabrafenib and trametinib versus dabrafenib and placebo for Val600 BRAF-mutant melanoma: a multicentre, double-blind, phase 3 randomised controlled trial.* Lancet. 2015;386(9992):410-419. doi:10.1016/S0140-6736(15)60972-2. 2. Robert C, Karaszewska B, Schachter J, et al. *Improved overall survival in melanoma with combined dabrafenib and trametinib.* N Engl J Med. 2015;372(1):30-39. 3. Sun C, Wang L, Huang S. *Dabrafenib and trametinib, alone and in combination for BRAF-mutant metastatic melanoma.* Oncologist. 2014;19(8): 846-854.

OTHER SYSTEMIC THERAPIES

Cytotoxic Regimens for Metastatic Disease[1]

- Dacarbazine
- Temozolomide
- Paclitaxel
- Albumin-bound paclitaxel
- Carboplatin/paclitaxel

Biochemotherapy for Metastatic Disease[1]

- Dacarbazine or temozolomide, and cisplatin or carboplatin, with or without vinblastine or nitrosourea, and IL-2 and interferon alfa-2b

Biochemotherapy for Adjuvant Treatment of High-Risk Disease

- Dacarbazine, cisplatin, vinblastine, IL-2, and interferon alfa-2b (category 2B)

附件四、對於轉移性或不可切除黑色素瘤的全身治療 Systemic therapy for metastatic or unresectable diseases

Metastatic or unresectable disease →

FIRST-LINE THERAPY

Preferred regimens
- Combination checkpoint blockade (preferred)
  - Nivolumab/ipilimumab (category 1)
  - Nivolumab and relatlimab-rmbw (category 1)
- Anti-PD-1 monotherapy
  - Pembrolizumab (category 1)
  - Nivolumab (category 1)

Other recommended regimens
- Combination targeted therapy if BRAF V600 mutation positive
  - Dabrafenib/trametinib (category 1)
  - Vemurafenib/cobimetinib (category 1)
  - Encorafenib/binimetinib (category 1)
- Pembrolizumab/low-dose ipilimumab (category 2B)

→ Disease progression, intolerance, and/or projected risk of progression with BRAF-targeted therapy →

SECOND-LINE OR SUBSEQUENT THERAPY

Preferred regimens
- Anti-PD-1 monotherapy

Pembrolizumab
Nivolumab
- Nivolumab/ipilimumab
- Nivolumab and relatlimab-rmbw
- Pembrolizumab/low-dose ipilimumab for progression following anti-PD-1 therapy
- Combination targeted therapy with BRAF V600 mutation positive

Dabrafenib/trametinib
Vemurafenib/cobimetinib
Encorafenib/binimetinib
- Tumor-infiltrating lymphocyte therapy (TIL)

Lifileucel

Other recommended regimens
- Ipilimumab
- High-dose IL-2

Useful in certain circumstances
- For activating mutations of KIT

KIT inhibitor therapy
(eg, imatinib, dasatinib, nilotinib, ripretinib)
- For ROS1 fusions

Crizotinib, entrectinib
- For NTRK fusions

Larotrectinib, entrectinib
- For BRAF fusions and non-V600 mutations

Trametinib
- For NRAS-mutated tumors (for progression following immune checkpoint inhibitor therapy)

Binimetinibv (category 2B)
- Combination therapy

Pembrolizumab/lenvatinib
Ipilimumabf/intralesional T-VEC (category 2B)
- Combination BRAF/MEK + PD(L)-1 checkpoint inhibitors (eg, dabrafenib/trametinib + pembrolizumab or vemurafenib/ cobimetinib + atezolizumabx if BRAF V600 mutation positive)
- Consider best supportive care for poor performance status

五、其他細胞型態(皮膚 T 細胞淋巴瘤 mycosis fungoides,MF)參照台灣皮膚醫學會共識手冊

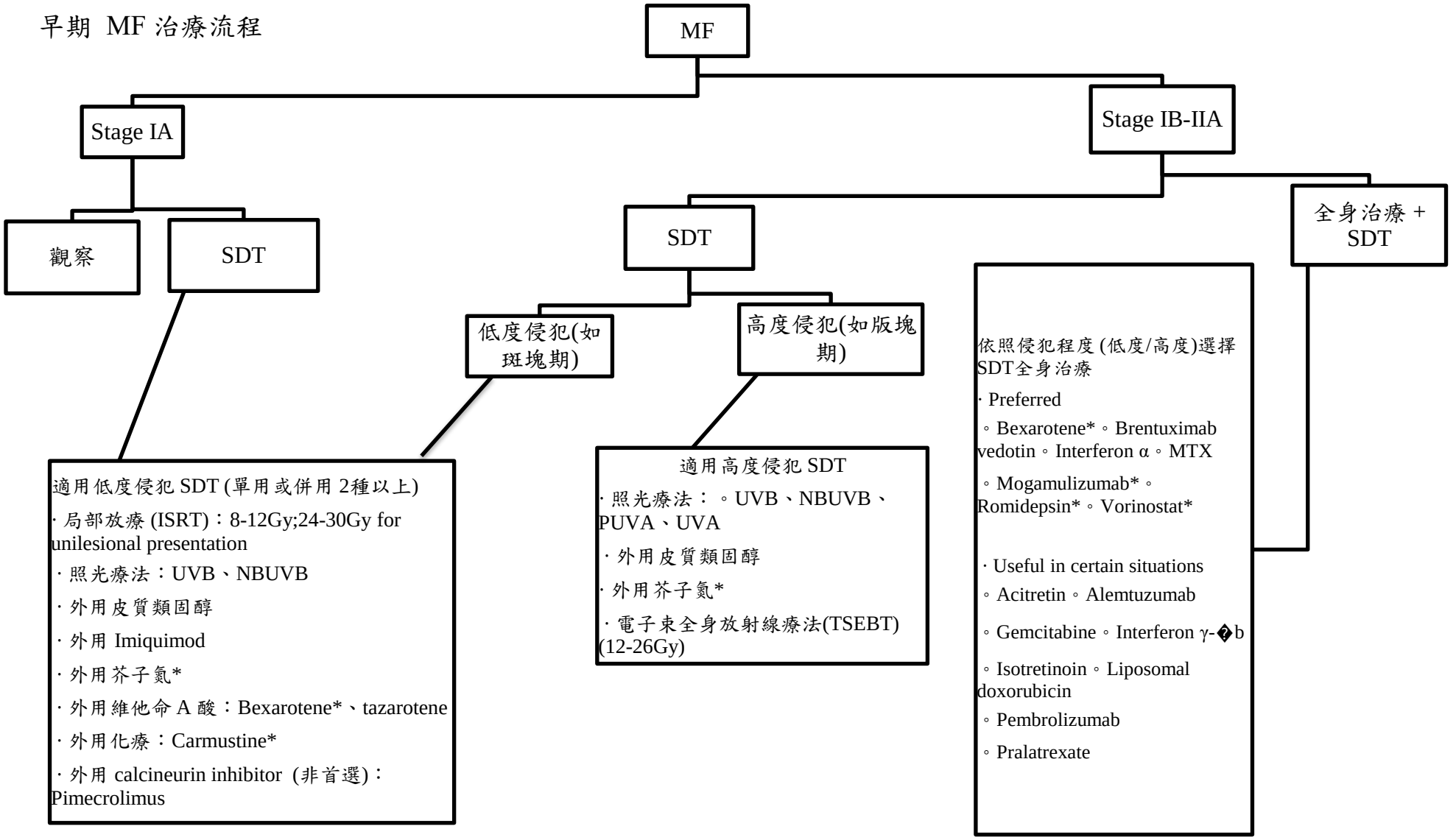
診斷：皮膚切片評估、常規血液檢查、影像學檢查(包含電腦斷層或是核磁共振、正子攝影)

分期：

Skin(T)	T0	Absence of clinically suspicious lesions		
	T1	Patches, plaques, or papules,	T1a	Patch only lesions
			T1b	Plaque/papule+/- patch lesions
	T2	Patches, plaques, or papules ≥10% BSA	T2a	Patch only lesions T2B Plaque/papule+/- patch lesions
			T2b	Patch only lesions T2B Plaque/papule+/- patch lesions
	T3	One or more tumors≥1 cm diameter		
	T4	Confluence of erythema covering ≥80% BSA		
Nodes (N)	N0	No clinically abnormal LN; no biopsy necessary		
	N1	N1a	Pathology Dutch grade 1 or NCI LN 0-2: clone negative or equivocal	
		N1b	Pathology Dutch grade 1 or NCI LN 0-2: clone positive and identical to skin	
	N2	N2a	Dutch grade 2, NCI LN3: clone negative or equivocal	
		N2b	Dutch grade 2, NCI LN3: clone positive and identical to skin	
	N3 (lymphoma)	N3a	Dutch grade 3-4, NCI LN4: clone negative or equivocal	
		N3b	Dutch grade 3-4, NCI LN4: clone positive and identical to skin	
	Nx	Clinically abnormal peripheral or central lymph node but no pathologic determination of representative LN. Other surrogate means of determining involvement may be determined by Tri-Society consensus		
Viscera	M0	No visceral involvement		

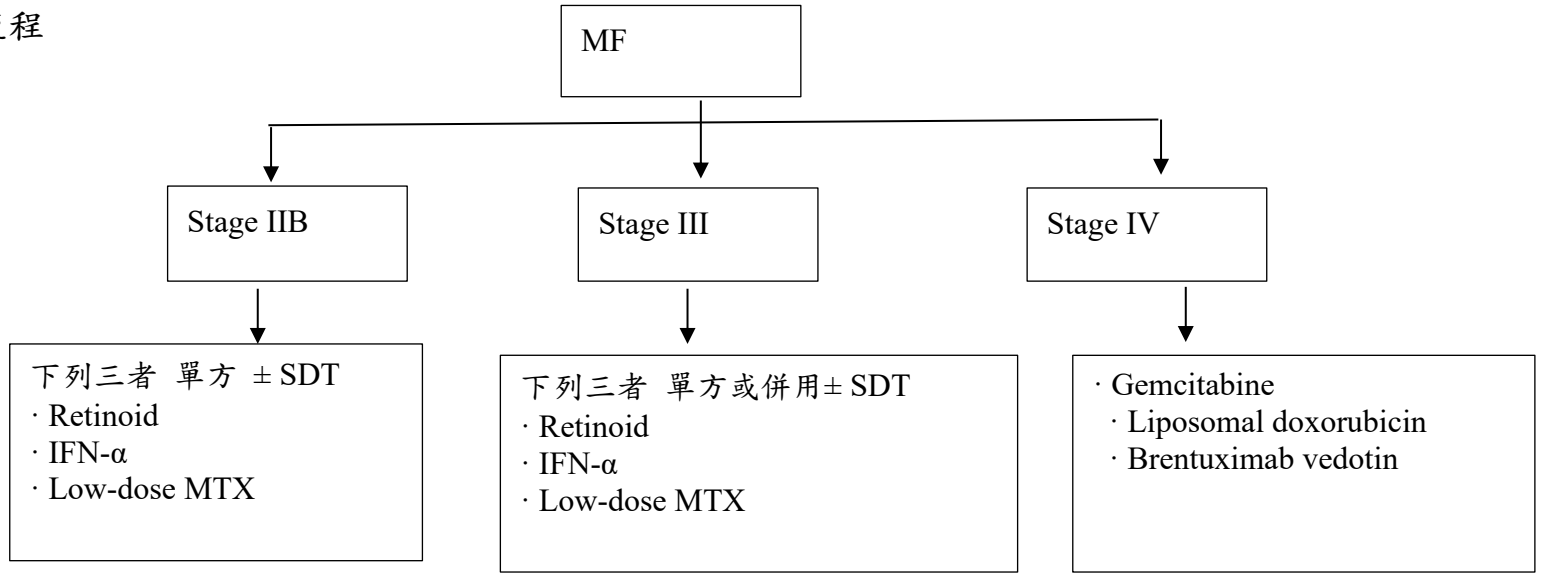
(M)	M1a	BM only involvement	Clone positive and identical to skin	
			Clone negative or indeterminate	
	M1b	Non-BM visceral involvement	Clone positive and identical to skin	
			Clone negative or indeterminate	
	Mx	Visceral involvement is neither confirmed nor refuted by available pathologic or imaging assessment		
Blood (B)	B0	B0A	Clone negative or equivocal	Absence of significant blood involvement
		B0B	Clone positive and identical to skin	
	B1	B1A	Clone negative or equivocal	Low blood tumor burden
		B1B	Clone positive and identical to skin	
	B2	B2A	Clone negative or equivocal	High blood tumor burden
		B2B	Clone positive and identical to skin	
	Bx	BxA	Clone negative or equivocal	Unable to quantify blood involvement according to agreed upon guidelines
		BxB	Clone positive and identical to skin	

早期 MF 治療流程

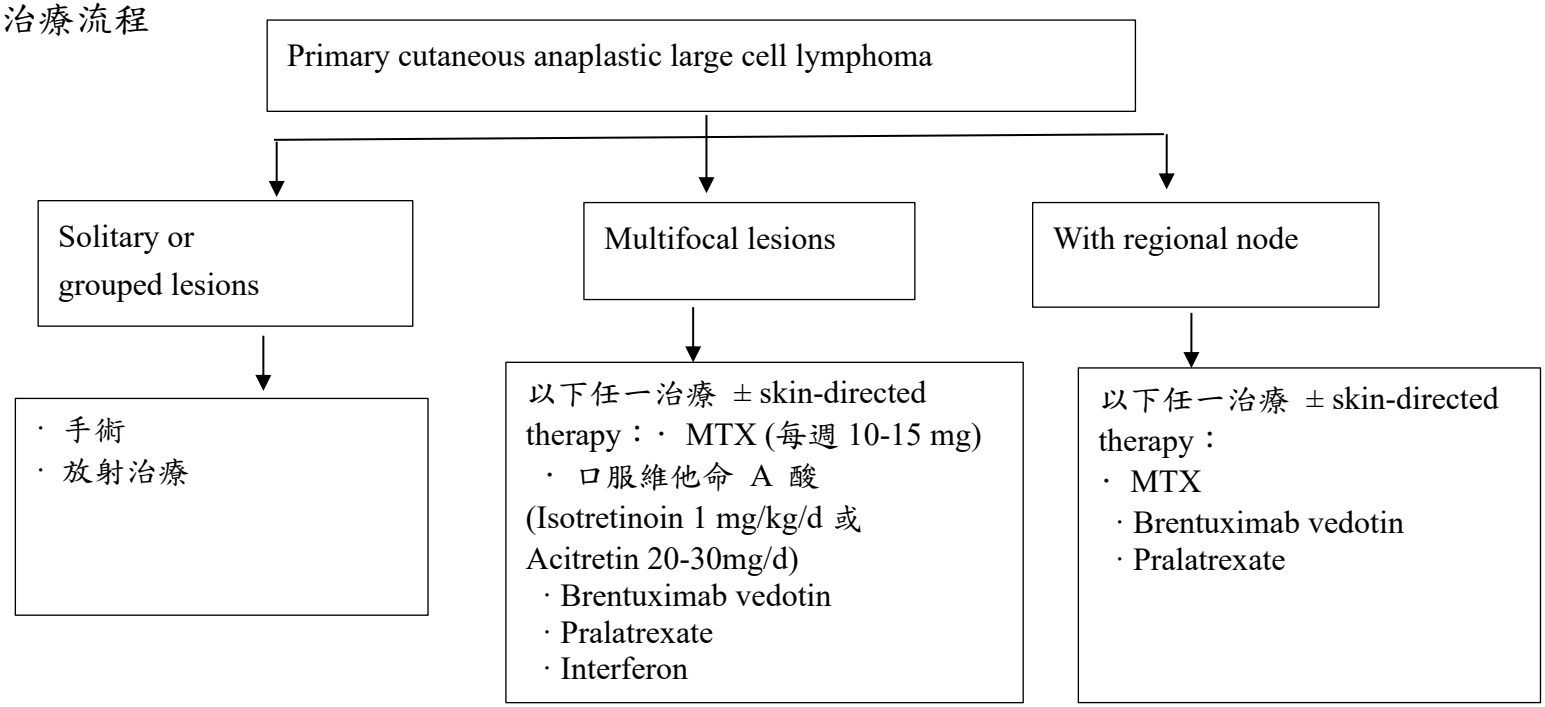


*該品項截至 2023 年 12 月於台灣未取得藥物許可證

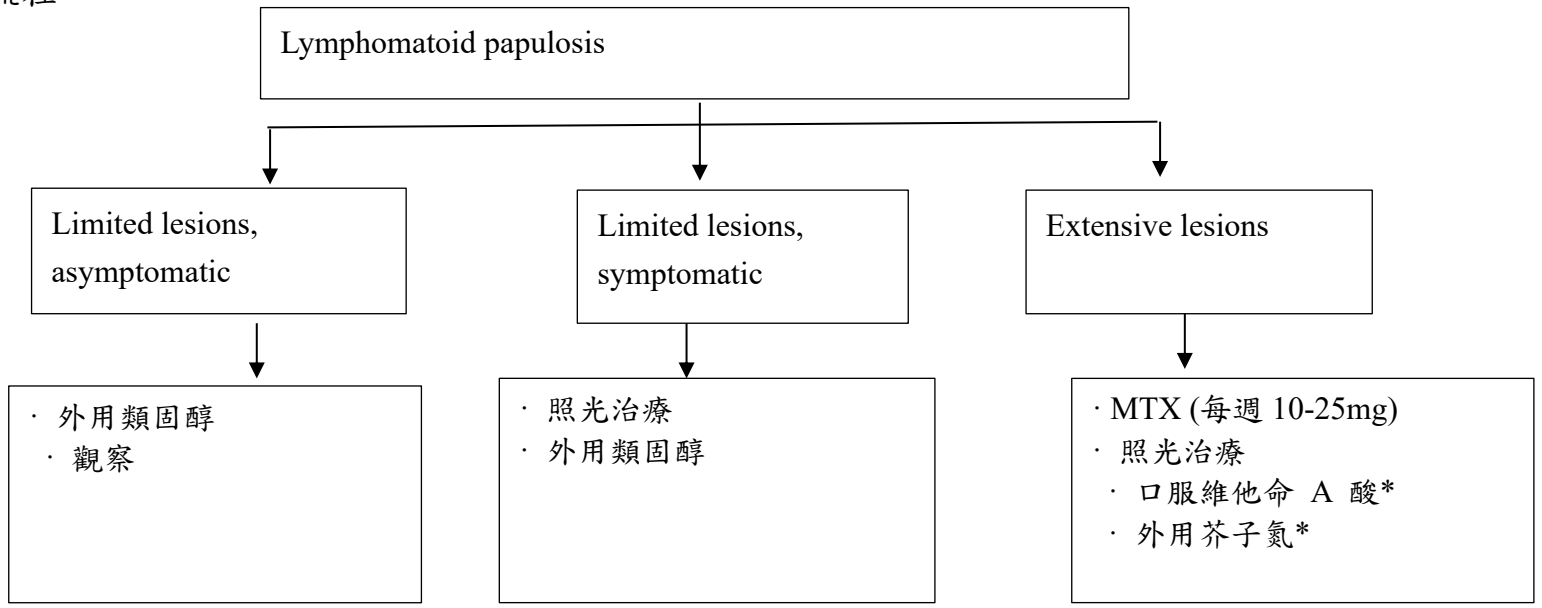
MF 治療流程



PC-ALCL 治療流程



LyP 治療流程

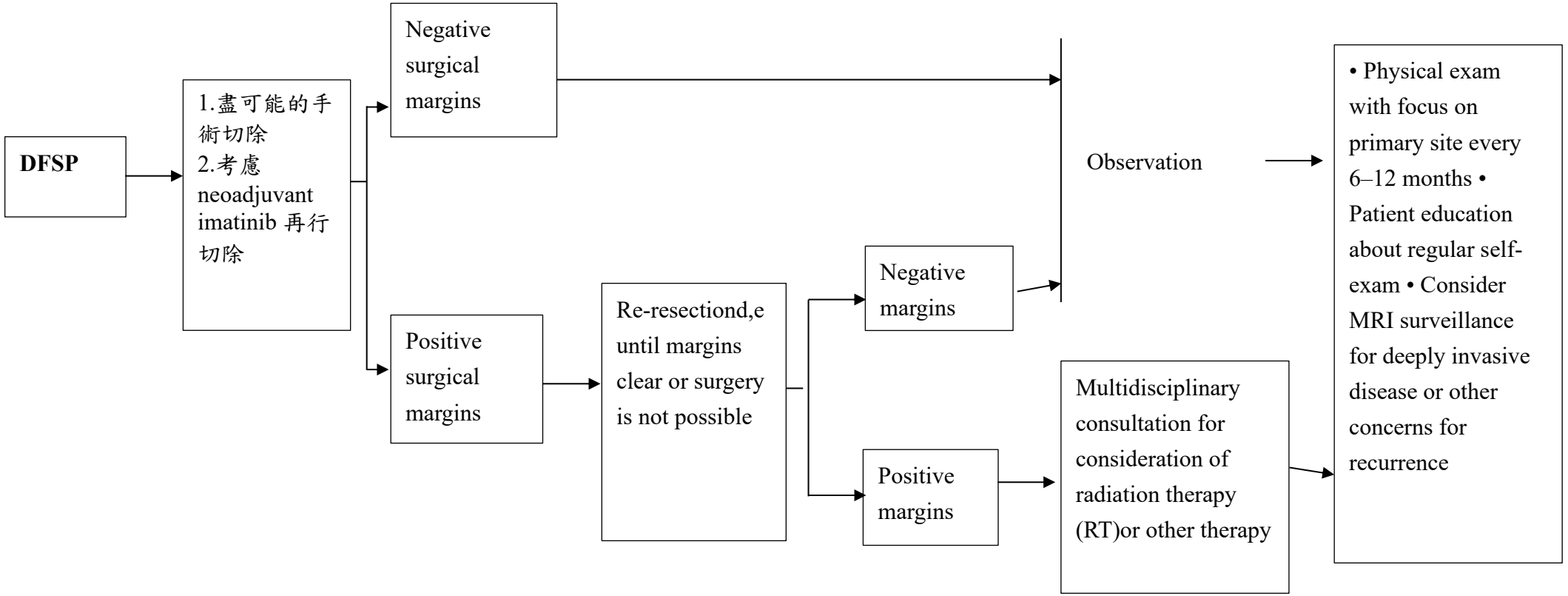


* Bexarotene、外用芥子氮截至 2023 年 12 月於台灣未取得藥品許可證

其他細胞型態(Dermatofibrosarcoma Protuberans,DFSP)

診斷：皮膚切片評估、常規血液檢查、影像學檢查(選擇性)

DIAGNOSIS TREATMENT ADJUVANT TREATMENT FOLLOW-UP



六、安寧緩和照護原則

若預期疾病難以治癒時，病人存活期小於 6 個月便適合安寧療護(Pomeranz & Brustman, 2005；Waldrop & Rinfrette, 2009) 。若藉由症狀、檢驗數據、及確切的腫瘤診斷，證實臨床上該惡性腫瘤已經廣泛侵犯、或進展快速；功能分數（Palliative Performance Scale）低於 70%；拒絕進一步腫瘤治癒性治療，或者在治療之下仍持續惡化者，即可轉介緩和醫療團隊（彭等，2006）。

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