中山醫學大學附設醫院

子宮體癌診療指引

臨床指引參考台灣國家衛生研究院、與美國NCCN版本
再依據中山醫學大學附設醫院婦癌小組經驗作編修
婦癌醫療小組

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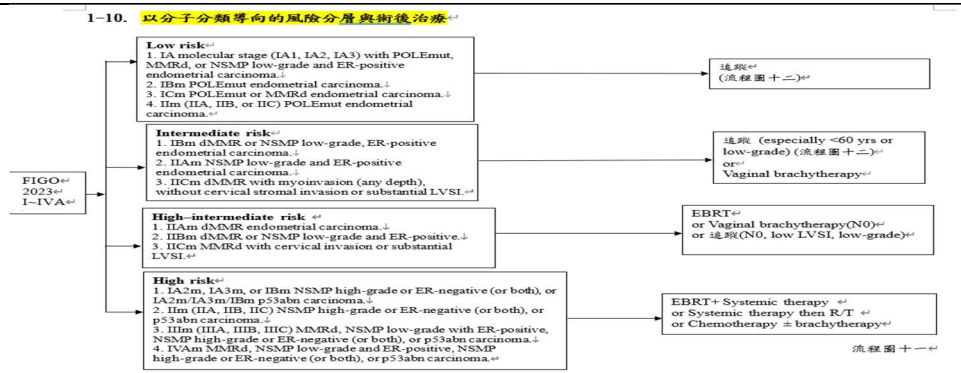
修訂內容

頁數	第 15 版	第 16 版
1	本子宮體癌診斷及治療指引的內容有子宮內膜癌、子宮惡性肉瘤及妊娠組織瘤等，其內容除了依據已發表的實證醫學證據及專家意見外，並參考國家衛生研究院子宮內膜癌臨床指引、美國 National Comprehensive Cancer Network (NCCN) 的 Practice Guide-lines in endometrial Cancer 2022Version1 版、FIGO Staging Classifications and Clinical Practice Guidelines in the Management of Gynecologic Cancer、MD Anderson cancer center 及中山醫學大學附設醫院子宮體癌治療經驗進行編修。	本《子宮體癌診斷及治療指引》內容涵蓋子宮內膜癌、子宮惡性肉瘤及妊娠組織瘤等疾病，其制定除依據已發表之實證醫學證據與專家共識外，並參考國家衛生研究院子宮內膜癌臨床指引、美國 National Comprehensive Cancer Network（NCCN）《Practice Guidelines in Endometrial Cancer》（2025 Version 3）、FIGO Staging Classifications and Clinical Practice Guidelines in the Management of Gynecologic Cancer，以及 Pan-Asian adapted ESMO Clinical Practice Guidelines for the diagnosis, treatment and follow-up of patients with endometrial cancer，並結合 MD Anderson Cancer Center 及中山醫學大學附設醫院之子宮體癌臨床治療經驗進行編修。
8	● 病史、身體檢查 ● 血液常規 ● 子宮頸內頸暨子宮內膜切片 (分段式擴刮術) ● 子宮頸細胞學檢查 ● 胸部X光 ● 腹部或骨盆腔的電腦斷層或核磁共振\ ● CA125 ● PET自費 (依臨床的適應症)	修改**主要檢查** ● 病史、身體檢查 ● 血液常規 ● 子宮頸內頸暨子宮內膜切片 (分段式擴刮術) ● 子宮頸細胞學檢查 ● 胸部X光 ● 腹部或骨盆腔的電腦斷層或核磁共振 ● CA125 **次要檢查** ● PET自費 (依臨床的適應症)

13	新增流程圖七:以分子分類導向的風險分層與術後治療	
14	修改不完整手術	修改分期治療方式
15、24	加入生育保留手術藥物	4.考慮加入雙重黃體素治療 Anastrozole、Letrozole、Exemestane、Megestrol acetate + levonorgestrel IUD、edroxyprogesterone acetate + levonorgestrel IUD
24	刪除化療 regimens 新增 Systemic Therapy 藥物及劑量	刪除Cisplatin+Ifosfamide、Carboplatin+Ifosfamide、Ifosfamide (Ifex) + paclitaxel •Carboplatin(or Cisplatin)優先順序更改為Cisplatin **(or** Carboplatin) • Carboplatin/paclitaxel/bevacizumab (for stage III/IV with measureble disease)
29	新增 EBRT+-Platinum base Chemotherapy	Cisplatin、Carboplatin + Paclitaxel
30	新增 Immunotherapy	Pembrolizumab、Durvalumab
30	Maintenance Therapy	Olaparib(Lynparza)、Pembrolizumab、Durvalumab

32	IVBT alone: HDR 4-6 Gy x 6-8 Fractions	IVBT alone: HDR 5-7 Gy x 3-6 Fractions
41	修改子宮惡性肉瘤追蹤時程	Physical exam every 3-4 mo for 2y(consider every 6 months for low-grade, early-stage sarcomas)
43、44、49	修改子宮惡性肉瘤之全身性治療	藥物 •Preferred Regimens ◊Anastrozole ◊Letrozole ◊Exemestane ★ Consider gonadotropin-releasing hormone (GnRH) analogs with aromatase inhibitors in patients who are premenopausal and not suitable for surgery (BSO) • Other recommended regimens: ~~★ GnRH analogs (category 2B for low-grade ESS and ER/PR positive uLMS)~~ ~~★Fulvestrant~~ •新增Yondelis(Trabectedin 1.1-1.2mg/ m^2 iv) +Lipo-dox(Doxorubicin liposome (25-45)mg/ m^2 iv) q3w
58	新增	緩和收案條件: 1.原發或復發第 IV 期個案、卵巢癌第 IIIC 期個案(生命預期存活期＞6 個月) 。 2.經醫師及團隊評估，個案身體狀況不適用於常規治療方式(如 ECOG 3)。 3.癌症確診後拒絕接受積極治療之個案。 4.因疾病進展出現不適症狀，需住院症狀控制之個案，排除化療副作用之個案。 5.有身心靈需求之個案。
64	第三、第四期備註	建議基因檢測及免疫治療

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一、子宮內膜癌

1-1. 前言

共識手冊內所提之各種診治意見，為原則性之建議，希望能為癌症患者及其家屬提供一個正確的指引；但對臨床醫師之醫療行為無絕對之法律性約束力！由於醫藥科技持續在進步，每位患者的病情亦不盡相同；醫師應就病人之病情做個別的考量，病人和家屬亦應與醫師溝通討論，以決定最適當之診治方式。

台灣大部分子宮內膜癌發生在停經後之女性，其好發的年齡中位值是在52-54歲，大部分病人其年齡在45-59歲之間。雖然 60% 的病例發生在50歲之後，但仍有15%的病例出現在40歲之前。子宮內膜癌可以發生在生育年齡及其後的任何一個年齡層，但比較好發於更年期或停經後的婦女。70-80%的子宮內膜癌診斷時僅侷限在子宮。其早期症狀主要為停經後之陰道出血，病患會因此早期就醫，與其他女性生殖道惡性腫瘤比較，有較高的存活率。

子宮內膜癌的危險因子包括有糖尿病、高血壓、肥胖、未有生育之婦女、初經年齡早而停經年齡晚、使用更年期荷爾蒙治療未合併黃體素之婦女、遺傳及種族因素、乳癌病患使用抗癌藥物治療者。

本子宮體癌診斷及治療指引的內容有子宮內膜癌、子宮惡性肉瘤及妊娠組織瘤等，其內容除了依據已發表的實證醫學證據及專家意見外，並參考國家衛生研究院子宮內膜癌臨床指引、美國 National Comprehensive Cancer Network (NCCN) 的 Practice Guide-lines in endometrial Cancer-2025 Version3版、FIGO Staging Classifications and Clinical Practice Guidelines in the Management of Gynecologic Cancer、MD Anderson cancer center、Pan-Asian adapted ESMO Clinical Practice Guidelines for the diagnosis,treatment and follow-up of patients with endometrial cancer及中山醫學大學附設醫院子宮體癌治療經驗進行編修。

1-2. 子宮內膜癌之分期 AJCC 第八版 and 2009 FIGO

Uterine Carcinomas and Carcinosarcoma

TNM Categories **T**	FIGO分期2009	Primary Tumor
Tx		Primary tumor cannot be assessed
T0		No evidence of primary tumor
T1	I	Tumor confined to the corpus uteri, including endocervical glandular involvement 腫瘤局限於宮體，包括宮頸腺體
T1a	IA	Tumor limited to the endometrium or invading less than half the myometrium 腫瘤局限於子宮內膜或侵入少於肌層的一半
T1b	IB	Tumor invading one half or more of the myometrium 腫瘤侵入肌層的一半或更多
T2	II	Tumor invading the stromal connective tissue of the cervix but not extending beyond the uterus. Does NOT include endocervical glandular involvement. 腫瘤侵入子宮頸的基質結締組織，但不能超出子宮。不包括子宮頸腺體。
T3	III	Tumor involving serosa, adnexa, vagina, or parametrium 腫瘤涉及漿膜，附屬器官，陰道或子宮旁
T3a	IIIA	Tumor involving the serosa and/or adnexa (direct extension or metastasis) 涉及漿膜和/或附屬器官的腫瘤（直接延伸或轉移）
T3b	IIIB	Vaginal involvement (direct extension or metastasis) or parametrial involvement 腫瘤侵犯至陰道或是子宮頸旁組織
T4	IVA	Tumor invading the bladder mucosa and/or bowel mucosa (bullous edema is not sufficient to classify a tumor as T4) 腫瘤侵犯膀胱黏膜和/或腸黏膜（膀胱壁上的輸尿管口出現紅腫腫脹不足以將腫瘤分類為 T4）
N	FIGO 分期 2009	Regional Lymph Nodes
NX		Regional lymph nodes cannot be assessed
N0		No regional lymph node metastasis
N0(i+)		Isolated tumor cells in regional lymph node(s) no greater than 0.2 mm
N1	IIIC1	***N1***-Regional lymph node metastasis to pelvic lymph nodes

		局部淋巴結轉移至骨盆腔淋巴結 ***N1a***-Regional lymph node metastasis (greater than 2.0 mm in diameter) to pelvic lymph nodes 區域淋巴結轉移（直徑大於 2.0mm）至骨盆腔淋巴結
N1mi	IIIC1	Regional lymph node metastasis (greater than 0.2 mm but not greater than 2.0 mm in diameter) to pelvic lymph nodes 區域淋巴結轉移（直徑大於 0.2mm 但不大於 2.0mm）至骨盆腔淋巴結
N1a	IIIC1	Regional lymph node metastasis (greater than 2.0 mm in diameter) to pelvic lymph nodes 區域淋巴結轉移（直徑大於 2.0mm）至骨盆腔淋巴結
N2	IIIC2	Regional lymph node metastasis to para-aortic lymph nodes, with or without positive pelvic lymph nodes 局部淋巴結轉移至腹主動脈旁淋巴結，伴隨或不伴隨骨盆腔淋巴結陽性
N2mi	IIIC2	***N2mi***-Regional lymph node metastasis (greater than 0.2 mm but not greater than 2.0 mm in diameter) to para-aortic lymph nodes, with or without positive pelvic lymph nodes 區域淋巴結轉移（直徑大於 0.2mm 但不大於 2.0mm）至主動脈旁淋巴結，伴隨或不伴隨骨盆腔淋巴結陽性
N2a	IIIC2	***N2a***-Regional lymph node metastasis (greater than 2.0 mm in diameter) to para-aortic lymph nodes, with or without positive pelvic lymph nodes 局部淋巴結轉移（直徑大於 2.0mm）至主動脈旁淋巴結，伴隨或不伴隨骨盆腔淋巴結陽性
M	FIGO 分期 2009	Distant Metastasis
M0		No distant metastasis
M1	IVB	Distant metastasis (includes metastasis to inguinal lymph nodes, intraperitoneal disease, lung, liver, or bone).(It excludes metastasis to pelvic or para-aortic lymph nodes, vagina, uterine serosa, or adnexa.) 遠處轉移（包括轉移到腹股溝淋巴結，腹膜疾病，肺，肝臟或骨骼）。 （不包括轉移到骨盆腔或主動脈旁淋巴結，陰道，子宮漿膜或附屬器官）。

AJCC Prognostic Stage Groups			
	T	**N**	**M**
Stage I	**T1**	**N0**	**M0**
Stage IA	**T1a**	**N0**	**M0**
Stage IB	**T1b**	**N0**	**M0**
Stage II	**T2**	**N0**	**M0**
Stage III	**T3**	**N0**	**M0**
Stage IIIA	**T3a**	**N0**	**M0**
Stage IIIB	**T3b**	**N0**	**M0**
Stage IIIC1	**T1-T3**	**N1/N1mi/N1a**	**M0**
Stage IIIC2	**T1-T3**	**N2/N2mi/N2a**	**M0**
Stage IVA	**T4**	**Any N**	**M0**
Stage IVB	**Any T**	**Any N**	**M1**

(參考用)2023 FIGO 分期

Uterine Carcinomas and Carcinosarcoma

I	Confined to the uterine corpus and ovary 病灶只侷限在子宮體和卵巢
IA	Disease limited to the endometrium OR non-aggressive histological type, i.e. low- grade endometroid, with invasion of less than half of myometrium with no or focal lymphovascular space involvement (LVSI) OR good prognosis disease 病灶只限在子宮內膜或屬非侵犯性組織類型：如低度（grade 1 和2）類子宮內膜癌，侵犯＜ 1/2 肌肉層，沒有或僅局部淋巴血管侵犯、或屬良好預後的疾病
IA1	Non-aggressive histological type limited to an endometrial polyp OR confined to the endometrium 非侵犯性組織，只侷限在子宮內膜瘜肉內或子宮內膜中
IA2	Non-aggressive histological types involving less than half of the myometrium with no or focal LVSI 非侵犯性組織，侵犯＜ 1/2 肌肉層，沒有或僅局部淋巴血管侵犯
IA3	Low-grade endometrioid carcinomas limited to the uterus and ovary 低度類子宮內膜癌，侷限在子宮和卵巢中

IB	Non-aggressive histological types with invasion of half or more of the myometrium, and with no or focal LVSI 非侵犯性組織，併侵犯≧ 1/2 肌肉層，沒有或僅局部淋巴血管侵犯
IC	Aggressive histological typese limited to a polyp or confined to the endometrium 侵犯性組織，侷限在瘜肉內或子宮內膜層中
II	Invasion of cervical stroma without extrauterine extension OR with substantial LVSI OR aggressive histological types with myometrial invasion病灶侵犯至子宮頸基質內，或多量的淋巴血管侵犯，或侵犯性組織類型併肌肉層侵犯
IIA	Invasion of the cervical stroma of non-aggressive histological types 非侵犯性組織，侵犯至子宮頸基質內
IIB	Substantial LVSId of non-aggressive histological types 非侵犯性組織，多量的淋巴血管侵犯
IIC	Aggressive histological types with any myometrial involvement 侵犯性組織，併任何肌肉層侵犯
III	Local and/or regional spread of the tumor of any histological subtype 任何組織型病灶，有局部性擴散
IIIA	Invasion of uterine serosa, adnexa, or both by direct extension or metastasis 經擴散或轉移病灶侵犯至漿膜層、附屬器或二者
IIIA1	Spread to ovary or fallopian tube (except when meeting stage IA3 criteria) 擴散至卵巢和輸卵管（不符合 Ia3 條件者）
IIIA2	Involvement of uterine subserosa or spread through the uterine serosa 擴散至子宮漿膜層下，或經子宮漿膜層擴散
IIIB	Metastasis or direct spread to the vagina and/or to the parametria or pelvic peritoneum 轉移或直接擴散至陰道、和/ 或至子宮旁組織、或骨盆腔腹膜
IIIB1	Metastasis or direct spread to the vagina and/or the parametria 轉移或直接擴散至陰道、和/或至子宮旁組織
IIIB2	Metastasis to the pelvic peritoneum 轉移至骨盆腔腹膜
IIIC	Metastasis to the pelvic or para-aortic lymph nodes or both 轉移至骨盆腔、主動脈旁淋巴結或二者
IIIC1	Metastasis to the pelvic lymph nodes 轉移至骨盆腔淋巴結
IIIC1i	Micrometastasis 顯微性轉移
IIIC1ii	Macrometastasis 巨大轉移
IIIC2	Metastasis to para-aortic lymph nodes up to the renal vessels, with or without metastasis to the pelvic lymph nodes 轉移至主動脈旁淋巴結，在腎血管下，有或沒有骨盆腔淋巴結轉移
IIIC2i	Micrometastasis 顯微性轉移
IIIC2ii	Macrometastasis 巨大轉移
IV	Spread to the bladder mucosa and/or intestinal mucosa and/or distance metastasis 擴散至膀胱黏膜、和/或腸子黏膜、和/或遠端轉移
IVA	Invasion of the bladder mucosa and/or the intestinal/bowel mucosa 侵犯至膀胱的黏膜，和/或腸子黏膜
IVB	Abdominal peritoneal metastasis beyond the pelvis 腹腔腹膜轉移超過骨盆腔外

IVC	Distant metastasis, including metastasis to any extra- or intra-abdominal lymph nodes above the renal vessels, lungs, liver, brain, or bone遠端轉移，包括任何腎血管上方的腹腔內、外淋巴結、肺、肝、腦或骨骼

FIGO endometrial cancer stage with molecular classification

Stage designation	Molecular findings in patients with early endometrial cancer (Stages I and II after surgical staging)
Stage IA$m_{POLEmut}$	POLEmut endometrial carcinoma, confined to the uterine corpus or with cervical extension, regardless of the degree of LVSI or histological type
Stage IICm_{p53abn}	p53abn endometrial carcinoma confined to the uterine corpus with any myometrial invasion, with or without cervical invasion, and regardless of the degree of LVSI or histological type

1-3. 子宮內膜腺癌保留生育功能：評估與方法
(特殊類型子宮內膜癌和肉瘤不能保留生育功能)

1. 子宮內膜腺癌，G1 級
2. MRI(首選)或陰道超陰波檢查確認病灶侷限於子宮內膜
3. 影像學檢查未發現可以的轉移病灶
4. 無藥物治療或妊娠的禁忌症
5. 經充分諮詢了解保留生育功能並非子宮內膜癌的標準治療方式
6. 治療前諮詢生殖醫學
7. 有條件者可考慮遺傳諮詢或基因檢測
8. 可選擇 Medroxyprogesterone(400-600mg/D)、Levonorgestrel 和 Megestrol(160-320mg/D)藥物控制子宮內膜癌
9. 嚴密追蹤：每 3-6 個月 D&C 並採病理報告檢驗
10. 癌持續存在 6-12 個月，全子宮+雙附屬器官切除+手術分期
11. 病變完全緩解 6 個月，鼓勵病患受孕，孕前持續每 6-12 個月進行子宮內膜取樣檢查。暫無生育計畫者，於以雌激素維持治療及定期監測

12. 完成生育後或內膜取樣發現疾病進展，即行全子宮+雙附屬器官切除+手術分期

子宮內膜腺癌的手術原則

TH/BSO and lymph node assessment may be performed by any surgical route (eg, laparoscopic, robotic, vaginal, abdominal), although the standard in those with apparent uterine-confined disease is to perform the procedure via a minimally invasive approach.

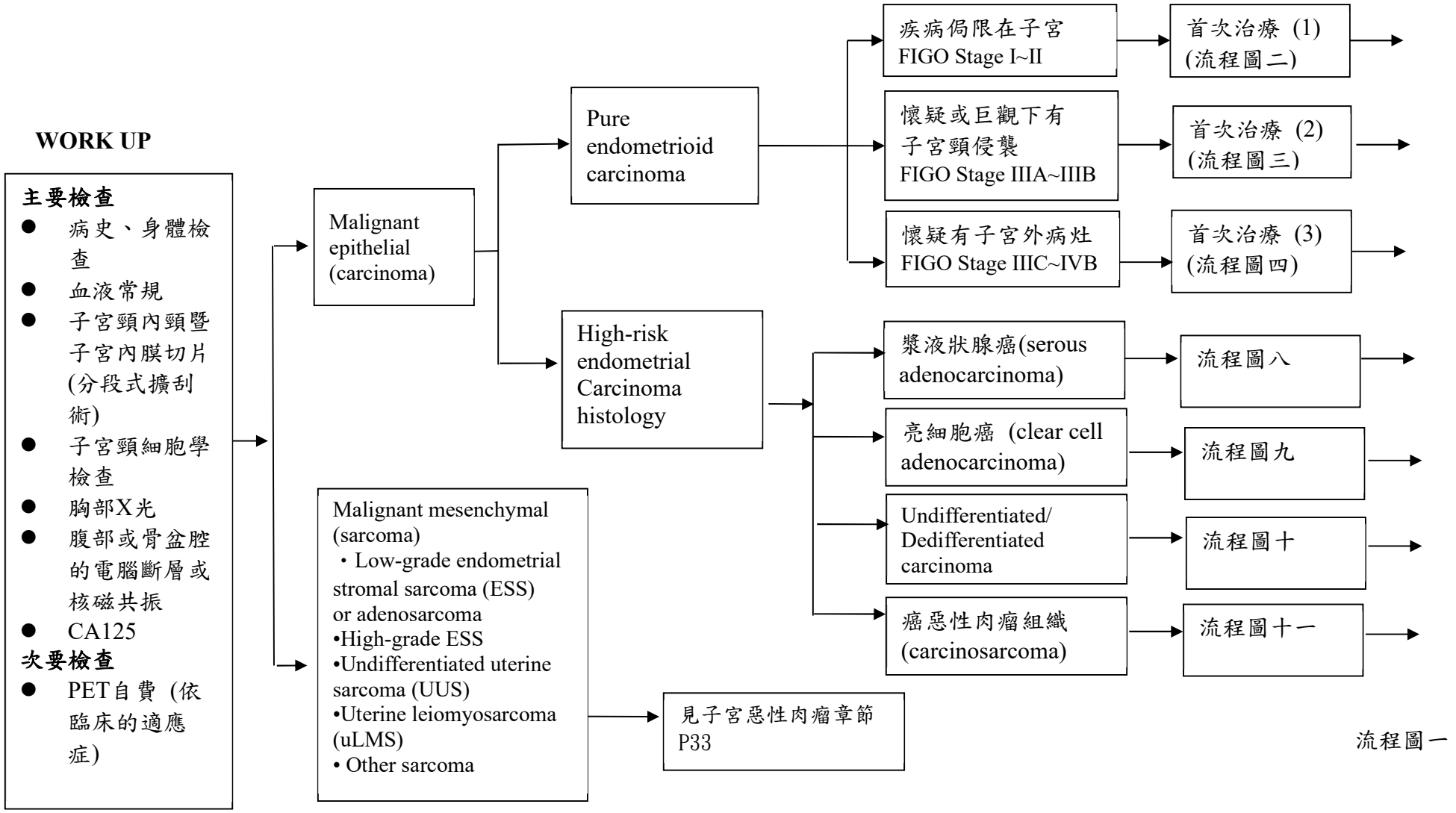
第一型(Type I)及第二型(TypeII)組織類型分組

限定原發部位 癌登編碼 =C54.0、C54.1、C54.3、C54.8、C54.9 扣除 2.6 原發部位=C54.2(myometrium)。

第一型(Type I)		第二型(TypeII)	
Endometrioid carcinoma	(M8380,8382-8383)	Serous carcinoma	(M-8441, 8460-8461)
		Clear cell carcinoma	(M-8310)
Mucinous adenocarcinoma	(M8480)	Small cell carcinoma	(M-8041, 8045)
		Neuroendocrine carcinoma, NOS	(M-8246)
Adenosquamous carcinoma	(M-8560)	Large cell neuroendocrine carcinomas	(M-8013)
		Undifferentiated/dedifferentiated carcinomas	(M-8020)
Endometrioid carcinoma with squamous differentiation	(M-8570)	Mixed cell adenocarcinoma	(M-8323)
		Squamous cell carcinoma	(M-8070-8072, 8076)
Adenocarcinoma, NOS	(M-8140)	Adenocarcinoma with neuroendocrine differentiation	(M-8574)
		Carcinosarcomas (malignant mixed Müllerian tumor)	(M-8950, 8980)

第二型（type II）子宮內膜癌病人應接受完整分期手術，包含Total hysterectomy, BSO, BPLND, PALND, omentectomy, washing cytology

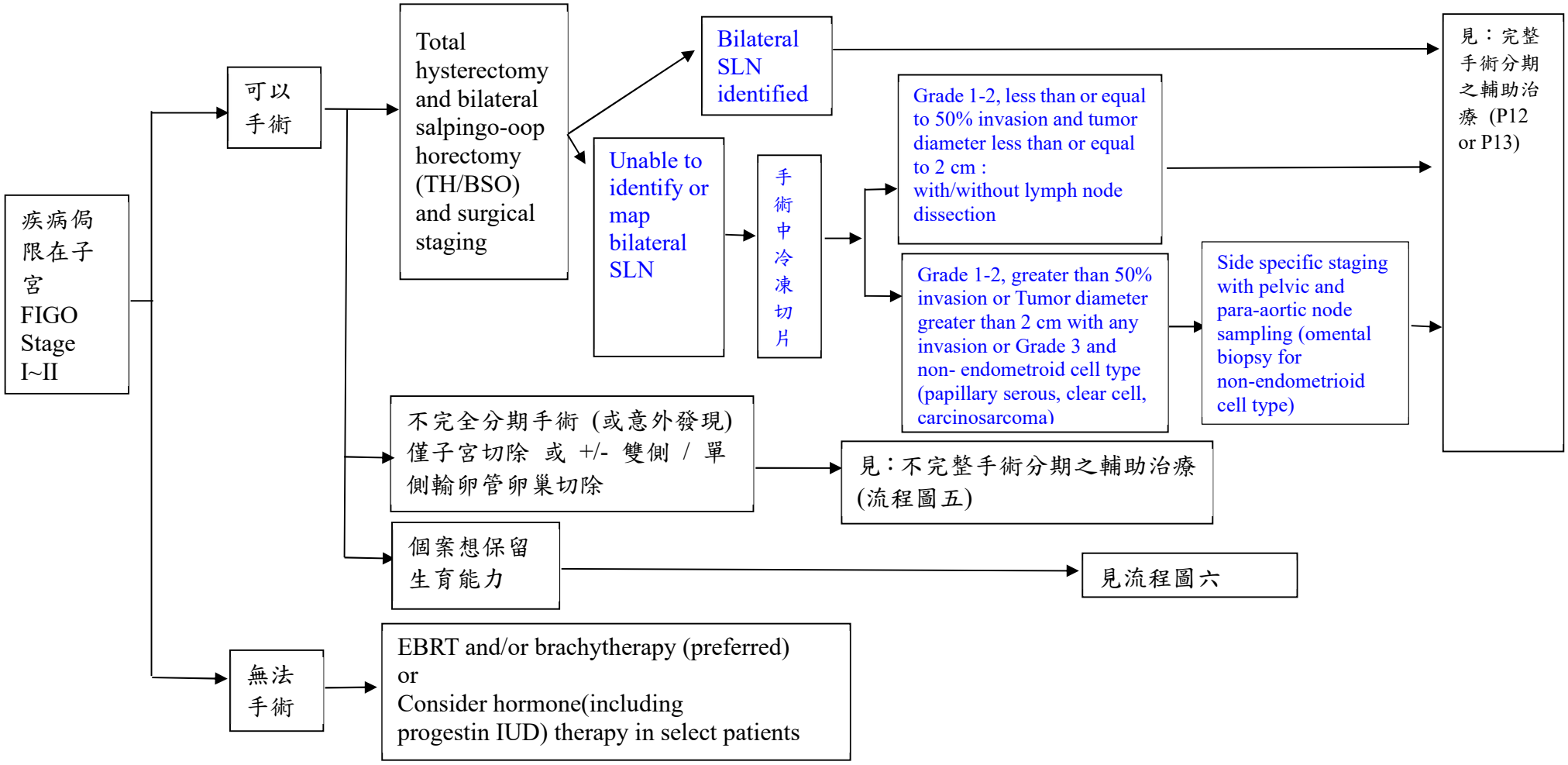
1-4.子宮內膜癌之診斷與評估



流程圖一

1-5. 子宮內膜癌之治療

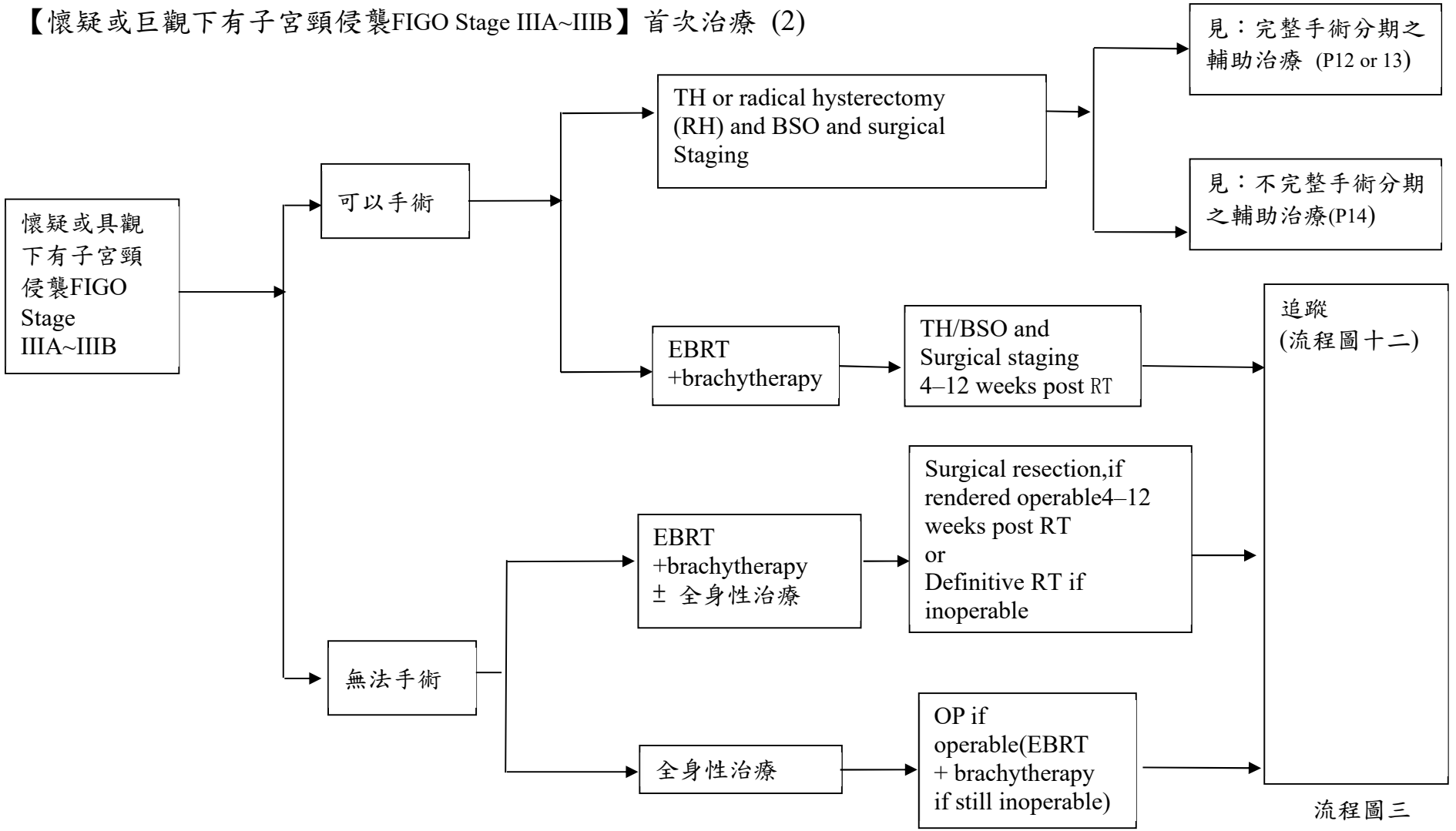
【疾病侷限在子宮FIGO Stage I~II】首次治療 (1)



流程圖二

1-5. 子宮內膜癌之治療

【懷疑或巨觀下有子宮頸侵襲FIGO Stage IIIA~IIIB】首次治療 (2)

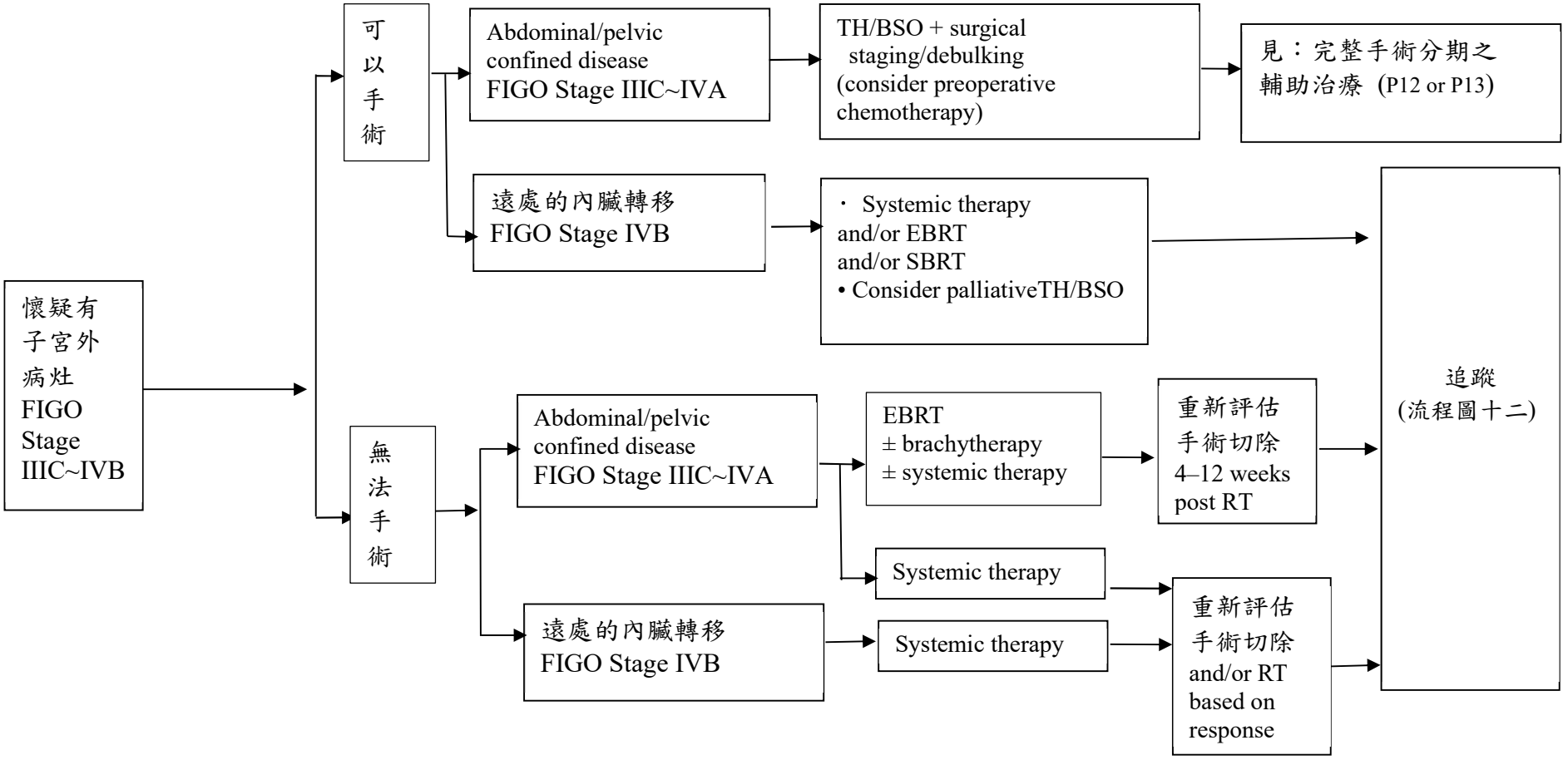


流程圖三

★全身性治療：意為化學治療或荷爾蒙治療或標靶治療或免疫療法(詳見 P.18)

1-5. 子宮內膜癌之治療

【懷疑有子宮外病灶FIGO Stage IIIC~IVB】首次治療 (3)



流程圖四

★全身性治療：意為化學治療或荷爾蒙治療或標靶治療或免疫療法(詳見 P.18)

1-6. 子宮內膜癌完整手術分期後之輔助治療

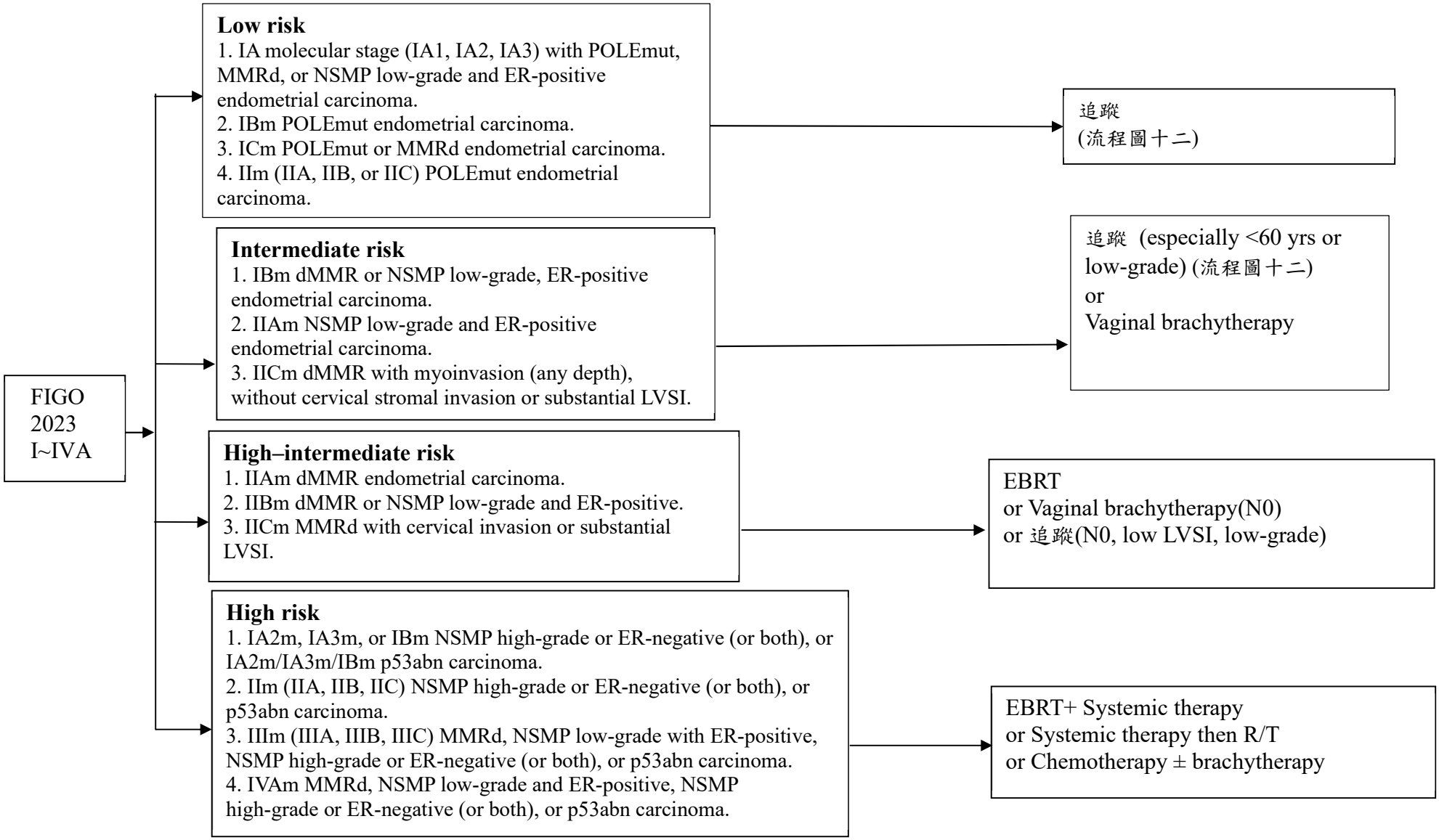
FIGO Stage 2017	Histologic Grade	Adjuvant Treatment
IA	G1, G2	Observation preferred or Consider vaginal brachytherapy if lymphovascular space invasion (LVSI)and/or age ≥60 y
	G3	Vaginal brachytherapy preferred or Consider observation if no myoinvasion or Consider EBRT if either age ≥70 y or LVSI (category 2B)
IB	G1	Vaginal brachytherapy preferred or Consider observation if age <60 y and no LVSI
	G2	Vaginal brachytherapy preferred or Consider EBRT if ≧60 y and/or LVSI or Consider observation if age <60 y and no LVSI
	G3	RT (EBRT and/or vaginal brachytherapy) ± systemic therapy (category 2B for systemic therapy)
II	G1~G3	EBRT (preferred) and/or vaginal brachytherapy ± systemic therapy (category 2B for systemic therapy)
III–IV		Systemic therapy ± EBRT ± vaginal brachytherapy

本院共識：

1.FIGO(2009)第一期子宮內膜癌合併 Aggressive histological types with any myometrial involvement，輔助性治療建議以 EBRT and/or vaginal brachytherapy± systemic therapy 為優先。備註：Aggressive histological types 為 P53 over expression、G3(參照 FIGO 2023 為ⅡC and ⅡCm)

2. 子宮體癌術後治療原則以上方表格分期導向流程為主要依據，分子分類的風險分層流程作為輔助參考；若兩者建議不一致，則由多專科團隊會議討論後決定治療方式。

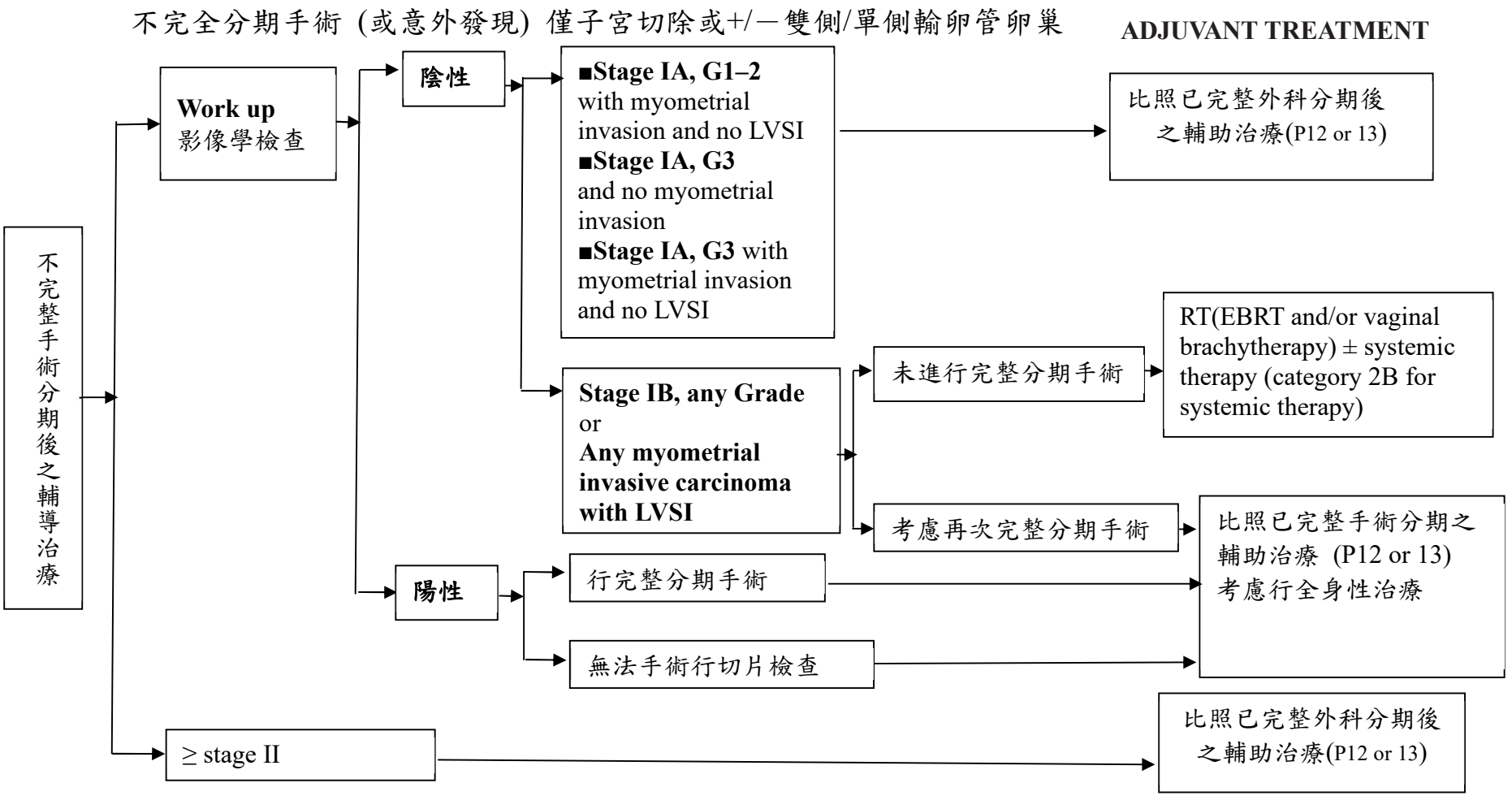
1-7. 以分子分類導向的風險分層與術後治療(參照文獻 88)



*m(molecular)=分子分類，含 MMR, p53, POLE status。

流程圖五

1-8. 未接受完整手術分期之輔助治療



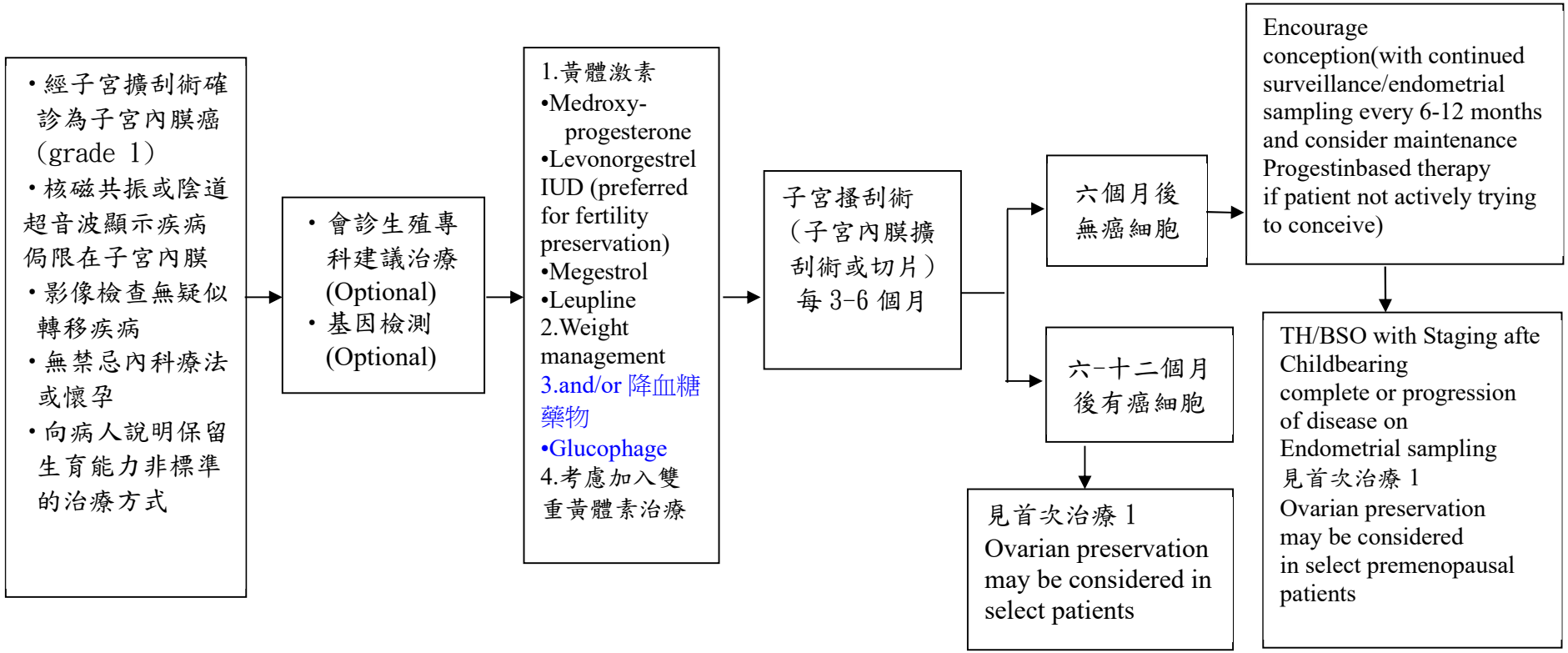
流程圖六

*：risk-factors age ≥60 y,grade 2 or 3, depth of invasion to outer half, and LVSI

*：年齡小於45歲、Stage IA、G1者，卵巢可不切除

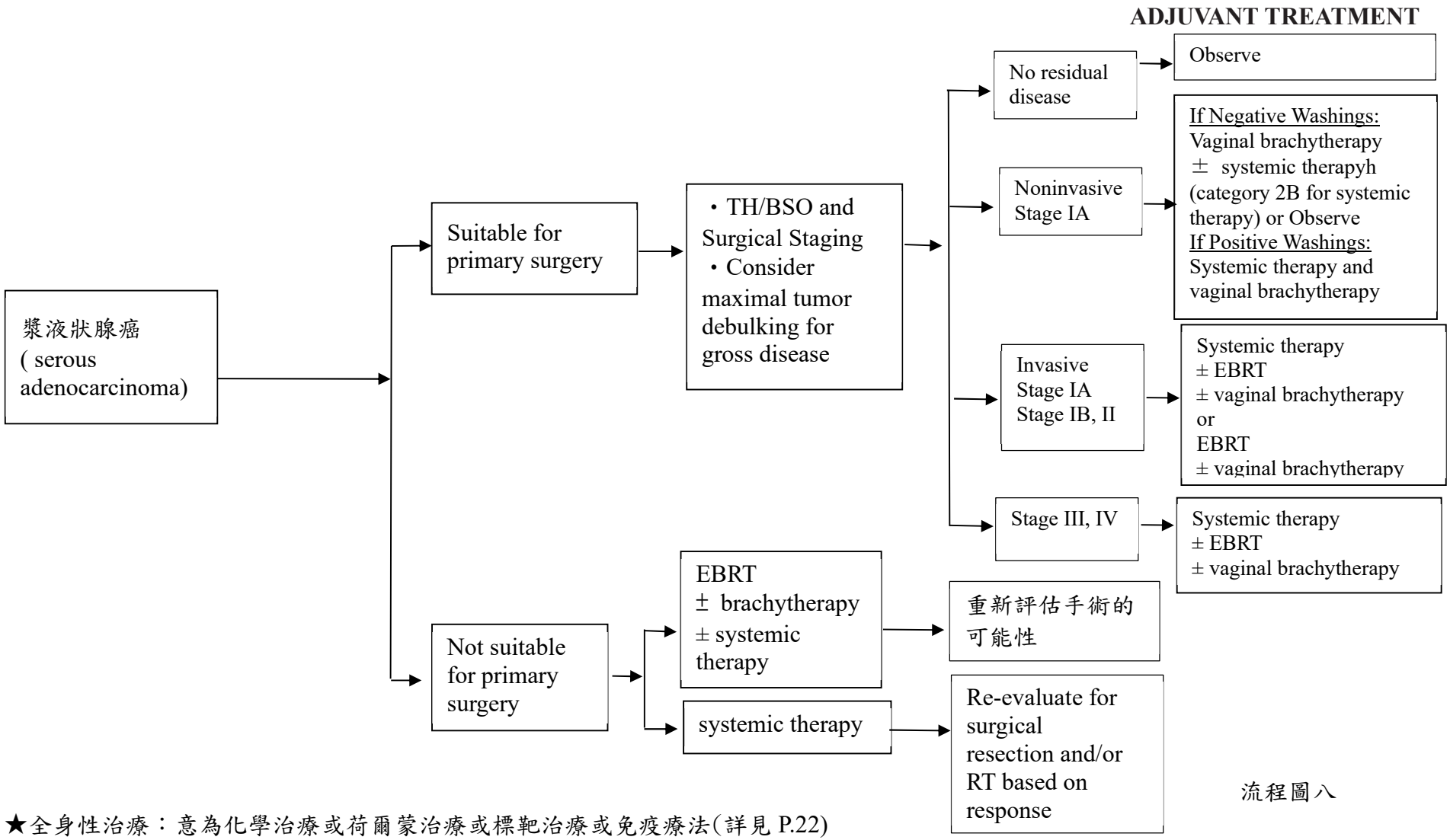
★全身性治療：意為化學治療或荷爾蒙治療或標靶治療或免疫療法(詳見 P.22)

1-9.子宮內膜癌保留生育能力處置



流程圖七

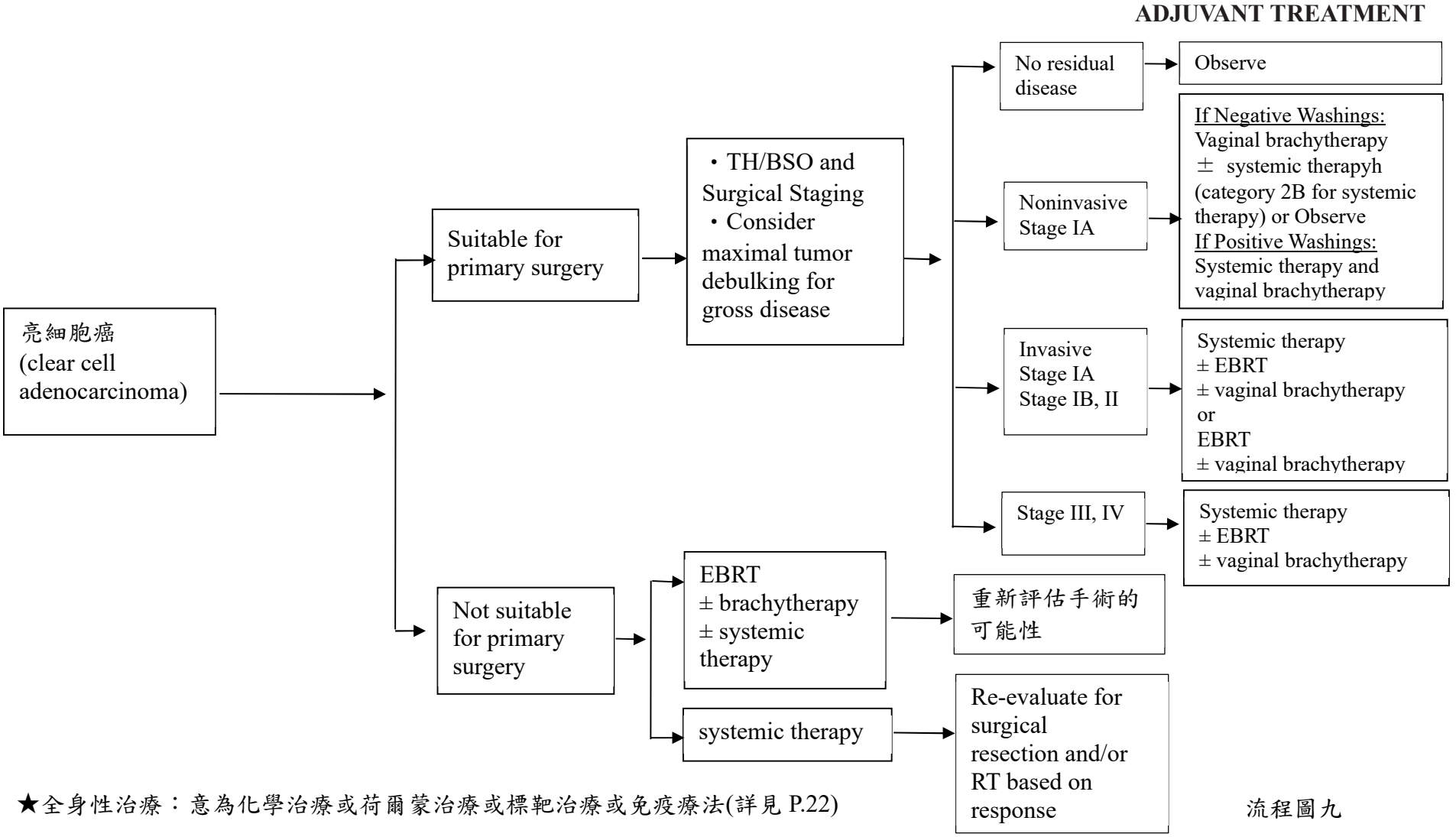
1-10. High risk carcinoma-漿液狀腺癌(serous adenocarcinoma)



流程圖八

★全身性治療：意為化學治療或荷爾蒙治療或標靶治療或免疫療法(詳見 P.22)

1-10. High risk carcinoma-亮細胞癌(clear cell adenocarcinoma)

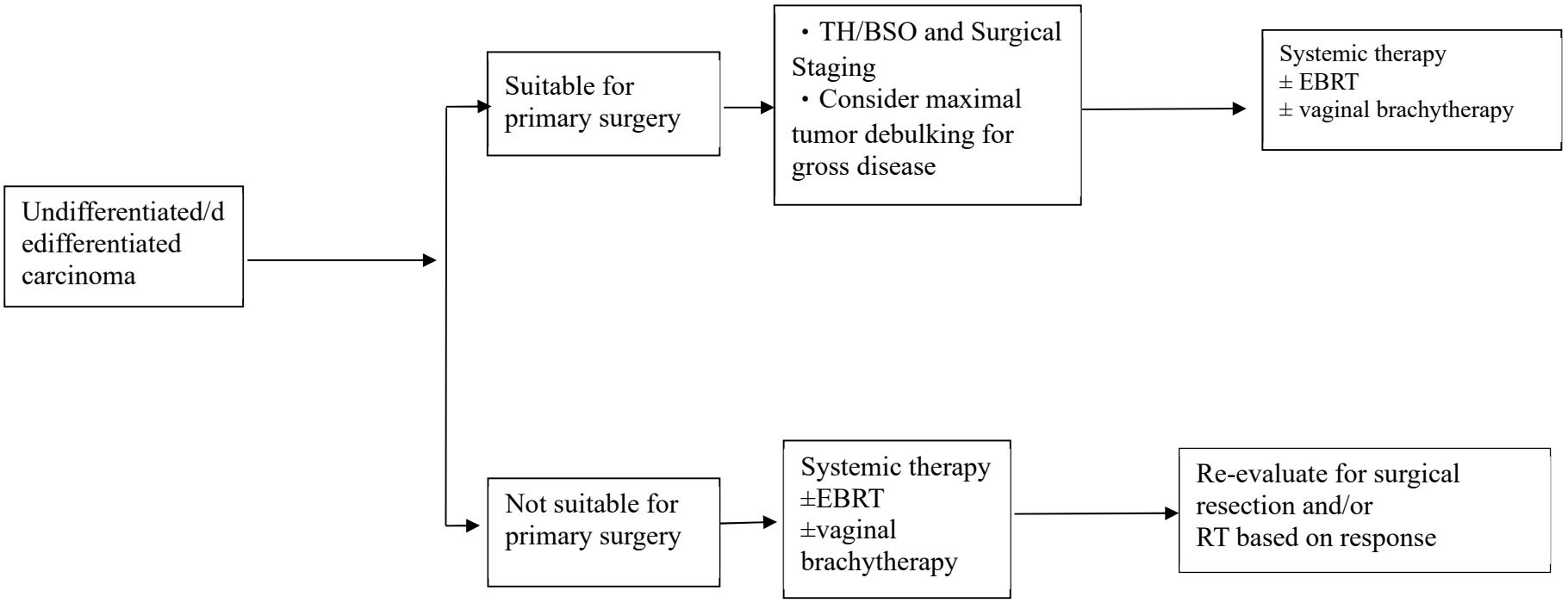


★全身性治療：意為化學治療或荷爾蒙治療或標靶治療或免疫療法(詳見 P.22)

流程圖九

1-10. High risk carcinoma -Undifferentiated/dedifferentiated carcinoma

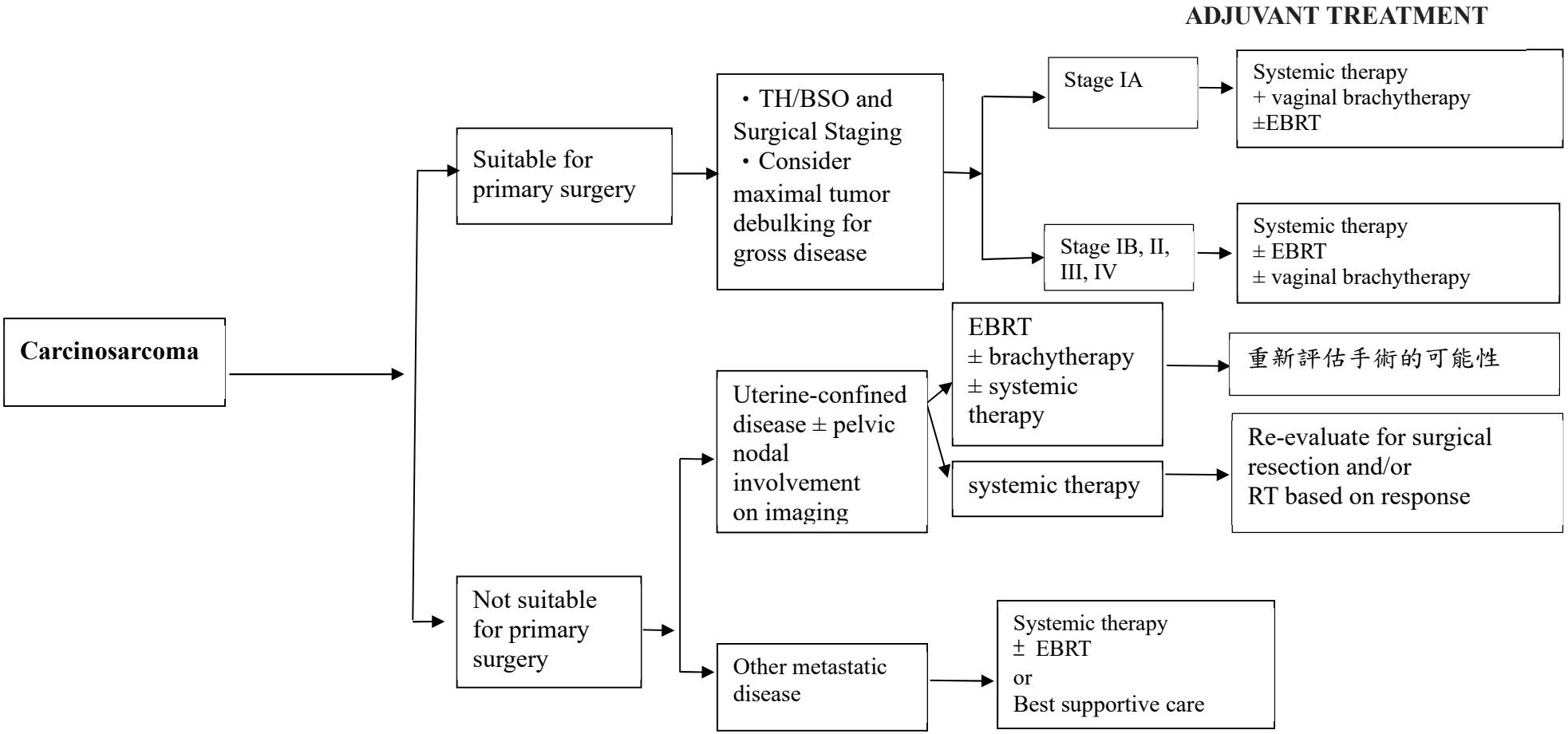
ADJUVANT TREATMENT



流程圖十

★全身性治療：意為化學治療或荷爾蒙治療或標靶治療或免疫療法(詳見 P.22)

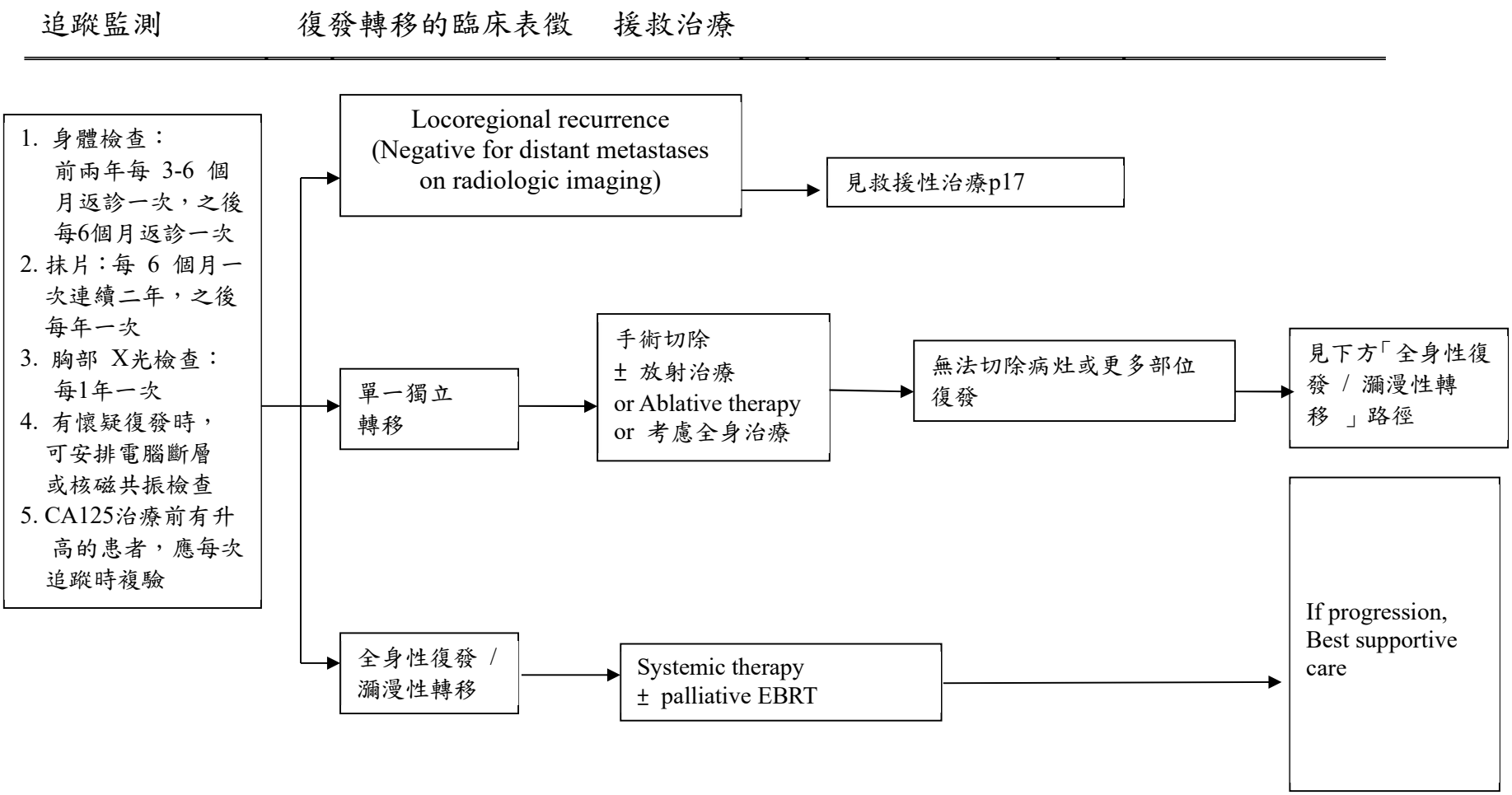
1-10. High risk carcinoma -Carcinosarcoma



流程圖十一

★全身性治療：意為化學治療或荷爾蒙治療或標靶治療或免疫療法(詳見 P.22)

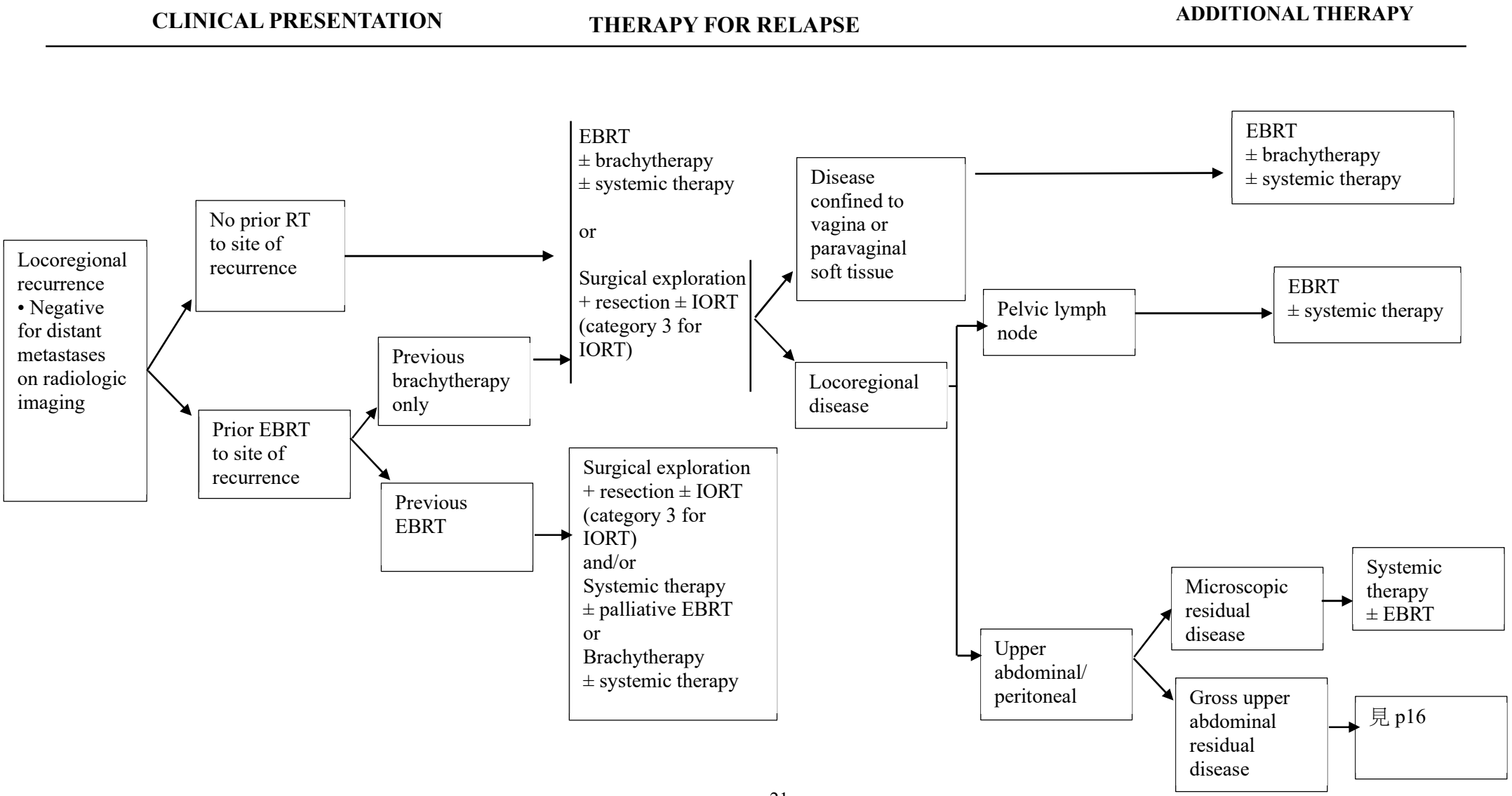
1-11.接續治療，追蹤及復發處置



★全身性治療：意為化學治療或荷爾蒙治療或標靶治療或免疫療法(詳見 P.22)

流程圖十二

1-11.接續治療，追蹤及復發處置(續)



1-12. 子宮內膜癌之全身性治療

Primary or Adjuvant Therapy (Stage I–IV)	
Chemoradiation Therapy	Systemic Therapy
Preferred Regimens • Cisplatin plus RT followed by carboplatin/paclitaxel Other Recommended Regimens (if cisplatin and carboplatin are unavailable) • Capecitabine/mitomycin(category 2) • Gemcitabine(category 2) • Paclitaxel(category 2)	Preferred Regimens •Cisplatin (or Carboplatin)/paclitaxel ・Carboplatin/paclitaxel/pembrolizumab (for stage III–IV tumors, except for carcinosarcoma) (category 1) • Carboplatin/paclitaxel/dostarlimab-gxly (for stage III–IV tumors) (category 1) • Carboplatin/paclitaxel/durvalumab (for stage III–IV dMMR tumors only)(category 1) • Carboplatin/paclitaxel/trastuzumab (for stage III/IV HER2-positive uterine serous carcinoma) • Carboplatin/paclitaxel/trastuzumab (for stage III/IV HER2-positive carcinosarcoma) • Carboplatin/paclitaxel/bevacizumab (for stage III/IV with measureble disease)

RECURRENT DISEASE	
First-Line Therapy for Recurrent Disease	Second-Line or Subsequent Therapy
Preferred Regimens • Carboplatin(or Cisplatin)/paclitaxel(category 1 for carcinosarcoma) •Carboplatin/paclitaxel/pembrolizumab(except for carcinosarcoma)(category 1) • Carboplatin/paclitaxel/dostarlimab-gxly (category 1) ・Carboplatin/paclitaxel/durvalumab (for dMMR tumors only) (category 1) •Carboplatin(or Cisplatin)/paclitaxel/trastuzumab (for-HER2-positive uterine serous carcinoma and carcinosarcoma) ***Other Recommended Regimens***	***Other Recommended Regimens*** • Cisplatin/doxorubicin • Cisplatin/doxorubicin/paclitaxel ・Cisplatin/gemcitabine • Cisplatin • Carboplatin • Doxorubicin • Liposomal doxorubicin • Paclitaxel • Albumin-bound paclitaxel • Topotecan • Bevacizumab

• Carboplatin/docetaxel • Carboplatin/paclitaxel/bevacizumab ***Useful in Certain Circumstances (Biomarker-directed therapy: after prior platinum-based therapy including neoadjuvant and adjuvant)*** •Lenvatinib/pembrolizumab(category 1) fo MMR-proficient (pMMR) tumors • Pembrolizumab(for TMB-H/MSI-H/dMMR tumors) • Dostarlimab-gxly(for MSI-H/dMMR tumors)	• Temsirolimus •Cabozantinib • Docetaxel(category 2B) • Ifosfamide (for carcinosarcoma) • Ifosfamide/paclitaxel (for carcinosarcoma) • Cisplatin/ifosfamide (for carcinosarcoma) ***Useful in Certain Circumstances (Biomarker-directed therapy)*** ***• pMMR tumors*** Lenvatinib/pembrolizumab (category 1) ***• TMB-H tumors*** Pembrolizumab ***• MSI-H/dMMR tumors*** Pembrolizumab Dostarlimab-gxly Avelumab Nivolumab ***• HER2-positive tumors (IHC 3+ or 2+)*** Fam-trastuzumab deruxetan-nxki **• *NTRK* gene fusion-positive tumors** Larotrectinib Entrectinib Repotrectinib

HORMONE THERAPY for Recurrent or Metastatic Endometrial Carcinoma		
Preferred Regimens	***Other Recommended Regimens***	***Useful In Certain Circumstances***
•Megestrol/tamoxifen (alternating) • Everolimus/letrozole	•Medroxyprogesterone acetate/tamoxifen(alternating) •Progestational agents Medroxyprogesterone acetate、Megestrol •Aromatase inhibitors	•ER-positive tumors Letrozole/ribociclib Letrozole/abemaciclib

	Anastrozole、Letrozole、Exemestane •Tamoxifen •Fulvestrant	

Hormonal Therapy for Uterine-Limited Disease Not Suitable for Primary Surgery or for Those Desiring Uterine Preservation for Fertility	
Preferred Regimens	***Other Recommended Regimens***
Levonorgestrel intrauterine device(IUD)	•Progestational agents Medroxyprogesterone acetate、Megestrol •Dual progestin agents Megestrol acetate + levonorgestrel IUD、edroxyprogesterone acetate + levonorgestrel IUD

Adjuvant chemotherapy

Carboplatin+Paclitaxel(135)

Carboplatin	AUC (5)	iv	d1
Paclitaxel	135mg/m^2	iv	d1
Q3W* 3-6 cycles			

Miller D, Filiaci V, Fleming G, et al. Randomized phase III noninferiority trial of first line chemotherapy for metastatic or recurrent endometrial carcinoma: a Gynecologic Oncology Group study [abstract]. Gynecol Oncol 2012;125:771.

Carboplatin+Paclitaxel(135)+Bevacizumab

Carboplatin	AUC (5)	iv	d1
Paclitaxel	135mg/m^2	iv	d1
Bevacizumab	7.5mg/kg	iv	d1
Q3W* 3-6 cycles			

1.Miller D, Filiaci V, Fleming G, et al. Randomized phase III noninferiority trial of first line chemotherapy for metastatic or recurrent endometrial carcinoma: a Gynecologic Oncology Group study [abstract]. Gynecol Oncol 2012;125:771.
2.NCCN Clinical Practice Guidelines in Oncology™. Uterine Neoplasms.v 2.2012. Available at: http://www.nccn.org/professionals/physician_gls/pdf/uterine.pdf. Accessed February 24, 2012.
3.Aghajanian C, Sill MW, Darcy KM, et al. Phase II trial of bevacizumab in recurrent or persistent endometrial cancer: a Gynecologic Oncology Group study. J Clin Oncol. 2011;29(16): 2259–2265.

Carboplatin+Paclitaxel(175)

Carboplatin	AUC (5)	iv	d1
Paclitaxel	175mg/m^2	iv	d1
Q3W* 3-6 cycles			

Miller D, Filiaci V, Fleming G, et al. Randomized phase III noninferiority trial of first line chemotherapy for metastatic or recurrent endometrial carcinoma: a Gynecologic Oncology Group study [abstract]. Gynecol Oncol 2012;125:771.

Carboplatin+Paclitaxel(175)+Bevacizumab

Carboplatin	AUC (5)	iv	d1
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Bevacizumab	7.5mg/kg	iv	d1
Q3W* 3-6 cycles			

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2.NCCN Clinical Practice Guidelines in Oncology™. Uterine Neoplasms.v 2.2012. Available at: http://www.nccn.org/professionals/physician_gls/pdf/uterine.pdf. Accessed February 24, 2012.
3.Aghajanian C, Sill MW, Darcy KM, et al. Phase II trial of bevacizumab in recurrent or persistent endometrial cancer: a Gynecologic Oncology Group study. J Clin Oncol. 2011;29(16): 2259–2265.

Cisplatin+ Paclitaxel(135)

Cisplatin	50mg/m^2	iv	d1
Paclitaxel	135mg/m^2	iv	d1
Q3W*3-6 cycles			

Homesley HD, Filiaci V, Gibbons SK, et al. A randomized phase III trial in advanced endometrial carcinoma of surgery and volume directed radiation followed by cisplatin and doxorubicin with or without paclitaxel: A Gynecologic Oncology Group study. Gynecol Oncol 2009;112:543-552.

Cisplatin+ Paclitaxel(135)+Bevacizumab

Cisplatin	50mg/m^2	iv	d1
Paclitaxel	135mg/m^2	iv	d1
Bevacizumab	7.5mg/kg	iv	d1
Q3W*3-6 cycles			

1.Homesley HD, Filiaci V, Gibbons SK, et al. A randomized phase III trial in advanced endometrial carcinoma of surgery and volume directed radiation followed by cisplatin and doxorubicin with or without paclitaxel: A Gynecologic Oncology Group study. Gynecol Oncol 2009;112:543-552.
2.NCCN Clinical Practice Guidelines in Oncology™. Uterine Neoplasms.v 2.2012. Available at: http://www.nccn.org/professionals/physician_gls/pdf/uterine.pdf. Accessed February 24, 2012.
3.Aghajanian C, Sill MW, Darcy KM, et al. Phase II trial of bevacizumab in recurrent or persistent endometrial cancer: a Gynecologic Oncology Group study. J Clin Oncol. 2011;29(16): 2259–2265.

Cisplatin+ Paclitaxel(175)

Cisplatin	50mg/m2	iv	d1
Paclitaxel	175mg/m2	iv	d1
Q3W*3-6 cycles			

Homesley HD, Filiaci V, Gibbons SK, et al. A randomized phase III trial in advanced endometrial carcinoma of surgery and volume directed radiation followed by cisplatin and doxorubicin with or without paclitaxel: A Gynecologic Oncology Group study. Gynecol Oncol 2009;112:543-552.

Cisplatin+ Paclitaxel(175)+Bevacizumab

Cisplatin	50mg/m2	iv	d1
Paclitaxel	175mg/m2	iv	d1
Bevacizumab	7.5mg/kg	iv	d1
Q3W* 3-6 cycles			

1.Homesley HD, Filiaci V, Gibbons SK, et al. A randomized phase III trial in advanced endometrial carcinoma of surgery and volume directed radiation followed by cisplatin and doxorubicin with or without paclitaxel: A Gynecologic Oncology Group study. Gynecol Oncol 2009;112:543-552.
2.NCCN Clinical Practice Guidelines in Oncology™. Uterine Neoplasms.v 2.2012. Available at: http://www.nccn.org/professionals/physician_gls/pdf/uterine.pdf. Accessed February 24, 2012.
3.Aghajanian C, Sill MW, Darcy KM, et al. Phase II trial of bevacizumab in recurrent or persistent endometrial cancer: a Gynecologic Oncology Group study. J Clin Oncol. 2011;29(16): 2259–2265.

Doxorubicin+Cisplatin

Doxorubicin	50mg/m^2	iv	d1
Cisplatin	75mg/m^2	iv	d1
Q3W* 3-6 cycles			

Homesley HD, Filiaci V, Gibbons SK, et al. A randomized phase III trial in advanced endometrial carcinoma of surgery and volume directed radiation followed by cisplatin and doxorubicin with or without paclitaxel: A Gynecologic Oncology Group study. Gynecol Oncol 2009;112:543-552.

Doxorubicin +Cisplatin+Bevacizumab

Doxorubicin	50mg/m^2	iv	d1
Cisplatin	75mg/m^2	iv	d1
Bevacizumab	7.5mg/kg	iv	d1
Q3W*3-6 cycles			

1.Homesley HD, Filiaci V, Gibbons SK, et al. A randomized phase III trial in advanced endometrial carcinoma of surgery and volume directed radiation followed by cisplatin and doxorubicin with or without paclitaxel: A Gynecologic Oncology Group study. Gynecol Oncol 2009;112:543-552.
2.NCCN Clinical Practice Guidelines in Oncology™. Uterine Neoplasms.v 2.2012. Available at: http://www.nccn.org/professionals/physician_gls/pdf/uterine.pdf. Accessed February 24, 2012.
3.Aghajanian C, Sill MW, Darcy KM, et al. Phase II trial of bevacizumab in recurrent or persistent endometrial cancer: a Gynecologic Oncology Group study. J Clin Oncol. 2011;29(16): 2259–2265.

Doxorubicin +Carboplatin

Doxorubicin	50mg/m^2 iv	d1
Carboplatin	AUC (5) iv	d1
Q3W*3-6 cycles		

Homesley HD, Filiaci V, Gibbons SK, et al. A randomized phase III trial in advanced endometrial carcinoma of surgery and volume directed radiation followed by cisplatin and doxorubicin with or without paclitaxel: A Gynecologic Oncology Group study. Gynecol Oncol 2009;112:543-552.

Doxorubicin +Carboplatin+Bevacizumab

Doxorubicin	50mg/m^2 iv	d1
Carboplatin	AUC (5) iv	d1
Bevacizumab	7.5mg/kg iv	d1
Q3W*3-6 cycles		

1.Homesley HD, Filiaci V, Gibbons SK, et al. A randomized phase III trial in advanced endometrial carcinoma of surgery and volume directed radiation followed by cisplatin and doxorubicin with or without paclitaxel: A Gynecologic Oncology Group study. Gynecol Oncol 2009;112:543-552.
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3.Aghajanian C, Sill MW, Darcy KM, et al. Phase II trial of bevacizumab in recurrent or persistent endometrial cancer: a Gynecologic Oncology Group study. J Clin Oncol. 2011;29(16): 2259–2265.

Paclitaxel(135)+Doxorubicin liposome(Lipodox)

Paclitaxel	135mg/m2 iv	d1
Doxorubicin liposome	45mg/ m^2 iv	d1
Q3W*3-6 cycles		

Pujade-Lauraine E, Wagner U, Aavall-Lundqvist E, et al. Pegylated liposomal doxorubicin and carboplatin compared with paclitaxel and carboplatin for patients with platinum-sensitive ovarian cancer in late relapse. J Clin Oncol 2010;28:3323-3329

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Paclitaxel(135)+Doxorubicin liposome(Lipodox) +Bevacizumab

Paclitaxel	135mg/m2 iv	d1
Doxorubicin liposome	45mg/ m^2 iv	d1
Bevacizumab	7.5mg/kg iv	d1
Q3W*3-6 cycles		

1.Pujade-Lauraine E, Wagner U, Aavall-Lundqvist E, et al. Pegylated liposomal doxorubicin and carboplatin compared with paclitaxel and carboplatin for patients with platinum-sensitive ovarian cancer in late relapse. J Clin Oncol 2010;28:3323-3329.
2.NCCN Clinical Practice Guidelines in Oncology™. Uterine Neoplasms.v 2.2012. Available at: http://www.nccn.org/professionals/physician_gls/pdf/uterine.pdf. Accessed February 24, 2012.
3.Aghajanian C, Sill MW, Darcy KM, et al. Phase II trial of bevacizumab in recurrent or persistent endometrial cancer: a Gynecologic Oncology Group study. J Clin Oncol. 2011;29(16): 2259–2265.

Paclitaxel(175)+Doxorubicin liposome(Lipodox)

paclitaxel	175mg/m2	iv	d1
Doxorubicin liposome	45mg/ m^2	iv	d1
Q3W*3-6 cycles			

Pujade-Lauraine E, Wagner U, Aavall-Lundqvist E, et al. Pegylated liposomal doxorubicin and carboplatin compared with paclitaxel and carboplatin for patients with platinum-sensitive ovarian cancer in late relapse. J Clin Oncol 2010;28:3323-3329.

Paclitaxel(175)+Doxorubicin liposome(Lipodox) +Bevacizumab

paclitaxel	175mg/m2	iv	d1
Doxorubicin liposome	45mg/ m^2	iv	d1
Bevacizumab	7.5mg/kg	iv	d1
Q3W*3-6 cycles			

1.Pujade-Lauraine E, Wagner U, Aavall-Lundqvist E, et al. Pegylated liposomal doxorubicin and carboplatin compared with paclitaxel and carboplatin for patients with platinum-sensitive ovarian cancer in late relapse. J Clin Oncol 2010;28:3323-3329.
2.NCCN Clinical Practice Guidelines in Oncology™. Uterine Neoplasms.v 2.2012. Available at: http://www.nccn.org/professionals/physician_gls/pdf/uterine.pdf. Accessed February 24, 2012.
3.Aghajanian C, Sill MW, Darcy KM, et al. Phase II trial of bevacizumab in recurrent or persistent endometrial cancer: a Gynecologic Oncology Group study. J Clin Oncol. 2011;29(16): 2259–2265.

Cisplatin+ Doxorubicin liposome(Lipodox)

Cisplatin	75mg/m^2	iv	d1
Doxorubicin liposome	45mg/ m^2	iv	d1
Q3W*3-6 cycles			

Pujade-Lauraine E, Wagner U, Aavall-Lundqvist E, et al. Pegylated liposomal doxorubicin and carboplatin compared with paclitaxel and carboplatin for patients with platinum-sensitive ovarian cancer in late relapse. J Clin Oncol 2010;28:3323-3329.

Carboplatin+ Doxorubicin liposome(Lipodox)

Carboplatin	AUC (5)	iv	d1
Doxorubicin liposome	45mg/ m^2	iv	d1
Q3W*3-6 cycles			

Pujade-Lauraine E, Wagner U, Aavall-Lundqvist E, et al. Pegylated liposomal doxorubicin and carboplatin compared with paclitaxel and carboplatin for patients with platinum-sensitive ovarian cancer in late relapse. J Clin Oncol 2010;28:3323-3329.

Carboplatin+ Doxorubicin liposome(Lipodox) +Bevacizumab

Carboplatin	AUC (5)	iv	d1
Doxorubicin liposome	45mg/ m^2	iv	d1
Bevacizumab	7.5mg/kg	iv	d1
Q3W*3-6 cycles			

1.Pujade-Lauraine E, Wagner U, Aavall-Lundqvist E, et al. Pegylated liposomal doxorubicin and carboplatin compared with paclitaxel and carboplatin for patients with platinum-sensitive ovarian cancer in late relapse. J Clin Oncol 2010;28:3323-3329.
2.NCCN Clinical Practice Guidelines in Oncology™. Uterine Neoplasms.v 2.2012. Available at: http://www.nccn.org/professionals/physician_gls/pdf/uterine.pdf. Accessed February 24, 2012.
3.Aghajanian C, Sill MW, Darcy KM, et al. Phase II trial of bevacizumab in recurrent or persistent endometrial cancer: a Gynecologic Oncology Group study. J Clin Oncol. 2011;29(16): 2259–2265.

EBRT+-Platinum base Chemotherapy

Cisplatin

Cisplatin	40mg/m2	iv	d1
Q1W*3-6 cycles			

Moore DH, Blessing JA, McQuellon RP, et al. Phase III study of cisplatin with or without paclitaxel in stage IVB, recurrent, or persistent squamous cell carcinoma of the cervix: a gynecologic oncology group study. J Clin Oncol. 2004;22:3113-3119.

Carboplatin + Paclitaxel

Carboplatin	AUC (2)	iv	d1
Paclitaxel	40mg/m^2	iv	d1
Note: 後需再接兩次consolidation chemotherapy(Paclitaxol 175 mg/m2 + Carboplatin AUC:5)			
Q1W*3-6 cycles			

Wen Q, Shao Z, Yang Z. Concomitant paclitaxel plus carboplatin and radiotherapy for high-risk or advanced endometrial cancer. Int J Gynecol Cancer. 2013 May;23(4):685-9. doi: 10.1097/IGC.0b013e3182808232. PMID: 23615571.

Immunotherapy

Pembrolizumab

Pembrolizumab	200mg	iv	d1
Note: for stage III–IV tumors, except for carcinosarcoma			
Q3W*3-6 cycles			

Eskander, R. N., et al. (2023). Pembrolizumab plus chemotherapy in advanced endometrial cancer. The New England Journal of Medicine, 388(23), 2159–2170.

Durvalumab

Durvalumab	1120mg	iv	d1
Note:for stage III–IV dMMR tumors、pMMR patient with Olaparib use			
Q3W* 6 cycles			

Westin, S. N., Moore, K., Chon, H. S. et al. (2024). Durvalumab plus carboplatin/paclitaxel followed by maintenance durvalumab with or without olaparib as first-line treatment for advanced endometrial cancer: The Phase III DUO-E trial. Journal of Clinical Oncology, 42(3), 283–299.

Carboplatin + Paclitaxel(135)+ Pembrolizumab

Carboplatin	AUC (5)	iv	d1
Paclitaxel	135mg/m^2	iv	d1
Pembrolizumab	200mg	iv	d1
Q3W*3-6 cycles			

1.Miller D, Filiaci V, Fleming G, et al. Randomized phase III noninferiority trial of first line chemotherapy for metastatic or recurrent endometrial carcinoma: a Gynecologic Oncology Group study [abstract]. Gynecol Oncol 2012;125:771.
2.Eskander, R. N., et al. (2023). Pembrolizumab plus chemotherapy in advanced endometrial cancer. The New England Journal of Medicine, 388(23), 2159–2170. https://doi.org/10.1056/NEJMoa2302312

Carboplatin + Paclitaxel(135)+ Durvalumab

Carboplatin	AUC (5)	iv	d1
Paclitaxel	135mg/m^2	iv	d1
Durvalumab	1120mg	iv	d1
Q3W*3-6 cycles			

1.Miller D, Filiaci V, Fleming G, et al. Randomized phase III noninferiority trial of first line chemotherapy for metastatic or recurrent endometrial carcinoma: a Gynecologic Oncology Group study [abstract]. Gynecol Oncol 2012;125:771.
2.Westin SN, Moore K, Chon HS, Lee JY, Thomes Pepin J, Sundborg M, Shai A, de la Garza J, Nishio S, Gold MA, Wang K, McIntyre K, Tillmanns TD, Blank SV, Liu JH, McCollum M, Contreras Mejia F, Nishikawa T, Pennington K, Novak Z, De Melo AC, Sehouli J, Klasa-Mazurkiewicz D, Papadimitriou C, Gil-Martin M, Brasiuniene B, Donnelly C, Del Rosario PM, Liu X, Van Nieuwenhuysen E; DUO-E Investigators. Durvalumab Plus Carboplatin/Paclitaxel Followed by Maintenance Durvalumab With or Without Olaparib as First-Line Treatment for Advanced Endometrial Cancer: The Phase III DUO-E Trial. J Clin Oncol. 2024 Jan 20;42(3):283-299. doi: 10.1200/JCO.23.02132. Epub 2023 Oct 21. Erratum in: J Clin Oncol. 2024 Sep 20;42(27):3262. doi: 10.1200/JCO-24-01660. PMID: 37864337; PMCID: PMC10824389.

Carboplatin + Paclitaxel(135)+ Bevacizumab+Pembrolizumab

Carboplatin	AUC (5)	iv	d1
Paclitaxel	135mg/m^2	iv	d1
Bevacizumab	7.5mg/kg	iv	d1
Pembrolizumab	200mg	iv	d1
Q3W*3-6 cycles			

1.Miller D, Filiaci V, Fleming G, et al. Randomized phase III noninferiority trial of first line chemotherapy for metastatic or recurrent endometrial carcinoma: a Gynecologic Oncology Group study [abstract]. Gynecol Oncol 2012;125:771.
2.NCCN Clinical Practice Guidelines in Oncology™. Uterine Neoplasms.v 2.2012. Available at: http://www.nccn.org/professionals/physician_gls/pdf/uterine.pdf. Accessed February 24, 2012.
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2011;29(16): 2259–2265.
4.Eskander, R. N., et al. (2023). Pembrolizumab plus chemotherapy in advanced endometrial cancer. The New England Journal of Medicine, 388(23), 2159–2170. https://doi.org/10.1056/NEJMoa2302312

Carboplatin + Paclitaxel(135)+ Bevacizumab+ Durvalumab

Carboplatin	AUC (5)	iv	d1
Paclitaxel	135mg/m^2	iv	d1
Bevacizumab	7.5mg/kg	iv	d1
Durvalumab	1120mg	iv	d1
Q3W*3-6 cycles			

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2.NCCN Clinical Practice Guidelines in Oncology™. Uterine Neoplasms.v 2.2012. Available at: http://www.nccn.org/professionals/physician_gls/pdf/uterine.pdf. Accessed February 24, 2012.
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Carboplatin + Paclitaxel(175)+ Pembrolizumab

Carboplatin	AUC (5)	iv	d1
Paclitaxel	175mg/m^2	iv	d1
Pembrolizumab	200mg	iv	d1
Q3W*3-6 cycles			

1.Miller D, Filiaci V, Fleming G, et al. Randomized phase III noninferiority trial of first line chemotherapy for metastatic or recurrent endometrial carcinoma: a Gynecologic Oncology Group study [abstract]. Gynecol Oncol 2012;125:771.
2.Eskander, R. N., et al. (2023). Pembrolizumab plus chemotherapy in advanced endometrial cancer. The New England Journal of Medicine, 388(23), 2159–2170. https://doi.org/10.1056/NEJMoa2302312

Carboplatin + Paclitaxel(175)+ Durvalumab

Carboplatin	AUC (5)	iv	d1
Paclitaxel	175mg/m^2	iv	d1
Durvalumab	1120mg	iv	d1
Q3W*3-6 cycles			

1.Miller D, Filiaci V, Fleming G, et al. Randomized phase III noninferiority trial of first line chemotherapy for metastatic or recurrent endometrial carcinoma: a Gynecologic Oncology Group study [abstract]. Gynecol Oncol 2012;125:771.
2.Westin SN, Moore K, Chon HS, Lee JY, Thomes Pepin J, Sundborg M, Shai A, de la Garza J, Nishio S, Gold MA, Wang K, McIntyre K, Tillmanns TD, Blank SV, Liu JH, McCollum M, Contreras Mejia F, Nishikawa T, Pennington K, Novak Z, De Melo AC, Sehouli J, Klasa-Mazurkiewicz D, Papadimitriou C, Gil-Martin M, Brasiuniene B, Donnelly C, Del Rosario PM, Liu X, Van Nieuwenhuysen E; DUO-E Investigators. Durvalumab Plus Carboplatin/Paclitaxel Followed by Maintenance Durvalumab With or Without Olaparib as First-Line Treatment for Advanced Endometrial Cancer: The Phase III DUO-E Trial. J Clin Oncol. 2024 Jan 20;42(3):283-299. doi: 10.1200/JCO.23.02132. Epub 2023 Oct 21. Erratum in: J Clin Oncol. 2024 Sep 20;42(27):3262. doi: 10.1200/JCO-24-01660. PMID: 37864337; PMCID: PMC10824389.

Carboplatin + Paclitaxel(175)+ Bevacizumab+Pembrolizumab

Carboplatin	AUC (5)	iv	d1
Paclitaxel	175mg/m^2	iv	d1
Bevacizumab	7.5mg/kg	iv	d1
Pembrolizumab	200mg	iv	d1
Q3W*3-6 cycles			

1.Miller D, Filiaci V, Fleming G, et al. Randomized phase III noninferiority trial of first line chemotherapy for metastatic or recurrent endometrial carcinoma: a Gynecologic Oncology Group study [abstract]. Gynecol Oncol 2012;125:771.
2.NCCN Clinical Practice Guidelines in Oncology™. Uterine Neoplasms.v 2.2012. Available at: http://www.nccn.org/professionals/physician_gls/pdf/uterine.pdf. Accessed February 24, 2012.
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4.Eskander, R. N., et al. (2023). Pembrolizumab plus chemotherapy in advanced endometrial cancer. The New England Journal of Medicine, 388(23), 2159–2170.

Carboplatin + Paclitaxel(175)+ Bevacizumab+ Durvalumab

Carboplatin	AUC (5)	iv	d1
Paclitaxel	175mg/m^2	iv	d1
Bevacizumab	7.5mg/kg	iv	d1
Durvalumab	1120mg	iv	d1
Q3W*3-6 cycles			

1.Miller D, Filiaci V, Fleming G, et al. Randomized phase III noninferiority trial of first line chemotherapy for metastatic or recurrent endometrial carcinoma: a Gynecologic Oncology Group study [abstract]. Gynecol Oncol 2012;125:771.
2.NCCN Clinical Practice Guidelines in Oncology™. Uterine Neoplasms.v 2.2012. Available at: http://www.nccn.org/professionals/physician_gls/pdf/uterine.pdf. Accessed February 24, 2012.
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Cisplatin + Paclitaxel(135)+ Pembrolizumab

Cisplatin	50mg/m^2	iv	d1
Paclitaxel	135mg/m^2	iv	d1
Pembrolizumab	200mg	iv	d1
Q3W*3-6 cycles			

1.Homesley HD, Filiaci V, Gibbons SK, et al. A randomized phase III trial in advanced endometrial carcinoma of surgery and volume directed radiation followed by cisplatin and doxorubicin with or without paclitaxel: A Gynecologic Oncology Group study. Gynecol Oncol 2009;112:543-552.
2.Eskander, R. N., et al. (2023). Pembrolizumab plus chemotherapy in advanced endometrial cancer. The New England Journal of Medicine, 388(23), 2159–2170.

Cisplatin + Paclitaxel(135)+ Durvalumab

Cisplatin	50mg/m^2	iv	d1
Paclitaxel	135mg/m^2	iv	d1
Durvalumab	1120mg	iv	d1
Q3W*3-6 cycles			

1.Homesley HD, Filiaci V, Gibbons SK, et al. A randomized phase III trial in advanced endometrial carcinoma of surgery and volume directed radiation followed by cisplatin and doxorubicin with or without paclitaxel: A Gynecologic Oncology Group study. Gynecol Oncol 2009;112:543-552.
Westin SN, Moore K, Chon HS, Lee JY, Thomes Pepin J, Sundborg M, Shai A, de la Garza J, Nishio S, Gold MA, Wang K, McIntyre K, Tillmanns TD, Blank SV, Liu JH,
2.McCollum M, Contreras Mejia F, Nishikawa T, Pennington K, Novak Z, De Melo AC, Sehouli J, Klasa-Mazurkiewicz D, Papadimitriou C, Gil-Martin M, Brasiuniene B, Donnelly C, Del Rosario PM, Liu X, Van Nieuwenhuysen E; DUO-E Investigators. Durvalumab Plus Carboplatin/Paclitaxel Followed by Maintenance Durvalumab With or Without Olaparib as First-Line Treatment for Advanced Endometrial Cancer: The Phase III DUO-E Trial. J Clin Oncol. 2024 Jan 20;42(3):283-299. doi: 10.1200/JCO.23.02132. Epub 2023 Oct 21. Erratum in: J Clin Oncol. 2024 Sep 20;42(27):3262. doi: 10.1200/JCO-24-01660. PMID: 37864337; PMCID: PMC10824389.

Cisplatin + Paclitaxel(135)+ Bevacizumab+Pembrolizumab

Cisplatin	50mg/m^2	iv	d1
Paclitaxel	135mg/m^2	iv	d1
Bevacizumab	7.5mg/kg	iv	d1
Pembrolizumab	200mg	iv	d1
Q3W*3-6 cycles			

1.Homesley HD, Filiaci V, Gibbons SK, et al. A randomized phase III trial in advanced endometrial carcinoma of surgery and volume directed radiation followed by cisplatin and doxorubicin with or without paclitaxel: A Gynecologic Oncology Group study. Gynecol Oncol 2009;112:543-552.
2.NCCN Clinical Practice Guidelines in Oncology™. Uterine Neoplasms.v 2.2012. Available at: http://www.nccn.org/professionals/physician_gls/pdf/uterine.pdf. Accessed February 24, 2012.
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Cisplatin + Paclitaxel(135)+ Bevacizumab+ Durvalumab

Cisplatin	50mg/m^2	iv	d1
Paclitaxel	135mg/m^2	iv	d1
Bevacizumab	7.5mg/kg	iv	d1
Durvalumab	1120mg	iv	d1
Q3W*3-6 cycles			

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Cisplatin + Paclitaxel(175)+ Pembrolizumab

Cisplatin	50mg/m^2	iv	d1
Paclitaxel	175mg/m^2	iv	d1
Pembrolizumab	200mg	iv	d1
Q3W*3-6 cycles			

1.Homesley HD, Filiaci V, Gibbons SK, et al. A randomized phase III trial in advanced endometrial carcinoma of surgery and volume directed radiation followed by cisplatin and doxorubicin with or without paclitaxel: A Gynecologic Oncology Group study. Gynecol Oncol 2009;112:543-552.
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Cisplatin + Paclitaxel(175)+ Durvalumab

Cisplatin	50mg/m^2	iv	d1
Paclitaxel	175mg/m^2	iv	d1
Durvalumab	1120mg	iv	d1
Q3W*3-6 cycles			

1.Homesley HD, Filiaci V, Gibbons SK, et al. A randomized phase III trial in advanced endometrial carcinoma of surgery and volume directed radiation followed by cisplatin and doxorubicin with or without paclitaxel: A Gynecologic Oncology Group study. Gynecol Oncol 2009;112:543-552.
Westin SN, Moore K, Chon HS, Lee JY, Thomes Pepin J, Sundborg M, Shai A, de la Garza J, Nishio S, Gold MA, Wang K, McIntyre K, Tillmanns TD, Blank SV, Liu JH,
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Cisplatin + Paclitaxel(175)+ Bevacizumab+Pembrolizumab

Cisplatin	50mg/m^2	iv	d1
Paclitaxel	175mg/m^2	iv	d1
Bevacizumab	7.5mg/kg	iv	d1
Pembrolizumab	200mg	iv	d1
Q3W*3-6 cycles			

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Cisplatin + Paclitaxel(175)+ Bevacizumab+ Durvalumab

Cisplatin	50mg/m^2	iv	d1
Paclitaxel	175mg/m^2	iv	d1
Bevacizumab	7.5mg/kg	iv	d1
Durvalumab	1120mg	iv	d1
Q3W*3-6 cycles			

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Doxorubicin+Cisplatin+Pembrolizumab

Doxorubicin	50mg/m^2	iv	d1
Cisplatin	75mg/m^2	iv	d1
Pembrolizumab	200mg	iv	d1
Q3W* 3-6 cycles			

1.Homesley HD, Filiaci V, Gibbons SK, et al. A randomized phase III trial in advanced endometrial carcinoma of surgery and volume directed radiation followed by cisplatin and doxorubicin with or without paclitaxel: A Gynecologic Oncology Group study. Gynecol Oncol 2009;112:543-552.
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Doxorubicin+Cisplatin+ Durvalumab

Doxorubicin	50mg/m^2	iv	d1
Cisplatin	75mg/m^2	iv	d1
Durvalumab	1120mg	iv	d1
Q3W* 3-6 cycles			

1.Homesley HD, Filiaci V, Gibbons SK, et al. A randomized phase III trial in advanced endometrial carcinoma of surgery and volume directed radiation followed by cisplatin and doxorubicin with or without paclitaxel: A Gynecologic Oncology Group study. Gynecol Oncol 2009;112:543-552.
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Doxorubicin+Cisplatin+Bevacizumab +Pembrolizumab

Doxorubicin	50mg/m^2 iv	d1
Cisplatin	75-100mg/m^2 iv	d1
Bevacizumab	7.5mg/kg iv	d1
Pembrolizumab	200mg iv	d1
Q3W* 3-6 cycles		

1.Homesley HD, Filiaci V, Gibbons SK, et al. A randomized phase III trial in advanced endometrial carcinoma of surgery and volume directed radiation followed by cisplatin and doxorubicin with or without paclitaxel: A Gynecologic Oncology Group study. Gynecol Oncol 2009;112:543-552.
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Doxorubicin+Cisplatin+Bevacizumab +Durvalumab

Doxorubicin	50mg/m^2 iv	d1
Cisplatin	75-100mg/m^2 iv	d1
Bevacizumab	7.5mg/kg iv	d1
Durvalumab	1120mg iv	d1
Q3W* 3-6 cycles		

Homesley HD, Filiaci V, Gibbons SK, et al. A randomized phase III trial in advanced endometrial carcinoma of surgery and volume directed radiation followed by cisplatin and doxorubicin with or without paclitaxel: A Gynecologic Oncology Group study. Gynecol Oncol 2009;112:543-552.
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Doxorubicin+Carboplatin +Pembrolizumab

Doxorubicin	50mg/m^2 iv	d1
Carboplatin	AUC (5) iv	d1
Pembrolizumab	200mg iv	d1
Q3W* 3-6 cycles		

1.Homesley HD, Filiaci V, Gibbons SK, et al. A randomized phase III trial in advanced endometrial carcinoma of surgery and volume directed radiation followed by cisplatin and doxorubicin with or without paclitaxel: A Gynecologic Oncology Group study. Gynecol Oncol 2009;112:543-552.
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Doxorubicin+ Carboplatin + Durvalumab

Doxorubicin	50mg/m^2	iv	d1
Carboplatin	AUC (5)	iv	d1
Durvalumab	1120mg	iv	d1
Q3W* 3-6 cycles			

1.Homesley HD, Filiaci V, Gibbons SK, et al. A randomized phase III trial in advanced endometrial carcinoma of surgery and volume directed radiation followed by cisplatin and doxorubicin with or without paclitaxel: A Gynecologic Oncology Group study. Gynecol Oncol 2009;112:543-552.
2.McCollum M, Contreras Mejia F, Nishikawa T, Pennington K, Novak Z, De Melo AC, Sehouli J, Klasa-Mazurkiewicz D, Papadimitriou C, Gil-Martin M, Brasiuniene B, Donnelly C, Del Rosario PM, Liu X, Van Nieuwenhuysen E; DUO-E Investigators. Durvalumab Plus Carboplatin/Paclitaxel Followed by Maintenance Durvalumab With or Without Olaparib as First-Line Treatment for Advanced Endometrial Cancer: The Phase III DUO-E Trial. J Clin Oncol. 2024 Jan 20;42(3):283-299. doi: 10.1200/JCO.23.02132. Epub 2023 Oct 21. Erratum in: J Clin Oncol. 2024 Sep 20;42(27):3262. doi: 10.1200/JCO-24-01660. PMID: 37864337; PMCID: PMC10824389.

Doxorubicin+ Carboplatin +Bevacizumab +Pembrolizumab

Doxorubicin	50mg/m^2	iv	d1
Carboplatin	AUC (5)	iv	d1
Bevacizumab	7.5mg/kg	iv	d1
Pembrolizumab	200mg	iv	d1
Q3W* 3-6 cycles			

1.Homesley HD, Filiaci V, Gibbons SK, et al. A randomized phase III trial in advanced endometrial carcinoma of surgery and volume directed radiation followed by cisplatin and doxorubicin with or without paclitaxel: A Gynecologic Oncology Group study. Gynecol Oncol 2009;112:543-552.
2.NCCN Clinical Practice Guidelines in Oncology™. Uterine Neoplasms.v 2.2012. Available at: http://www.nccn.org/professionals/physician_gls/pdf/uterine.pdf. Accessed February 24, 2012.
3.Aghajanian C, Sill MW, Darcy KM, et al. Phase II trial of bevacizumab in recurrent or persistent endometrial cancer: a Gynecologic Oncology Group study. J Clin Oncol. 2011;29(16): 2259–2265.
4.Eskander, R. N., et al. (2023). Pembrolizumab plus chemotherapy in advanced endometrial cancer. The New England Journal of Medicine, 388(23), 2159–2170. https://doi.org/10.1056/NEJMoa2302312

Doxorubicin+ Carboplatin +Bevacizumab +Durvalumab

Doxorubicin	50mg/m^2	iv	d1
Carboplatin	AUC (5)	iv	d1
Bevacizumab	7.5mg/kg	iv	d1
Durvalumab	1120mg	iv	d1
Q3W* 3-6 cycles			

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2.NCCN Clinical Practice Guidelines in Oncology™. Uterine Neoplasms.v 2.2012. Available at: http://www.nccn.org/professionals/physician_gls/pdf/uterine.pdf. Accessed February 24, 2012.

3.Aghajanian C, Sill MW, Darcy KM, et al. Phase II trial of bevacizumab in recurrent or persistent endometrial cancer: a Gynecologic Oncology Group study. J Clin Oncol. 2011;29(16): 2259–2265.
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Paclitaxel(135)+Doxorubicin liposome(Lipodox)+ Pembrolizumab

Paclitaxel	135mg/m^2	iv	d1
Doxorubicin liposome	45mg/m^2	iv	d1
Pembrolizumab	200mg	iv	d1
Q3W*3-6 cycles			

1.Pujade-Lauraine E, Wagner U, Aavall-Lundqvist E, et al. Pegylated liposomal doxorubicin and carboplatin compared with paclitaxel and carboplatin for patients with platinum-sensitive ovarian cancer in late relapse. J Clin Oncol 2010;28:3323-3329.
2.Eskander, R. N., et al. (2023). Pembrolizumab plus chemotherapy in advanced endometrial cancer. The New England Journal of Medicine, 388(23), 2159–2170. https://doi.org/10.1056/NEJMoa2302312

Paclitaxel(135)+Doxorubicin liposome(Lipodox)+Durvalumab

Paclitaxel	135mg/m^2	iv	d1
Doxorubicin liposome	45mg/m^2	iv	d1
Durvalumab	1120mg	iv	d1
Q3W* 3-6 cycles			

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2.McCollum M, Contreras Mejia F, Nishikawa T, Pennington K, Novak Z, De Melo AC, Sehouli J, Klasa-Mazurkiewicz D, Papadimitriou C, Gil-Martin M, Brasiuniene B, Donnelly C, Del Rosario PM, Liu X, Van Nieuwenhuysen E; DUO-E Investigators. Durvalumab Plus Carboplatin/Paclitaxel Followed by Maintenance Durvalumab With or Without Olaparib as First-Line Treatment for Advanced Endometrial Cancer: The Phase III DUO-E Trial. J Clin Oncol. 2024 Jan 20;42(3):283-299. doi: 10.1200/JCO.23.02132. Epub 2023 Oct 21. Erratum in: J Clin Oncol. 2024 Sep 20;42(27):3262. doi: 10.1200/JCO-24-01660. PMID: 37864337; PMCID: PMC10824389.

Paclitaxel(135)+Doxorubicin liposome(Lipodox)+Bevacizumab +Pembrolizumab

Paclitaxel	135mg/m^2	iv	d1
Doxorubicin liposome	45mg/m^2	iv	d1
Bevacizumab	7.5mg/kg	iv	d1
Pembrolizumab	200mg	iv	d1
Q3W* 3-6 cycles			

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2.NCCN Clinical Practice Guidelines in Oncology™. Uterine Neoplasms.v 2.2012. Available at: http://www.nccn.org/professionals/physician_gls/pdf/uterine.pdf. Accessed February

24, 2012.
3.Aghajanian C, Sill MW, Darcy KM, et al. Phase II trial of bevacizumab in recurrent or persistent endometrial cancer: a Gynecologic Oncology Group study. J Clin Oncol. 2011;29(16): 2259–2265.
4.Eskander, R. N., et al. (2023). Pembrolizumab plus chemotherapy in advanced endometrial cancer. The New England Journal of Medicine, 388(23), 2159–2170. https://doi.org/10.1056/NEJMoa2302312

Paclitaxel(135)+Doxorubicin liposome(Lipodox) +Bevacizumab +Durvalumab

Paclitaxel	135mg/m^2	iv	d1
Doxorubicin liposome	45mg/m^2	iv	d1
Bevacizumab	7.5mg/kg	iv	d1
Durvalumab	1120mg	iv	d1
Q3W* 3-6 cycles			

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2.NCCN Clinical Practice Guidelines in Oncology™. Uterine Neoplasms.v 2.2012. Available at: http://www.nccn.org/professionals/physician_gls/pdf/uterine.pdf. Accessed February 24, 2012.
3.Aghajanian C, Sill MW, Darcy KM, et al. Phase II trial of bevacizumab in recurrent or persistent endometrial cancer: a Gynecologic Oncology Group study. J Clin Oncol. 2011;29(16): 2259–2265.
4.McCollum M, Contreras Mejia F, Nishikawa T, Pennington K, Novak Z, De Melo AC, Sehouli J, Klasa-Mazurkiewicz D, Papadimitriou C, Gil-Martin M, Brasiuniene B, Donnelly C, Del Rosario PM, Liu X, Van Nieuwenhuysen E; DUO-E Investigators. Durvalumab Plus Carboplatin/Paclitaxel Followed by Maintenance Durvalumab With or Without Olaparib as First-Line Treatment for Advanced Endometrial Cancer: The Phase III DUO-E Trial. J Clin Oncol. 2024 Jan 20;42(3):283-299. doi: 10.1200/JCO.23.02132. Epub 2023 Oct 21. Erratum in: J Clin Oncol. 2024 Sep 20;42(27):3262. doi: 10.1200/JCO-24-01660. PMID: 37864337; PMCID: PMC10824389.

Paclitaxel(175)+Doxorubicin liposome(Lipodox)+ Pembrolizumab

Paclitaxel	175mg/m^2	iv	d1
Doxorubicin liposome	45mg/m^2	iv	d1
Pembrolizumab	200mg	iv	d1
Q3W*3-6 cycles			

1.Pujade-Lauraine E, Wagner U, Aavall-Lundqvist E, et al. Pegylated liposomal doxorubicin and carboplatin compared with paclitaxel and carboplatin for patients with platinum-sensitive ovarian cancer in late relapse. J Clin Oncol 2010;28:3323-3329.
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Paclitaxel(175)+Doxorubicin liposome(Lipodox)+Durvalumab

Paclitaxel	175mg/m^2	iv	d1
Doxorubicin liposome	45mg/m^2	iv	d1
Durvalumab	1120mg	iv	d1
Q3W* 3-6 cycles			

1.Pujade-Lauraine E, Wagner U, Aavall-Lundqvist E, et al. Pegylated liposomal doxorubicin and carboplatin compared with paclitaxel and carboplatin for patients with platinum-sensitive ovarian cancer in late relapse. J Clin Oncol 2010;28:3323-3329.
2.McCollum M, Contreras Mejia F, Nishikawa T, Pennington K, Novak Z, De Melo AC, Sehouli J, Klasa-Mazurkiewicz D, Papadimitriou C, Gil-Martin M, Brasiuniene B, Donnelly

C, Del Rosario PM, Liu X, Van Nieuwenhuysen E; DUO-E Investigators. Durvalumab Plus Carboplatin/Paclitaxel Followed by Maintenance Durvalumab With or Without Olaparib as First-Line Treatment for Advanced Endometrial Cancer: The Phase III DUO-E Trial. J Clin Oncol. 2024 Jan 20;42(3):283-299. doi: 10.1200/JCO.23.02132. Epub 2023 Oct 21. Erratum in: J Clin Oncol. 2024 Sep 20;42(27):3262. doi: 10.1200/JCO-24-01660. PMID: 37864337; PMCID: PMC10824389.

Paclitaxel(175)+Doxorubicin liposome(Lipodox)+Bevacizumab +Pembrolizumab

Paclitaxel	175mg/m^2	iv	d1
Doxorubicin liposome	45mg/m^2	iv	d1
Bevacizumab	7.5mg/kg	iv	d1
Pembrolizumab	200mg	iv	d1
Q3W* 3-6 cycles			

1.Pujade-Lauraine E, Wagner U, Aavall-Lundqvist E, et al. Pegylated liposomal doxorubicin and carboplatin compared with paclitaxel and carboplatin for patients with platinum-sensitive ovarian cancer in late relapse. J Clin Oncol 2010;28:3323-3329.
2.NCCN Clinical Practice Guidelines in Oncology™. Uterine Neoplasms.v 2.2012. Available at: http://www.nccn.org/professionals/physician_gls/pdf/uterine.pdf. Accessed February 24, 2012.
3.Aghajanian C, Sill MW, Darcy KM, et al. Phase II trial of bevacizumab in recurrent or persistent endometrial cancer: a Gynecologic Oncology Group study. J Clin Oncol. 2011;29(16): 2259–2265.
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Paclitaxel(175)+Doxorubicin liposome(Lipodox) +Bevacizumab +Durvalumab

Paclitaxel	175mg/m^2	iv	d1
Doxorubicin liposome	45mg/m^2	iv	d1
Bevacizumab	7.5mg/kg	iv	d1
Durvalumab	1120mg	iv	d1
Q3W* 3-6 cycles			

1.Pujade-Lauraine E, Wagner U, Aavall-Lundqvist E, et al. Pegylated liposomal doxorubicin and carboplatin compared with paclitaxel and carboplatin for patients with platinum-sensitive ovarian cancer in late relapse. J Clin Oncol 2010;28:3323-3329.
2.NCCN Clinical Practice Guidelines in Oncology™. Uterine Neoplasms.v 2.2012. Available at: http://www.nccn.org/professionals/physician_gls/pdf/uterine.pdf. Accessed February 24, 2012.
3.Aghajanian C, Sill MW, Darcy KM, et al. Phase II trial of bevacizumab in recurrent or persistent endometrial cancer: a Gynecologic Oncology Group study. J Clin Oncol. 2011;29(16): 2259–2265.
4.McCollum M, Contreras Mejia F, Nishikawa T, Pennington K, Novak Z, De Melo AC, Sehouli J, Klasa-Mazurkiewicz D, Papadimitriou C, Gil-Martin M, Brasiuniene B, Donnelly C, Del Rosario PM, Liu X, Van Nieuwenhuysen E; DUO-E Investigators. Durvalumab Plus Carboplatin/Paclitaxel Followed by Maintenance Durvalumab With or Without Olaparib as First-Line Treatment for Advanced Endometrial Cancer: The Phase III DUO-E Trial. J Clin Oncol. 2024 Jan 20;42(3):283-299. doi: 10.1200/JCO.23.02132. Epub 2023 Oct 21. Erratum in: J Clin Oncol. 2024 Sep 20;42(27):3262. doi: 10.1200/JCO-24-01660. PMID: 37864337; PMCID: PMC10824389.

Cisplatin+Doxorubicin liposome(Lipodox)+ Pembrolizumab

Cisplatin	75mg/m^2	iv	d1
Doxorubicin liposome	45mg/m^2	iv	d1
Pembrolizumab	200mg	iv	d1
Q3W*3-6 cycles			

1.Pujade-Lauraine E, Wagner U, Aavall-Lundqvist E, et al. Pegylated liposomal doxorubicin and carboplatin compared with paclitaxel and carboplatin for patients with platinum-sensitive ovarian cancer in late relapse. J Clin Oncol 2010;28:3323-3329.
2.Eskander, R. N., et al. (2023). Pembrolizumab plus chemotherapy in advanced endometrial cancer. The New England Journal of Medicine, 388(23), 2159–2170. https://doi.org/10.1056/NEJMoa2302312

Cisplatin+Doxorubicin liposome(Lipodox)+Durvalumab

Cisplatin	75mg/m^2	iv	d1
Doxorubicin liposome	45mg/m^2	iv	d1
Durvalumab	1120mg	iv	d1
Q3W* 3-6 cycles			

1.Pujade-Lauraine E, Wagner U, Aavall-Lundqvist E, et al. Pegylated liposomal doxorubicin and carboplatin compared with paclitaxel and carboplatin for patients with platinum-sensitive ovarian cancer in late relapse. J Clin Oncol 2010;28:3323-3329.
2.McCollum M, Contreras Mejia F, Nishikawa T, Pennington K, Novak Z, De Melo AC, Sehouli J, Klasa-Mazurkiewicz D, Papadimitriou C, Gil-Martin M, Brasiuniene B, Donnelly C, Del Rosario PM, Liu X, Van Nieuwenhuysen E; DUO-E Investigators. Durvalumab Plus Carboplatin/Paclitaxel Followed by Maintenance Durvalumab With or Without Olaparib as First-Line Treatment for Advanced Endometrial Cancer: The Phase III DUO-E Trial. J Clin Oncol. 2024 Jan 20;42(3):283-299. doi: 10.1200/JCO.23.02132. Epub 2023 Oct 21. Erratum in: J Clin Oncol. 2024 Sep 20;42(27):3262. doi: 10.1200/JCO-24-01660. PMID: 37864337; PMCID: PMC10824389.

Carboplatin+Doxorubicin liposome(Lipodox)+ Pembrolizumab

Carboplatin	AUC(5)	iv	d1
Doxorubicin liposome	45mg/m^2	iv	d1
Pembrolizumab	200mg	iv	d1
Q3W*3-6 cycles			

1.Pujade-Lauraine E, Wagner U, Aavall-Lundqvist E, et al. Pegylated liposomal doxorubicin and carboplatin compared with paclitaxel and carboplatin for patients with platinum-sensitive ovarian cancer in late relapse. J Clin Oncol 2010;28:3323-3329.
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Carboplatin +Doxorubicin liposome(Lipodox)+Durvalumab

Carboplatin	AUC(5)	iv	d1
Doxorubicin liposome	45mg/m^2	iv	d1
Durvalumab	1120mg	iv	d1
Q3W* 3-6 cycles			

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Carboplatin+Doxorubicin liposome(Lipodox)+Bevacizumab +Pembrolizumab

Carboplatin	AUC(5)	iv	d1
Doxorubicin liposome	45mg/m^2	iv	d1
Bevacizumab	7.5mg/kg	iv	d1
Pembrolizumab	200mg	iv	d1
Q3W* 3-6 cycles			

1.Pujade-Lauraine E, Wagner U, Aavall-Lundqvist E, et al. Pegylated liposomal doxorubicin and carboplatin compared with paclitaxel and carboplatin for patients with platinum-sensitive ovarian cancer in late relapse. J Clin Oncol 2010;28:3323-3329.
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Carboplatin +Doxorubicin liposome(Lipodox) +Bevacizumab +Durvalumab

Carboplatin	AUC(5)	iv	d1
Doxorubicin liposome	45mg/m^2	iv	d1
Bevacizumab	7.5mg/kg	iv	d1
Durvalumab	1120mg	iv	d1
Q3W* 3-6 cycles			

1.Pujade-Lauraine E, Wagner U, Aavall-Lundqvist E, et al. Pegylated liposomal doxorubicin and carboplatin compared with paclitaxel and carboplatin for patients with platinum-sensitive ovarian cancer in late relapse. J Clin Oncol 2010;28:3323-3329.
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3.Aghajanian C, Sill MW, Darcy KM, et al. Phase II trial of bevacizumab in recurrent or persistent endometrial cancer: a Gynecologic Oncology Group study. J Clin Oncol. 2011;29(16): 2259–2265.
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Maintenance Therapy

Olaparib(Lynparza)

Olaparib(Lynparza)	300mg	PO	BID

Westin, S. N., Moore, K., Chon, H. S. et al. (2024). Durvalumab plus carboplatin/paclitaxel followed by maintenance durvalumab with or without olaparib as first-line treatment for advanced endometrial cancer: The Phase III DUO-E trial. Journal of Clinical Oncology, 42(3), 283–299.

Pembrolizumab

Pembrolizumab	200mg	iv	d1
Q3W			

Eskander, R. N., et al. (2023). Pembrolizumab plus chemotherapy in advanced endometrial cancer. The New England Journal of Medicine, 388(23), 2159–2170.

Durvalumab

Durvalumab	1500mg	iv	d1
Q3W			

Westin, S. N., Moore, K., Chon, H. S. et al. (2024). Durvalumab plus carboplatin/paclitaxel followed by maintenance durvalumab with or without olaparib as first-line treatment for advanced endometrial cancer: The Phase III DUO-E trial. Journal of Clinical Oncology, 42(3), 283–299.

Hormonal therapy

Megestrol

Megestrol	40-160 mg /d
QD x 6months	

1.Fiorica JV, Brunetto VL, Hanjani P, et al. Phase II trial of alternating courses of megestrol acetate and tamoxifen in advanced endometrial carcinoma: a Gynecologic Oncology Group study. Gynecol Oncol 2004;92:10-14. Available at: http://www.ncbi.nlm.nih.gov/pubmed/14751131.
2.Pandya KJ, Yeap BY, Weiner LM, et al. Megestrol and tamoxifen in patients with advanced endometrial cancer: an Eastern Cooperative Oncology Group Study (E4882). Am J Clin Oncol 2001;24:43-46.Available at: http://www.ncbi.nlm.nih.gov/pubmed/11232948.

Medroxyprogesterone

Medroxyprogesterone	400-800 mg /d
QD x 6months	

1.Whitney CW, Brunetto VL, Zaino RJ, et al. Phase II study of medroxyprogesterone acetate plus tamoxifen in advanced endometrial carcinoma: a Gynecologic Oncology Group study. Gynecol Oncol 2004;92:4-9. Available at:http://www.ncbi.nlm.nih.gov/pubmed/14751130.
2.Thigpen JT, Brady MF, Alvarez RD, et al. Oral medroxyprogesterone acetate in the treatment of advanced or recurrent endometrial carcinoma: a dose-response study by the Gynecologic Oncology Group. J Clin Oncol 1999;17:1736-1744. Available at: http://www.ncbi.nlm.nih.gov/pubmed/10561210.

Levonorgestrel IUD

Levonorgestrel IUD	Intrauterine Devise x1

Baker J, Obermair A, Gebski V, Janda M. Efficacy of oral or intrauterine device-delivered progestin in patients with complex endometrial hyperplasia with atypia or early endometrial adenocarcinoma: a meta-analysis and systematic review of the literature. Gynecol Oncol 2012;125:263-270. Available at:http://www.ncbi.nlm.nih.gov/pubmed/22196499.

Leupline

Leupline	375mg IM
qm x 6months	

1.A.R. Jeyarajah, M.D.C.J. Gallagher, M.D., Ph.D.P.R. Blake, M.D,et al.Long-Term Follow-up of Gonadotrophin-Releasing Hormone Analog Treatment for Recurrent Endometrial Cancer. Gynecologic Oncology Volume 63, Issue 1, October 1996, Pages 47–52

2. Tirso Pérez-Medina, M.D.José Bajo, M.D.Gonzalo Folgueira, M.D.,et al.Atypical Endometrial Hyperplasia Treatment with Progestogens and Gonadotropin-Releasing Hormone Analogues: Long-Term Follow-up. Gynecologic Oncology Volume 73, Issue 2, May 1999, Pages 299–304

1-12. 子宮內膜癌之放射線治療

- Adjuvant treatment
  - Whole pelvic irradiation: total 45-55Gy
  - IVBT boost: HDR 4-6Gy x 2-3 Fractions
  - IVBT alone: HDR 5-7 Gy x 3-6 Fractions
  - Consider dose escalation to gross disease

  IVBT：intravaginal brachytherapy

  HDR(high dose rate)

- Definitive
  - Whole pelvic irradiation: total 45-60Gy + HDR ICBT 4-6 Gy * 5-6 Fractions

  ICBT：intracavitary brachytherapy

  ＊Prefer 3D CRT , IMRT, or IGRT(optional)

*If gross disease in the lymph node(+)：Target dose for nodes can range from 54 to 66 Gy

二、 子宮惡性肉瘤

2-1.分期(Leiomyosarcoma and Endometrial Stromal Sarcoma)

TNM Categories	FIGO 分期 (2017)	Primary Tumor
Tx		Primary tumor cannot be assessed
T0		No evidence of primary tumor
T1	I	Tumor limited to the uterus
T1a	IA	Tumor 5 cm or less in greatest dimension
T1b	IB	Tumor more than 5 cm
T2	II	Tumor extends beyond the uterus, within the pelvis
T2a	IIA	Tumor involves adnexa
T2b	IIB	Tumor involves other pelvic tissues
T3	III	Tumor infiltrates abdominal tissues
T3a	IIIA	One site
T3b	IIIB	More than one site
T4	IVA	Tumor invades bladder or rectum

TNM Categories	FIGO 分期	Regional Lymph Nodes
NX		Regional lymph nodes cannot be assessed
N0		No regional lymph node metastasis
N0(i+)		Isolated tumor cells in regional lymph node(s) no greater than 0.2 mm
N1	**IIIC**	Regional lymph node metastasis

TNM Categories	FIGO 分期	Distant Metastasis
M0		No distant metastasis
M1	**IVB**	Distant metastasis (excluding adnexa, pelvic, and abdominal tissues)

AJCC 8th	T	N	M
Stage I	T1	N0	M0
Stage IA	T1a	N0	M0
Stage IB	T1b	N0	M0
Stage II	T2	N0	M0
Stage IIIA	T3a	N0	M0
Stage IIIB	T3b	N0	M0
Stage IIIC	T1-3	N1	M0
Stage IVA	T4	ANY	M0
Stage IVB	ANY	ANY	M1

Uterine Sarcoma

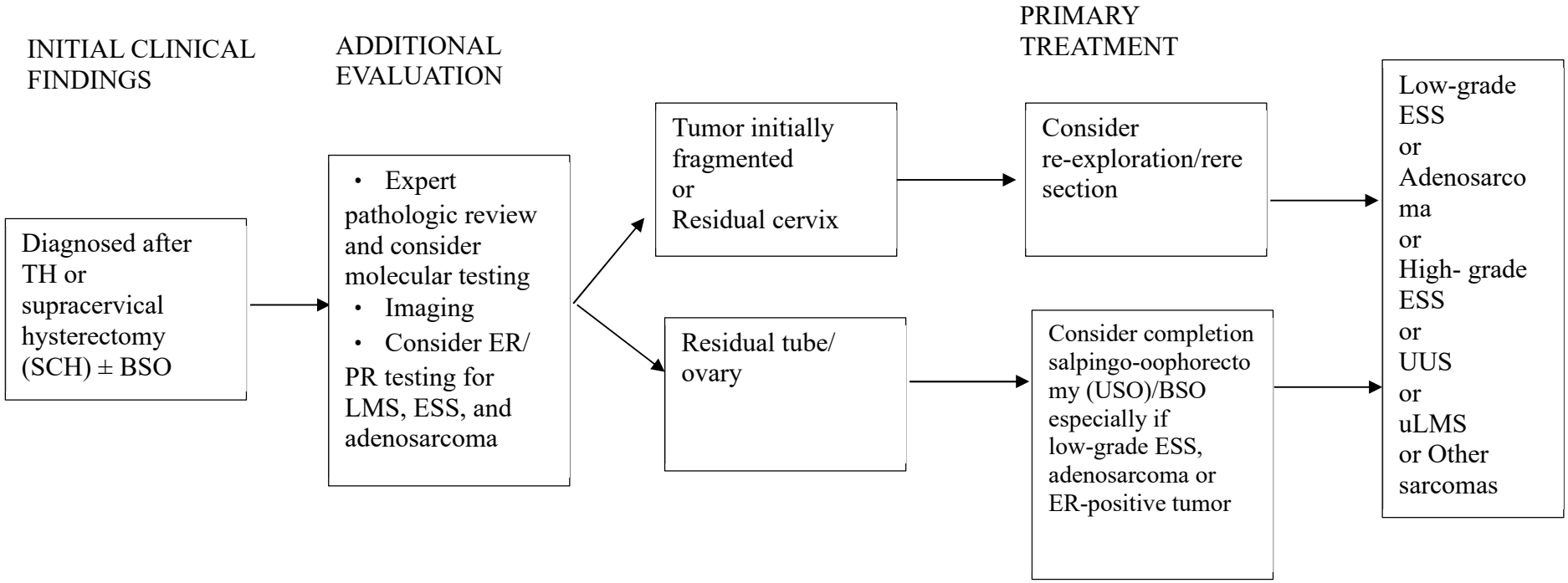
TNM Categories	FIGO 分期	Primary Tumor
Tx		Primary tumor cannot be assessed
T0		No evidence of primary tumor
T1	I	Tumor limited to the uterus
T1a	IA	Tumor limited to the endometrium/endocervix
T1b	IB	Tumor invades less than or equal to half myometrial invasion
T1c	IC	Tumor invades more than half myometrial invasion
T2	II	Tumor extends beyond the uterus, within the pelvis
T2a	IIA	Tumor involves adnexa
T2b	IIB	Tumor involves other pelvic tissues
T3	III	Tumor infiltrates abdominal tissues
T3a	IIIA	One site
T3b	IIIB	More than one site
T4	IVA	Tumor invades bladder or rectum

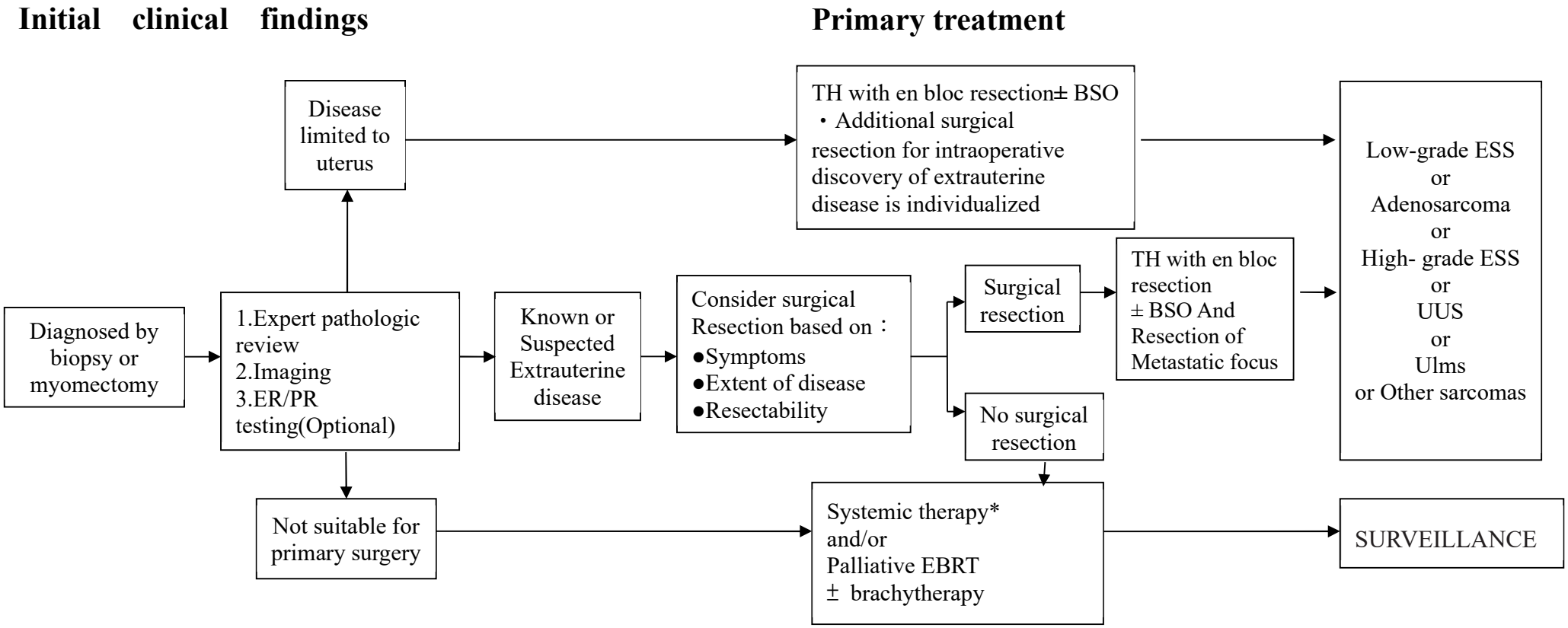
TNM Categories	FIGO 分期	Regional Lymph Nodes
NX		Regional lymph nodes cannot be assessed
N0		No regional lymph node metastasis
N0(i+)		Isolated tumor cells in regional lymph node(s) no greater than 0.2 mm
N1	**IIIC**	Regional lymph node metastasis

TNM Categories	FIGO 分期	Distant Metastasis
M0		No distant metastasis
M1	**IVB**	Distant metastasis (excluding adnexa, pelvic, and abdominal tissues)

AJCC 8th	T	N	M
Stage I	T1	N0	M0
Stage IA	T1a	N0	M0
Stage IB	T1b	N0	M0
Stage IC	T1c	N0	M0
Stage II	T2	N0	M0
Stage IIIA	T3a	N0	M0
Stage IIIB	T3b	N0	M0
Stage IIIC	T1-3	N1	M0
Stage IVA	T4	ANY	M0
Stage IVB	ANY	ANY	M1

2-2.子宮惡性肉瘤之臨床發現及處置

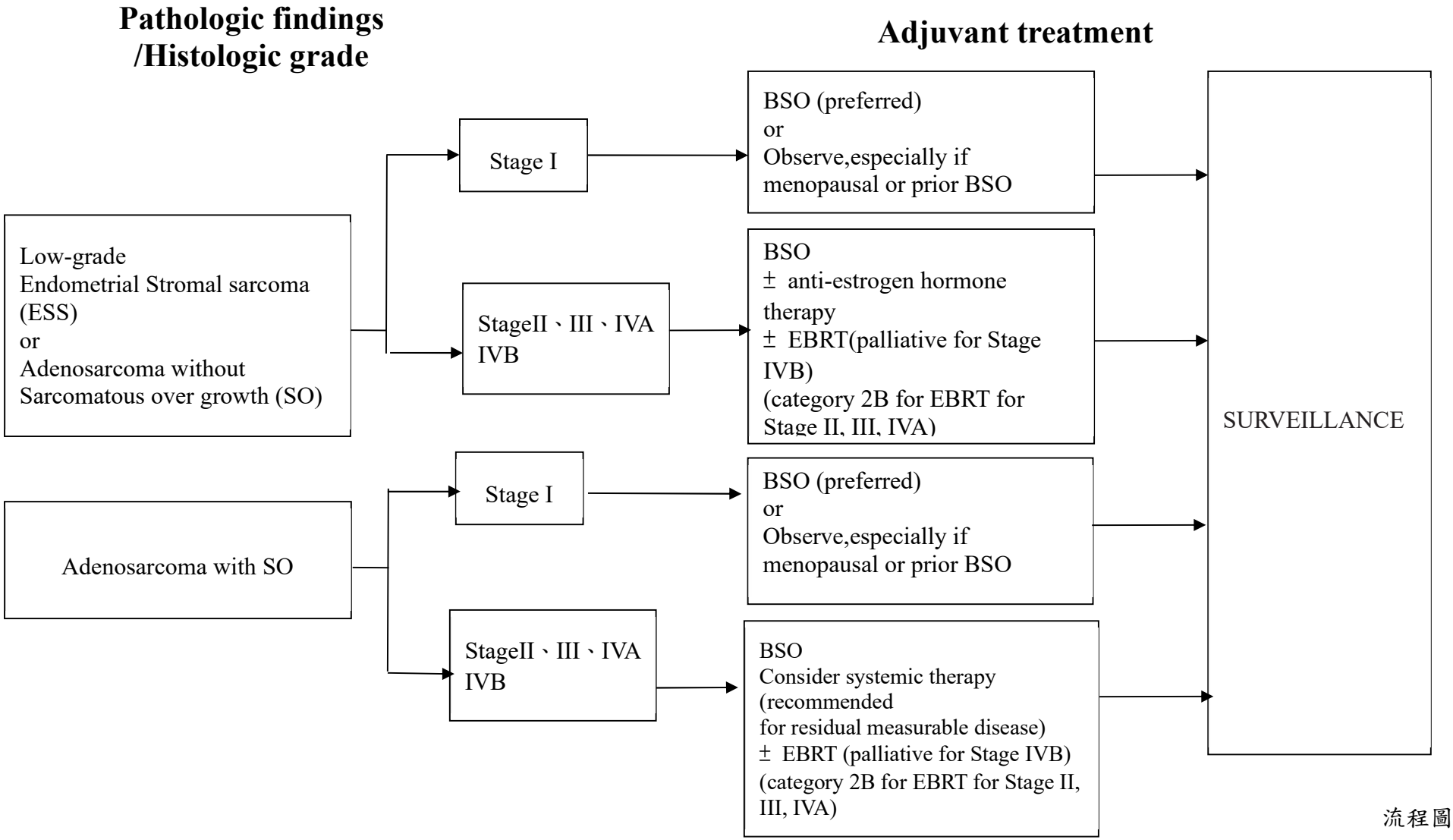




流程圖一

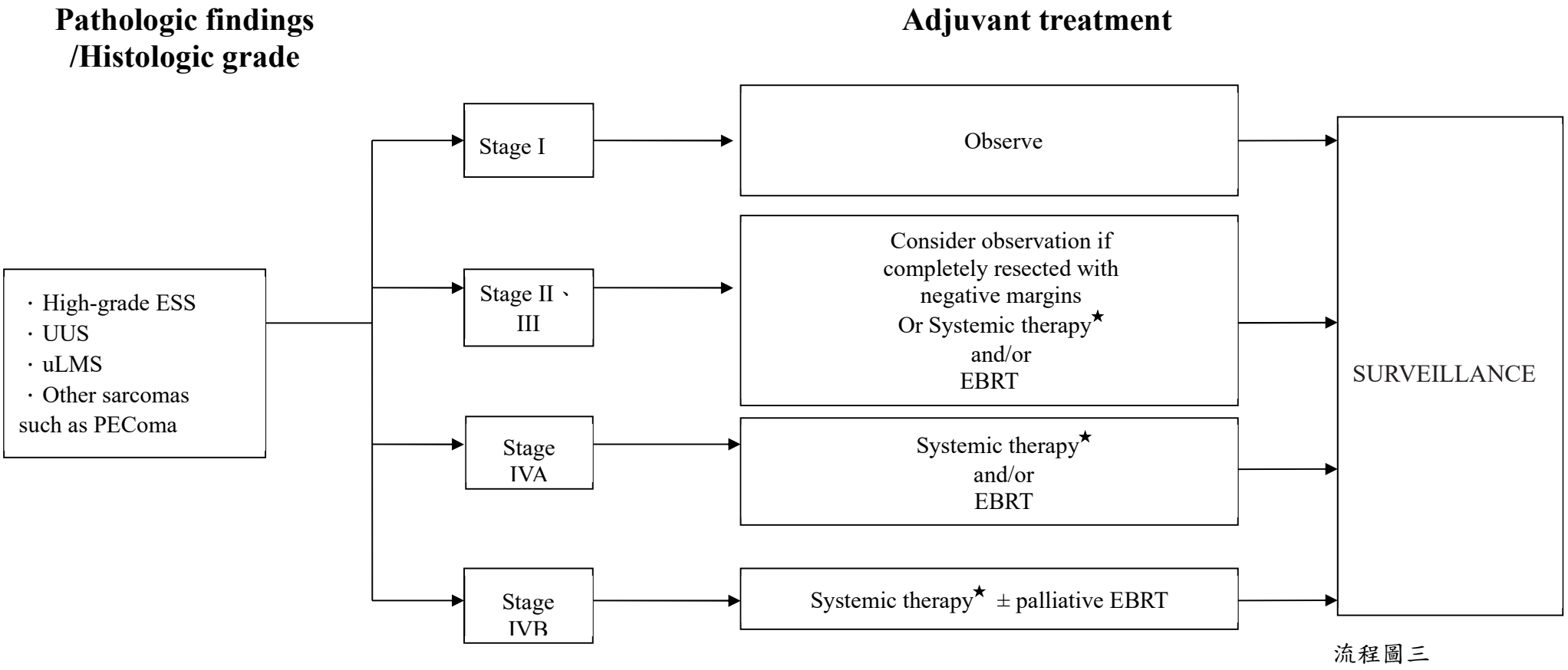
★Systemic therapy：意為化學治療或荷爾蒙治療或標靶治療或免疫療法(詳見 P.32)

2-2.子宮惡性肉瘤之臨床發現及處置



流程圖二

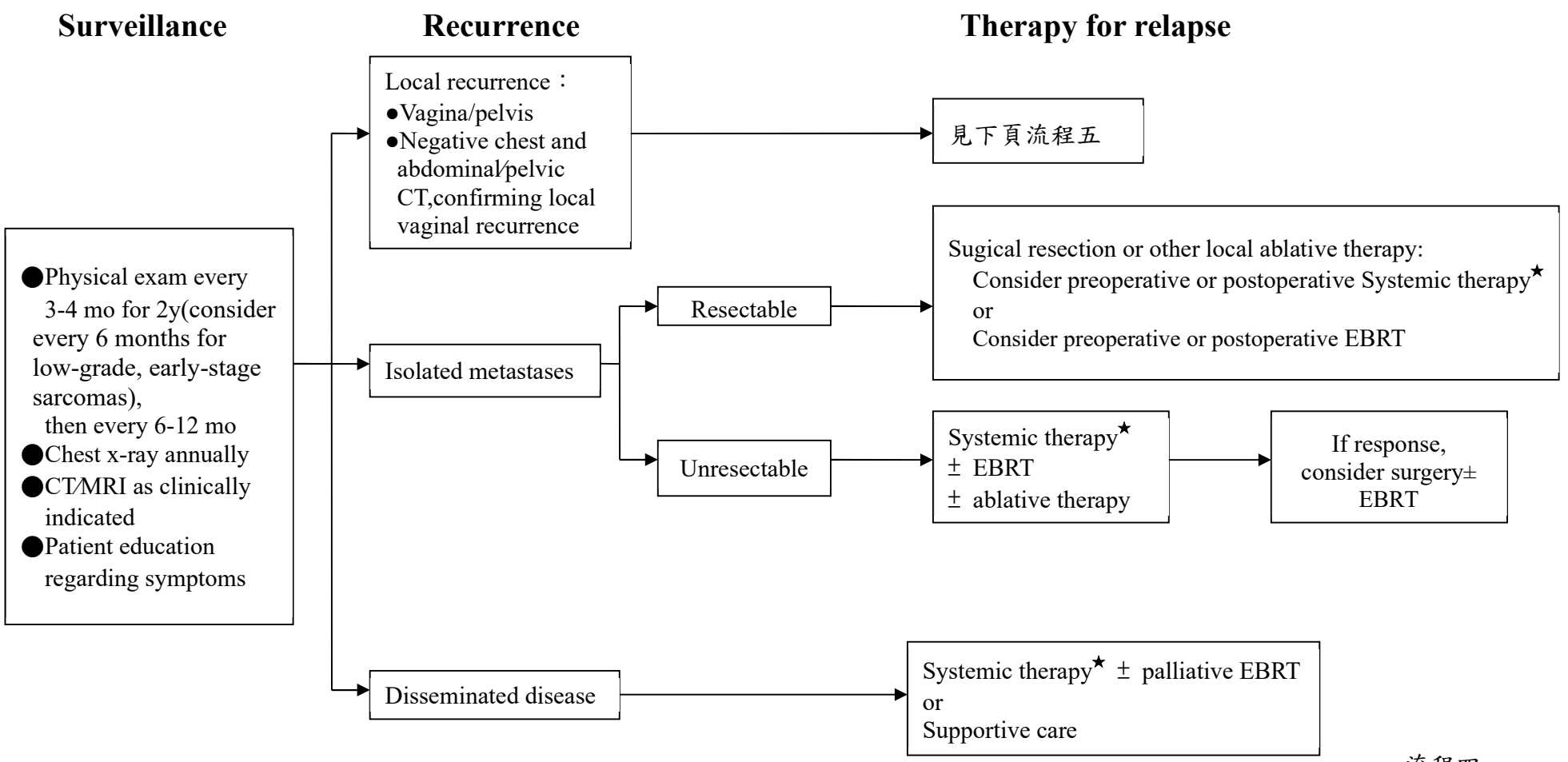
2-2.子宮惡性肉瘤之臨床發現及處置



流程圖三

★Systemic therapy：意為化學治療或荷爾蒙治療或標靶治療或免疫療法(詳見 P.32)

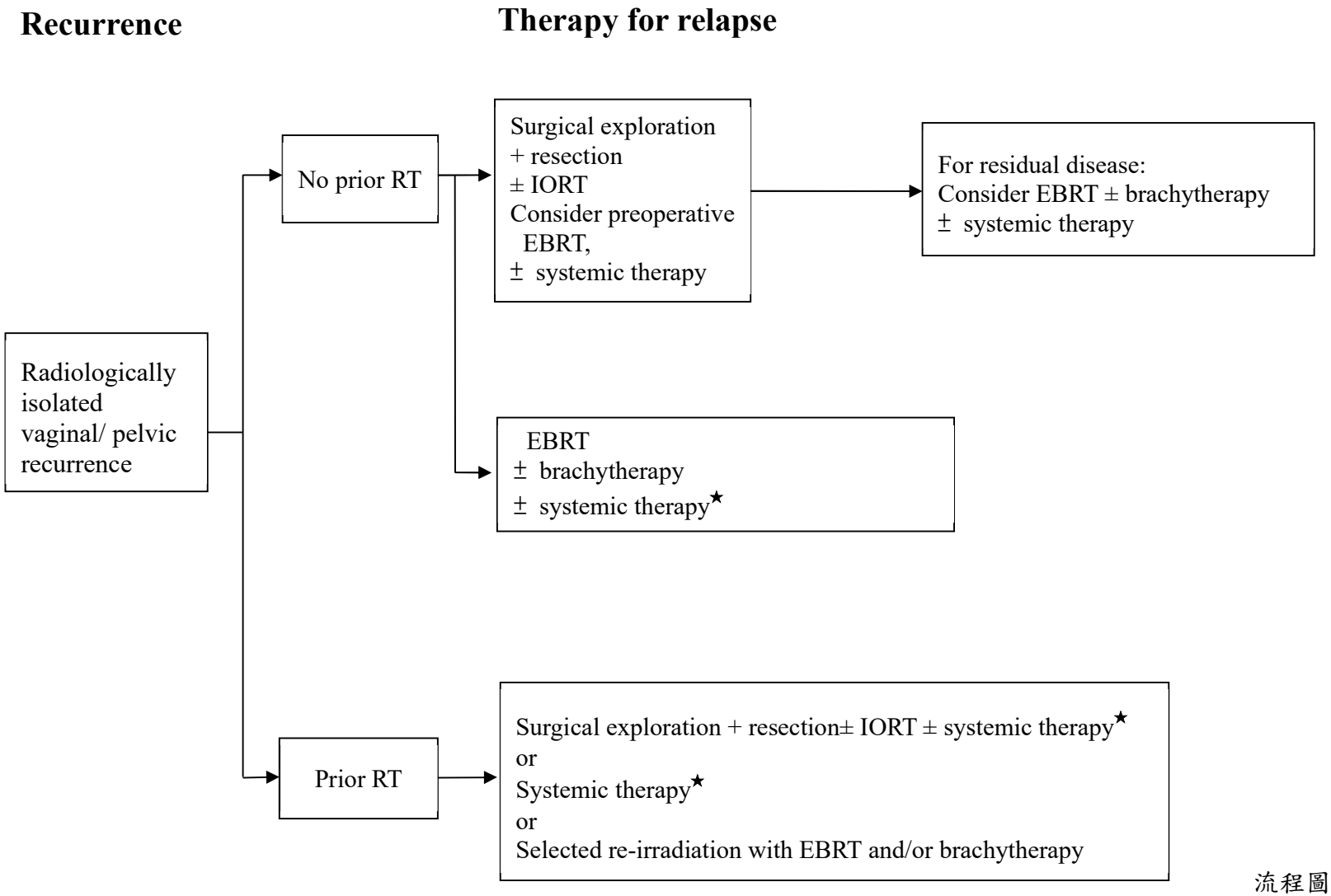
2-3.子宮惡性肉瘤之復發處置



流程四

★Systemic therapy：意為化學治療或荷爾蒙治療或標靶治療或免疫療法(詳見 P.32)

2-3. 子宮惡性肉瘤之復發處置



流程圖五

★Systemic therapy：意為化學治療或荷爾蒙治療或標靶治療或免疫療法(詳見 P.32)

2-4.子宮惡性肉瘤之全身性治療

SYSTEMIC THERAPY FOR UTERINE SARCOMA
(Clinical trials strongly recommended)

Systemic Therapy	HORMONE THERAPY (For Low-grade ESS or Hormone Receptor Positive (ER/PR) uLMS or Adenosarcoma Without SO):
First-Line Therapy *Preferred Regimens:* ★ Doxorubicin ★ Docetaxel/gemcitabine ★ Doxorubicin/trabectedin (for LMS) ★ Doxorubicin/ifosfamide ★ Doxorubicin/dacarbazine *Useful in Certain Circumstances* • Biomarker-directed therapy NTRK gene fusion-positive tumors ◊ Larotrectinib ◊ Entrectinib ◊ Repotrectinib IMT with ALK translocation	*Preferred Regimens:* ★ Aromatase inhibitors for low-grade ESS or adenosarcoma without SO ◊Anastrozole ◊Letrozole ◊Exemestane ★ Consider gonadotropin-releasing hormone (GnRH) analogs with aromatase inhibitors in patients who are premenopausal and not suitable for surgery (BSO) *Other recommended regimens:* ★ Medroxyprogesterone acetate (category 2B for ER/PR positive uLMS) ★ Megestrol acetate (category 2B for ER/PR positive uLMS) ★ Aromatase inhibitors(for ER/PR positive uLMS)

◊ Crizotinib
◊ Ceritinib
◊ Brigatinib
◊ Lorlatinib
◊ Alectinib
• PEComa
Albumin-bound sirolimus

Second-Line or Subsequent Therapy

Preferred Regimens
• Trabectedin(for LMS)

Other Recommended Regimens:
★ Gemcitabine/dacarbazine
★ Gemcitabine/vinorelbine
★ Dacarbazine
★ Gemcitabine
★ Epirubicin
★ Ifosfamide
★ Liposomal doxorubicin
★ Pazopanib(Votrient)
★ Temozolomide
★ Regorafenib
★ Eribulin (category 2B)

Biomarker-Directed Systemic Therapy for Second-Line Treatment
• Pembrolizumab for TMB-H tumors
•Consider PARP inhibitors for BRCA2-altered uLMS
◊Olaparib
◊Rucaparib
◊Niraparib
• PEComa
◊ Sirolimus
◊ Everolimus
◊ Temsirolimus

Adjuvant chemotherapy

Epirubicin+Cisplatin

Epirubicin	60mg/m2	iv	d1
Cisplatin	50mg/m2	iv	d1
Q3W* 3-6 cycles			

Lissoni1, A. Gabriele1, G. Gorga2, et al. Cisplatin-, epirubicin- and aclitaxel-containing chemotherapy in uterine adenocarcinoma.*Ann Oncol* (1997) 8 (10): 969-972

Epirubicin+Carboplatin

Epirubicin	60mg/m2	iv	d1
Carboplatin	AUC (5)	iv	d1
Q3W* 3-6 cycles			

F. Calero, E. Asins-Codoñerb, J. Jimenoc,et al. Epirubicin in advanced endometrial adenocarcinoma: a phase II study of the grupo ginecologico Español para el tratamiento oncologico (GGETO).European Journal of Cancer and Clinical Oncology, Volume 27, Issue 7, July 1991, Pages 864–866

Cisplatin+ Paclitaxel(135)

Cisplatin	50mg/m2	iv	d1
Paclitaxel	135mg/m2	iv	d1
Q3W* 3-6 cycles			

Homesley HD, Filiaci V, Gibbons SK, et al. A randomized phase III trial in advanced endometrial carcinoma of surgery and volume directed radiation followed by cisplatin and doxorubicin with or without paclitaxel: A Gynecologic Oncology Group study. Gynecol Oncol 2009;112:543-552.

Cisplatin+ Paclitaxel(175)

Cisplatin	50mg/m2	iv	d1
Paclitaxel	175mg/m2	iv	d1
Q3W* 3-6 cycles			

Homesley HD, Filiaci V, Gibbons SK, et al. A randomized phase III trial in advanced endometrial carcinoma of surgery and volume directed radiation followed by cisplatin and doxorubicin with or without paclitaxel: A Gynecologic Oncology Group study. Gynecol Oncol 2009;112:543-552.

Carboplatin+Paclitaxel(135)

Carboplatin	AUC (5)	iv	d1
Paclitaxel	135mg/m2	iv	d1

Note:腎功能不好者可使用
Q3W* 3-6 cycles

Miller D, Filiaci V, Fleming G, et al. Randomized phase III noninferiority trial of first line chemotherapy for metastatic or recurrent endometrial carcinoma: a Gynecologic Oncology Group study [abstract]. Gynecol Oncol 2012;125:771.

Carboplatin+Paclitaxel(175)

Carboplatin	AUC (5)	iv	d1
Paclitaxel	175mg/m2	iv	d1
Note:腎功能不好者可使用			
Q3W* 3-6 cycles			

Miller D, Filiaci V, Fleming G, et al. Randomized phase III noninferiority trial of first line chemotherapy for metastatic or recurrent endometrial carcinoma: a Gynecologic Oncology Group study [abstract]. Gynecol Oncol 2012;125:771.

Doxorubicin(Adriamycin) +Cisplatin

Doxorubicin	50mg/m^2	iv	d1
Cisplatin	50mg/m^2	iv	d1
Q3W*3-6 cycles			

Homesley HD, Filiaci V, Gibbons SK, et al. A randomized phase III trial in advanced endometrial carcinoma of surgery and volume directed radiation followed by cisplatin and doxorubicin with or without paclitaxel: A Gynecologic Oncology Group study. Gynecol Oncol 2009;112:543-552.

Doxorubicin(Adriamycin) +Carboplatin

Doxorubicin	50mg/m^2	iv	d1
Carboplatin	AUC (5)	iv	d1
Note:腎功能不好者可使用			
Q3W*3-6 cycles			

Homesley HD, Filiaci V, Gibbons SK, et al. A randomized phase III trial in advanced endometrial carcinoma of surgery and volume directed radiation followed by cisplatin and doxorubicin with or without paclitaxel: A Gynecologic Oncology Group study. Gynecol Oncol 2009;112:543-552.

Cisplatin+Ifosfamide

Cisplatin	20mg/m^2	iv	d1
Ifosfamide	1.5g/m^2	iv	d1
Q3W* 3-6 cycles			

Wolfson, A. H., Brady, M. F., Rocereto, T., Mannel, R. S., Lee, Y. C., Futoran, R. J., Cohn, D. E., & Ioffe, O. B. (2007). A Gynecologic Oncology Group randomized phase III trial of whole abdominal irradiation (WAI) versus cisplatin–ifosfamide and mesna (CIM) as post-surgical therapy in stage I–IV carcinosarcoma (CS) of the uterus. Gynecologic Oncology, 107(2), 177–185.

Carboplatin+Ifosfamide

Carboplatin	AUC (5) iv	d1
Ifosfamide	1.5g/m^2 iv	d1
Note:腎功能不好者可使用		
Q3W* 3-6 cycles		

A. Pawinski1, a, e, S. Tumolob, G. Hoeselc, A. Cervantesd, et al. Cyclophosphamide or ifosfamide in patients with advanced and/or recurrent endometrial carcinoma: a randomized phase II study of the EORTC Gynecological Cancer Cooperative Group.European Journal of Obstetrics & Gynecology and Reproductive Biology Volume 86, Issue 2, October 1999, Pages 179–183

Doxorubicin (Adriamycin)

Doxorubicin 75mg/m^2 iv bolus.	d1
Repeat cycle every 31 days OR	
60mg/m^2–70mg/m^2 iv typically dosed every 3 weeks.	

1.NCCN Clinical Practice Guidelines in Oncology™. Uterine Neoplasms.v 2.2012. Available at: http://www.nccn.org/professionals/physician_gls/pdf/uterine.pdf. Accessed February 24, 2012.
2. Sarcoma Meta-analysis Collaboration (SMAC). Cochrane Database Syst Rev. 2000;4:CD001419.

Gemcitabine (Gemzar) +docetaxel (Taxotere)

Gemcitabine 900mg/m2 iv over 90 min(自費),	d1
Docetaxel 100mg/m2 iv over 60 min,	d8
Repeat cycle every 3 weeks until disease progression or toxicity occurs.	
NOTE: Patients with prior pelvic irradiation received Gemcitabine 675mg/m2 iv and Docetaxel 75mg/m2 iv	

1.NCCN Clinical Practice Guidelines in Oncology™. Uterine Neoplasms.v 2.2012. Available at: http://www.nccn.org/professionals/physician_gls/pdf/uterine.pdf. Accessed February 24, 2012.
2.Hensley ML, Blessing JA, Mannel R, Rose PG. Fixed-dose rate gemcitabine plus docetaxel as first-line therapy for metastatic uterine leiomyosarcoma: a Gynecologic Oncology Group phase II trial. Gynecol Oncol. 2008;109:329–34.

Gemcitabine

Gemcitabine 1,000mg/m2 iv. (自費)	d1,8,15
Q4W	

1.NCCN Clinical Practice Guidelines in Oncology™. Uterine Neoplasms.v 2.2012. Available at: http://www.nccn.org/professionals/physician_gls/pdf/uterine.pdf.

Accessed February 24, 2012.
2.Look KY, Sandler A, Blessing JA, Lucci JA 3rd, Rose PG; Gynecologic Oncology Group (GOG) Study. Phase II trial of gemcitabine as second-line chemotherapy of uterine leiomyosarcoma: a Gynecologic Oncology Group (GOG) Study. Gynecol Oncol. 2004;92:644–647.

Gemcitabine+Carboplatin

Gemcitabine	1,000mg/m2	iv. (自費)	d1,8,15
Carboplatin	AUC(5)	iv	d1
Q4W			

1.NCCN Clinical Practice Guidelines in Oncology™. Uterine Neoplasms.v 2.2012. Available at: http://www.nccn.org/professionals/physician_gls/pdf/uterine.pdf. Accessed February 24, 2012.
2.Look KY, Sandler A, Blessing JA, Lucci JA 3rd, Rose PG; Gynecologic Oncology Group (GOG) Study. Phase II trial of gemcitabine as second-line chemotherapy of uterine leiomyosarcoma: a Gynecologic Oncology Group (GOG) Study. Gynecol Oncol. 2004;92:644–647.

Doxorubicin liposome

Doxorubicin liposome	45mg/ m^2 iv	d1
Q3W* 3-6 cycles		

Pujade-Lauraine E, Wagner U, Aavall-Lundqvist E, et al. Pegylated liposomal doxorubicin and carboplatin compared with paclitaxel and carboplatin for patients with platinum-sensitive ovarian cancer in late relapse. J Clin Oncol 2010;28:3323-3329.

Paclitaxel(135)+Doxorubicin liposome(Lipo-dox)

Paclitaxel	135mg/m2 iv	d1
Doxorubicin liposome	45mg/ m^2 iv	d1
Q3W* 3-6 cycles		

Pujade-Lauraine E, Wagner U, Aavall-Lundqvist E, et al. Pegylated liposomal doxorubicin and carboplatin compared with paclitaxel and carboplatin for patients with platinum-sensitive ovarian cancer in late relapse. J Clin Oncol 2010;28:3323-3329.

Paclitaxel(175)+Doxorubicin liposome(Lipo-dox)

Paclitaxel	175mg/m2 iv	d1
Doxorubicin liposome	45mg/ m^2 iv	d1
Q3W*3-6 cycles		

Pujade-Lauraine E, Wagner U, Aavall-Lundqvist E, et al. Pegylated liposomal doxorubicin and carboplatin compared with paclitaxel and carboplatin for patients with platinum-sensitive ovarian cancer in late relapse. J Clin Oncol 2010;28:3323-3329.

Cisplatin+Doxorubicin liposome(Lipo-dox)

Cisplatin	75 mg/m^2 iv	d1
Doxorubicin liposome	45mg/ m^2 iv	d1

Q3W* 3-6 cycles

Pujade-Lauraine E, Wagner U, Aavall-Lundqvist E, et al. Pegylated liposomal doxorubicin and carboplatin compared with paclitaxel and carboplatin for patients with platinum-sensitive ovarian cancer in late relapse. J Clin Oncol 2010;28:3323-3329.

Carboplatin+Doxorubicin liposome(Lipo-dox)

Carboplatin	AUC (5)	iv	d1
Doxorubicin liposome	45mg/ m^2	iv	d1
Q3W* 3-6 cycles			

Pujade-Lauraine E, Wagner U, Aavall-Lundqvist E, et al. Pegylated liposomal doxorubicin and carboplatin compared with paclitaxel and carboplatin for patients with platinum-sensitive ovarian cancer in late relapse. J Clin Oncol 2010;28:3323-3329.

Trabectedin(Yondelis)+Doxorubicin liposome(Lipo-dox)

Trabectedin	1.2mg/ m^2	iv	d1
Doxorubicin liposome	45mg/ m^2	iv	d1
Q3W*3-6 cycles			

Pautier, P., Italiano, A., Piperno-Neumann, S.,et al.(2024). Doxorubicin–trabectedin with trabectedin maintenance in leiomyosarcoma. The New England Journal of Medicine, 391(9), 789–799.

Pazopanib(Votrient)

Pazopanib(Votrient)	800mg	po
QD		

Veli Sunar , Vakkas Korkmaz , Serkan Akin, et al.Efficacy of Pazopanib in patients with metastatic uterine sarcoma: A multi-institutional study.JBUON 2019; 24(6): 2327-2332

三、妊娠組織瘤

1. Definition

Complete hydatidiform mole. It arises from the fertilisation of an empty ovum lacking maternal genes. [1] The sperm then duplicates, making a diploid number of chromosomes which are therefore entirely male in origin and thus no embryonic tissue is present. [1] The overgrowth of the placenta is benign but can metastasise if left untreated. [2,3]

Partial hydatidiform moles differ in that the ovum retains its maternal genes, which results in a triploid

chromosomal pattern after the addition of duplicated sperm to the normal ovum. [1] In this case a foetus may be present but survival after 8 weeks is unlikely due to its abnormal genetic make-up. [2]

Invasive moles occur as a result of local invasion of the myometrium by a complete or partial mole. [2] In the spectrum of malignant potential they are intermediate between hydatidiform moles and choriocarcinomas. [4]

Choriocarcinoma is a rare and overtly malignant condition both clinically and histologically. [2] It occurs when chorionic cells become malignant and metastasise to other parts of the body. [2] A choriocarcinoma can therefore arise subsequent to a molar pregnancy, or follow an otherwise normal pregnancy or miscarriage. [1,2]

PSTT are the least common form of GTD, comprising less than 2% of all cases. [2,5] They arise from the non-villous trophoblast and are diploid in nature. [2] In contrast to the other GTDs, it is characterised by a late presentation (months to years) of symptoms caused by a prior pregnancy, miscarriage or hydatidiform mole. [2]
The secretion of human Chorionic Gonadotrophin (hCG) is characteristic of all GTDs and is therefore used as part of their diagnosis, treatment and follow up. [2]

2. Treatment and follow-up:

2.1.Partial and complete mole

For complete and partial molar pregnancies suction evacuation (with dilation) is recommended. [2] An ultrasound scan should be performed prior to evacuation, to confirm the diagnosis, assess for the possible presence of a foetus and ensure absence of theca lutein cysts. [2,4] Other preoperative evaluations include complete history, examination, measurement of baselines serum hCG level, chest x-ray, full blood count, coagulation profile and liver, renal and thyroid function tests. [2,6] If excessive bleeding occurs after a complete evacuation, a single dose of oxytocin can be administered. [2]
Surveillance with serial serum hCG determinations commences within 48 hours following evacuation to obtain a baseline serum hCG level. [2] Thereafter this is performed weekly until the hCG level returns to normal. [2]
If the serum hCG level returns to normal within 8 weeks post-evacuation, monitoring of serum hCG levels can be stopped at 6 months. [2] However, if they do not monitoring stops 6 months after the first normal value following

normalisation. [2,4] After normalisation of the serum hCG levels, monitoring continues through urine hCG measurements monthly. [2,4]

Following a molar evacuation, patients should avoid pregnancy until after the completion of the surveillance period. [2] Pregnancy naturally increases serum hCG levels, which could be perceived as abnormal and ultimately means that the hCG levels can no longer be used to monitor the patient. [2] Although, the oral contraceptive pill (and Hormone Replacement therapy) cannot be used until normal hCG values are obtained, thus other methods of contraception should be in place. [2,7]

Complete mole frequently proceeds to invasive disease with 8-20% of patients requiring chemotherapy, whereas Partial mole rarely becomes malignant, with only 0.5% of patients requiring chemotherapy. [2,3] A rise in the hCG level during surveillance can be used to detect this and patients should be treated with the appropriate chemotherapy as outlined below. [2]

2.2.Indications for chemotherapy

The treatment of women with GTD is undertaken in conjunction with Charing Cross Hospital. Chemotherapy cycles are administered by them and therefore the assessment of whether or not a patient requires chemotherapy is decided using their guidelines [2].

1. Brain, liver, GI mets or lung mets >2cm on CXR
2. Histological evidence of choriocarcinoma
3. Heavy PV bleeding or GI/intraperitoneal bleeding
4. Pulmonary, vulval or vaginal mets unless the hCG level is falling
5. Rising hCG in two consecutive serum samples
6. hCG > 20,000 IU/L more than 4 weeks after evacuation
7. hCG plateau in 3 consecutive serum samples
8. Raised hCG level 6 months after evacuation (even if falling)

Any one of these findings would be considered an indication for chemotherapy, however further assessments are carried out by Charing Cross Hospital.

2.3.FIGO Indications for chemotherapy treatment [2,7]

1. hCG plateau of 4 values +/- 10% over a 3 week period
2. hCG increase of >10% of three values over a 2 week period
3. Persistence of hCG for more than 6 months after molar evacuation.

4. Staging for chemotherapy

Human chorionic gonadotrophin (hCG) is a hormone that is predominantly produced by syncytiotrophoblast cells. [1,2] The measurement of hCG allows for an estimation of the number of proliferating cells. [2] This forms the basis of disease risk assessment in patients with GTD, and allows for the monitoring of subsequent responses to treatment. [2]

There is now a revised 2000 FIGO prognostic score table [2,7] which has parameters that allow clinicians to determine the risk category of individual patients. [2]

Scores	0	1	2	4
Age	＜40	≧40	.	.
Antecedent pregnancy	Mole	Abortion	Term	.
Months from index pregnancy	＜4	4-6	7-13	＞13
Pre-Treatment hCG	＜1,000	1,000-10,000	10,000-100,000	＞100,000
Largest Tumour Size	.	3-5cm	≧5cm	.
Site of mets	Lung	Spleen, kidney	Gastro-Intestinal	Brain, Liver
Number of Mets	.	1-4	5-8	＞8
Previous chemotherapy	.	.	Single agent	Two or more drug

According to FIGO 2002, if the patient scores between 0-6 they are considered to be in the low risk category and initial treatment will involve a single chemotherapeutic agent. [2,8] However if their score is greater than 7, then the

treatment regime will involve multi-agent combinations of chemotherapy. [2,8]

5. Treatment

5.1.Low risk disease management

The standard treatment of low risk GTD is Methotrexate administered intra-muscularly, with oral Folinic Acid rescue. [2,9] The first course of treatment is administered in hospital to minimise complications which may arise due to the rapid shrinkage of the tumour. [2] Cycles subsequent to this are administered at home. [2]
The treatment is generally well tolerated without major toxicity. [2] Common side effects include pleural inflammation, mucositis, and asymptomatic elevation of liver function tests. [2,9] Alopecia, nausea and myelosuppression are possible but extremely rare. [2,9]
To minimise the risk of development of CNS disease in patients with lung metastasis, CNS prophylaxis with intra-thecal Methotrexate (12.5mg) is also added, and administered at 2 week intervals on 3 occasions. [2,9]
Treatment is continued for 6 weeks after the normalisation of hCG levels. [2,9] However, if patients have an inadequate response to Methotrexate therapy (as shown by an hCG plateau or rise), the treatment is switched to second line therapy using single agent Actinomycin D or EMA/CO combination chemotherapy (consisting of Etoposide, Methotrexate, Actinomycin D, Cyclophosphamide and Vincristine), if the hCG level is above 300iu/L. [2,9]

5.2.High risk disease management

EMA/CO chemotherapy has shown a cure rate of 86% for high risk patients. [2,10] This intense treatment combines 5 chemotherapy agents delivered in 2 cycles one week apart (see appendix 8.2 for full details). [2,10] This appears to be the most effective approach to this rapidly proliferating malignancy. [2] In patients with cerebral metastasis at the time of diagnosis of GTD (4%), treatment may also include surgical resection if the disease is superficial, and higher doses of chemotherapy may be implemented to enhance penetration into the CNS. [2,11]
G-CSF (Granylocyte-Colony Stimulating Factor) support is frequently helpful as these drugs can be fairly myelosuppressive. [2,11] Life threatening toxicity is rare and the majority of patients tolerate treatment without any

major problems. [2]

Treatment is continued for 6 weeks after the normalisation of hCG levels, although the dose of Etoposide may be reduced after the hCG levels normalise to minimise the risk of developing secondary malignancies. If patients develop resistance to the EMA/CO treatment regime (17%), a change to a second line drug treatment is required. The general replacement is EP/EMA (consisting of Etoposide-Cisplatin and Etoposide-Methotrexate-Actinomycin D) which, combined with surgery to defined drug resistant areas of the uterus, produces a cure rate of 90% in this minority of patients.

5.3.Management of PSTT

Prognosis for these patients is dependent upon the time of presentation after the antecedent pregnancy, but data from Charing Cross hospital showed a 100% cure rate for those presenting within 4 years of the antecedent pregnancy (later presentation carries a poorer prognosis). [2,12]
These tumours are characterised by resistance to the conventional chemotherapy used in the treatment of GTD, so a hysterectomy should be considered early in the course of treatment as a curative measure. [2,4] For patients with disseminated disease, EP/EMA chemotherapy is recommended, which can be stopped 6-8 weeks after normalisation of the hCG levels. [2,] Following this, hysterectomy is still also recommended. [2]

6. Follow-up

6.1.Post-chemotherapy follow up

Patients are reviewed 6 weeks after the completion of chemotherapy and the following inquiries should be undertaken, as stated by Charing Cross Hospital [2] :

- Recheck the sites of original disease
- Doppler US of pelvis
- CXR or CT/MRI if abnormal at presentation
- Advise on the need for contraception for 12 months
- Advise re avoidance of excess sunlight exposure
- Outline the risk of relapse

All patients have routine hCG marker follow-up for life. [2]

6.2.Post treatment hCG follow-up as stated by Charing Cross Hospital [2]

Year 1	→	2-weekly serum and urine hCG for 1 – 6 months
		2 weekly urine hCG for 7-12 months
Year 2	→	4 weekly urine hCG
Year 3	→	8 weekly urine hCG
Year 4	→	3-monthly urine hCG
Year 5	→	4-monthly urine hCG
Year 6 – life	→	6-monthly urine hCG

Note: hCG levels should also be taken 6 weeks after the delivery of any future pregnancy. [2\]

Women should be advised not to conceive until the hCG level has been normal for six months. (level C).

GTD Chemotherapy Protocol【Primary】

GTD-Low risk Methotrexate-FA

MTX	1mg/kg IM	d 1,3,5,7
Folinic acid	0.1mg/kg IM	d 2,4,6,8
qow		

1.McNeish IA, Strickland S, Holden L, Rustin GJ, Foskett M, Seckl MJ, Newlands ES. Low-risk persistent gestational trophoblastic disease: outcome after initial treatment with low-dose methotrexate and folinic acid from 1992 to 2000. J Clin Oncol. 2002 Apr 1;20(7):1838-44
2.Newlands ES, Bagshawe KD, Begent RH, Rustin GJ, Holden L. Results with the EMA/CO (etoposide, methotrexate, actinomycin D, cyclophosphamide, vincristine) regimen in high risk gestational trophoblastic tumours, 1979 to 1989. Br J Obstet Gynaecol. 1991 Jun;98(6):550-7.

GTD-Low risk Actinomycin-D

Actinomycin-D	1.25 mg/m2 iv	d1
q2w		

Newlands ES, Bagshawe KD, Begent RH, Rustin GJ, Holden L. Results with the EMA/CO (etoposide, methotrexate, actinomycin D, cyclophosphamide, vincristine) regimen in high risk gestational trophoblastic tumours, 1979 to 1989. Br J Obstet Gynaecol. 1991 Jun;98(6):550-7.

GTD-High EMA/CO

Etoposide	100 mg/m2	d1
Actinomycin-D	0.5 mg	d1
MTX	100mg/m2 iv push	d1
MTX	200mg/m2 iv 12hrs	d1
Etoposide	100 mg/m2	d2
Actinomycin-D	0.5 mg	d2
Folinic acid	15 mg P.O q12h*4	d2
Cyclophophamide	60	d8

Newlands ES, Bagshawe KD, Begent RH, Rustin GJ, Holden L. Results with the EMA/CO (etoposide, methotrexate, actinomycin D, cyclophosphamide, vincristine) regimen in high risk gestational trophoblastic tumours, 1979 to 1989. Br J Obstet Gynaecol. 1991 Jun;98(6):550-7.

GTD Chemotherapy Protocol【Resistant】

GTD-Resistant EMA/PE

Etoposide	100 mg/m2	d1
Actinomycin-D	0.5 mg	d1
MTX	100mg/m2 iv push	d1
MTX	200mg/m2 iv 12hrs	d1
Etoposide	100 mg/m2	d2
Actinomycin-D	0.5 mg	d2
Folinic acid	15 mg P.O q12h*4	d2
Cisplatin	75~80 mg	d8

1.Newlands ES, Bagshawe KD, Begent RH, Rustin GJ, Holden L. Results with the EMA/CO (etoposide, methotrexate, actinomycin D, cyclophosphamide, vincristine) regimen in high risk gestational trophoblastic tumours, 1979 to 1989. Br J Obstet Gynaecol. 1991 Jun;98(6):550-7.
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四、緩和照護原則

若預期疾病難以治癒(如子宮體癌第四期或是子宮體癌復發的病人)，病人存活期大於 6 個月，緩和醫療的及早介入能減輕癌症病人及家屬在生理、社會、心理等問題，改善病人生活品質。許多民眾都會將緩和醫療與安寧照護畫上等號，其實它們還是有差異性，當癌病人接受緩和醫療服務時，也可同時併行癌症治療，但接受安寧醫療後，會由安寧醫療團隊接受後續照護，不再有癌症治療介入。(Thomas J et al.2012)

緩和收案條件:

1.原發或復發第 IV 期個案、卵巢癌第 IIIC 期個案(生命預期存活期＞6 個月) 。

2.經醫師及團隊評估，個案身體狀況不適用於常規治療方式(如 ECOG 3)。

3.癌症確診後拒絕接受積極治療之個案。

4.因疾病進展出現不適症狀，需住院症狀控制之個案，排除化療副作用之個案。

5.有身心靈需求之個案。

五、安寧照護原則

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，即可轉介安寧醫療團隊（彭等，2006）。

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七、子宮體癌各期治療完治定義

期別	治療方式	完治定義	備註
第 I 期	1.OP 2.RT	1.完成黃體激素(Megestrol、Medroxyprogesterone、Levonorgestrel IUD、Leupline)治療，每 3-6 個月子宮搔刮術(子宮內膜擴刮術或切片)，6 個月完治 or 2.完成手術 or 3.完成 EBRT and/or brachytherapy	
第 II 期	1.OP 2.RT ± C/T	1.完成手術 or 2.完成 EBRT +brachytherapy ± C/T	
第 III 期	1.OP 2.RT ± C/T 3.C/T + OP	1.完成手術 or 2.完成 EBRT +brachytherapy + C/T or 3.完成術前化療後再開刀	建議基因檢測及免疫治療
第 IV 期	1.OP 2.CCRT 3.C/T + OP 4.Systemic therapy	1.接受手術或 C/T 3 次或 R/T 一個療程或荷爾蒙治療 3 個月完治 2.接受『安寧照護』	建議基因檢測及免疫治療
High risk carcinoma 第 I~III 期	OP + Systemic therapy ± EBRT ± brachytherapy	完成手術+ Systemic therapy	漿液狀腺癌 (serous adenocarcinoma) 或亮細胞癌 (clear cell adenocarcinoma) 或未分化/去分化癌 (Undifferentiated/ Dedifferentiated carcinoma) 或癌肉瘤 Carcinosarcoma

2026/11/19