



中山醫學大學附設醫院

卵巢癌診療指引

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	美國 National Comprehensive Cancer Network (NCCN) 的 Practice Guide-lines in Ovarin Cancer 2024,V3 版	美國 National Comprehensive Cancer Network (NCCN) 的 Practice Guide-lines in Ovarin Cancer 2025,V3 版		
3	<ul style="list-style-type: none"> ◆ 身體理學檢查及個人病史探詢 ◆ 家族史評估 ◆ 婦產科超音波檢查 ◆ 胸部X光檢查 ◆ 腫瘤指標 (tumor marker) 包含：CA125、CEA*。 ◆ 若年齡小於35歲(含)治療前應評估的腫瘤指標：CA125、AFP、β-hCG、CEA、LDH*。 ◆ 全血球計數、血清生化檢查 ◆ 可安排電腦斷層掃描或核磁共振掃描來協助擬定適當的手術計畫 ◆ 建議進行遺傳學檢查*(如果以往都沒做過，建議檢查) ◆ 若臨床上懷疑有腸道之壓迫或阻塞、或疑似轉移性卵巢癌，則可安排上消化道內視鏡、大腸鏡或銀劑顯影等胃腸道檢查 ◆ 對於固體性 (solid) 或複雜性 (complex) 卵巢腫瘤，一般都避免用細針抽吸 (fine-needle aspiration) 的方式來做細胞學檢查 ◆ 腹腔鏡不宜使用於懷疑是卵巢惡性腫瘤的患者 ◆ 生殖內分泌和不孕症 (REI) 評估根據臨床指示 	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; vertical-align: top;"> <p>主要檢查</p> <ul style="list-style-type: none"> ◆ 身體理學檢查及個人病史探詢 ◆ 家族史評估 ◆ 婦產科超音波檢查 ◆ 胸部X光檢查 ◆ 腫瘤指標 (tumor marker)：CA125。 ◆ 全血球計數、血清生化檢查 ◆ 可安排電腦斷層掃描或核磁共振掃描來協助擬定適當的手術計畫 </td> <td style="width: 50%; vertical-align: top;"> <p>次要檢查</p> <ul style="list-style-type: none"> ◆ 建議進行遺傳學檢查*(如果以往都沒做過，建議檢查) ◆ 若臨床上懷疑有腸道之壓迫或阻塞、或疑似轉移性卵巢癌，則可安排上消化道內視鏡、大腸鏡或銀劑顯影等胃腸道檢查 ◆ 對於實質性 (solid) 或複雜性 (complex) 卵巢腫瘤，一般都避免用細針抽吸 (fine-needle aspiration) 的方式來做細胞學檢查 ◆ 腫瘤指標 (tumor marker)：CEA；若年齡小於35歲(含)治療前應評估的腫瘤指標：AFP、β-hCG、CEA、LDH*。 ◆ 腹腔鏡不宜使用於懷疑是卵巢惡性腫瘤的患者 ◆ 生殖內分泌和不孕症 (REI) 評估根據臨床指示 </td> </tr> </table>	<p>主要檢查</p> <ul style="list-style-type: none"> ◆ 身體理學檢查及個人病史探詢 ◆ 家族史評估 ◆ 婦產科超音波檢查 ◆ 胸部X光檢查 ◆ 腫瘤指標 (tumor marker)：CA125。 ◆ 全血球計數、血清生化檢查 ◆ 可安排電腦斷層掃描或核磁共振掃描來協助擬定適當的手術計畫 	<p>次要檢查</p> <ul style="list-style-type: none"> ◆ 建議進行遺傳學檢查*(如果以往都沒做過，建議檢查) ◆ 若臨床上懷疑有腸道之壓迫或阻塞、或疑似轉移性卵巢癌，則可安排上消化道內視鏡、大腸鏡或銀劑顯影等胃腸道檢查 ◆ 對於實質性 (solid) 或複雜性 (complex) 卵巢腫瘤，一般都避免用細針抽吸 (fine-needle aspiration) 的方式來做細胞學檢查 ◆ 腫瘤指標 (tumor marker)：CEA；若年齡小於35歲(含)治療前應評估的腫瘤指標：AFP、β-hCG、CEA、LDH*。 ◆ 腹腔鏡不宜使用於懷疑是卵巢惡性腫瘤的患者 ◆ 生殖內分泌和不孕症 (REI) 評估根據臨床指示
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7	新增	新增 Consider HIPEC 治療選擇		
11	新增 HR deficient 治療選擇	Homologous recombination (HR) proficient or status unknown→ Bevacizumab HR deficient→ Bevacizumab + olaparib (1) or Bevacizumab + niraparib(if unable to tolerate olaparib) or Bevacizumab or Olaparib (2B)		



15	修改 Mucinous carcinoma of the ovary 處置	<p>七、其他卵巢癌組織病理學之處置- Mucinous carcinoma of the ovary⁶¹</p> <p>☆考慮進一步的檢測以幫助鑑定轉移性胃腸癌性腫瘤與原發性粘液性卵巢癌⁶¹</p> <p>流經圖六⁶¹</p>
17	修改 Low-grade serous carcinoma monitoring/follow up for recurrence 追蹤	4.依臨床指示安排影像學檢查(如：胸／腹／骨盆電腦斷層、胸部電腦斷層、腹／骨盆核磁共振等) 8 提供長期健康照護與存活性照護
22	手術切除 or 觀察	新增切片
24	niraparib or olaparib or Rucaparib	刪除
31	新增	<p>Mirvetuximab soravtansine-gynx (for FRα-expressing tumors ≥75% positive tumor cells) Mirvetuximab/bevacizumab (for FRα-expressing tumors ≥50% positive tumor cells) (category 2B)</p>
33	新增	<p>Mirvetuximab soravtansine-gynx/bevacizumab (for FRα-expressing tumors > 25% positive tumor cells) (category 2B) For mucinous carcinoma: • FOLFIRI ± bevacizumab (category 2B)</p>
43	刪除 Adjuvant second line therapy	修改為 Advanced/Recurrence regimens



47	新增 Palliative regimens	Gemcitabine+ Doxorubicin liposome(Lipodox) 、 Gemcitabine+Doxorubicin liposome(Lipodox)+ Bevacizumab Paclitaxel Doxorubicin liposome (Lipodox) Doxorubicin liposome (Lipodox) + Bevacizumab Carboplatin + Doxorubicin liposome(Lipodox) Carboplatin + Doxorubicin liposome(Lipodox) + Bevacizumab Topotecan 、 Cisplatin+Topotecan Cisplatin+Topotecan+Bevacizumab
50	新增 Maintenance Therapy	Olaparib(Lynparza) , Note: HRD(+) Niraparib(Zejula) , Note:無須檢驗 HRD 但是要 platin-sensitivity Bevacizumab
51	<p>Principles of Radiation Therapy for Ovarian cancer</p> <p>Indication:</p> <ul style="list-style-type: none"> ● Post-operative Stage \geq IC Gr.3 and if <u>not a chemotherapy candidate</u> and <u><2cm residual tumor</u> <ul style="list-style-type: none"> ● Whole abdominal irradiation ● Whole field 30Gy at 1.2-1.5Gy/Fraction , para-aortic boost to 45Gy, pelvic boost to 45-55Gy ● Radiotherapy for palliation of symptomatic tumor deposits <p>Note: Tomotherapy preferred(Patient have to pay for daily image-guidance.)</p>	<p>1.Overall Role of Radiation Therapy</p> <ul style="list-style-type: none"> ● 放射治療並非卵巢癌之常規根治性治療方式。 ● 卵巢癌之標準治療仍以**腫瘤減積手術 (cytoreductive surgery) 合併全身性治療 (systemic therapy) **為核心。 ● 放射治療主要扮演輔助性、症狀導向或局部疾病控制之角色，是否使用須依病人臨床狀況進行個別化評估。 <p>2.Palliative Radiation Therapy</p> <p>可用於緩解腫瘤相關症狀，包括但不限於：疼痛、出血、壓迫症狀、骨轉移等。治療目標為 symptom control 與 quality of life 改善。治療劑量應視個別情況訂定。</p> <p>3.無法手術切除之殘存腫瘤 (Unresectable Residual Disease)</p> <p>對於因解剖位置、重大共病或手術風險過高，而無法進行再次手術切除之局部殘存腫瘤，可考慮 localized RT 作為局部疾病控制或症狀緩解之治療方式。此情境下 RT 之治療目的非根治，應審慎評估正常組織耐受度來訂定個別治療劑量。</p> <p>4.Oligometastatic Disease</p>



		<p>於高度選擇之病人，可考慮 localized RT 或 stereotactic body radiation therapy (SBRT)作為局部控制手段。</p> <p>此屬非標準治療策略，建議經 multidisciplinary team (MDT) 討論後執行。</p> <p>5. Non-recommended Use</p> <ul style="list-style-type: none"> ● 不建議常規術後輔助放射治療 (adjuvant RT)。 <p>不建議預防性全腹腔放射治療 (prophylactic whole abdominal RT)。</p>
52	新增	<p>緩和收案條件：</p> <ol style="list-style-type: none"> 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。
60	第三、四期完治定義：完成手術+4-6 次的化療	<p>完成手術+6 次的化療</p> <p>第三、四期新增備註：建議基因檢測</p>



目 錄

一、	前言-----	P1
二、	風險因子、篩檢與預防-----	P2
三、	疑似惡性卵巢腫瘤治療前的評估-----	P3
四、	治療主軸-----	P3
五、	分期-----	P4
六、	卵巢上皮癌之處置-----	P7
七、	其他卵巢癌組織病理學之處置-----	P12
八、	追蹤及復發處置-----	P23
九、	化學治療-----	P26
十、	放射線治療-----	P51
十一、	緩和照護原則-----	P51
十二、	安寧照護原則-----	P52
十三、	參考文獻-----	P52
十四、	卵巢癌各期治療完治定義 -----	P60



一、前言

本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。

早期的卵巢癌往往沒有症狀，因而一旦發現，75%的患者已達到第III /IV期；症狀多半為腹部腫大、脹氣等腹部不適症狀。上皮性卵巢癌通常經由局部的瀉落 (local shedding) 在腹膜腔裡擴散；淋巴結轉移的機率：第一期的患者有24%淋巴結轉移的機率，第二期的患者有50%，第三期的患者有74%；轉移到骨盆淋巴結 (pelvic lymph node) 與主動脈旁淋巴結 (para-aortic lymph node)的機率相當；也有經由橫膈膜而侵襲肋膜腔的情況發生。

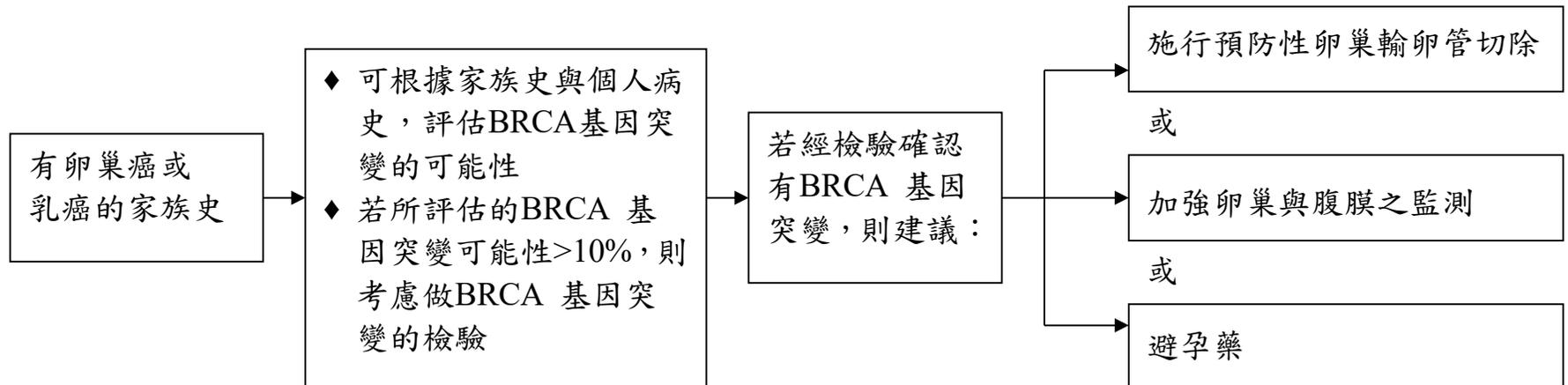
卵巢癌患者若有下列條件則預後較佳；反之則預後較差。這些較佳預後因素(favorable prognostic factors)有：年紀較輕、良好的身體狀況(good performance status)、細胞組織型態不是黏液性 (mucinous) 細胞或亮細胞(clear cell)型、較低的分期期別(lower stage)、細胞分化良好(well differentiated)、較少的腫瘤體積、無腹水(ascites)、以及減積手術(cytoreductive surgery) 之後僅剩下較小的殘留腫瘤 (smaller residual tumor)。

本卵巢癌診斷及治療指引的建立，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卵巢癌臨床指引、美國 National Comprehensive Cancer Network (NCCN) 的 Practice Guide-lines in Ovarian Cancer 2025,V3版、FIGO Staging Classifications and Clinical Practice Guidelines in the Management of Gynecologic Cancer、及中山醫學大學附設醫院卵巢癌治療經驗進行編修。



二、風險因子、篩檢與預防

在25歲之前懷孕，對嬰兒哺育母乳可減少發生卵巢癌的風險。發生卵巢癌的風險因子 (risk factors) 有：未曾生產 (nulliparity)、第一胎生產時已逾35歲、家族史(主要是家族內有兩個或以上的親戚包括母、女及姐妹罹患卵巢癌者) 等。不孕症本身也是風險因子，連續使用排卵藥 (如clomiphene) 超過一年，有增加卵巢癌的風險。

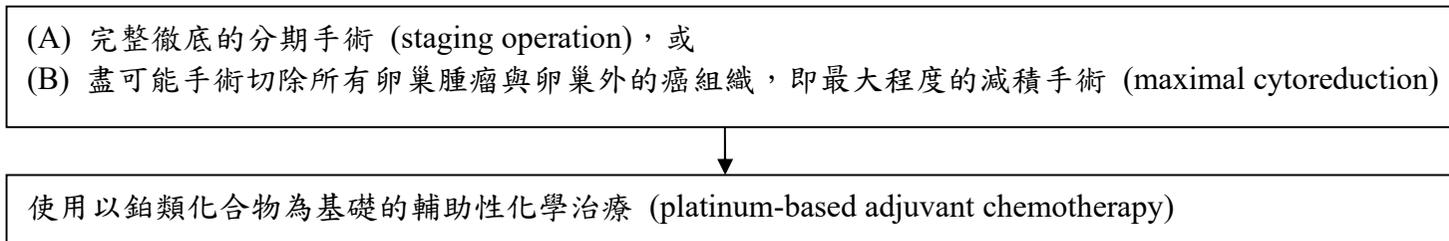




三、疑似惡性卵巢腫瘤治療前的評估 WORK UP

<p>主要檢查</p> <ul style="list-style-type: none"> ◆ 身體理學檢查及個人病史探詢 ◆ 家族史評估 ◆ 婦產科超音波檢查 ◆ 胸部X光檢查 ◆ 腫瘤指標 (tumor marker)包含：CA125。 ◆ 全血球計數、血清生化檢查 ◆ 可安排電腦斷層掃描或核磁共振掃描來協助擬定適當的手術計畫 	<p>次要檢查</p> <ul style="list-style-type: none"> ◆ 建議進行遺傳學檢查*(如果以往都沒做過，建議檢查) ◆ 若臨床上懷疑有腸道之壓迫或阻塞、或疑似轉移性卵巢癌，則可安排上消化道內視鏡、大腸鏡或鋇劑顯影等胃腸道檢查 ◆ 對於實質性 (solid) 或複雜性 (complex) 卵巢腫瘤，一般都避免用細針抽吸 (fine-needle aspiration) 的方式來做細胞學檢查 ◆ 腫瘤指標 (tumor marker)包含：CEA；若年齡小於35歲 (含)治療前應評估的腫瘤指標：CA125、AFP、β-hCG、CEA、LDH*。 ◆ 腹腔鏡不宜使用於懷疑是卵巢惡性腫瘤的患者 ◆ 生殖內分泌和不孕症 (REI) 評估根據臨床指示
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四、治療之主軸





五、分期

FIGO 分期		TNM Categories
N/A	Primary tumor cannot be assessed 原發腫瘤無法評估	TX
N/A	No evidence of primary tumor 沒有原發腫瘤的證據	T0
I	Tumor limited to ovaries (one or both) or fallopian tube(s) 腫瘤限於卵巢（一個或兩個）或輸卵管（S）	T1
IA	Tumor limited to one ovary (capsule intact) or fallopian tube, no tumor on ovarian or fallopian tube surface; no malignant cells in ascites or peritoneal washings 腫瘤限於一個卵巢（表面完整）或輸卵管，卵巢或輸卵管表面無腫瘤；腹水或腹腔沖洗液中無惡性細胞	T1a
IB	Tumor limited to both ovaries (capsules intact) or fallopian tubes; no tumor on ovarian or fallopian tube surface; no malignant cells in ascites or peritoneal washings 腫瘤局限於兩個卵巢（表面完整）或輸卵管；卵巢或輸卵管表面無腫瘤；腹水或腹腔沖洗液中無惡性細胞	T1b
IC	Tumor limited to one or both ovaries or fallopian tubes, with any of the following: 腫瘤限於一個或兩個卵巢或輸卵管，具有以下任何一種：	T1c
IC1	Surgical spill (手術破裂)	T1c1
IC2	Capsule ruptured before surgery or tumor on ovarian or fallopian tube surface 手術前囊膜或卵巢或輸卵管表面腫瘤破裂	T1c2
IC3	Malignant cells in the ascites or peritoneal washings (腹水或腹腔沖洗有惡性細胞)	T1c3
II	Tumor involves one or both ovaries or fallopian tubes with pelvic extension below pelvic brim or primary peritoneal cancer 腫瘤包括一個或兩個卵巢或輸卵管，在盆骨邊緣或原發性腹膜癌	T2



IIA	Extension and/or implants on the uterus and/or fallopian tube(s) and/or ovaries 擴散只限於子宮或輸卵管或卵巢	T2a
IIB	Extension to and/or implants on other pelvic tissues 擴散至骨盆腔內的其他組織	T2b
III	Tumor involves one or both ovaries or fallopian tubes, or primary peritoneal cancer, with microscopically confirmed peritoneal metastasis outside the pelvis and/or metastasis to the retroperitoneal (pelvic and/or para-aortic) lymph nodes 腫瘤包括卵巢或輸卵管或原發性腹膜癌中的一種或兩種，顯微鏡確認盆腔外的腹膜轉移和/或向腹膜後（盆腔和/或主動脈旁）淋巴結轉移	T3
N/A	Isolated tumor cells in regional lymph node(s) no greater than 0.2 mm	N0(i+)
IIIA1	Positive retroperitoneal lymph nodes only (histologically confirmed) 僅有腹膜後淋巴結陽性（組織學證實） <i>IIIA1(i)</i> metastasis $\leq 10\text{mm}$ (轉移 ≤ 10 毫米) <i>IIIA1(ii)</i> metastasis $> 10\text{mm}$ (轉移 > 10 毫米)	N1 N1a N1b
IIIA2	Microscopic extrapelvic (above the pelvic brim) peritoneal involvement with or without positive retroperitoneal lymph nodes 顯微鏡下外膜（盆骨邊緣以上）腹膜穿刺有或無腹膜後淋巴結陽性	T3a
IIIB	Macroscopic peritoneal metastasis beyond pelvis 2 cm or less in greatest dimension with or without metastasis to the retroperitoneal lymph nodes 肉眼可見的腹膜轉移超過骨盆 2 公分或以下的最大維度有或無腹膜後淋巴結轉移	T3b
IIIC	Macroscopic peritoneal metastasis beyond the pelvis more than 2 cm in greatest dimension with or without metastasis to the retroperitoneal lymph nodes (includes extension of tumor to capsule of liver and spleen without parenchymal involvement of either organ) 最大尺寸超過 2 公分的肉眼可見的腹膜轉移，有或沒有轉移到腹膜後淋巴結（包括腫瘤向肝和脾的囊腫延伸而沒有任何器官的實質累及）	T3c
IV	Distant metastasis, including pleural effusion with positive cytology; liver or splenic parenchymal metastasis; metastasis to extra-abdominal organs (including inguinal lymph nodes and lymph nodes outside the abdominal cavity); and transmural involvement of intestine	M1

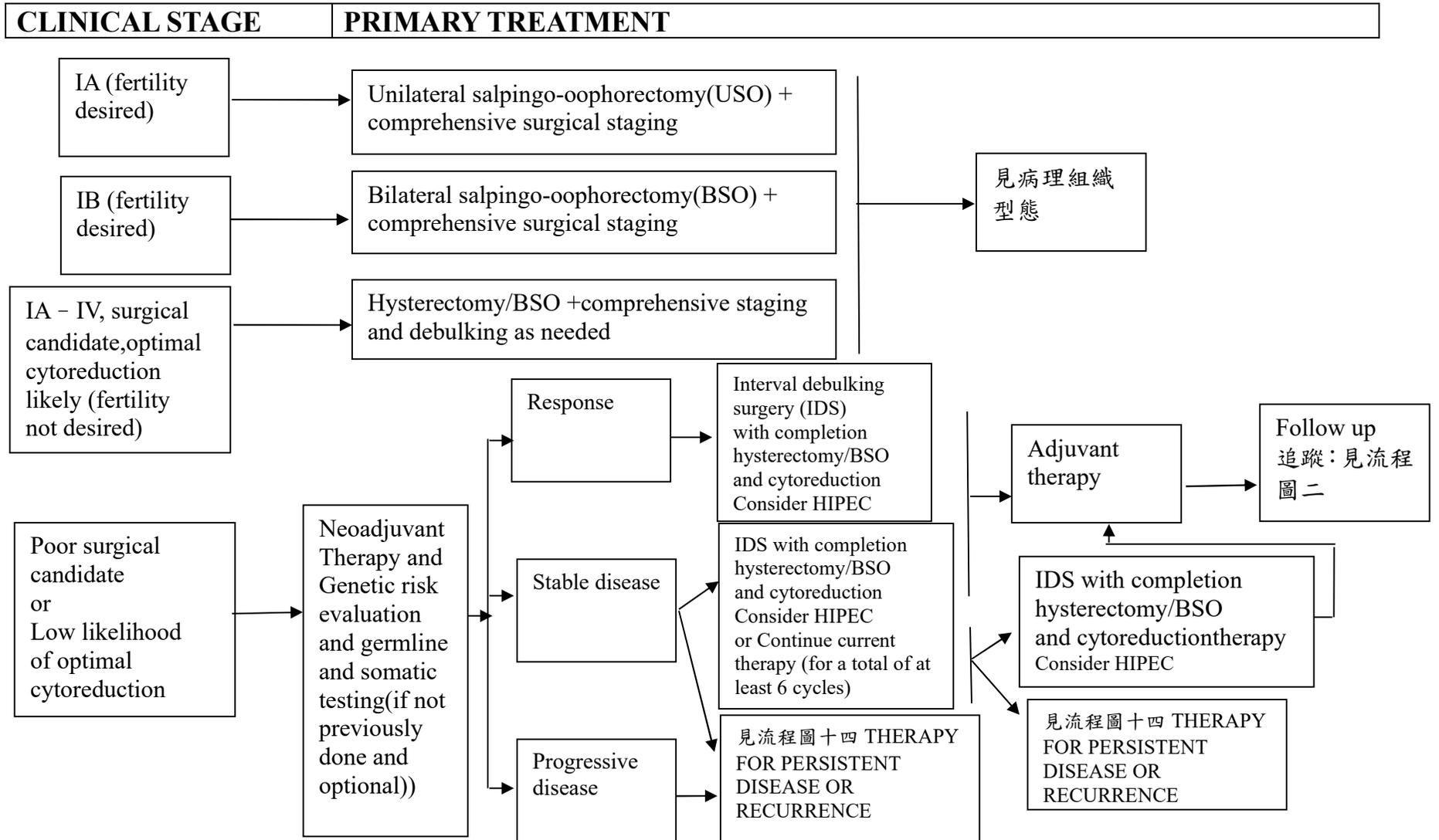


	遠處轉移，包括伴有細胞學陽性的胸腔積液;肝或脾實質轉移;轉移到腹外器官（包括腹股溝淋巴結和腹腔外淋巴結）;和腸壁的透壁受累	
IVA	Pleural effusion with positive cytology 胸腔積液細胞學陽性	M1a
IVB	Liver or splenic parenchymal metastases; metastases to extra-abdominal organs (including inguinal lymph nodes and lymph nodes outside the abdominal cavity); transmural involvement of intestine 肝或脾實質轉移;轉移到腹外器官（包括腹股溝淋巴結和腹腔外的淋巴結）;透壁涉及腸道	M1b

AJCC 8 th	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 IIA	T2a	N0	M0
Stage IIB	T2b	N0	M0
Stage IIIA1	T1/T2	N1	M0
Stage IIIA2	T3a	NX/N0/N1	M0
Stage IIIB	T3b	NX/N0/N1	M0
Stage IIIC	T3c	NX/N0/N1	M0
Stage IV	AnyT	AnyN	M1
Stage IVA	AnyT	AnyN	M1a
Stage IVB	AnyT	AnyN	M1b

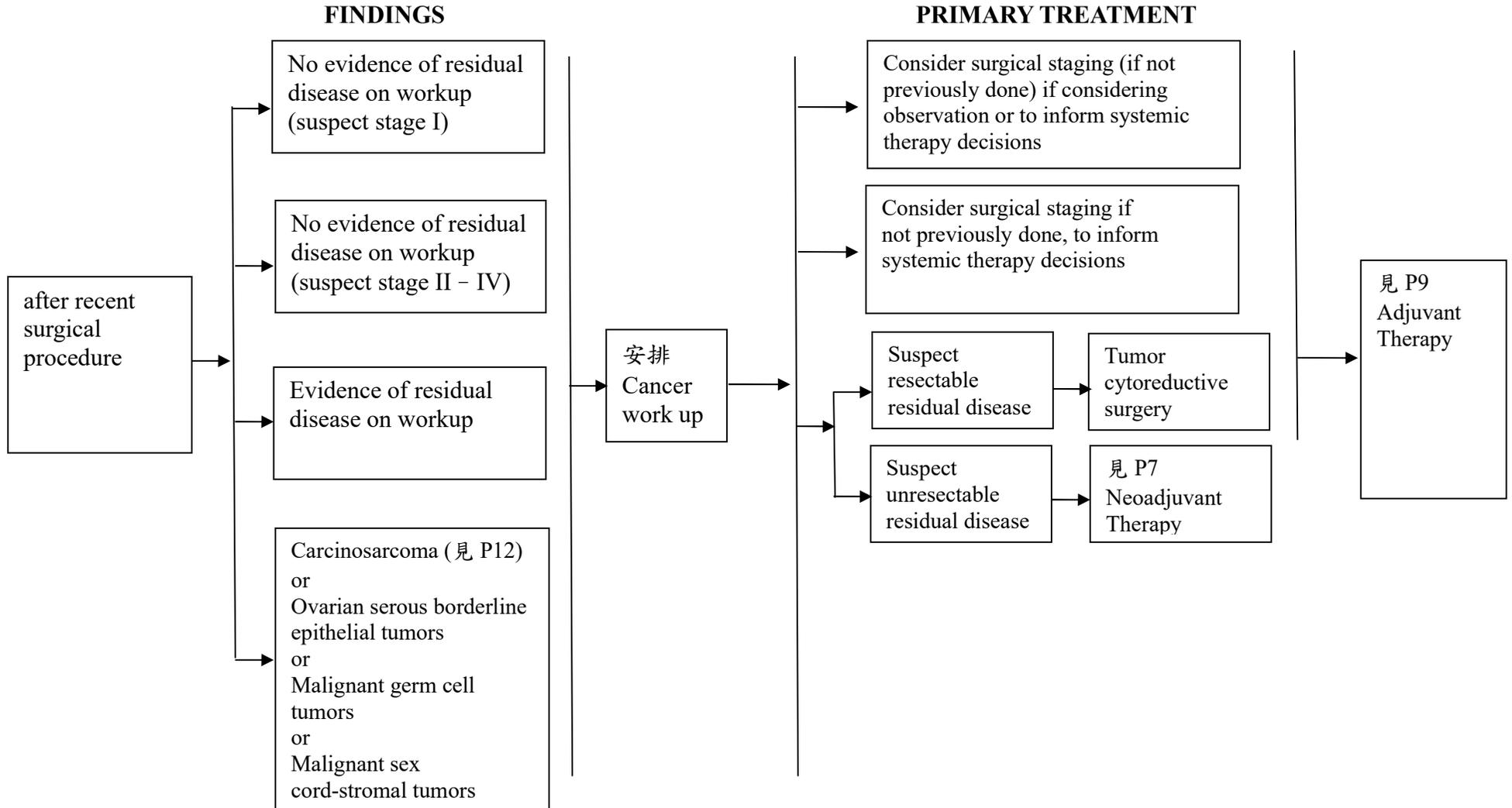


六、卵巢上皮癌之處置

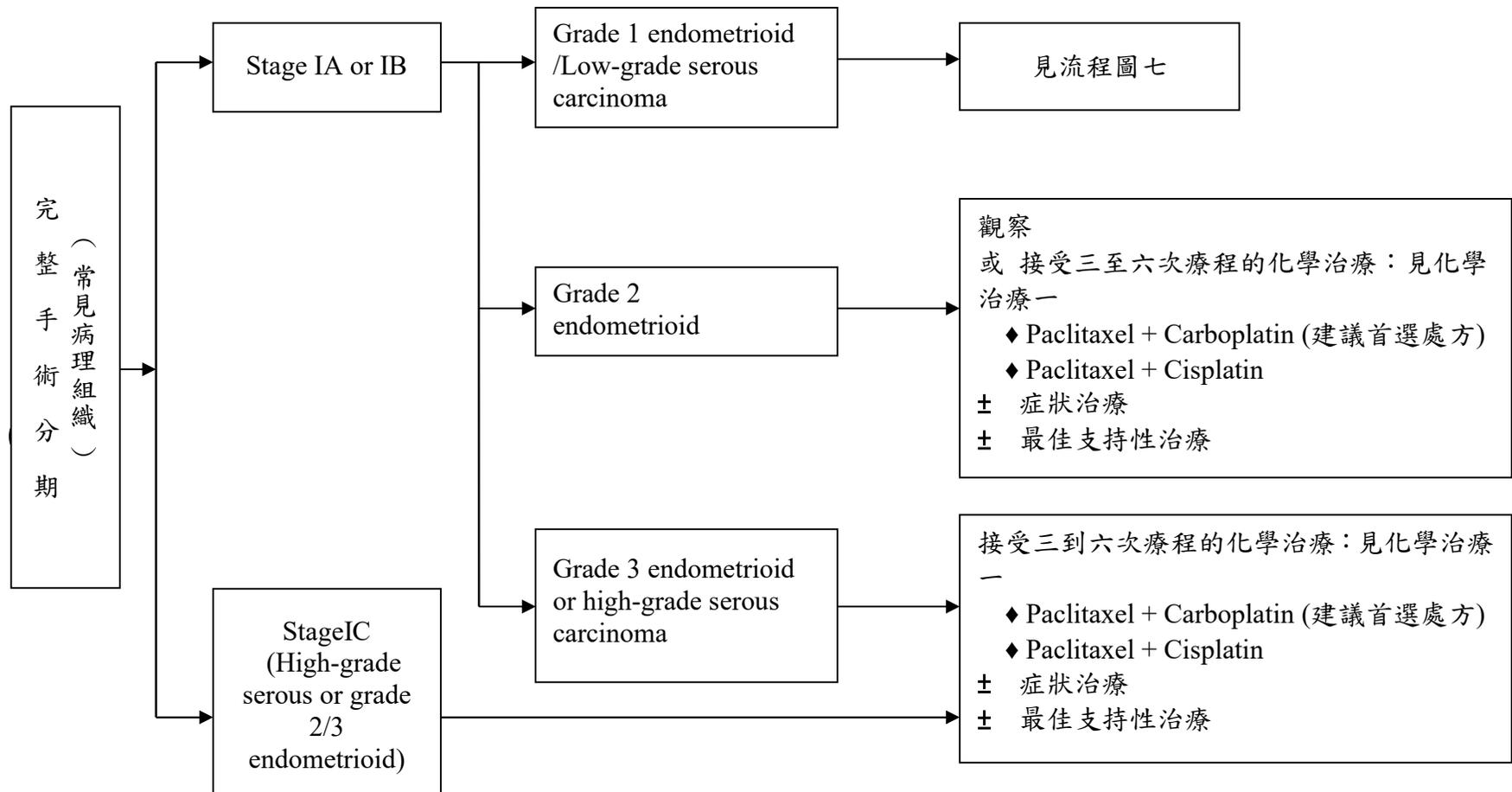




DIAGNOSIS BY PREVIOUS SURGERY



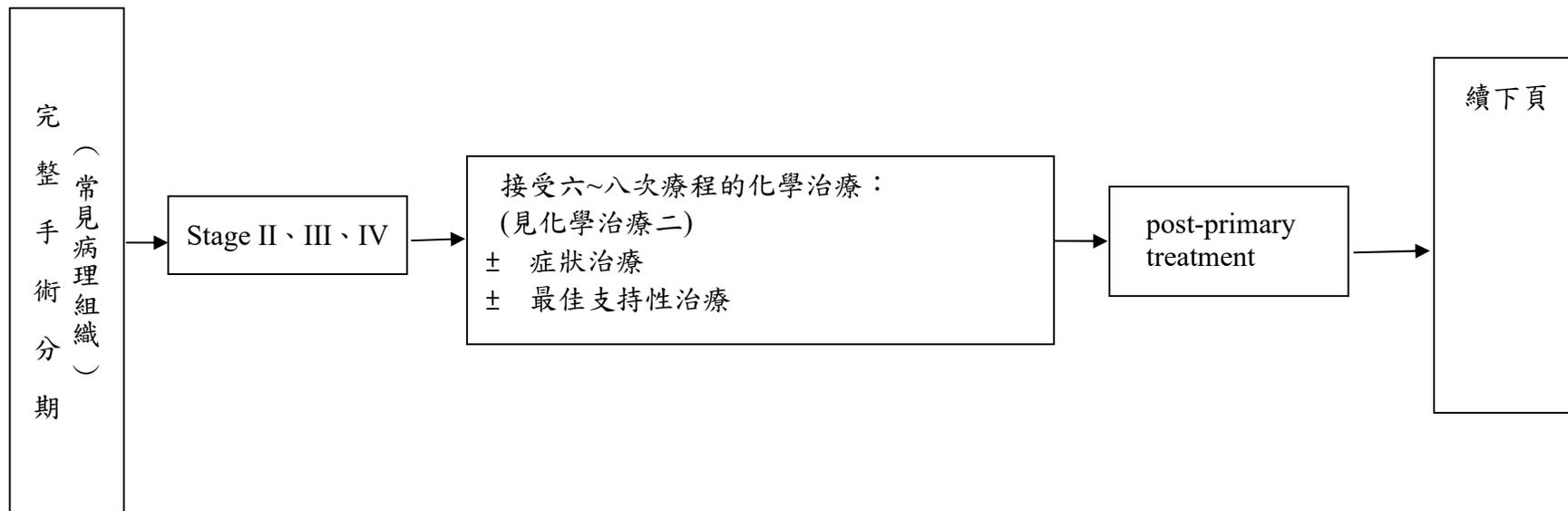
Stage IA、IB、IC



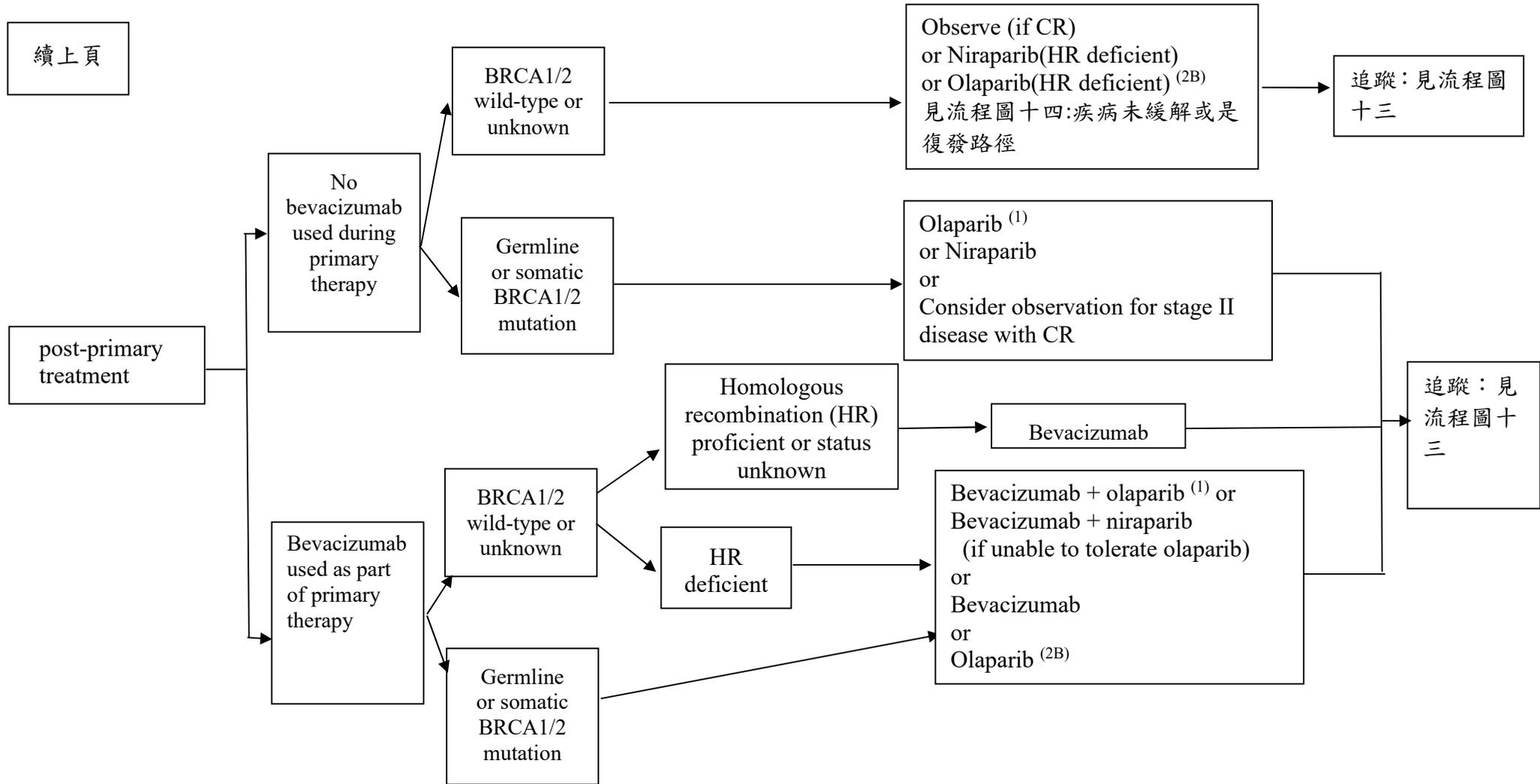
流程圖一



六、卵巢上皮癌之處置- Stage II、III、IV

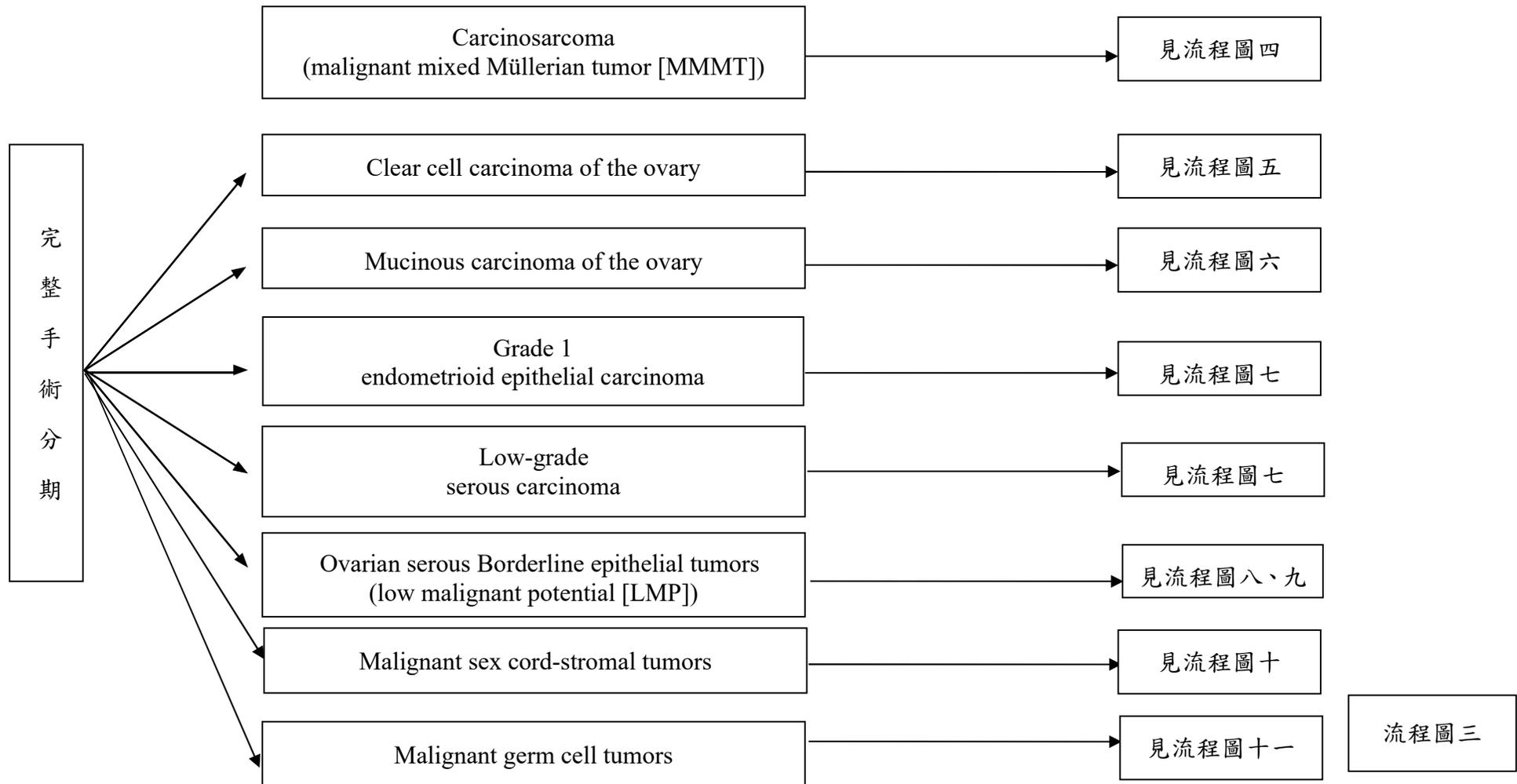


流程圖二



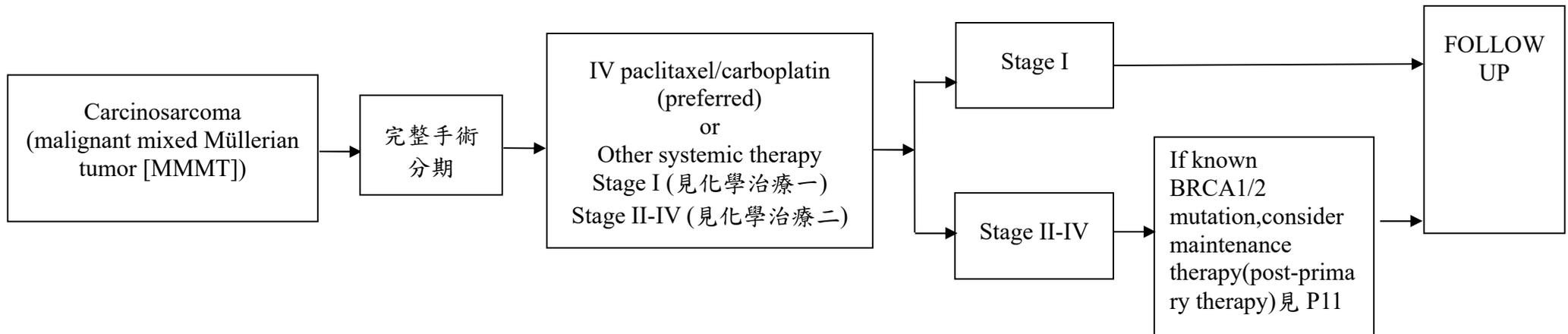


七、其他卵巢癌組織病理學之處置





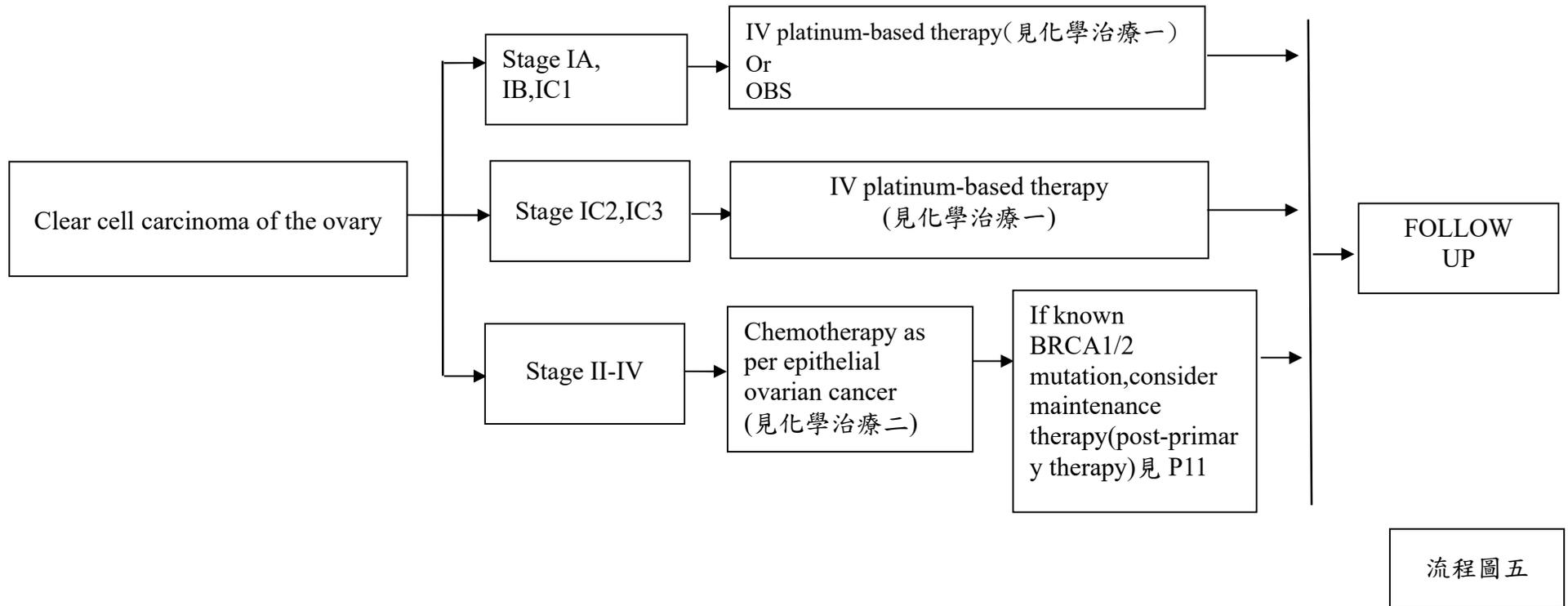
七、其他卵巢癌組織病理學之處置- Carcinosarcoma(malignant mixed Müllerian tumor [MMMT])



流程圖四

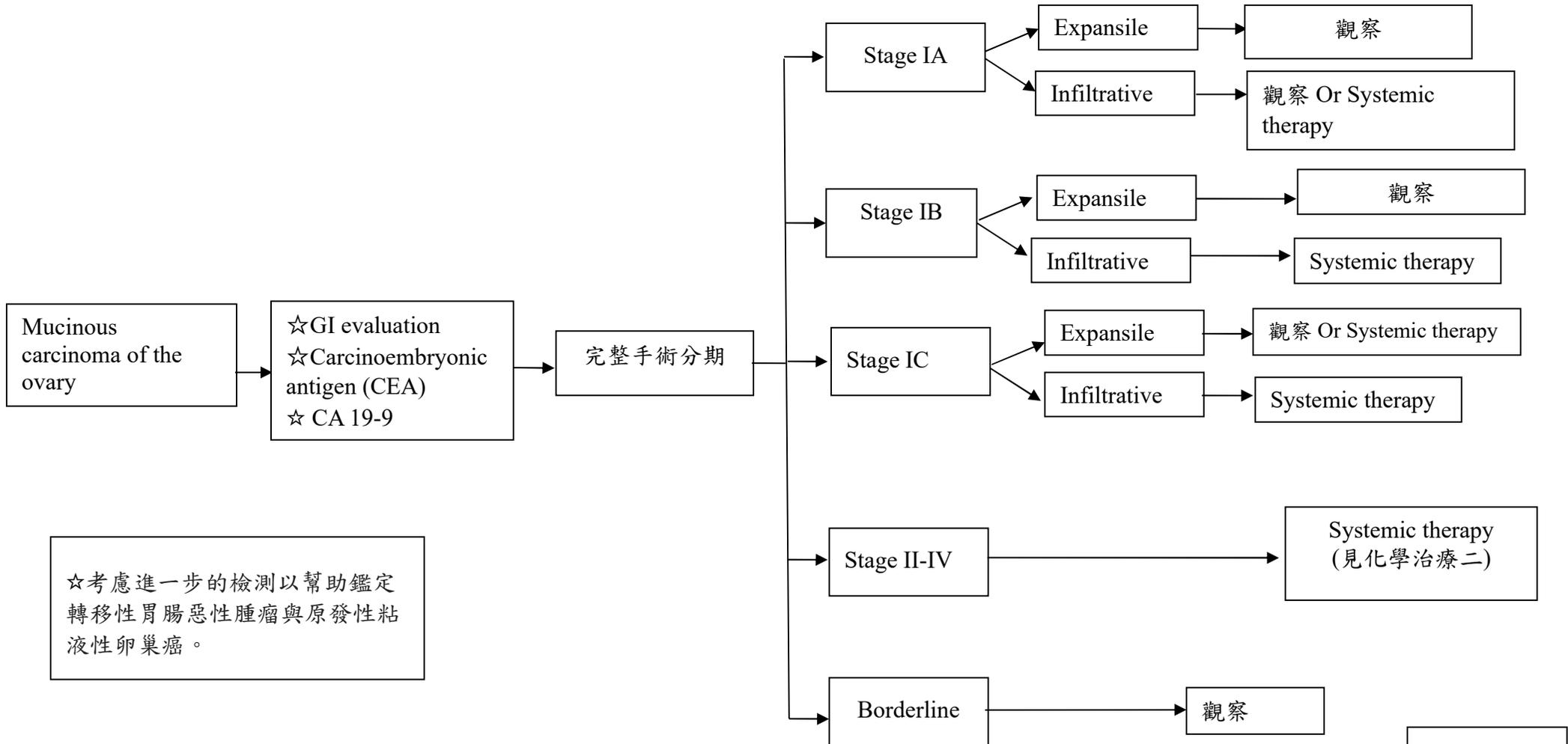


七、其他卵巢癌組織病理學之處置- Clear cell carcinoma of the ovary





七、其他卵巢癌組織病理學之處置- Mucinous carcinoma of the ovary

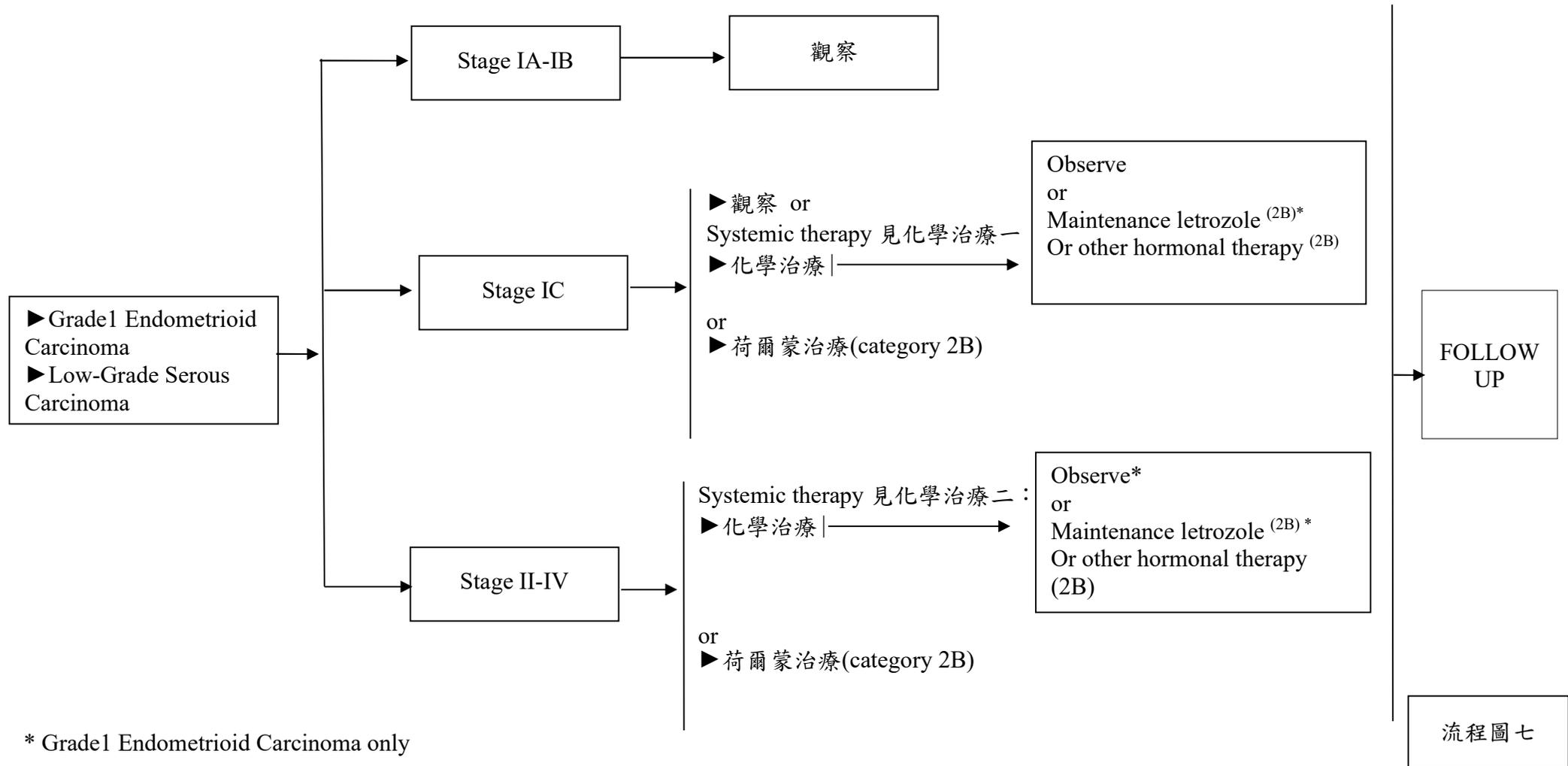


☆考慮進一步的檢測以幫助鑑定轉移性胃腸惡性腫瘤與原發性粘液性卵巢癌。

流程圖六



七、其他卵巢癌組織病理學之處置- Grade 1 Endometrioid /Low-grade serous carcinoma



* Grade 1 Endometrioid Carcinoma only

七、其他卵巢癌組織病理學之處置- Low-grade serous carcinoma monitoring/follow up for recurrence

MONITORING/FOLLOW-UP

- 1.前二年每2-4個月返診；第三年至五年每3-6個月返診；第五年起每年返診
- 2.理學檢查包括骨盆腔檢查
- 3.腫瘤分子(Tumor molecular)檢驗(optional)
- 4.依臨床指示安排影像學檢查(如：胸／腹／骨盆電腦斷層、胸部電腦斷層、腹／骨盆核磁共振等)
- 5若手術之前的腫瘤指標有異常，則每次返診時都檢查腫瘤指標
- 6請參考遺傳風險評估
- 7全血球計數檢查、生化檢查
- 8提供長期健康照護與存活者照護

疾病復發

RECURRENT THERAPY

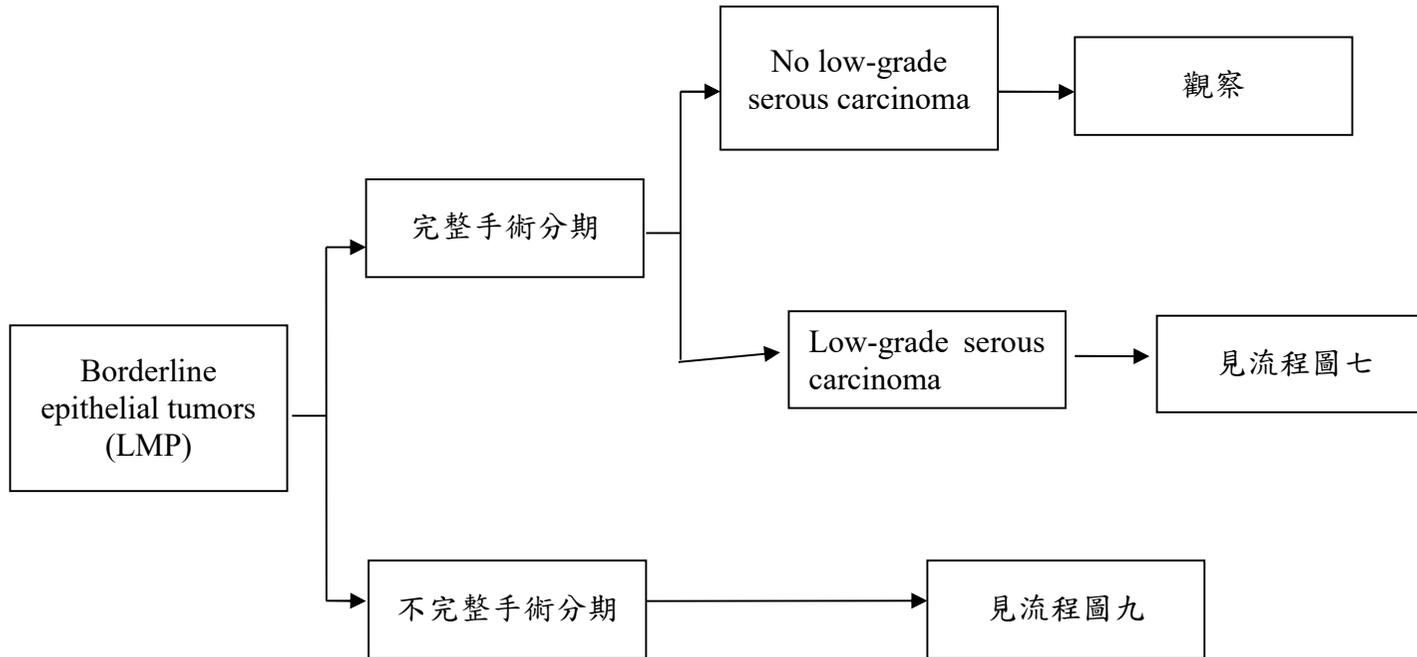
- 1.荷爾蒙治療
- or
- 2.化學治療(未曾化療者)，見化學治療二
- or
- 3.其他 systemic therapy
 - For platinum-sensitive disease, 見P30
 - For platinum-resistant disease, 見P31
- or
- 4.觀察

續流程圖七



七、其他卵巢癌組織病理學之處置- Borderline epithelial tumors(low malignant potential [LMP])

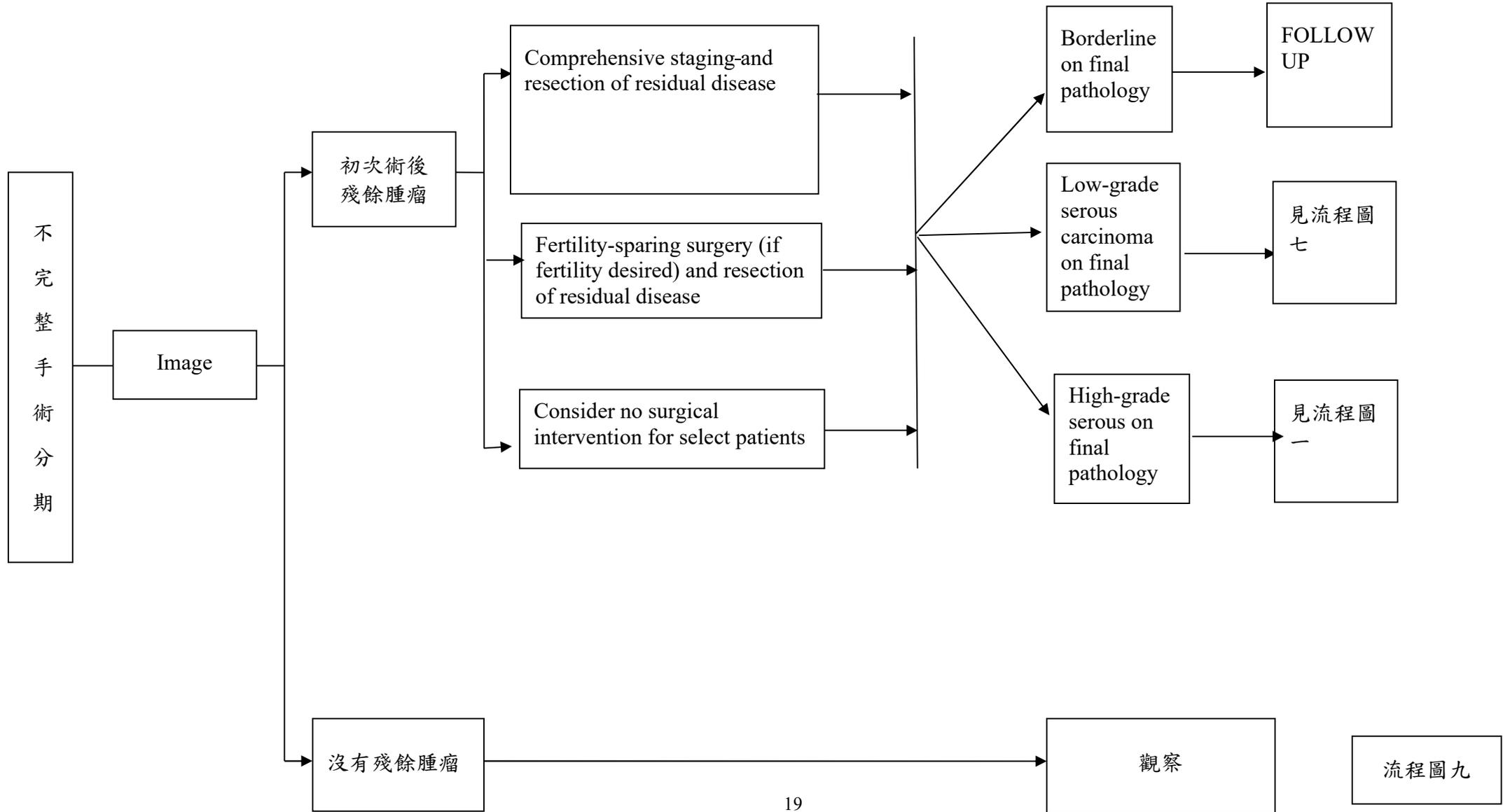
見流程圖七



流程圖八

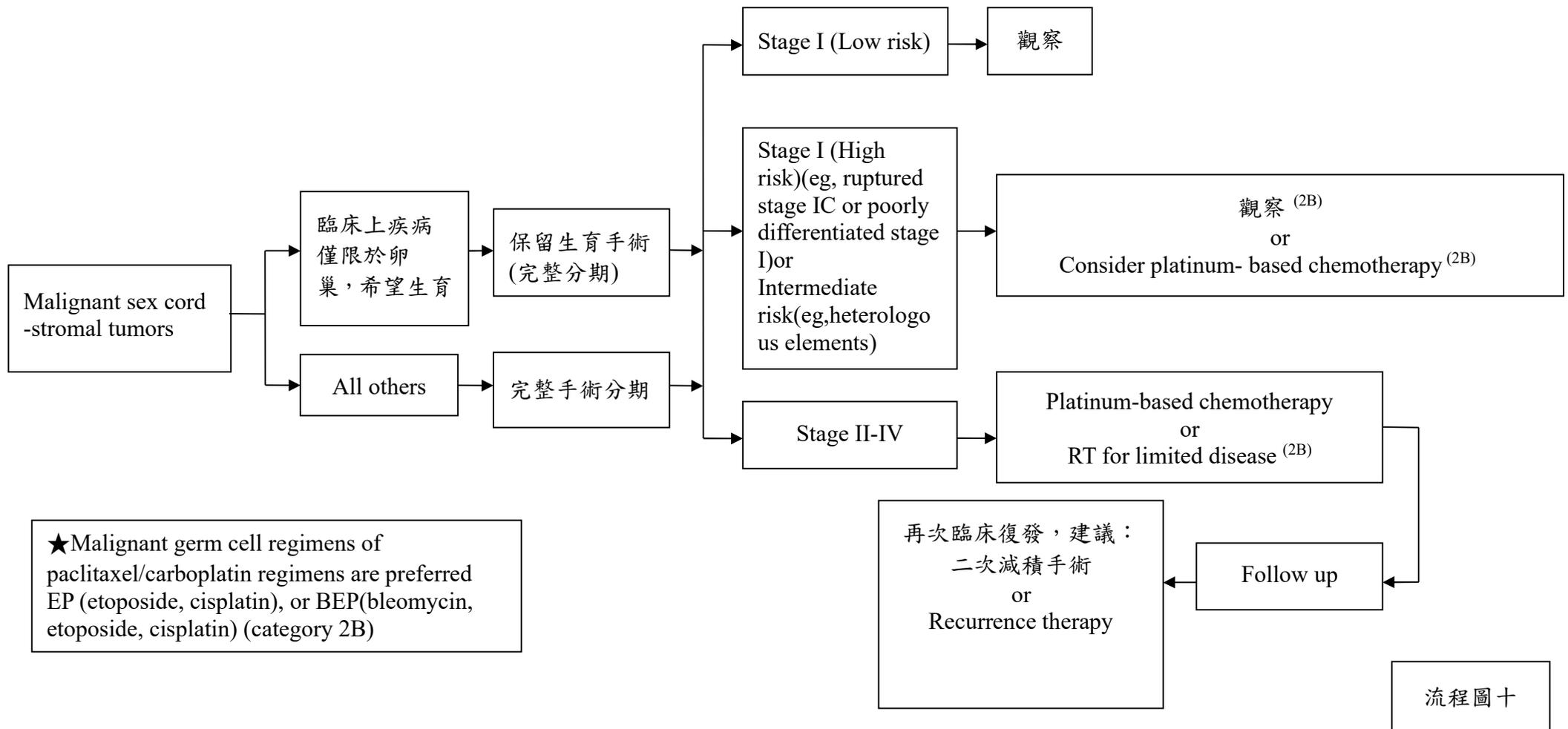


七、其他卵巢癌組織病理學之處置- Borderline epithelial tumors(low malignant potential [LMP])

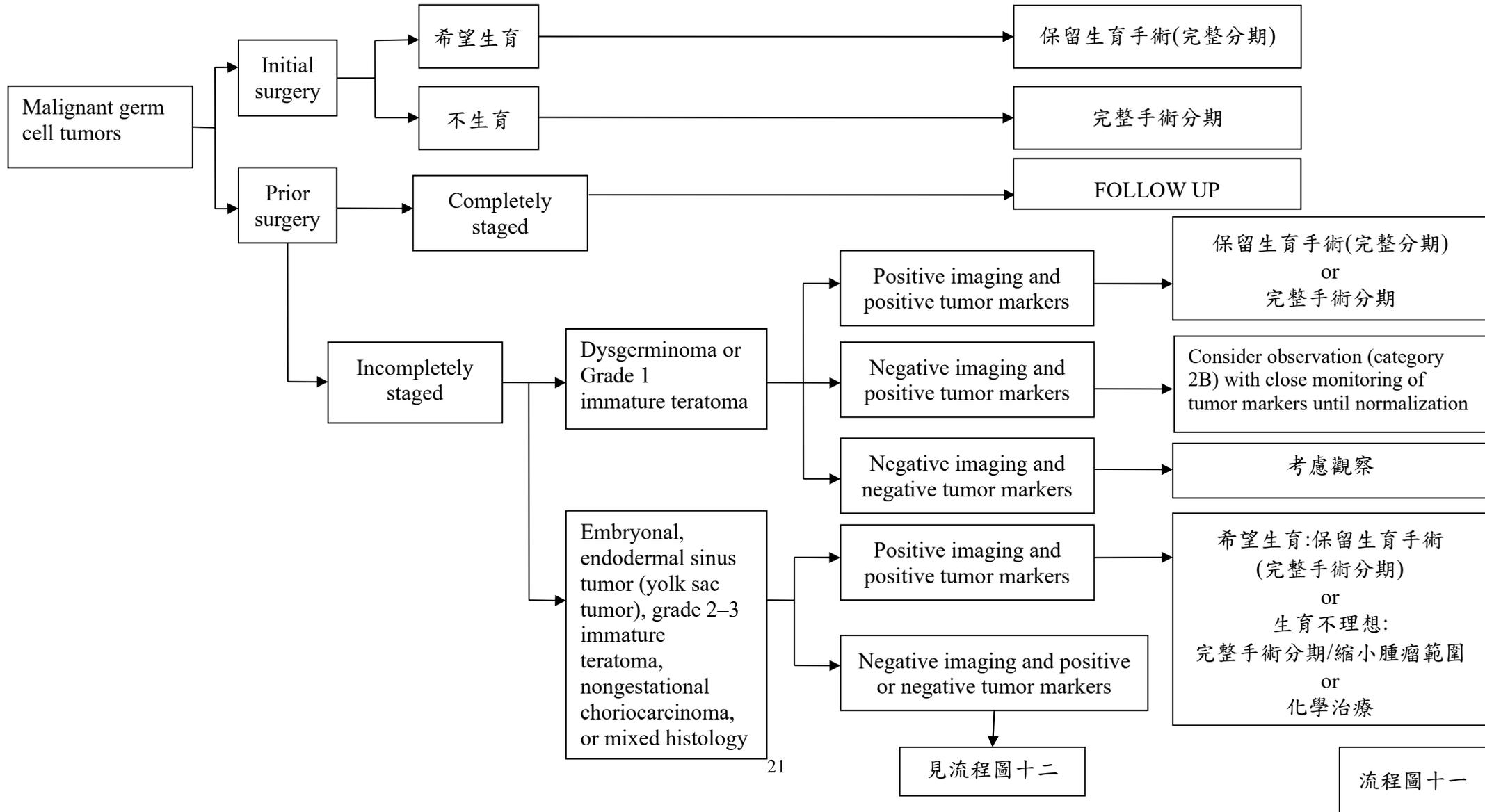




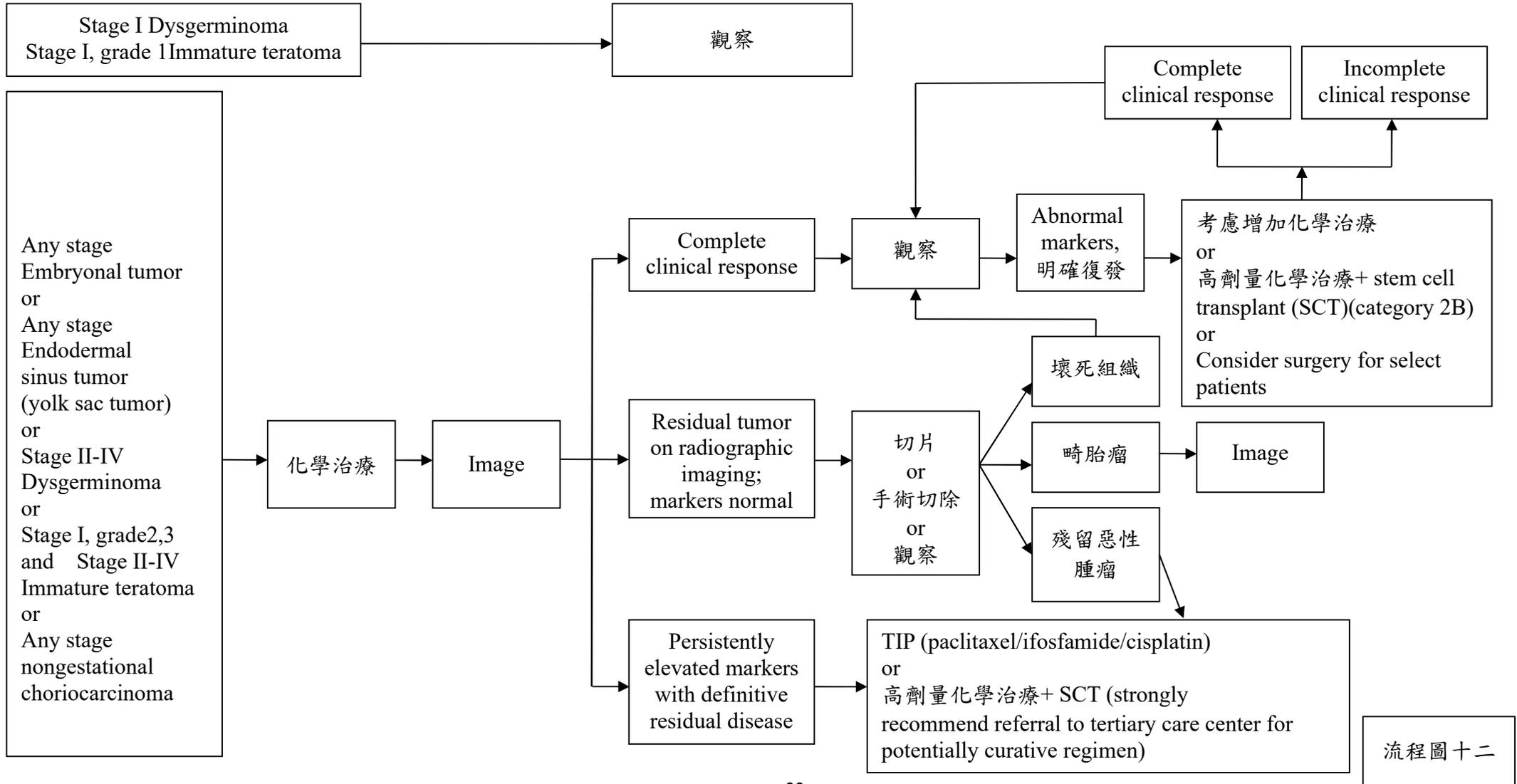
七、其他卵巢癌組織病理學之處置- Malignant sex cord-stromal tumors



七、其他卵巢癌組織病理學之處置- Malignant germ cell tumors



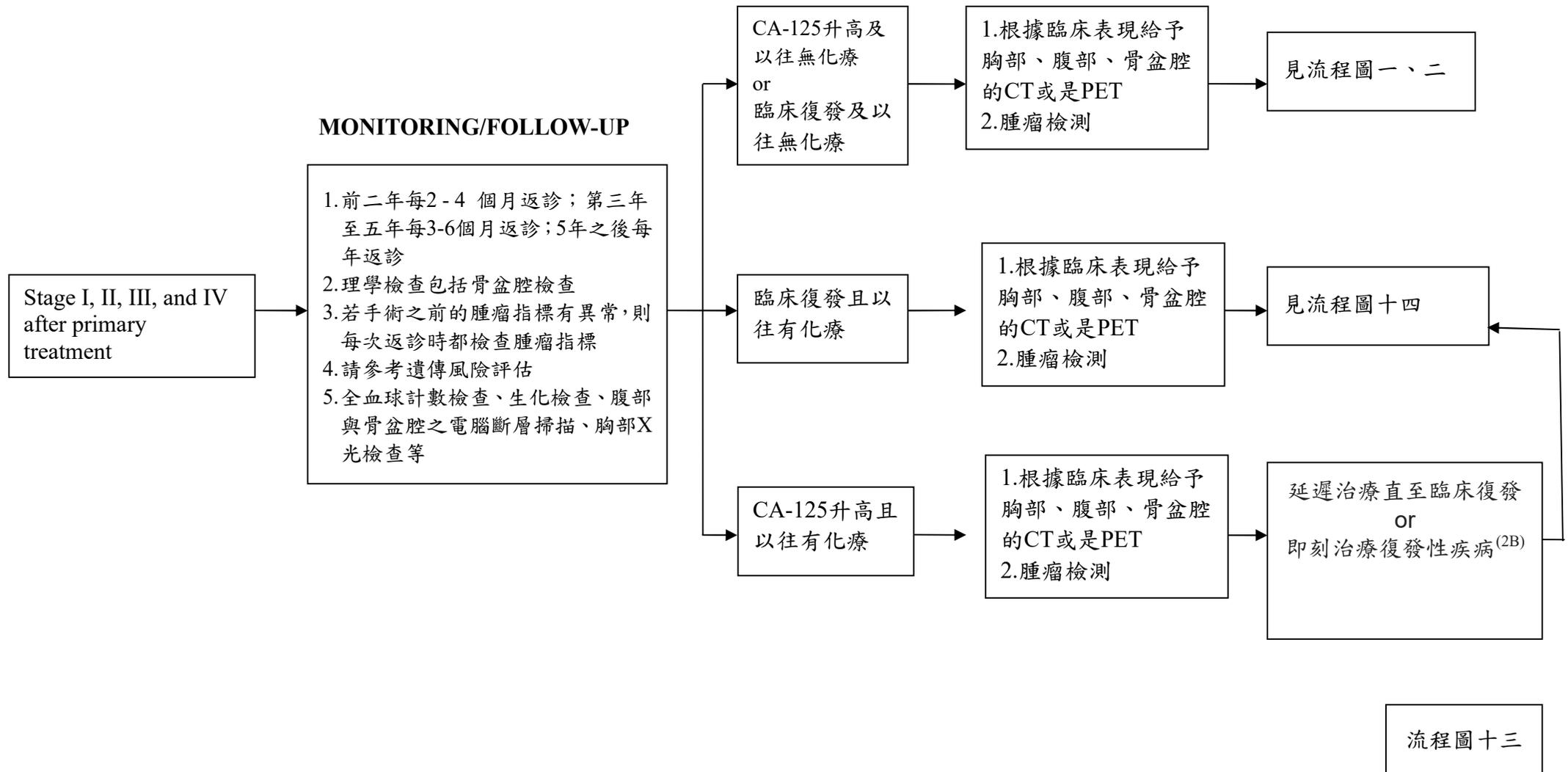
七、其他卵巢癌組織病理學之處置- Malignant germ cell tumors





八、追蹤及復發處置

RECURRENT DISEASE

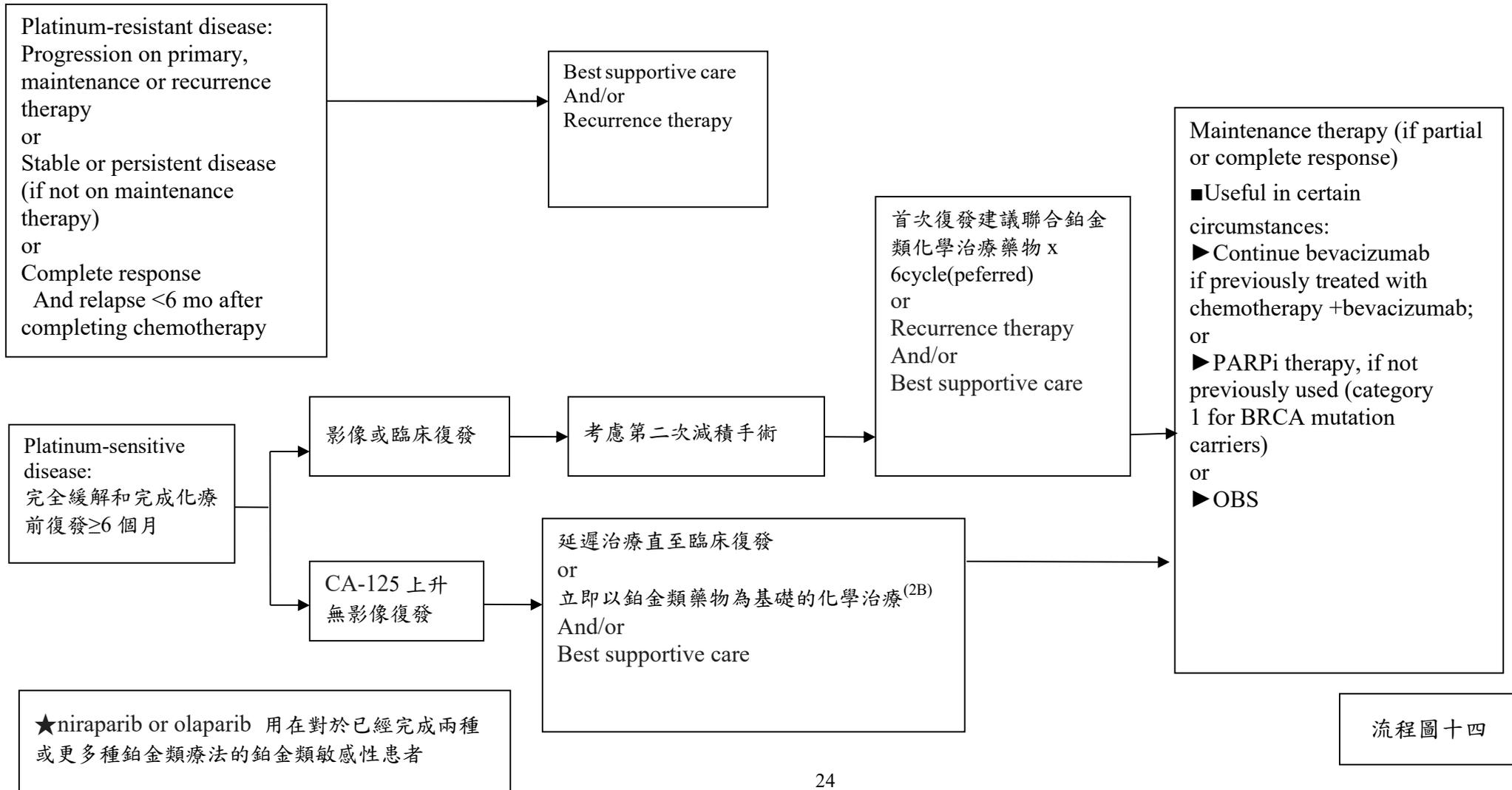




復發處置

DISEASE STATUS

THERAPY FOR PERSISTENT DISEASE OR RECURRENCE



流程圖十四



九、化學治療 - Primary Systemic Therapy Regimens

PRINCIPLES OF SYSTEMIC THERAPY

- ★輔助治療：癌症手術後的藥物治療，放療或其他形式的輔助治療，旨在降低疾病復發的風險，或主要治療手術細胞減少後殘餘的疾病。
- ★新輔助治療：在癌症手術前給予藥物，放射線或其他形式的治療，以減少手術準備時的腫瘤負擔。
- ★復發治療：用於治療復發性癌症，控制症狀，可增加生命長度和/或生活質量，包含藥物治療、放射線治療或其他形式的治療。
- ★Bevacizumab 可能影響傷口癒合，建議術前及術後 4-6 周暫停使用
- ★維持性治療：高風險的新診斷第 II-IV 期患者（如 high-grade serous、grade 2/3 子宮內膜樣癌或 BRCA1/2 突變的透明細胞癌或癌肉瘤）可能會受益於 PARPi 維持治療。



九、化學治療 - Primary Systemic Therapy Regimens

Stage I

STAGE I DISEASE			
	<u>Preferred Regimens</u>	<u>Other Recommended Regimens</u>	<u>Useful in Certain Circumstances</u>
<ul style="list-style-type: none"> •High-grade serous •Endometrioid (Grade 2/3) •Clear cell carcinoma •Carcinosarcoma 	<ul style="list-style-type: none"> •Paclitaxel /carboplatin every 3 weeks 	<ul style="list-style-type: none"> •Carboplatin/liposomal doxorubicin •Docetaxel/carboplatin 	Paclitaxel/cisplatin For carcinosarcoma: <ul style="list-style-type: none"> •Carboplatin/ifosfamide •Cisplatin/ifosfamide •Paclitaxel/ifosfamide (2B)
Mucinous Carcinoma (stage IC, grades 1–3)	<u>Preferred Regimens</u> <ul style="list-style-type: none"> •5-FU/leucovorin/oxaliplatin •Capecitabine (Xeloda)/oxaliplatin •Paclitaxel/carboplatin every 3 weeks 	<u>Other Recommended Regimens</u> <ul style="list-style-type: none"> •Carboplatin/liposomal doxorubicin •Docetaxel/carboplatin 	<u>Useful in Certain Circumstances</u> Paclitaxel/cisplatin
Low-Grade Serous (stage IC)/Grade I Endometrioid (stage IC)	<u>Preferred Regimens</u> <ul style="list-style-type: none"> •Paclitaxel /carboplatin every 3 week s± maintenance letrozole (2B) or other hormonal therapy (2B) •Hormone therapy (aromatase inhibitors [anastrozole, letrozole, exemestane]) (2B) 	<u>Other Recommended Regimens</u> <ul style="list-style-type: none"> •Carboplatin/liposomal doxorubicin ±maintenance letrozole (category 2B) or other hormonal therapy (2B) •Docetaxel/carboplatin±maintenance letrozole (2B) or other hormonal therapy (2B) •Hormone therapy (leuprolide acetate, tamoxifen) (2B) 	<u>Useful in Certain Circumstances</u> Paclitaxel/cisplatin

化學治療一



Stage II-IV

STAGE II-IV DISEASE			
<ul style="list-style-type: none"> •High-grade serous •Endometrioid (Grade 2/3) •Clear cell carcinoma •Carcinosarcoma 	<p><u>Preferred Regimens</u></p> <ul style="list-style-type: none"> •Paclitaxel /carboplatin every 3 weeks •Paclitaxel/carboplatin/bevacizumab + maintenance bevacizumab (ICON-7 & GOG-218) 	<p><u>Other Recommended Regimens</u></p> <ul style="list-style-type: none"> •Paclitaxel weekly/carboplatin weekly •Docetaxel/carboplatin •Carboplatin/liposomal doxorubicin •Paclitaxel weekly/carboplatin q3weeks •Docetaxel/carboplatin/bevacizumab +maintenance bevacizumab (GOG-218) 	<p><u>Useful in Certain Circumstances</u></p> <ul style="list-style-type: none"> •Paclitaxel/cisplatin•Docetaxel/oxaliplatin/bevacizumab+maintenance bevacizumab •IV/IP paclitaxel/carboplatin •IP/IV paclitaxel/cisplatin (for optimally debulked stage II-III disease) •For carcinosarcoma: Carboplatin/ifosfamide Cisplatin/ifosfamide Paclitaxel/ifosfamide (category 2B)
<p>Mucinous Carcinoma</p>	<p><u>Preferred Regimens</u></p> <ul style="list-style-type: none"> •5-FU/leucovorin/oxaliplatin ± bevacizumab (category 2B for bevacizumab) •Capecitabine/oxaliplatin ± bevacizumab (category 2B for bevacizumab) •Paclitaxel /carboplatin every 3 weeks •Paclitaxel/carboplatin/bevacizumab + maintenance bevacizumab (ICON-7 & GOG-218) 	<p><u>Other Recommended Regimens</u></p> <ul style="list-style-type: none"> •Paclitaxel weekly/carboplatin weekly •Docetaxel/carboplatin •Carboplatin/liposomal doxorubicin •Paclitaxel weekly/carboplatin q3weeks •Docetaxel/carboplatin/bevacizumab +maintenance bevacizumab(GOG-218) 	<p><u>Useful in Certain Circumstances</u></p> <ul style="list-style-type: none"> •Paclitaxel/cisplatin •Docetaxel/oxaliplatin/bevacizumab+maintenance bevacizumab



<p>Low-Grade Serous/Grade I Endometrioid</p>	<p><u>Preferred Regimens</u></p> <ul style="list-style-type: none"> • Paclitaxel /carboplatin every 3 weeks±maintenance letrozole(category 2B) or other hormonal therapy (category 2B) • Paclitaxel/carboplatin/bevacizumab + maintenance bevacizumab (ICON-7 & GOG-218) • Hormone therapy (aromatase inhibitors [anastrozole, letrozole, exemestane]) (category 2B) 	<p><u>Other Recommended Regimens</u></p> <ul style="list-style-type: none"> • Paclitaxel weekly/carboplatin weekly • Docetaxel/carboplatin±maintenance letrozole(category 2B) or other hormonal therapy (category 2B) • Carboplatin/liposomal doxorubicin±maintenance letrozole (category 2B) or other hormonal therapy (category 2B) • Paclitaxel weekly/carboplatin q3weeks • Docetaxel/carboplatin/bevacizumab +maintenance bevacizumab (GOG-218) • Hormone therapy (leuprolide acetate, tamoxifen) (category 2B) 	<p><u>Useful in Certain Circumstances</u></p> <ul style="list-style-type: none"> • Paclitaxel/cisplatin • Docetaxel/oxaliplatin/bevacizumab+maintenance bevacizumab (category 2B)
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化學治療二

**Primary Systemic Therapy Recommended Dosing****Paclitaxel/carboplatin every 3 weeks**

- Paclitaxel 175 mg/m² IV followed by carboplatin AUC 5–6 IV Day 1
- Repeat every 21 days x 3–6 cycles

Paclitaxel/cisplatin every 3 weeks

- Paclitaxel 175 mg/m² IV followed by cisplatin 75 mg/m² IV
- Repeat every 21 days x 3–9 cycles

IV/IP Paclitaxel/cisplatin

- Paclitaxel 135 mg/m² IV continuous infusion Day 1; Cisplatin 75 – 100 mg/m² IP Day 2 after IV paclitaxel; Paclitaxel 60 mg/m² IP Day 8
- Repeat every 21 days x 6 cycles

IV/IP Paclitaxel/carboplatin

- Paclitaxel 80 mg/m² IV on days 1, 8, and 15; carboplatin AUC 6 IP Day 1 after IV paclitaxel
- Repeat every 21 days x 6–8 cycles

Paclitaxel weekly/carboplatin q3weeks

- Dose-dense paclitaxel 80 mg/m² IV Days 1, 8, and 15 followed by carboplatin AUC 5 – 6 IV Day 1
- Repeat every 21 days x 6 cycles

Paclitaxel weekly/carboplatin weekly

- Paclitaxel 60 mg/m² IV followed by carboplatin AUC 2 IV
- Days 1, 8, and 15; repeat every 21 days x 6 cycles (18 weeks)

Docetaxel/oxaliplatin/bevacizumab+maintenance bevacizumab

- Docetaxel 75 mg/m² IV followed by oxaliplatin 85 mg/m² IV,

Docetaxel/carboplatin

- Docetaxel 60 – 75 mg/m² IV followed by carboplatin AUC 5 – 6 IV Day 1
- Repeat every 21 days x 3 – 6 cycles

Carboplatin/liposomal doxorubicin

- Carboplatin AUC 5 IV + pegylated liposomal doxorubicin 30 mg/m² IV
- Repeat every 28 days for 3 – 6 cycles

Paclitaxel/carboplatin/bevacizumab + maintenance bevacizumab(ICON-7)

- Paclitaxel 175 mg/m² IV followed by carboplatin AUC 5 – 6 IV, and bevacizumab 7.5 mg/kg IV Day 1
- Repeat every 21 days x 5 – 6 cycles
- Continue bevacizumab for up to 12 additional cycles

Paclitaxel/carboplatin/bevacizumab + maintenance bevacizumab (GOG-218)

- Paclitaxel 175 mg/m² IV followed by carboplatin AUC 6 IV Day 1. Repeat every 21 days x 6 cycles
- Starting Day 1 of cycle 2, give bevacizumab 15 mg/kg IV every 21 days for up to 22 cycles

Docetaxel/carboplatin/bevacizumab + maintenance bevacizumab (GOG-218)

- Docetaxel 75 mg/m² IV followed by carboplatin AUC 6 IV Day 1. Repeat every 21 days x 6 cycles
- Starting Day 1 of cycle 2, give bevacizumab 15 mg/kg IV every 21 days for up to 22 cycles



and bevacizumab 15 mg/kg IV
 • Repeat every 21 days x 6 cycles
 • Continue bevacizumab 15mg/kg IV every 21 days to complete one year of therapy

Individuals Over the Age of 70 Years and/or those with comorbidities

Paclitaxel 135/carboplatin

- Paclitaxel 135 mg/m² IV + carboplatin AUC 5 IV given every 21 days x 3 – 6 cycles

Paclitaxel weekly/carboplatin weekly

- Paclitaxel 60 mg/m² IV over 1 hour followed by carboplatin AUC 2 IV over 30 minutes
- Days 1, 8, and 15; repeat every 21 days x 6 cycles (18 weeks)

Recurrence Therapy for Platinum-Sensitive Disease (alphabetical order)

Preferred Regimens	Other Recommended Regimens	Useful in Certain Circumstances
Carboplatin/gemcitabine ± bevacizumab Carboplatin/liposomal doxorubicin ± bevacizumab Carboplatin/paclitaxel ± bevacizumab Carboplatin/paclitaxel ± bevacizumab Cisplatin/gemcitabine	Carboplatin/docetaxel Carboplatin/paclitaxel (weekly) Capecitabine Carboplatin Cisplatin Cyclophosphamide Doxorubicin	For mucinous carcinoma: • 5 -FU/leucovorin/oxaliplatin ± bevacizumab (category 2B for bevacizumab) • Capecitabine/oxaliplatin ± bevacizumab (category 2B for bevacizumab) • Carboplatin/paclitaxel, albumin bound (for confirmed taxane hypersensitivity) • Carboplatin/paclitaxels (for age >70) • Irinotecan/cisplatin (for clear cell carcinoma)
<u>Targeted Therapy (single agents)</u> Bevacizumab	<u>Targeted Therapy</u> Niraparib/bevacizumab (category 2B) Niraparib (category 3) Olaparib (category 3) Pazopanib (category 2B) Rucaparib (category 3)	<u>Targeted Therapy (single agents)</u> Dabrafenib + trametinib (for BRAF V600E-positive tumors) Entrectinib or larotrectinib (for NTRK gene fusion-positive tumors)
	<u>Hormone Therapy</u>	



	<p>Aromatase inhibitors (anastrozole, exemestane, letrozole) Leuprolide acetate Megestrol acetate Tamoxifen</p>	<p>Mirvetuximab soravtansine-gynx (for FRα-expressing tumors \geq75% positive tumor cells) Mirvetuximab/bevacizumab (for FRα-expressing tumors \geq50% positive tumor cells) (category 2B) Selpercatinib (for RET gene fusion-positive tumors) For Low-Grade Serous Carcinoma • Trametinib • Binimetinib (category 2B) <u>Hormone Therapy</u> Fulvestrant (for low-grade serous carcinoma) <u>Immunotherapy</u> Dostarlimab-gxly (for dMMR/MSI-H recurrent or advanced tumors) Pembrolizumab (for microsatellite instability-high [MSI-H] or mismatch repair-deficient [dMMR] solid tumors, or patients with tumor mutational burden-high [TMB-H] tumors \geq 10 mutations/megabase)</p>
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Recurrence Therapy for Platinum-Resistant Disease (alphabetical order)			
Preferred Regimens	Other Recommended Regimens		Useful in Certain Circumstances
<p><u>Cytotoxic Therapy</u> Cyclophosphamide (oral)/bevacizumab Docetaxel Etoposide, oral Gemcitabine Liposomal doxorubicin Liposomal doxorubicin/bevacizumab Paclitaxel (weekly) Paclitaxel (weekly)/bevacizumab Topotecan Topotecan/bevacizumab</p> <p><u>Targeted Therapy (single agents)</u> Bevacizumab Mirvetuximab soravtansine-gynx (for FRα-expressing tumors[\geq75% positive tumor cells])(category 1))</p>	<p><u>Cytotoxic Therapy</u> Capecitabine Carboplatin* Carboplatin/docetaxel Carboplatin/paclitaxel (weekly) Carboplatin/gemcitabin e\pm bevacizumab Carboplatin/liposomal doxorubicin\pm bevacizumab Carboplatin/paclitaxel\pm bevacizumab Cyclophosphamide Cyclophosphamide (oral)/pembrolizumab /bevacizumab Doxorubicin Gemcitabine/bevacizum ab Gemcitabine/cisplatin Ifosfamide Irinotecan Ixabepilone/bevacizu mab (category 2B) Melphalan</p>	<p>Oxaliplatin Paclitaxel Paclitaxel, albumin bound Pemetrexed Sorafenib/topotecan Vinorelbine</p>	<p>Carboplatin/paclitaxel (for age >70) Carboplatin/paclitaxel, albumin bound (for confirmed taxane hypersensitivity) <u>Immunotherapy</u> Dostarlimab-gxly (for dMMR/MSI-H recurrent or advanced tumors) Pembrolizumab (for MSI-H or dMMR solid tumors or TMB-H tumors \geq 10 mutations/megabase and no satisfactory alternative treatment options)</p> <p><u>Hormone Therapy</u> Fulvestrant (for low-grade serous carcinoma)</p> <p><u>Targeted Therapy (single agents)</u> Dabrafenib + trametinib (for BRAF V600E-positive tumors) Entrectinib or larotrectinib (for NTRK gene fusion-positive tumors) Fam-trastuzumab deruxtecan-nxki (for HER2-positive tumors [IHC 3+ or 2+]) Mirvetuximab soravtansine-gynx/bevacizumab (for</p>



	<p><u>Targeted Therapy (single agents)</u> Niraparib(category 3) Olaparib(category 3) Pazopanib (category 2B) Rucaparib(category 3)</p> <p><u>Hormone Therapy</u> Aromatase inhibitors (anastrozole, exemestane, letrozole) Goserelin acetate Leuprolide acetate Megestrol acetate Tamoxifen</p>	<p>FRα-expressing tumors > 25% positive tumor cells) (category 2B) Selpercatinib (for RET gene fusion-positive tumors) For Low-Grade Serous Carcinoma</p> <ul style="list-style-type: none"> • Trametinib • Binimetinib (category 2B) <p>For mucinous carcinoma:</p> <ul style="list-style-type: none"> • FOLFIRI \pm bevacizumab (category 2B)
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MALIGNANT GERM CELL TUMORS			
Primary Therapy	<p><u>Preferred Regimens</u></p> <ul style="list-style-type: none"> • BEP (bleomycin, etoposide, cisplatin) Bleomycin 30 units IV per week plus etoposide 100 mg/m² IV daily on days 1 – 5 plus cisplatin 20 mg/m² IV daily on days 1 – 5; repeat every 21 days for 3 cycles for good risk (category 2B), or 4 cycles for poor risk. 	<p><u>Other Recommended Regimens</u></p> <ul style="list-style-type: none"> • None 	<p><u>Useful in Certain Circumstances</u></p> <ul style="list-style-type: none"> • Etoposide/carboplatin (for select patients with stage II – III resected dysgerminoma for whom minimizing toxicity is critical) >>Carboplatin 400 mg/m² IV on day 1 plus etoposide 120 mg/m² IV on days 1, 2, and 3 every 28 days for 3 cycles.
Recurrence Therapy	<p><u>Preferred Regimens (Potentially Curative)</u></p> <ul style="list-style-type: none"> • High-dose chemotherapy 	<p><u>Other Recommended Regimens (Palliative Only)</u></p> <ul style="list-style-type: none"> • Etoposide/cisplatin 	<ul style="list-style-type: none"> • Paclitaxel/ifosfamide • Pembrolizumab (if MSI-H/dMMR or TMB-H)



<ul style="list-style-type: none"> • TIP (paclitaxel, ifosfamide, cisplatin) 	<p>(EP), if not previously used</p> <ul style="list-style-type: none"> • Docetaxel • Docetaxel/carboplatin • Etoposide (oral) • Etoposide/ifosfamide /cisplatin (VIP) • <p>Gemcitabine/paclitaxel/oxaliplatin</p> <ul style="list-style-type: none"> • Gemcitabine/oxaliplatin • Paclitaxel • Paclitaxel/carboplatin • Paclitaxel/gemcitabine 	<ul style="list-style-type: none"> • VeIP (vinblastine, ifosfamide, cisplatin) • VAC (vincristine, dactinomycin, cyclophosphamide) • Supportive care
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MALIGNANT SEX CORD-STROMAL TUMORS

Primary Therapy	<u>Preferred Regimens</u>	<u>Other Recommended Regimens</u>	<u>Useful in Certain Circumstances</u>
	<ul style="list-style-type: none"> • Paclitaxel/carboplatin 	<ul style="list-style-type: none"> • Etoposide/cisplatin (EP) 	<ul style="list-style-type: none"> • BEP (category 2B)
Recurrence Therapy	<u>Preferred Regimens</u>	<u>Other Recommended Regimens</u>	<u>Useful in Certain Circumstances</u>
	<ul style="list-style-type: none"> • Paclitaxel/carboplatin 	<ul style="list-style-type: none"> • EP, if not previously used • Paclitaxel/ifosfamide • Docetaxel • Paclitaxel • Supportive care only • Targeted therapy 	<ul style="list-style-type: none"> • Aromatase inhibitors (ie, anastrozole, exemestane, letrozole) • Leuprolide acetate (for granulosa cell tumors) • Tamoxifen • BEP (category 2B) • VAC (category 2B)



Bevacizumabe (single agent)

**Neoadjuvant therapy****Carboplatin+Paclitaxel(135)**

Carboplatin	AUC(5)	iv	d1
Paclitaxel	135mg/m ²	iv	d1
Q3W*3-4cycles			

Parmar MK, Ledermann JA, Colombo N, et al. Paclitaxel plus platinum-based chemotherapy versus conventional platinum-based chemotherapy in women with relapsed ovarian cancer: the ICON4/AGO-OVAR-2.2 trial. *Lancet* 2003;361:2099-2106.

Carboplatin+Paclitaxel(135) +Bevacizumab

Carboplatin	AUC(5)	iv	d1
Paclitaxel	135mg/m ²	iv	d1
Bevacizumab	7.5mg/kg	iv	d1
Q3W *3-4cycles			

1.Parmar MK, Ledermann JA, Colombo N, et al. Paclitaxel plus platinum-based chemotherapy versus conventional platinum-based chemotherapy in women with relapsed ovarian cancer: the ICON4/AGO-OVAR-2.2 trial. *Lancet* 2003;361:2099-2106.

2.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 *3-4cycles			

Parmar MK, Ledermann JA, Colombo N, et al. Paclitaxel plus platinum-based chemotherapy versus conventional platinum-based chemotherapy in women with relapsed ovarian cancer: the ICON4/AGO-OVAR-2.2 trial. *Lancet* 2003;361:2099-2106.

Carboplatin+Paclitaxel(175)+Bevacizumab

Carboplatin	AUC(5)	iv	d1
Paclitaxel	175mg/m ²	iv	d1
Bevacizumab	7.5mg/kg	iv	d1
Q3W *3-4cycles			

1.Parmar MK, Ledermann JA, Colombo N, et al. Paclitaxel plus platinum-based chemotherapy versus conventional platinum-based chemotherapy in women with relapsed ovarian cancer: the ICON4/AGO-OVAR-2.2 trial. *Lancet* 2003;361:2099-2106.

2.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 *3-4cycles			

Ignace Vergote, M.D., Ph.D., Claes G. Tropé, M.D., Ph.D., Frédéric Amant, M.D., Ph.D., et al. Neoadjuvant Chemotherapy or Primary Surgery in Stage IIIC or IV Ovarian Cancer. *N Engl J Med* 2010; 363:943-953 September 2, 2010

Cisplatin+Paclitaxel(135) +Bevacizumab

Cisplatin	50mg/m ²	iv	d1
Paclitaxel	135mg/m ²	iv	d1
Bevacizumab	7.5mg/kg	iv	d1
Q3W *3-4cycles			

1. Ignace Vergote, M.D., Ph.D., Claes G. Tropé, M.D., Ph.D., Frédéric Amant, M.D., Ph.D., et al. Neoadjuvant Chemotherapy or Primary Surgery in Stage IIIC or IV Ovarian Cancer. *N Engl J Med* 2010; 363:943-953 September 2, 2010

2. 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/m ²	iv	d1
Paclitaxel	175mg/m ²	iv	d1
Q3W *3-4cycles			

Ignace Vergote, M.D., Ph.D., Claes G. Tropé, M.D., Ph.D., Frédéric Amant, M.D., Ph.D., et al. Neoadjuvant Chemotherapy or Primary Surgery in Stage IIIC or IV Ovarian Cancer. *N Engl J Med* 2010; 363:943-953 September 2, 2010

Cisplatin+Paclitaxel(175) +Bevacizumab

Cisplatin	50mg/m ²	iv	d1
Paclitaxel	175mg/m ²	iv	d1
Bevacizumab	7.5mg/kg	iv	d1
Q3W *3-4cycles			

1. Ignace Vergote, M.D., Ph.D., Claes G. Tropé, M.D., Ph.D., Frédéric Amant, M.D., Ph.D., et al. Neoadjuvant Chemotherapy or Primary Surgery in Stage IIIC or IV Ovarian Cancer. *N Engl J Med* 2010; 363:943-953 September 2, 2010

2. 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/m ²	iv	d1
Doxorubicin liposome	25mg/m ²	iv	d1
Q3W *3-4cycles			

Eleftherios P. Mamounas, John Bryant, Barry Lembersky, et al. Paclitaxel After Doxorubicin Plus Cyclophosphamide As Adjuvant Chemotherapy for Node-Positive Breast Cancer: Results From NSABP B-28.JCO June 1, 2005 vol. 23 no. 16 3686-3696

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

Paclitaxel	135mg/m ²	iv	d1
Doxorubicin liposome	25mg/m ²	iv	d1
Bevacizumab	7.5mg/kg	iv	d1
Q3W *3-4cycles			

1.Eleftherios P. Mamounas, John Bryant, Barry Lembersky, et al. Paclitaxel After Doxorubicin Plus Cyclophosphamide As Adjuvant Chemotherapy for Node-Positive Breast Cancer: Results From NSABP B-28.JCO June 1, 2005 vol. 23 no. 16 3686-3696

2.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/m ²	iv	d1
Doxorubicin liposome	25mg/m ²	iv	d1
Q3W *3-4cycles			

Eleftherios P. Mamounas, John Bryant, Barry Lembersky, et al. Paclitaxel After Doxorubicin Plus Cyclophosphamide As Adjuvant Chemotherapy for Node-Positive Breast Cancer: Results From NSABP B-28.JCO June 1, 2005 vol. 23 no. 16 3686-3696

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

Paclitaxel	175mg/m ²	iv	d1
Doxorubicin liposome	25mg/m ²	iv	d1
Bevacizumab	7.5mg/kg	iv	d1
Q3W *3-4cycles			

1.Eleftherios P. Mamounas, John Bryant, Barry Lembersky, et al. Paclitaxel After Doxorubicin Plus Cyclophosphamide As Adjuvant Chemotherapy for Node-Positive Breast Cancer: Results From NSABP B-28.JCO June 1, 2005 vol. 23 no. 16 3686-3696

2.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.

*Adjuvant therapy***Carboplatin+Paclitaxel(135)**

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

1.NCCN Clinical Practice Guidelines in Oncology™. Ovarian Cancer including Fallopian Tube Cancer and Primary Peritoneal Cancer.v 2.2012. Available at: http://www.nccn.org/professionals/physician_gls/pdf/ovarian.pdf. Accessed May 11, 2012.

2.Ozols RF, Bundy BN, Greer BE, et al; Gynecologic Oncology Group. Phase III trial of carboplatin and paclitaxel compared with cisplatin and paclitaxel in patients with optimally resected stage III ovarian cancer: a Gynecologic Oncology Group study.J Clin Oncol. 2003;21:3194–3200.

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.NCCN Clinical Practice Guidelines in Oncology™. Ovarian Cancer including Fallopian Tube Cancer and Primary Peritoneal Cancer.v 2.2012. Available at: http://www.nccn.org/professionals/physician_gls/pdf/ovarian.pdf. Accessed May 11, 2012.

2.Ozols RF, Bundy BN, Greer BE, et al; Gynecologic Oncology Group. Phase III trial of carboplatin and paclitaxel compared with cisplatin and paclitaxel in patients with optimally resected stage III ovarian cancer: a Gynecologic Oncology Group study.J Clin Oncol. 2003;21:3194–3200.

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			

1.NCCN Clinical Practice Guidelines in Oncology™. Ovarian Cancer including Fallopian Tube Cancer and Primary Peritoneal Cancer.v 2.2012. Available at: http://www.nccn.org/professionals/physician_gls/pdf/ovarian.pdf. Accessed May 11, 2012.

2.Ozols RF, Bundy BN, Greer BE, et al; Gynecologic Oncology Group. Phase III trial of carboplatin and paclitaxel compared with cisplatin and paclitaxel in patients with optimally resected stage III ovarian cancer: a Gynecologic Oncology Group study.J Clin Oncol. 2003;21:3194–3200.

Carboplatin+Paclitaxel(175)+Bevacizumab

Carboplatin	AUC (5)	iv	d1
Paclitaxel	175mg/m ²	iv	d1
Bevacizumab	7.5mg/kg	iv	d1

**Q3W* 3-6 cycles**

- 1.NCCN Clinical Practice Guidelines in Oncology™. Ovarian Cancer including Fallopian Tube Cancer and Primary Peritoneal Cancer.v 2.2012. Available at: http://www.nccn.org/professionals/physician_gls/pdf/ovarian.pdf. Accessed May 11, 2012.
- 2.Ozols RF, Bundy BN, Greer BE, et al; Gynecologic Oncology Group. Phase III trial of carboplatin and paclitaxel compared with cisplatin and paclitaxel in patients with optimally resected stage III ovarian cancer: a Gynecologic Oncology Group study.J Clin Oncol. 2003;21:3194–3200.
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

Lesnock JL, Darcy KM, Tian C, et al. BRCA1 expression and improved survival in ovarian cancer patients treated with intraperitoneal cisplatin and paclitaxel: a Gynecologic Oncology Group Study. Br J Cancer 2013;108:1231-1237. Available at:<http://www.ncbi.nlm.nih.gov/pubmed/23462720>

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.Lesnock JL, Darcy KM, Tian C, et al. BRCA1 expression and improved survival in ovarian cancer patients treated with intraperitoneal cisplatin and paclitaxel: a Gynecologic Oncology Group Study. Br J Cancer 2013;108:1231-1237. Available at:<http://www.ncbi.nlm.nih.gov/pubmed/23462720>
- 2.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/m ² iv	d1
Paclitaxel	175mg/m ² iv	d1

Q3W* 3-6 cycles

Lesnock JL, Darcy KM, Tian C, et al. BRCA1 expression and improved survival in ovarian cancer patients treated with intraperitoneal cisplatin and paclitaxel: a Gynecologic Oncology Group Study. Br J Cancer 2013;108:1231-1237. Available at:<http://www.ncbi.nlm.nih.gov/pubmed/23462720>

Cisplatin+Paclitaxel(175) +Bevacizumab

Cisplatin	50mg/m ² iv	d1
Paclitaxel	175mg/m ² iv	d1



Bevacizumab	7.5mg/kg	iv	d1
Q3W* 3-6 cycles			

- 1.Lesnock JL, Darcy KM, Tian C, et al. BRCA1 expression and improved survival in ovarian cancer patients treated with intraperitoneal cisplatin and paclitaxel: a Gynecologic Oncology Group Study. Br J Cancer 2013;108:1231-1237. Available at:<http://www.ncbi.nlm.nih.gov/pubmed/23462720>
- 2.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/m ²	iv	d1
Doxorubicin liposome	25 mg/m ²	iv	d1
Q3W* 3-6 cycles			

- Elizabeth M. Swisher, M.D., David G. Mutch, M.D., Janet S. Rader, M.D., et al. Topotecan in Platinum- and Paclitaxel-Resistant Ovarian Cancer .Gynecologic Oncology, Volume 66, Issue 3, September 1997, Pages 480–486

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

Paclitaxel	135mg/m ²	iv	d1
Doxorubicin liposome	25 mg/m ²	iv	d1
Bevacizumab	7.5mg/kg	iv	d1
Q3W* 3-6 cycles			

- 1.Elizabeth M. Swisher, M.D., David G. Mutch, M.D., Janet S. Rader, M.D., et al. Topotecan in Platinum- and Paclitaxel-Resistant Ovarian Cancer .Gynecologic Oncology, Volume 66, Issue 3, September 1997, Pages 480–486
- 2.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/m ²	iv	d1
Doxorubicin liposome	25 mg/m ²	iv	d1
Q3W* 3-6 cycles			

- Elizabeth M. Swisher, M.D., David G. Mutch, M.D., Janet S. Rader, M.D., et al. Topotecan in Platinum- and Paclitaxel-Resistant Ovarian Cancer .Gynecologic Oncology, Volume 66, Issue 3, September 1997, Pages 480–486

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

Paclitaxel	175mg/m ²	iv	d1
Doxorubicin liposome	25 mg/m ²	iv	d1
Bevacizumab	7.5mg/kg	iv	d1

**Q3W* 3-6 cycles**

- 1.Elizabeth M. Swisher, M.D., David G. Mutch, M.D., Janet S. Rader, M.D., et al. Topotecan in Platinum- and Paclitaxel-Resistant Ovarian Cancer .Gynecologic Oncology, Volume 66, Issue 3, September 1997, Pages 480–486
- 2.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+Cyclophosphamide

Cisplatin	75mg/m ²	iv	d1
Cyclophosphamide	750mg/m ²	iv	d1

Q3W* 3-6cycles

McGuire WP, Hoskins WJ, Brady MF, et al. Cyclophosphamide and cisplatin compared with paclitaxel and cisplatin in patients with stage III and stage IV ovarian cancer. N Engl J Med 1996;334:1-6.Available at: <http://www.ncbi.nlm.nih.gov/pubmed/7494563>.

Carboplatin+Cyclophosphamide

Carboplatin	AUC (5)	iv	d1
Cyclophosphamide	750mg/m ²	iv	d1

Q3W* 3-6 cycles

Swenerton K, Jeffrey J, Stuart G, et al. Cisplatin-cyclophosphamide versus carboplatin-cyclophosphamide in advanced ovarian cancer: a randomized phase III study of the National Cancer Institute of Canada Clinical Trials Group. J Clin Oncol 1992;10:718-726.

Ovary (Dysgerminoma ,Embryonal, endodermal sinus tumor, immature teratoma, or mixed histology)**BEP 3 day regimen**

Etoposide	165mg/m ²	Day1,2,3
Cisplatin	35 mg/m ²	Day1,2,3
± Bleomycin	30 U	Day1,8,15

Q3W* x 3-4course

Patients who do not respond to BEP may benefit from the following as salvage therapy (TIP):

Cisplatin	35 mg/m ²	Day1,2,3
Ifosfamide	2 gm/m ²	Day2,3,4

Alberta Provincial Gynecologic Oncology Tumour Team. Ovarian germ cell tumours. Edmonton (Alberta): CancerControl Alberta; 2013 Apr. 12 p. (Clinical practice guideline; no. GYNE-001).



Patients who do not respond to BEP may benefit from the following as salvage therapy (TIP):

Cisplatin	35 mg/m ²	Day1,2,3
Paclitaxel	135 mg/m ²	Day1

Alberta Provincial Gynecologic Oncology Tumour Team. Ovarian germ cell tumours. Edmonton (Alberta): CancerControl Alberta; 2013 Apr. 12 p. (Clinical practice guideline; no. GYNE-001).

Advanced/Recurrence regimens

Paclitaxel

Paclitaxel	80mg/m ² iv	d1
Note:or Every 3 weeks rest 1week for at least 12cycles		
Every 1weeks for at least 12cycles		

Markman M, Blessing J, Rubin SC, et al. Phase II trial of weekly paclitaxel (80 mg/m) in platinum and paclitaxel-resistant ovarian and primary peritoneal cancers: a Gynecologic Oncology Group study. *Gynecol Oncol* 2006;101:436-440.

Paclitaxel(175)

Paclitaxel	175mg/m ² iv	d1
Q3W* 6 cycles		

Chan, J. K., Brady, M. F., Penson, R. T. et al, (2016). Weekly vs. every-3-week paclitaxel and carboplatin for ovarian cancer. *New England Journal of Medicine*, 374(8), 738–748.

Paclitaxel(175) +Bevacizumab

Paclitaxel	175mg/m ² iv	d1
Bevacizumab	7.5mg/kg iv	d1
Q3W* 6 cycles		

1.Chan, J. K., Brady, M. F., Penson, R. T. et al, (2016). Weekly vs. every-3-week paclitaxel and carboplatin for ovarian cancer. *New England Journal of Medicine*, 374(8), 738–748.

2.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 liposome(Lipodox)

Doxorubicin liposome	45mg/ m ² iv	d1
Q3W* 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.

Doxorubicin liposome(Lipodox) +Bevacizumab

Doxorubicin liposome	45mg/ m ²	iv	d1
Bevacizumab	7.5mg/kg	iv	d1
Q3W* 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.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+Doxorubicin liposome(Lipodox)

Carboplatin	AUC (5)	iv	d1
Doxorubicin liposome	25mg/ m ²	iv	d1
Q3W* 6 cycles			

- 1.Mutch DG, Orlando M, Goss T, et al. Randomized phase III trial of gemcitabine compared with pegylated liposomal doxorubicin in patients with platinumresistant ovarian cancer. *J Clin Oncol* 2007;25:2811-2818.
- 2.Ferrandina G, Ludovisi M, Lorusso D, et al. Phase III trial of gemcitabine compared with pegylated liposomal doxorubicin in progressive or recurrent ovarian cancer. *J Clin Oncol* 2008;26:890-896.

Carboplatin+Doxorubicin liposome(Lipodox)+Bevacizumab

Carboplatin	AUC (5)	iv	d1
Doxorubicin liposome	25mg/ m ²	iv	d1
Bevacizumab	7.5mg/kg	iv	d1
Q3W* 6 cycles			

- 1.Mutch DG, Orlando M, Goss T, et al. Randomized phase III trial of gemcitabine compared with pegylated liposomal doxorubicin in patients with platinumresistant ovarian cancer. *J Clin Oncol* 2007;25:2811-2818.
- 2.Ferrandina G, Ludovisi M, Lorusso D, et al. Phase III trial of gemcitabine compared with pegylated liposomal doxorubicin in progressive or recurrent ovarian cancer. *J Clin Oncol* 2008;26:890-896.
- 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/m ²	iv	d1
Doxorubicin liposome	25 mg/m ²	iv	d1



Q3W* 6 wks

Elizabeth M. Swisher, M.D., David G. Mutch, M.D., Janet S. Rader, M.D., et al. Topotecan in Platinum- and Paclitaxel-Resistant Ovarian Cancer .Gynecologic Oncology, Volume 66, Issue 3, September 1997, Pages 480–486

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

Paclitaxel	135mg/m ²	iv	d1
Doxorubicin liposome	25 mg/m ²	iv	d1
Bevacizumab	7.5mg/kg	iv	d1

Q3W* 6 wks

- 1.Elizabeth M. Swisher, M.D., David G. Mutch, M.D., Janet S. Rader, M.D., et al. Topotecan in Platinum- and Paclitaxel-Resistant Ovarian Cancer .Gynecologic Oncology, Volume 66, Issue 3, September 1997, Pages 480–486
- 2.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/m ²	iv	d1
Doxorubicin liposome	25 mg/m ²	iv	d1

Q3W* 6 wks

Elizabeth M. Swisher, M.D., David G. Mutch, M.D., Janet S. Rader, M.D., et al. Topotecan in Platinum- and Paclitaxel-Resistant Ovarian Cancer .Gynecologic Oncology, Volume 66, Issue 3, September 1997, Pages 480–486

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

Paclitaxel	135mg/m ²	iv	d1
Doxorubicin liposome	25 mg/m ²	iv	d1
Bevacizumab	7.5mg/kg	iv	d1

Q3W* 6 wks

- 1.Elizabeth M. Swisher, M.D., David G. Mutch, M.D., Janet S. Rader, M.D., et al. Topotecan in Platinum- and Paclitaxel-Resistant Ovarian Cancer .Gynecologic Oncology, Volume 66, Issue 3, September 1997, Pages 480–486
- 2.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.

Topotecan(自費)

Topotecan	0.75mg/ m ²	iv	d1
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Q1W* 6 cycles

- 1.Sehouli J, Stengel D, Harter P, et al. Topotecan weekly versus conventional 5-day schedule in patients with platinum-resistant ovarian cancer: A randomized



- multicenter phase II trial of the North-Eastern German Society of Gynecological Oncology Ovarian Cancer Study Group. J Clin Oncol 2011;29:242-248.
 2. Preventing Occupational Exposures to Antineoplastic and Other Hazardous Drugs in Health Care Settings. NIOSH Alert 2004-165.
 3. American Society of Health-System Pharmacists. ASHP Guidelines on Handling Hazardous Drugs. Am J Health-Syst Pharm. 2006;63:1172-1193.

Topotecan(自費)

Topotecan	1.25mg/ m ²	iv	d1
Q3W* 6 cycles			

- 1.Gordon AN, Tonda M, Sun S, Rackoff W. Long-term survival advantage for women treated with pegylated liposomal doxorubicin compared with topotecan in a phase 3 randomized study of recurrent and refractory epithelial ovarian cancer. Gynecol Oncol 2004;95:1-8.
 2. Preventing Occupational Exposures to Antineoplastic and Other Hazardous Drugs in Health Care Settings. NIOSH Alert 2004-165.
 3. American Society of Health-System Pharmacists. ASHP Guidelines on Handling Hazardous Drugs. Am J Health-Syst Pharm. 2006;63:1172-1193.

Cisplatin+ Topotecan

Cisplatin	75mg/m ²	iv	d1
Topotecan	0.75mg/m ²	iv	d1
10days x 3 course			

- 1.M A Bookman, H Malmström, G Bolis, et al. Topotecan for the treatment of advanced epithelial ovarian cancer: an open-label phase II study in patients treated after prior chemotherapy that contained cisplatin or carboplatin and paclitaxel.JCO October 1998 vol. 16 no. 10 3345-3352
 2. Preventing Occupational Exposures to Antineoplastic and Other Hazardous Drugs in Health Care Settings. NIOSH Alert 2004-165.
 3. American Society of Health-System Pharmacists. ASHP Guidelines on Handling Hazardous Drugs. Am J Health-Syst Pharm. 2006;63:1172-1193.

Carboplatin+ Topotecan

Carboplatin	AUC (5)	iv	d1
Topotecan	0.75mg/m ²	iv	d1
10days x 3 course			

- 1.M A Bookman, H Malmström, G Bolis, et al. Topotecan for the treatment of advanced epithelial ovarian cancer: an open-label phase II study in patients treated after prior chemotherapy that contained cisplatin or carboplatin and paclitaxel.JCO October 1998 vol. 16 no. 10 3345-3352
 2. Preventing Occupational Exposures to Antineoplastic and Other Hazardous Drugs in Health Care Settings. NIOSH Alert 2004-165.
 3. American Society of Health-System Pharmacists. ASHP Guidelines on Handling Hazardous Drugs. Am J Health-Syst Pharm. 2006;63:1172-1193.

Bevacizumab

Bevacizumab	15mg/kg	iv	d1
Q3W			

- 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.

***Palliative regimens*****Gemcitabine+Doxorubicin liposome(Lipodox)**

Gemcitabine	1000mg/m ²	iv	d1
Doxorubicin liposome	30mg/m ²	iv	d1
Every 3 weeks rest 1 week for 6 cycles			

1.Mutch DG, Orlando M, Goss T, et al. Randomized phase III trial of gemcitabine compared with pegylated liposomal doxorubicin in patients with platinumresistant ovarian cancer. J Clin Oncol 2007;25:2811-2818.

2.Ferrandina G, Ludovisi M, Lorusso D, et al. Phase III trial of gemcitabine compared with pegylated liposomal doxorubicin in progressive or recurrent ovarian cancer. J Clin Oncol 2008;26:890-896.

Gemcitabine+Doxorubicin liposome(Lipodox)+ Bevacizumab

Gemcitabine	1000mg/m ²	iv	d1
Doxorubicin liposome	30mg/m ²	iv	d1
Bevacizumab	7.5mg/kg	iv	d1
Every 3 weeks rest 1 week for 6 cycles			

1.Mutch DG, Orlando M, Goss T, et al. Randomized phase III trial of gemcitabine compared with pegylated liposomal doxorubicin in patients with platinumresistant ovarian cancer. J Clin Oncol 2007;25:2811-2818.

2.Ferrandina G, Ludovisi M, Lorusso D, et al. Phase III trial of gemcitabine compared with pegylated liposomal doxorubicin in progressive or recurrent ovarian cancer. J Clin Oncol 2008;26:890-896.

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

Paclitaxel	80mg/m ²	iv	d1
Q1W*6cycles			

Markman M, Blessing J, Rubin SC, et al. Phase II trial of weekly paclitaxel (80 mg/m) in platinum and paclitaxel-resistant ovarian and primary peritoneal cancers: a Gynecologic Oncology Group study. Gynecol Oncol 2006;101:436-440.

Doxorubicin liposome (Lipodox)

Doxorubicin liposome	25mg/m ²	iv	d1
Q3W			

1.Mutch DG, Orlando M, Goss T, et al. Randomized phase III trial of gemcitabine compared with pegylated liposomal doxorubicin in patients with platinumresistant ovarian cancer. J Clin Oncol 2007;25:2811-2818.



2.Ferrandina G, Ludovisi M, Lorusso D, et al. Phase III trial of gemcitabine compared with pegylated liposomal doxorubicin in progressive or recurrent ovarian cancer. J Clin Oncol 2008;26:890-896.

Doxorubicin liposome (Lipodox) + Bevacizumab

Doxorubicin liposome	25mg/m ²	iv	d1
Bevacizumab	7.5mg/kg	iv	d1
Q3W			

- 1.Mutch DG, Orlando M, Goss T, et al. Randomized phase III trial of gemcitabine compared with pegylated liposomal doxorubicin in patients with platinumresistant ovarian cancer. J Clin Oncol 2007;25:2811-2818.
- 2.Ferrandina G, Ludovisi M, Lorusso D, et al. Phase III trial of gemcitabine compared with pegylated liposomal doxorubicin in progressive or recurrent ovarian cancer. J Clin Oncol 2008;26:890-896.
- 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 + Doxorubicin liposome(Lipodox)

Carboplatin	AUC (5)	iv	d1
Doxorubicin liposome	25 mg/m ²	iv	d1
Q3W			

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	25 mg/m ²	iv	d1
Bevacizumab	7.5mg/kg	iv	d1
Q3W			

- 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.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.

Topotecan

Topotecan	0.75mg/m ²	iv	d1
Q1W *6 cycles			

- 1.Gordon AN, Tonda M, Sun S, Rackoff W. Long-term survival advantage for women treated with pegylated liposomal doxorubicin compared with topotecan in a phase 3 randomized study of recurrent and refractory epithelial ovarian cancer. Gynecol Oncol 2004;95:1-8.



2. Preventing Occupational Exposures to Antineoplastic and Other Hazardous Drugs in Health Care Settings. NIOSH Alert 2004-165.
3. American Society of Health-System Pharmacists. ASHP Guidelines on Handling Hazardous Drugs. Am J Health-Syst Pharm. 2006;63:1172-1193.

Topotecan

Topotecan	1.25mg/m ²	iv	d1
Q1W*6 cycles			

1. Gordon AN, Tonda M, Sun S, Rackoff W. Long-term survival advantage for women treated with pegylated liposomal doxorubicin compared with topotecan in a phase 3 randomized study of recurrent and refractory epithelial ovarian cancer. Gynecol Oncol 2004;95:1-8.
2. Preventing Occupational Exposures to Antineoplastic and Other Hazardous Drugs in Health Care Settings. NIOSH Alert 2004-165.
3. American Society of Health-System Pharmacists. ASHP Guidelines on Handling Hazardous Drugs. Am J Health-Syst Pharm. 2006;63:1172-1193.

Cisplatin+Topotecan

Cisplatin	50mg/m ²	iv	d1
Topotecan	1.25mg/m ²	iv	d1
Every 10days for 3 cycles			

1. M A Bookman, H Malmström, G Bolis, et al. Topotecan for the treatment of advanced epithelial ovarian cancer: an open-label phase II study in patients treated after prior chemotherapy that contained cisplatin or carboplatin and paclitaxel. JCO October 1998 vol. 16 no. 10 3345-3352
2. Preventing Occupational Exposures to Antineoplastic and Other Hazardous Drugs in Health Care Settings. NIOSH Alert 2004-165.
3. American Society of Health-System Pharmacists. ASHP Guidelines on Handling Hazardous Drugs. Am J Health-Syst Pharm. 2006;63:1172-1193.

Cisplatin+Topotecan+Bevacizumab

Cisplatin	50mg/m ²	iv	d1
Topotecan	1.25mg/m ²	iv	d1
Bevacizumab	7.5mg/kg	iv	d1
Every 10days for 3 cycles			

1. M A Bookman, H Malmström, G Bolis, et al. Topotecan for the treatment of advanced epithelial ovarian cancer: an open-label phase II study in patients treated after prior chemotherapy that contained cisplatin or carboplatin and paclitaxel. JCO October 1998 vol. 16 no. 10 3345-3352
2. Preventing Occupational Exposures to Antineoplastic and Other Hazardous Drugs in Health Care Settings. NIOSH Alert 2004-165.
3. American Society of Health-System Pharmacists. ASHP Guidelines on Handling Hazardous Drugs. Am J Health-Syst Pharm. 2006;63:1172-1193.

Maintenance Therapy

Olaparib(Lynparza)

Olaparib(Lynparza)	300mg	po	BID
Note: HRD(+)			



QD

Kathleen Moore, M.D., Nicoletta Colombo, M.D., et al. Maintenance Olaparib in Patients with Newly Diagnosed Advanced Ovarian Cancer. *N Engl J Med* 2018; 379:2495-2505

Niraparib(Zejula)

Niraparib(Zejula)	100mg po	BID
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Note: 無須檢驗 HRD 但是要 platin-sensitivity

QD

A. González-Martín, B. Pothuri, I. Vergote, R. DePont Christensen, W. Graybill, M.R. Mirza, C. McCormick, D. Lorusso, P. Hoskins, G. Freyer, K. Baumann, K. Jardon, A. Redondo, R.G. Moore, C. Vulsteke, R.E. O’Cearbhaill, B. Lund, F. Backes, P. Barretina-Ginesta, A.F. Haggerty, M.J. Rubio-Pérez, M.S. Shahin, G. Mangili, W.H. Bradley, I. Bruchim, K. Sun, I.A. Malinowska, Y. Li, D. Gupta, and B.J. Monk, for the PRIMA/ENGOT-OV26/GOG-3012 Investigators*

Bevacizumab

Bevacizumab	7.5mg/kg iv	d1
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Q3W

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.

Intraperitoneal for stage III**Cisplatin IP**

cisplatin	75- 100mg/m ² ip	d1
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Note: Then follow by 3 times CT

During operation

1. David S. Alberts, M.D., P.Y. Liu, Ph.D., Edward V. Hannigan, M.D., et al. Intraperitoneal Cisplatin plus Intravenous Cyclophosphamide versus Intravenous Cisplatin plus Intravenous Cyclophosphamide for Stage III Ovarian Cancer. *N Engl J Med* 1996; 335:1950-1955 December 26, 1996

2. Hyperthermic intraperitoneal chemotherapy for recurrent ovarian cancer (CHIPOR): a randomised, open-label, phase 3 trial Classe, Jean-Marc et al. *The Lancet Oncology*, Volume 25, Issue 12, 1551 - 1562

3. *New England Journal of Medicine* Volume 378 • Number 3 • January 18, 2018 Pages: 230-240

十、放射線治療原則**1. Overall Role of Radiation Therapy**

- 放射治療並非卵巢癌之常規根治性治療方式。



- 卵巢癌之標準治療仍以**腫瘤減積手術 (cytoreductive surgery) 合併全身性治療 (systemic therapy) **為核心。
- 放射治療主要扮演輔助性、症狀導向或局部疾病控制之角色，是否使用須依病人臨床狀況進行個別化評估。

2. Palliative Radiation Therapy

可用於緩解腫瘤相關症狀，包括但不限於：疼痛、出血、壓迫症狀、骨轉移等。治療目標為 symptom control 與 quality of life 改善。治療劑量應視個別情況訂定。

3. 無法手術切除之殘存腫瘤 (Unresectable Residual Disease)

對於因解剖位置、重大共病或手術風險過高，而無法進行再次手術切除之局部殘存腫瘤，可考慮 localized RT 作為局部疾病控制或症狀緩解之治療方式。此情境下 RT 之治療目的非根治，應審慎評估正常組織耐受度來訂定個別治療劑量。

4. Oligometastatic Disease

於高度選擇之病人，可考慮 localized RT 或 stereotactic body radiation therapy (SBRT) 作為局部控制手段。此屬非標準治療策略，建議經 multidisciplinary team (MDT) 討論後執行。

5. Non-recommended Use

- 不建議常規術後輔助放射治療 (adjuvant RT)。
- 不建議預防性全腹腔放射治療 (prophylactic whole abdominal RT)。

十一、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。

十二、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）

十三、參考文獻

1. NCI (National Cancer Institute) Ovarian Epithelial Cancer Treatment Health Professional Version (date last modified: March 17, 2003).
2. NCI (National Cancer Institute) Ovarian Low Malignant Potential Tumors Treatment Health Professional Version (date last modified: June 19, 2003).
3. FIGO staging classifications and clinical practice guidelines in the management of gynecologic cancers. *Int J Gynecol Obstet* 2000; 70:209-262.
4. Standards, Options and Recommendations. Clinical practice guidelines for cancer care from the French National Federation of Cancer (FNCLCC). Ovarian cancer. *Bri J Cancer* 2001; 84(Suppl 2):18-23.
5. Ozols RF, Rubin SC, Thomas G, et al. Epithelial ovarian cancer, in Hoskins WJ, Perez CA, Young RC (eds): *Principles and Practice of Gynecologic Oncology*, 2nd ed, chap 32, pp 939-941. Philadelphia, Lippincott Williams & Wilkins, 1997.
6. Burghardt E, Girardi F, Lahousen M, et al. Patterns of pelvic and paraaortic lymph node involvement in ovarian cancer. *Gynecol Oncol* 1991; 40:103-106.
7. Omura GA, Brady MF, Homesley HD, et al. Long-term follow-up and prognostic factor analysis in advanced ovarian carcinoma: the Gynecologic Oncology Group experience. *J Clin Oncol* 1991;9:1138-1150.
8. Van Houwelingen JC, ten Bokkel Huinink WW, van der Burg ME, et al. Predictability of the survival of patients



- with advanced ovarian cancer. *J Clin Oncol* 1989; 7:769-773.
9. Neijt JP, ten Bokkel Huinink WW, van der Burg ME, et al. Long-term survival in ovarian cancer. Mature data from The Netherlands Joint Study Group for Ovarian Cancer. *Eur J Cancer* 1991; 27:1367-1372.
 10. Hoskins WJ, Bundy BN, Thigpen JT, et al. The influence of cytoreductive surgery on recurrence-free Interval and survival in small-volume stage III epithelial ovarian cancer: a Gynecologic Oncology Group study. *Gynecol Oncol* 1992; 47:159-166.
 11. Thigpen T, Brady MF, Omura GA, et al. Age as a prognostic factor in ovarian carcinoma. The Gynecologic Oncology Group experience. *Cancer* 1993; 71(2 Suppl):614.
 12. Bristow RE, Karlan BY. Ovulation induction, infertility, and ovarian cancer risk. *Fertilil* 1996; 66:499-507.
 13. Venn A, Watson L, Lumley J, et al. Breast and ovarian cancer incidence after infertility and in vitro fertilisation. *Lancet* 1995; 346:995-1000.
 14. Rossing MA, Daling JR, Weiss NS, et al. Ovarian tumors in a cohort of infertile women. *N Engl J Med* 1994; 331:771-776.
 15. Lynch HT, Watson P, Lynch JF, et al. Hereditary ovarian cancer. Heterogeneity in age at onset. *Cancer* 1993; 71(2 Suppl): 573-581.
 16. Statement of the American Society of Clinical Oncology: genetic testing for cancer susceptibility, Adopted on February 20, 1996. *J Clin Oncol* 1996; 14:1730-1736.
 17. Frank TS, Deffenbaugh AM, Reid JE, et al. Clinical characteristics of individuals with germline mutations in BRCA1 and BRCA2: analysis of 10,000 individuals. *J Clin Oncol* 2002; 20:1480-1490.
 18. Narod SA, Risch H, Moslehi R, et al. Oral contraceptives and the risk of hereditary ovarian cancer. Hereditary Ovarian Cancer Clinical Study Group. *N Engl J Med* 1998;424-428.
 19. Modan B, Hartge P, Hirsh-Yechezkel G, et al. National Israel Ovarian Cancer Study Group. Parity, oral contraceptives, and the risk of ovarian cancer among carriers and noncarriers of a BRCA1 or BRCA2 mutation. *N Engl J Med* 2001; 345:235-240.
 20. Narod SA, Sun P, Ghadirian P, et al. Tubal ligation and risk of ovarian cancer in carriers of BRCA1 or BRCA2 mutations: a case-control study. *Lancet* 2001;1467-1470.
 21. Rebbeck TR, Lynch HT, Neuhausen SL, et al. The Prevention and Observation of Surgical End Points Study Group. Prophylactic oophorectomy in carriers of BRCA1 or BRCA2 mutations. *N Engl J Med* 2002;



- 346:1616-1622.
22. Kauff ND, Satagopan JM, Robson ME, et al. Risk-reducing salpingo-oophorectomy in women with a BRCA1 or BRCA2 mutation. *N Engl J Med* 2002; 346:1609-1615.
 23. Haber D. Prophylactic oophorectomy to reduce the risk of ovarian and breast cancer in carriers of mutations. *N Engl J Med* 2002; 346:1660-1662.
 24. Shepherd JH. Revised FIGO staging for gynaecological cancer. *Br J Obstet aecol* 1989; 96:889-892. Ovary. In: American Joint Committee on Cancer: *AJCC Cancer Staging Manual*. Philadelphia, Pa: Lippincott- Raven Publishers, 5th ed., 1997, pp 201-206.
 25. Muggia FM, Braly PS, Brady MF, et al. Phase III randomized study of cisplatin versus paclitaxel versus cisplatin and paclitaxel in patients with suboptimal stage III or IV ovarian cancer: a gynecologic oncology group study. *J Clin Oncol* 2000; 18:106-115.
 26. International Collaborative Ovarian Neoplasm Group. Paclitaxel plus carboplatin versus standard chemotherapy with either single-agent carboplatin or cyclophosphamide, doxorubicin and cisplatin in women with ovarian cancer: the ICON3 randomised trial. *Lancet*. 2002 Aug 17; 360(9332):505-515.
 27. Ozols RF, Bundy BN, Greer BE, et al. Gynecologic Oncology Group. Phase III trial of carboplatin and paclitaxel compared with cisplatin and paclitaxel in patients with optimally resected stage III ovarian cancer: a Gynecologic Oncology Group study. *J Clin Oncol*. 2003 Sep 1; 21(17):3194-3200.
 28. McGuire WP, Hoskins WJ, Brady MF, et al. Cyclophosphamide and cisplatin compared with paclitaxel and cisplatin in patients with stage III and stage IV ovarian cancer. *N Engl J Med* 1996; 334:1-6.
 29. Vasey PA, Atkinson R, Coleman R, et al. Docetaxel-carboplatin as first line chemotherapy for epithelial ovarian cancer. *Br J Cancer* 2001; 84:170-178.
 30. Swenerton K, Jeffrey J, Stuart G, et al. Cisplatin-cyclophosphamide versus carboplatin-cyclophosphamide in advanced ovarian cancer: a randomized phase III study of the National Cancer Institute of Canada Clinical Trials Group. *J Clin Oncol* 1992; 10:718-726.
 31. Covens A, Carey M, Bryson P, et al. Systematic review of first-line chemotherapy for newly diagnosed postoperative patients with stage II, III or IV epithelial ovarian cancer. *Gynecol Oncol* 2002; 85:71-80.
 32. Markman M, Liu PY, Wilczynski S, et al. Southwest Oncology Group; Gynecologic Oncology Group. Phase III randomized trial of 12 versus 3 months of maintenance paclitaxel in patients with advanced ovarian cancer after



- complete response to platinum and paclitaxel-based chemotherapy: a Southwest Oncology Group and Gynecologic Oncology Group trial. *J Clin Oncol* 2003; 21:2460-2465.
33. Ten Bokkel Huinink W, Gore M, Carmichael J, et al. Topotecan vs paclitaxel for the treatment of recurrent epithelial ovarian cancer. *J Clin Oncol* 1997; 15:2183-2193.
 34. Muggia FM, Hainsworth JD, Jeffers S, et al. Phase II study of liposomal doxorubicin in refractory ovarian cancer: Antitumor activity and toxicity modification by encapsulation. *J Clin Oncol* 1997; 15:987-993.
 35. Rose PG, Blessing JA, Mayer AR, et al. Prolonged oral etoposide as second line therapy for platinum resistant (PLATR) and platinum sensitive (PLATS) ovarian carcinoma: A Gynecologic Oncology Group study. *Proc Am Soc Clin Oncol* 1992;82.
 36. Lund B, Hansen OP, Theilade K, et al. Phase II study of gemcitabine (2',2'- difluorodeoxycytidine) in previously treated ovarian cancer patients. *J Natl Cancer Inst* 1994; 86:1530-1533.
 37. Bajetta E, Di Leo A, Biganzoli L, et al. Phase II study of vinorelbine in patients with pretreated advanced ovarian cancer: Activity in platinum-resistant disease. *J Clin Oncol* 1996; 14:2546-2551.
 38. Vergote I, Himmelman A, Frankendal B, et al. Hexamethylmelamine as second-line therapy in platinum-resistant ovarian cancer. *Gynecol Oncol* 1992; 47:282-286.
 39. Markman M, Hakes T, Reichman B, et al. Ifosfamide and mesna in previously-treated advanced epithelial ovarian cancer: Activity in platinum-resistant disease. *J Clin Oncol* 1992; 10:243-248.
 40. Young RC, Walton LA, Ellenberg SS, et al. Adjuvant therapy in stage I and stage II epithelial ovarian cancer. *N Engl J Med* 1990; 322:1021-1027.
 41. Van der Burg ME, van Lent M, Buyse M, et al. The effect of debulking surgery after induction chemotherapy on the prognosis in advanced epithelial ovarian cancer. Gynecological Cancer Cooperative Group of the European Organization for Research and Treatment of Cancer. *N Engl J Med* 1995; 332:629-634.
 42. Rose PG, Nerenstone S, Brady M, et al. A phase III randomized study of interval secondary cytoreduction in patients with advanced stage ovarian carcinoma with suboptimal residual disease: a Gynecologic Oncology Group study. 2002 ASCO Annual Meeting Abstract No: 802.
 43. Fennelly D, Aghajanian C, Shapiro F, et al. Phase I and pharmacologic study of paclitaxel administered weekly in patients with relapsed ovarian cancer. *J Clin Oncol* 1997; 15:187-192.
 44. Corn BW, Lanciano RM, Boente M, et al. Recurrent ovarian cancer. *Cancer* 1994;2979-2983.



45. Leake JF, Currie JL, Rosenshein NB, et al. Long-term follow-up of serous ovarian tumors of low malignant potential. *Gynecol Oncol* 1992; 47:150-158.
46. Barnhill DR, Kurman RJ, Brady MV, et al. Preliminary analysis of the behavior of stage I ovarian serous tumors of low malignant potential: A Gynecologic Oncology Group study. *J Clin Oncol* 1995; 13:2752-2756.
47. Barakat RR, Benjamin I, Lewis JL, et al. Platinum-based chemotherapy for advanced- stage serous ovarian carcinoma of low malignant potential. *Gynecol Oncol* 1995;90-393.
48. Gershenson DM, Silva EG. Serous ovarian tumors of low malignant potential with peritoneal implants. *Cancer* 1990; 65:578-585.
49. Sutton GP, Bundy BN, Omura GA, et al. Stage III ovarian tumors of low malignant potential treated with cisplatin combination therapy (a Gynecologic Oncology Group study). *Gynecol Oncol* 1991; 41:230-233.
50. Trope C, Kaern J, Vergote IB, et al. Are borderline tumors of the ovary overtreated both surgically and systemically? A review of four prospective randomized trials including 253 patients with borderline tumors. *Gynecol Oncol* 1993; 51:236-243.
51. Chan JK, Cheung MK, Husain A, et al. Patterns and progress in ovarian cancer over 14 years. *Obstet Gynecol* 2006;108(3 Pt 1):521-523.
52. American Cancer Society. *Cancer Facts & Figures 2009*. Atlanta:American Cancer Society; 2009 (<http://www.cancer.org/downloads/STT/500809web.pdf>).
53. Ozols RF, Rubin SC, Thomas G, et al. Epithelial ovarian cancer. In:Hoskins WJ, Perez CA, Young RC, eds. *Principles and Practice of Gynecologic Oncology*, 4th ed. Philadelphia: Lippincott Williams & Wilkins. 2005:919-922.
54. Finch A, Beiner M, Lubinski J, et al; Hereditary Ovarian Cancer Clinical Study Group. Salpingo-oophorectomy and the risk of ovarian, fallopian tube, and peritoneal cancers in women with a BRCA1 or CA2 mutation. *JAMA* 2006;296(2):185-192.
55. Rebbeck TR, Kauff ND, Domchek SM. Meta-analysis of risk reduction estimates associated with risk-reducing salpingo-oophorectomy in BRCA1 or BRCA2 mutation carriers. *J Natl Cancer* 2009;101(2):80-87. Epub 2009 Jan 13.
56. Roh MH, Kindelberger D, Crum CP. Serous tubal intraepithelial carcinoma and the dominant ovarian mass: clues to serous tumor origin? *Am J Surg Pathol* 2009;33(3):376-383.



57. Carlson JW, Miron A, Jarboe EA, et al. Serous tubal intraepithelial carcinoma: its potential role in primary peritoneal serous carcinoma and serous cancer prevention. *J Clin Oncol* 2008;26(25):4160-4165.
58. Kindelberger DW, Lee Y, Miron A, et al. Intraepithelial carcinoma of the fimbria and pelvic serous carcinoma: Evidence for a causal relationship. *Am J Surg Pathol* 2007;31(2):161-169.
59. Goff BA, Mandel L, Drescher CW, et al. Development of an ovarian cancer symptom index. *Cancer* 2007; 109: 221-227.
60. Andersen MR, Goff BA, Lowe KA, et al. Combining a symptoms index with CA 125 to improve detection of ovarian cancer. *Cancer* 2008;113(3):484-489.
61. Menon U, Gentry-Maharaj A, Hallett R, et al. Sensitivity and specificity of multimodal and ultrasound screening for ovarian cancer, and stage distribution of detected cancers: results of the prevalence screen of the UK Collaborative Trial of Ovarian Cancer Screening (UKCTOCS). *Lancet Oncol* 2009;10(4):327-340. Epub 2009 Mar 11.
62. Partridge E, Kreimer AR, Greenlee RT, et al; PLCO Project Team. Results from four rounds of ovarian cancer screening in a randomized Obstet Gynecol 2009;113(4):775-782.
63. Horvath G, Järverud GA, Järverud S, Horváth I. Human ovarian carcinomas detected by specific odor. *Integr Cancer Ther* 2008;7:76-80.
64. Visintin I, Feng Z, Longton G, et al. Diagnostic markers for early ction of ovarian cancer. *Clin Cancer Res* 2008;14(4):1065-1072. Epub 2008 Feb 7.
65. du Bois A, Reuss A, Pujade-Lauraine E, et al. Role of surgical outcome as prognostic factor in advanced epithelial ovarian cancer: a combined exploratory analysis of 3 prospectively randomized phase 3 multicenter trials: by the Arbeitsgemeinschaft Gynaekologische Onkologie Studiengruppe Ovarialkarzinom (AGO- OVAR) and the Groupe d'Investigateurs Nationaux Pour les Etudes des Cancers de l'Ovaire (GINECO). *Cancer* 2009;115(6):1234-1244.
66. Eisenhauer EL, Abu-Rustum NR, Sonoda Y, et al. The effect of maximal surgical cytoreduction on sensitivity to platinum-taxane chemotherapy and subsequent survival in patients with advanced ovarian cancer. *Gynecol Oncol* 2008;108(2):276-281. Epub 2007 Dec 11.
67. Aletti GD, Powless C, Bakkum-Gamez J, et al. Pattern of retroperitoneal dissemination of primary peritoneum cancer: Basis for rational use of lymphadenectomy. *Gynecol Oncol* 2009 Apr 8.



68. Dembo AJ. Abdominopelvic radiotherapy in ovarian cancer. A 10-year experience. *Cancer* 1985, 55, 2285-2290.
69. Perez and Brady's : Principles and Practice of Radiation Oncology, 5th ed, 2008
70. Eric K. Hansen, Handbook of Evidence-Based Radiation Oncology, 2006
71. The new engl and journa l of medicine Robert A. Burger, M.D., Mark F. Brady, Ph.D., Michael A. Bookman, M.D., Gini F. Fleming, M.D., Bradley J. Monk, M.D., Helen Huang, M.S.,Robert S. Mannel, M.D., Howard D. Homesley, M.D., Jeffrey Fowler, M.D.,Benjamin E. Greer, M.D., Matthew Boente, M.D., Michael J. Birrer, M.D., Ph.D.,and Sharon X. Liang, M.D., for the Gynecologic Oncology Group* , december 29, 2011,473-2483
72. The new engl and journa l of medicineTimothy J. Perren, M.D., Ann Marie Swart, M.D., Jacobus Pfisterer, M.D.,Jonathan A. Ledermann, M.D., Eric Pujade-Lauraine, M.D., Gunnar Kristensen, M.D.,Mark S. Carey, M.D., Philip Beale, M.D., Andres Cervantes, M.D.,Christian Kurzeder, M.D., Andreas du Bois, M.D., Jalid Sehoul, M.D.,Rainer Kimmig, M.D., Anne Stahle, M.D., Fiona Collinson, M.D.,Sharadah Essapen, M.D., Charlie Gourley, M.D., Alain Lortholary, M.D.,Frederic Selle, M.D., Mansoor R. Mirza, M.D., Arto Lemin, M.D.,Marie Plante, M.D., Dan Stark, M.D., Wendi Qian, Ph.D., Mahesh K.B. Parmar, Ph.D.,and Amit M. Oza, M.D., for the ICON7 Investigators*december 29, 2011,2484-2496
73. Ozols RF, Bundy BN, Greer BE, et al; Gynecologic Oncology Group. Phase III trial of carboplatin and paclitaxel compared with cisplatin and paclitaxel in patients with optimally resected stage III ovarian cancer: a Gynecologic Oncology Group study. *J Clin Oncol.* 2003;21:3194–3200.
74. Vasey PA, Jayson GC, Gordon A, et al; Scottish Gynaecological Cancer Trials Group. Phase III randomized trial of docetaxelcarboplatinversus paclitaxel-carboplatin as first-line chemotherapy for ovarian carcinoma. *J Natl Cancer Inst.* 2004;96:1682–1691.
75. Katsumata N, Yasuda M, Takahashi F, et al; Japanese Gynecologic Oncology Group. Dose-dense paclitaxel once a week in combination with carboplatin every 3 weeks for advanced ovarian cancer: a phase 3, open-label, randomised controlled trial. *Lancet.* 2009;374:1331–1338.
76. Armstrong DK, Bundy B, Wenzel L, et al; Gynecologic Oncology Group. Intraperitoneal cisplatin and paclitaxel in ovarian cancer.*N Engl J Med.* 2006;354:34–43.
77. Alberta Provincial Gynecologic Oncology Tumour Team. Ovarian germ cell tumours. Edmonton (Alberta): CancerControl Alberta; 2013 Apr. 12 p. (Clinical practice guideline; no. GYNE-001).
78. 緩和文獻:Thomas, J.(2012).American Society of Clinical Oncology Provisional Clinical Opinion: The



Integration of Palliative Care Into Standard Oncology Care. *American Society of Clinical Oncology*, 30(8), 880-887

79. National Comprehensive Cancer Network. (2025). *NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®): Ovarian cancer, including fallopian tube cancer and primary peritoneal cancer*. Version 3. National Comprehensive Cancer Network.
80. Chan, J. K., Brady, M. F., Penson, R. T. et al, (2016). Weekly vs. every-3-week paclitaxel and carboplatin for ovarian cancer. *New England Journal of Medicine*, 374(8), 738–748.



十四、卵巢癌各期治療完治定義

期別	治療方式	完治定義	備註
第 I 期	OP ± C/T	完成手術 ± 至少 3~6 次的化療(是否需要化療醫師需視病理分化、細胞型態及殘存腫瘤做決定)	
第 II 期	OP + C/T	完成手術+ 6 次的化療	
第 III 期	OP + C/T	完成手術+ 6 次的化療	建議基因檢測
第 IV 期	OP + C/T	接受手術或 C/T 6 次完治。 接受『安寧照護』	建議基因檢測