中山醫學大學附設醫院

卵巢癌診療指引

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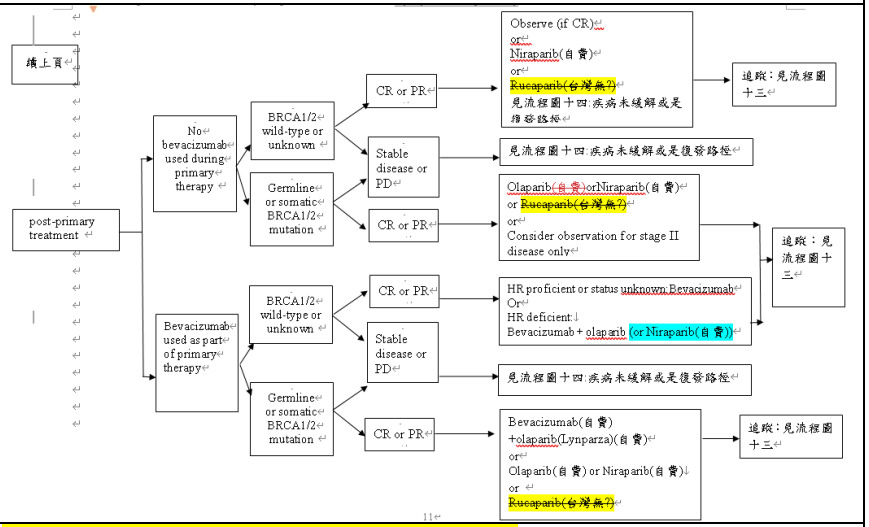
2014/12/17 Version 5.0
2014/01/08 Version 4.0
2012/12/13 Version 3.0
2011/11/24 Version 2.1
2011/02/21 Version 2.0
2010/07/12 Version 1.0

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

癌症委員會主任委員	癌症委員會執行長	癌症中心主任	團隊負責人

修訂內容

頁數	原文	修訂/新增
1	美國 National Comprehensive Cancer Network (NCCN) 的 Practice Guide-lines in Ovarin Cancer 2022,V5 版	美國 National Comprehensive Cancer Network (NCCN) 的 Practice Guide-lines in Ovarin Cancer 2023,V2 版
3	新增	♦ 生殖內分泌和不孕症 (REI) 評估根據臨床指示
11	修訂	
16	新增註解	* Grade1 Endometrioid Carcinoma only
18	No invasive implants	No low-grade serous carcinoma
18	~~Invasive implants~~	刪除
19	~~Completion surgery (contralateral USO, hysterectomy)~~	Comprehensive staging and resection of residual disease
20	Stage IA/IC 保留生育	臨床上疾病僅限於卵巢，希望生育
25		★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

<table>
<tr><td></td><td></td><td>突變的透明細胞癌或癌肉瘤）可能會受益於 PARPi 維持治療。</td></tr>
<tr><td>26</td><td>新增</td><td>Stage I
<table>
<tr><td colspan="4">STAGE I DISEASE</td></tr>
<tr><td>•High-grade serous
•Endometrioid (Grade 2/3)
•Clear cell carcinoma
•Carcinosarcoma</td><td>Preferred Regimens
•Paclitaxel 175/carboplatin</td><td>Other Recommended Regimens
•Carboplatin/liposomal doxorubicin
•Docetaxel/carboplatin</td><td>Useful in Certain Circumstances
•Docetaxel/oxaliplatin/bevacizumab±maintenance bevacizumab (for stage IB/IC)
For carcinosarcoma:
•Carboplatin/ifosfamide
•Cisplatin/ifosfamide
•Paclitaxel/ifosfamide (category 2B)</td></tr>
<tr><td>Mucinous Carcinoma (stage IC)</td><td>Preferred Regimens
•5-FU/leucovorin/oxaliplatin
•Capecitabine (Xeloda)/oxaliplatin
•Paclitaxel 175/carboplatin</td><td>Other Recommended Regimens
•Carboplatin/liposomal doxorubicin
•Docetaxel/carboplatin</td><td>Useful in Certain Circumstances
~~•None~~•Docetaxel/oxaliplatin/bevacizumab±maintenance bevacizumab (category 2B)</td></tr>
<tr><td>Low-Grade Serous (stage IC)/Grade I Endometrioid (stage IC)</td><td>Preferred Regimens
•Paclitaxel 175/carboplatin±maintenance letrozole(category 2B) or other hormonal therapy(category 2B)
•Hormone therapy (aromatase inhibitors [anastrozole, letrozole, exemestane]) (category 2B)</td><td>Other Recommended Regimens
•Carboplatin/liposomal doxorubicin ±maintenance letrozole (category 2B) or other hormonal therapy (category 2B)
•Docetaxel/carboplatin±maintenance letrozole (category 2B) or other hormonal therapy (category 2B)
•Hormone therapy (leuprolide acetate, tamoxifen) (category 2B)</td><td>Useful in Certain Circumstances
~~•None~~•Docetaxel/oxaliplatin/bevacizumab±maintenance bevacizumab (category 2B)</td></tr>
</table></td></tr>
<tr><td></td><td>新增</td><td>Stage II-IV
<table>
<tr><td colspan="4">STAGE II–IV DISEASE</td></tr>
<tr><td>•High-grade serous
•Endometrioid (Grade 2/3)
•Clear cell carcinoma
•Carcinosarcoma</td><td>Preferred Regimens
•Paclitaxel 175/carboplatin
•Paclitaxel/carboplatin/bevacizumab + maintenance bevacizumab (ICON-7 & GOG-218)</td><td>Other Recommended Regimens
•Paclitaxel weekly/carboplatin weekly
•Docetaxel/carboplatin
•Carboplatin/liposomal doxorubicin
•Paclitaxel weekly/carboplatin q3weeks
•Docetaxel/carboplatin/bevacizumab +maintenance bevacizumab(GOG-218)</td><td>Useful in Certain Circumstances
•Docetaxel/oxaliplatin/bevacizumab±maintenance bevacizumab
•IP/IV paclitaxel/cisplatin (for optimally debulked stage II–III disease)
•For carcinosarcoma:
Carboplatin/ifosfamide
Cisplatin/ifosfamide
Paclitaxel/ifosfamide (category 2B)</td></tr>
<tr><td>Mucinous Carcinoma</td><td>Preferred Regimens
•5-FU/leucovorin/oxaliplatin ± bevacizumab (category 2B for bevacizumab)
•Capecitabine/oxaliplatin ± bevacizumab (category 2B for bevacizumab)
•Paclitaxel 175/carboplatin
•Paclitaxel/carboplatin/bevacizumab + maintenance bevacizumab(ICON-7 & GOG-218)</td><td>Other Recommended Regimens
•Paclitaxel weekly/carboplatin weekly
•Docetaxel/carboplatin
•Carboplatin/liposomal doxorubicin
•Paclitaxel weekly/carboplatin q3weeks
•Docetaxel/carboplatin/bevacizumab +maintenance bevacizumab(GOG-218)</td><td>Useful in Certain Circumstances
•Docetaxel/oxaliplatin/bevacizumab±maintenance bevacizumab</td></tr>
<tr><td>Low-Grade Serous/Grade I Endometrioid</td><td>Preferred Regimens
•Paclitaxel 175/carboplatin±maintenance letrozole(category 2B) or other</td><td>Other Recommended Regimens
•Paclitaxel weekly/carboplatin weekly
•Docetaxel/carboplatin±maintenance</td><td>Useful in Certain Circumstances
•Docetaxel/oxaliplatin/bevacizumab±maintenance bevacizumab (category 2B)</td></tr>
</table></td></tr>
</table>

	新增	hormonal therapy (category 2B) •Paclitaxel/carboplatin/bevacizumab + maintenance bevacizumab (ICON-7 & GOG-218) •Hormone therapy (aromatase inhibitors [anastrozole, letrozole, exemestane]) (category 2B) 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)
	新增	**Primary Systemic Therapy Recommended Dosing** **IV/IP Paclitaxel/cisplatin** • Paclitaxel 135 mg/m2 IV continuous infusiong 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 ~~**Paclitaxel 175/carboplatin**~~ ~~• Paclitaxel 175 mg/m2 IV followed by carboplatini AUC 5 – 6 IV Day 1~~ ~~• Repeat every 21 days x 3 – 6 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, 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 **Docetaxel/carboplatin** • Docetaxel 60 – 75 mg/m2 IV followed by carboplatinc 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 carboplatinm 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

	新增	**Individuals Over the Age of 70 YearsElderly Patients (age >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/docetaxel	Ifosfamide	For mucinous carcinoma: • 5 -FU/leucovorin/oxaliplatin ± bevacizumab (category 2B for bevacizumab) • Capecitabine/oxaliplatin ± bevacizumab (category 2B for bevacizumab)
Carboplatin/liposomal doxorubicin ± bevacizumab	Carboplatin/ paclitaxel (weekly)	Irinotecan Melphalan	Carboplatin/paclitaxel, albumin bound (for confimed taxane hypersensitivity)
Carboplatin/paclitaxel ± bevacizumab	Capecitabine Carboplatin Cisplatin	Oxaliplatin Paclitaxel Paclitaxel, albumin bound	Carboplatin/paclitaxels (for age >70) Irinotecan/cisplatin (for clear cell carcinoma)
Cisplatin/gemcitabine	Cyclophosphamide Doxorubicin	Pemetrexed Vinorelbine	Targeted Therapy (single agents) Dabrafenib + trametinib (for BRAF V600E-positive tumors) Entrectinib or larotrectinib (for NTRK gene fusion-positive tumors) ~~Dabrafenib + trametinib (for BRAF V600E-positive tumors)~~ Selpercatinib (for RET gene fusion-positive tumors)
Targeted Therapy (single agents) Bevacizumab	Targeted Therapy Niraparib/bevacizumab Niraparib Olaparib Pazopanib (category 2B) Rucaparib		
	Hormone Therapy Aromatase inhibitors (anastrozole, exemestane, letrozole) Leuprolide acetate Megestrol acetate		
	新增		

Recurrence Therapy for Platinum-Resistant Disease (alphabetical order)

Preferred Regimens	Other Recommended Regimens		Useful in Certain Circumstances
Cytotoxic Therapy Cyclophosphamide (oral)/bevacizumab Docetaxel Etoposide, oral Gemcitabine Liposomal doxorubicin Liposomal doxorubicin/bevacizumab Paclitaxel (weekly) Paclitaxel (weekly)/bevacizumab Topotecan Topotecan/bevacizumab	Cytotoxic Therapy **Capecitabine** Carboplatin* Carboplatin/docetaxel Carboplatin/paclitaxel (weekly) Carboplatin/gemcitabine± bevacizumab Carboplatin/liposomal doxorubicin± bevacizumab) Carboplatin/paclitaxel ±bevacizumab	Oxaliplatin Paclitaxel Paclitaxel, albumin bound Pemetrexed Sorafenib/topotecan Vinorelbine	Carboplatin/paclitaxel (for age >70) Carboplatin/paclitaxel, albumin bound (for confirmed taxane hypersensitivity) Immunotherapy Dostarlimab-gxly (for dMMR/MSI-H recurrent or advanced tumors) Pembrolizumab (for MSI-H or dMMR solid tumors or TMB-H tumors≧10 mutations/megabase and no satisfactory alternative treatment options)

	新增	Targeted Therapy (single agents) Bevacizumab Mirvetuximab soravtansine-gynx (for FRα-expressing tumors)	Cyclophosphamide Doxorubicin Gemcitabine/bevacizumab Gemcitabine/cisplatin Ifosfamide Irinotecan Ixabepilone/bevacizumab (category 2B) Melphalan Targeted Therapy (single agents) Niraparib Olaparib Pazopanib (category 2B) Rucaparib Hormone Therapy Aromatase inhibitors (anastrozole, exemestane, letrozole) Leuprolide acetate Megestrol acetate Tamoxifen	Hormone Therapy Fulvestrant (for low-grade serous carcinoma) Targeted Therapy (single agents) Dabrafenib + trametinib (for BRAF V600E-positive tumors) Entrectinib or larotrectinib (for NTRK gene fusion-positive tumors) ~~Dabrafenib + trametinib (for BRAF V600E-positive tumors)~~ Mirvetuximab soravtansine-gynx/bevacizumab (for FRα-expressing tumors) (category 2B) Selpercatinib (for RET gene fusion-positive tumors) For Low-Grade Serous Carcinoma • Trametinib • Binimetinib (category 2B)

目 錄

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。

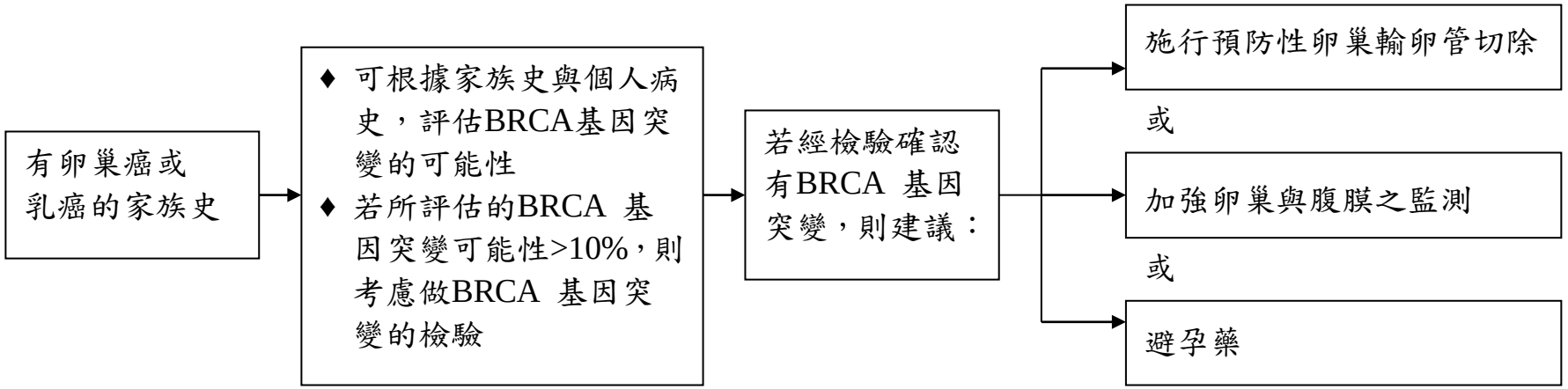
早期的卵巢癌往往沒有症狀，因而一旦發現，75%的患者已達到第III /IV期；症狀多半為腹部腫大、脹氣等腹部不適症狀。上皮性卵巢癌通常經由局部的瀉落 (local shedding) 在腹膜腔裡擴散；淋巴結轉移的機率：第一期的患者有24%淋巴結轉移的機率，第二期的患者有50%，第三期的患者有74%；轉移到骨盆淋巴結 (pelvic lymph node) 與主動脈旁淋巴結 (para-aortic lymph node)的機率相當；也有經由橫膈膜而侵襲肋膜腔的情況發生。

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 Ovarin Cancer 2023,V2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

- ♦ 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、大腸鏡或鋇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

*: option

四、治療之主軸

(A) 完整徹底的分期手術 (staging operation)，或
(B) 盡可能手術切除所有卵巢腫瘤與卵巢外的癌組織，即最大程度的減積手術 (maximal cytoreduction)

↓

使用以鉑類化合物為基礎的輔助性化學治療 (platinum-based adjuvant chemotherapy)

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	T2

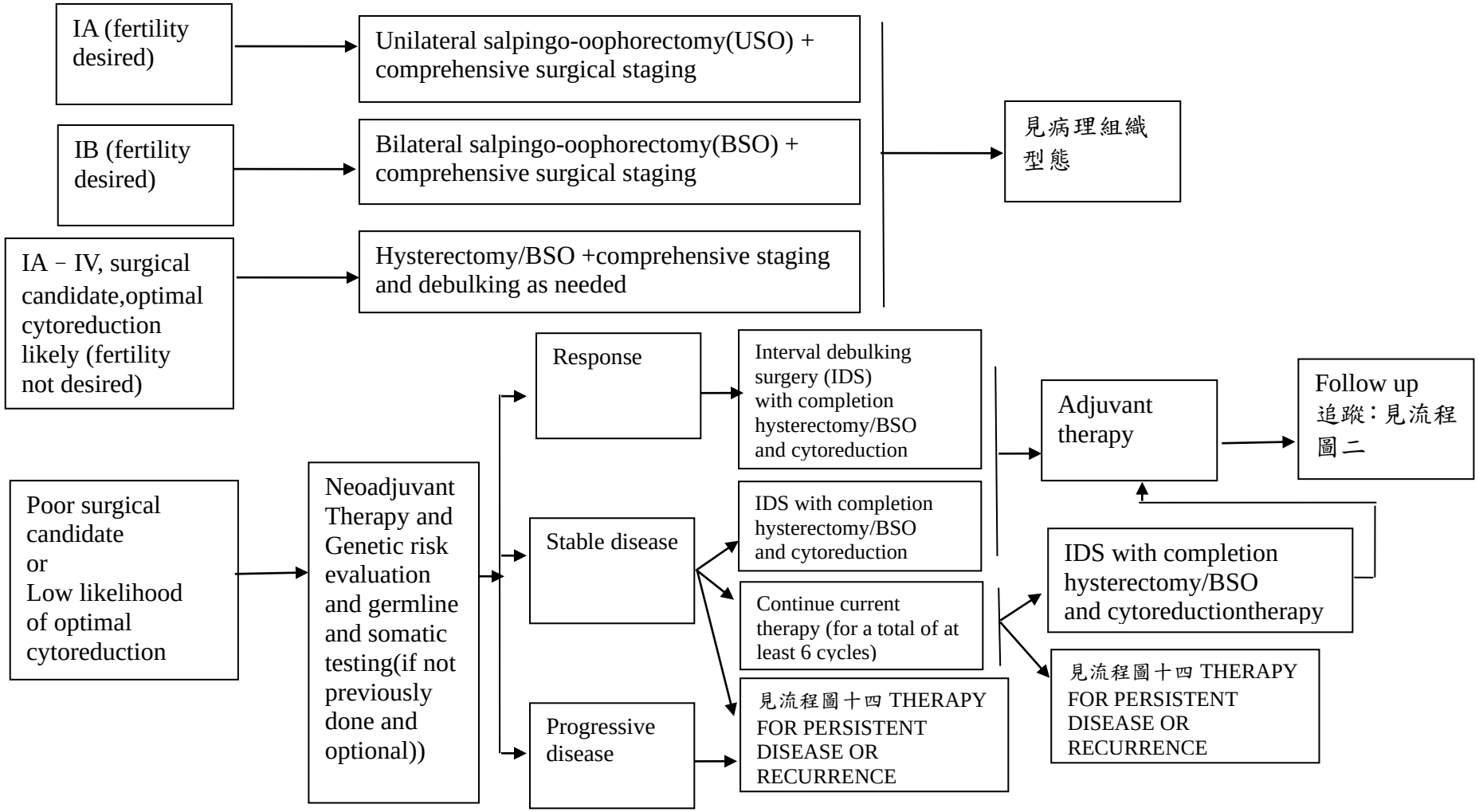
	腫瘤包括一個或兩個卵巢或輸卵管，在盆骨邊緣或原發性腹膜癌	
IIA	Extension and/or implants on the uterus and/or fallopian tube(s) and/or ovaries 擴散只限於子宮或輸卵管或卵巢	T2a
IIB	Extension to and/or implants on other pelvic tissues 擴散至骨盆腔內的其他組織	T2b
III	Tumor involves one or both ovaries or fallopian tubes, or primary peritoneal cancer, with 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） *IIIA1(i)* metastasis≦10㎜(轉移≦10 毫米） *IIIA1(ii)* metastasis＞10㎜(轉移＞10 毫米）	N1 N1a N1b
IIIA2	Microscopic extrapelvic (above the pelvic brim) peritonealinvolvement 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 retroperitoneallymph 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 than2 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	M1

	parenchymal metastasis; metastasis to extra-abdominal organs (including inguinal lymph nodes and lymph nodes outside the abdominal cavity); and transmural involvement of intestine 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

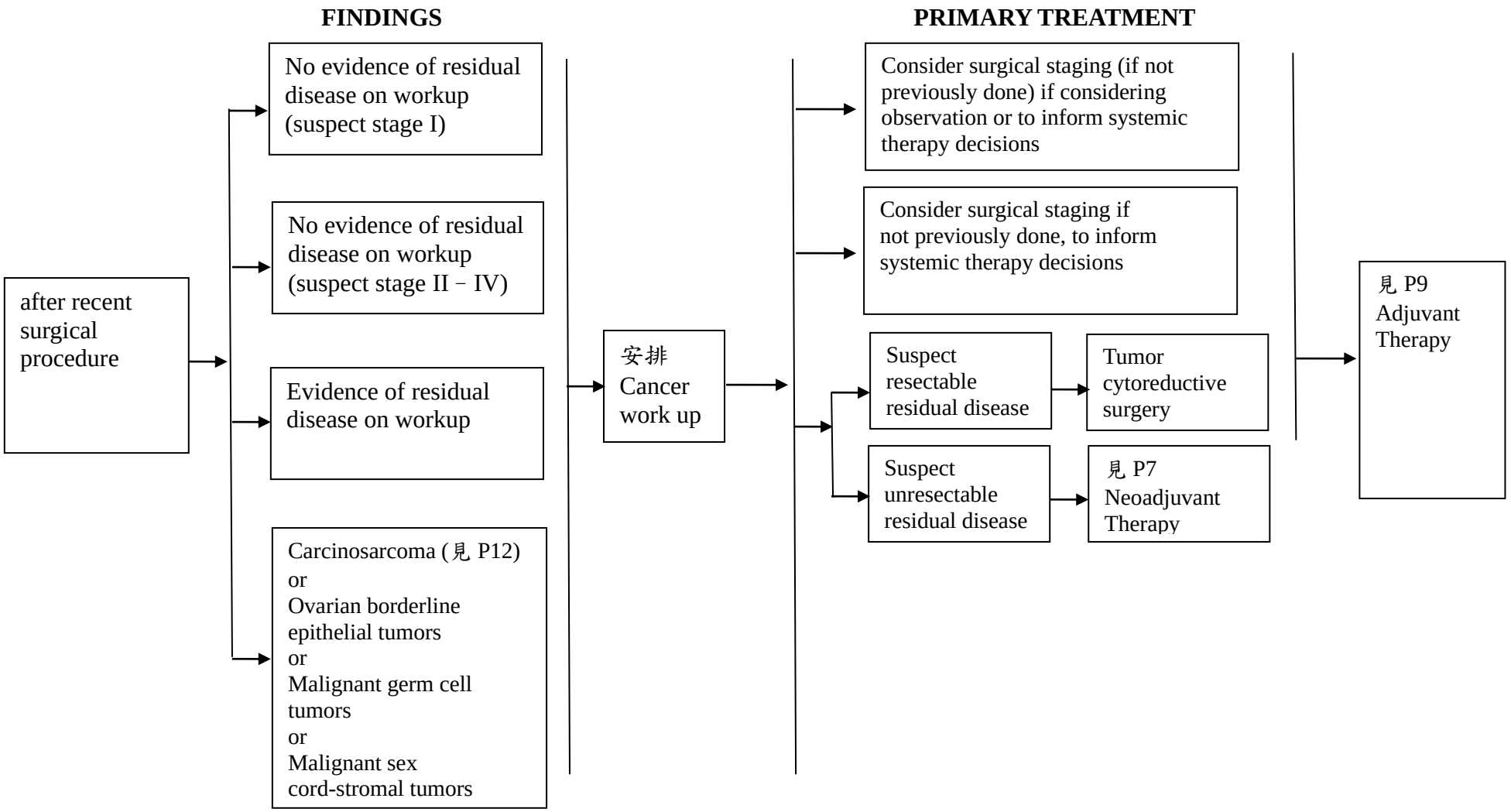
AJCC 8 th	T	N	M
Stage I	**T1**	**N0**	**M0**
Stage IA	**T1a**	**N0**	**M0**
Stage IB	**T1b**	**N0**	**M0**
Stage IC	**T1c**	**N0**	**M0**
Stage II	**T2**	**N0**	**M0**
Stage IIA	**T2a**	**N0**	**M0**
Stage IIB	**T2b**	**N0**	**M0**
Stage IIIA1	**T1/T2**	**N1**	**M0**
Stage IIIA2	**T3a**	**NX/N0/N1**	**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

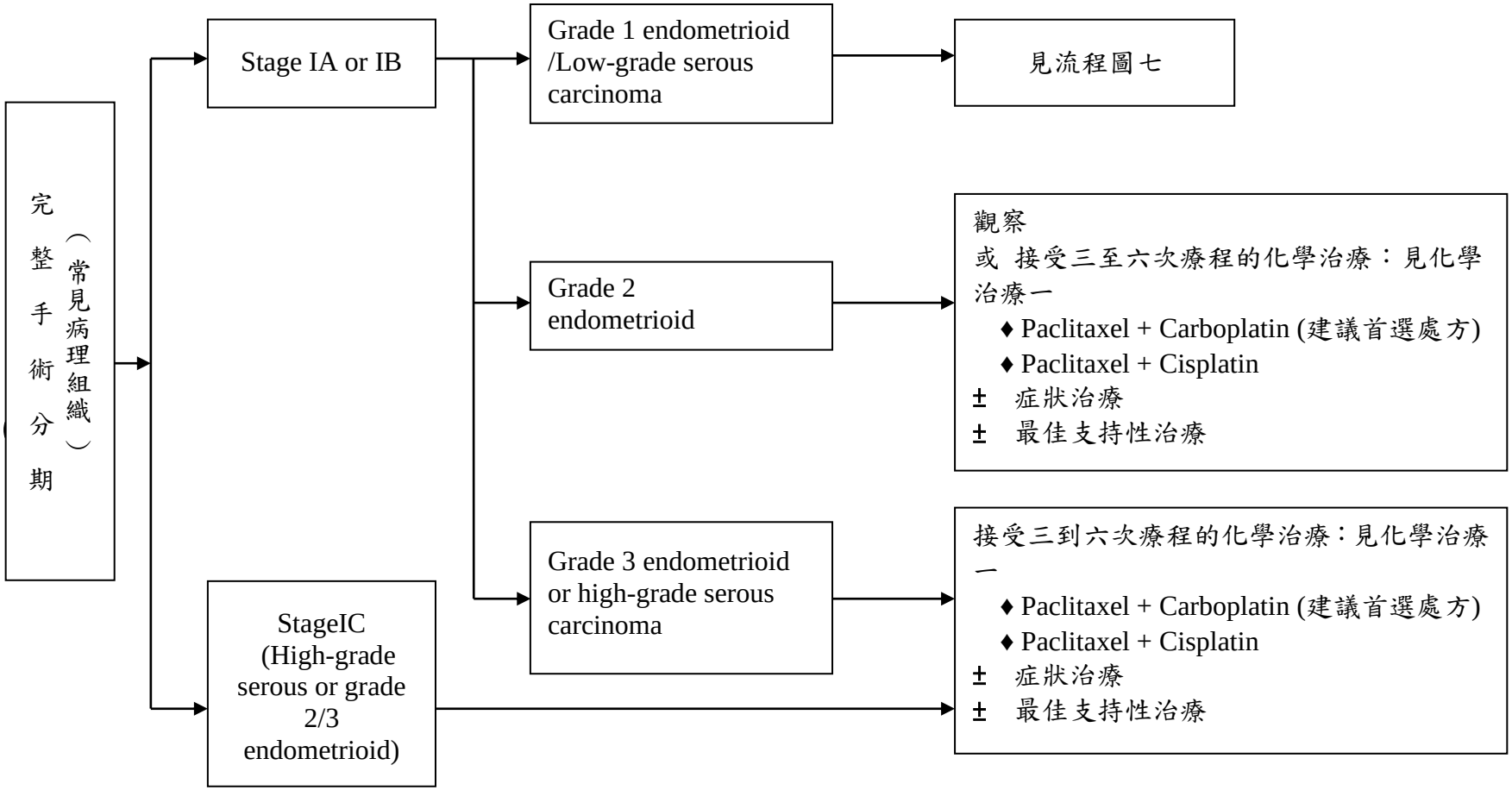
CLINICAL STAGE	PRIMARY TREATMENT



DIAGNOSIS BY PREVIOUS SURGERY

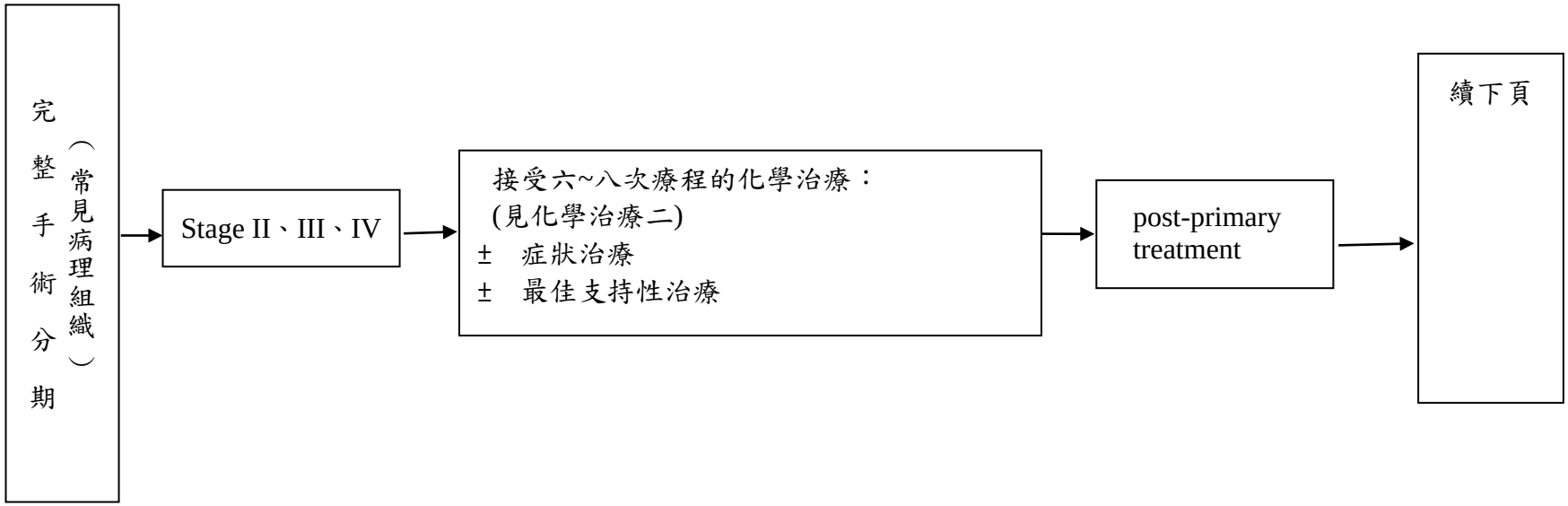


Stage IA、IB、IC

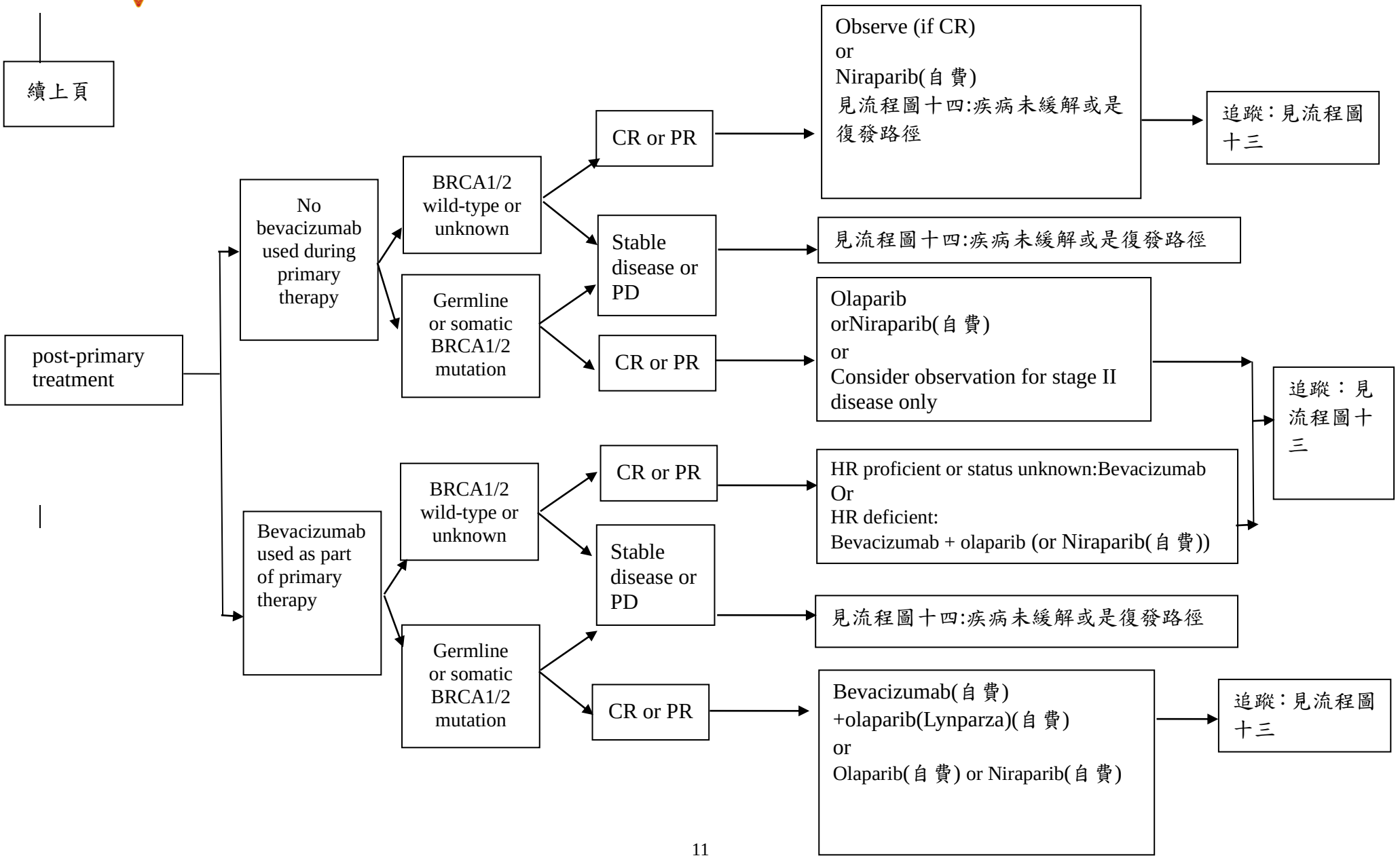


流程圖一

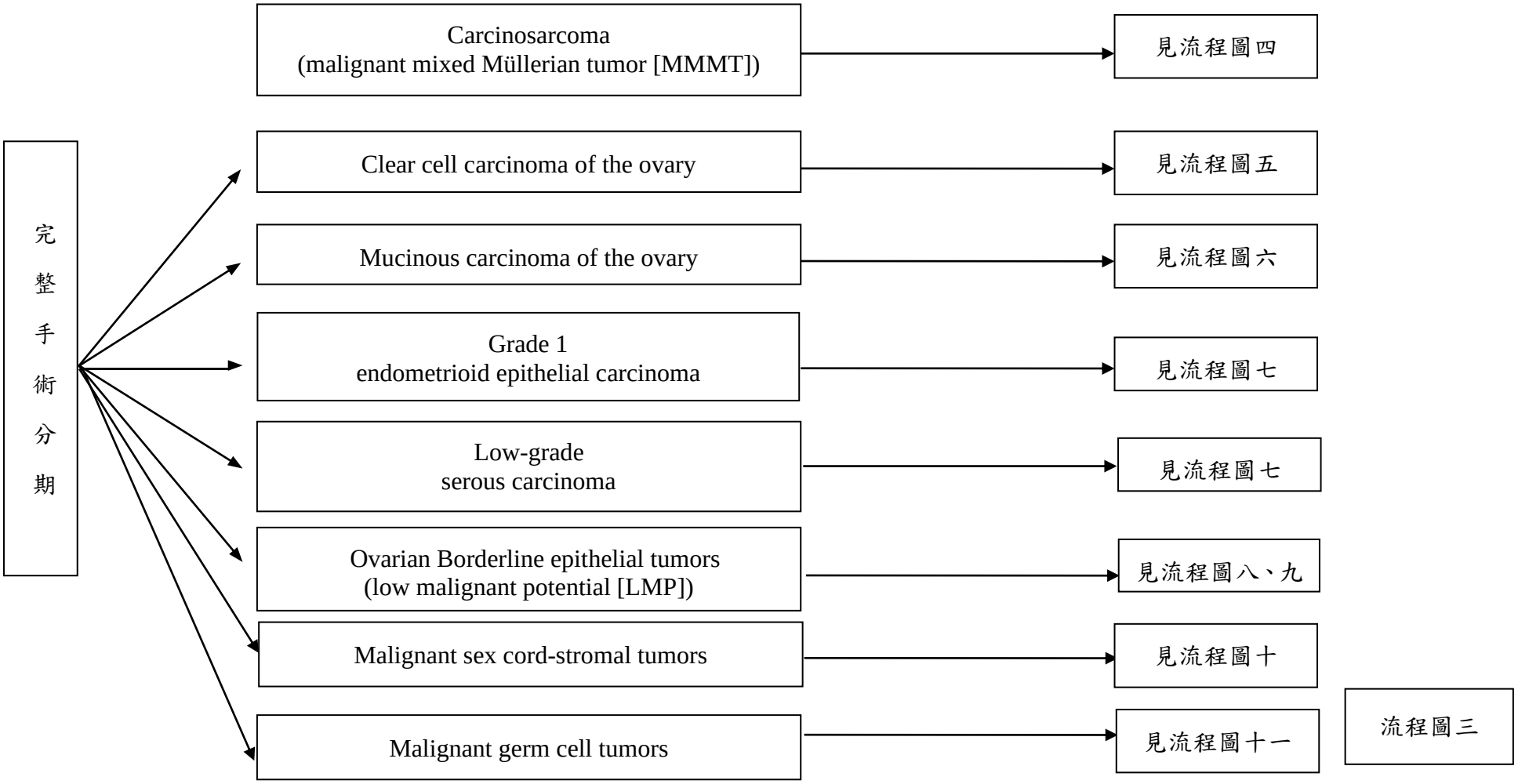
六、卵巢上皮癌之處置- Stage II、III、IV



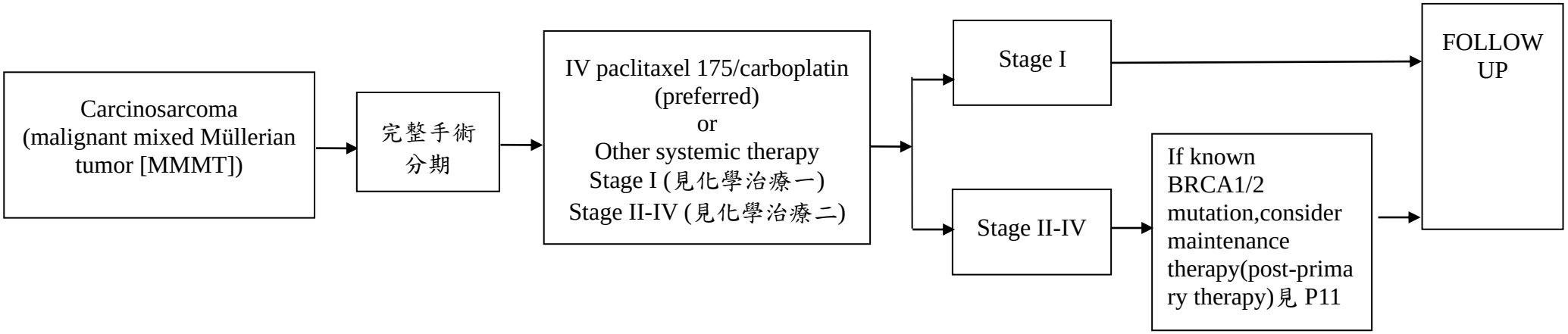
流程圖二


續上頁
post-primary treatment
No bevacizumab used during primary therapy
Bevacizumab used as part of primary therapy
BRCA1/2 wild-type or unknown
Germline or somatic BRCA1/2 mutation
BRCA1/2 wild-type or unknown
Germline or somatic BRCA1/2 mutation
CR or PR
Stable disease or PD
CR or PR
CR or PR
Stable disease or PD
CR or PR
Observe (if CR)
or
Niraparib(自費)
見流程圖十四:疾病未緩解或是復發路徑
追蹤：見流程圖十三
見流程圖十四:疾病未緩解或是復發路徑
Olaparib
orNiraparib(自費)
or
Consider observation for stage II disease only
HR proficient or status unknown:Bevacizumab
Or
HR deficient:
Bevacizumab + olaparib (or Niraparib(自費))
見流程圖十四:疾病未緩解或是復發路徑
Bevacizumab(自費)
+olaparib(Lynparza)(自費)
or
Olaparib(自費) or Niraparib(自費)
追蹤：見流程圖十三
追蹤：見流程圖十三

七、其他卵巢癌組織病理學之處置

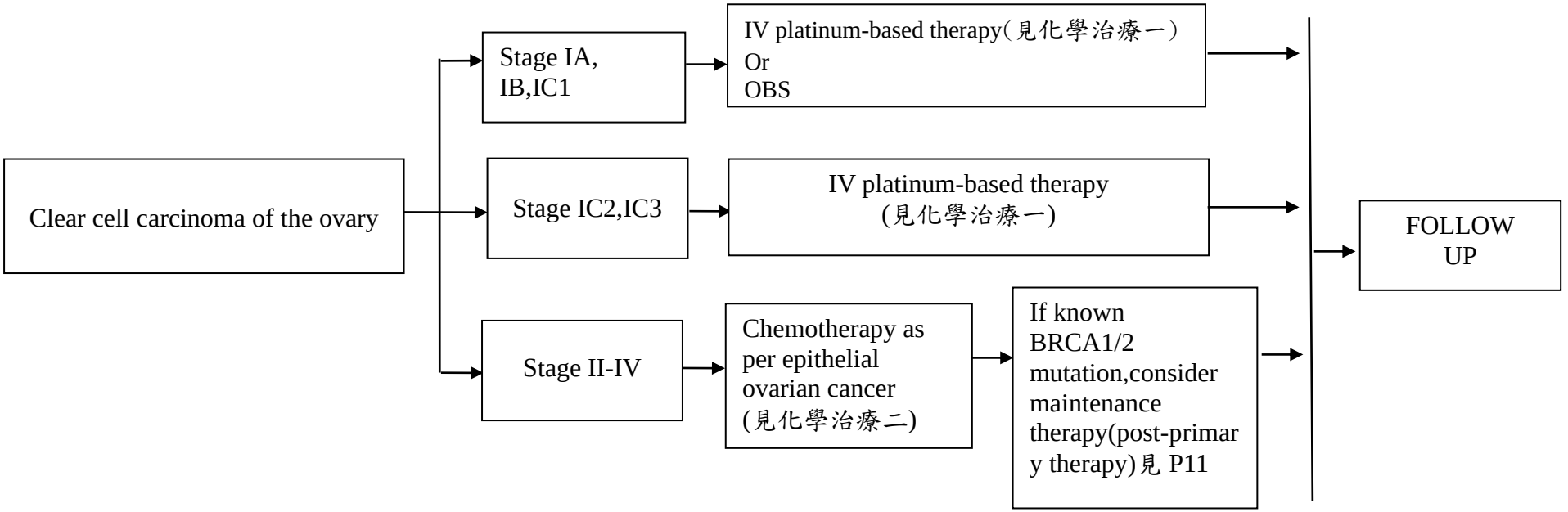


七、其他卵巢癌組織病理學之處置– Carcinosarcoma(malignant mixed Müllerian tumor [MMMT])



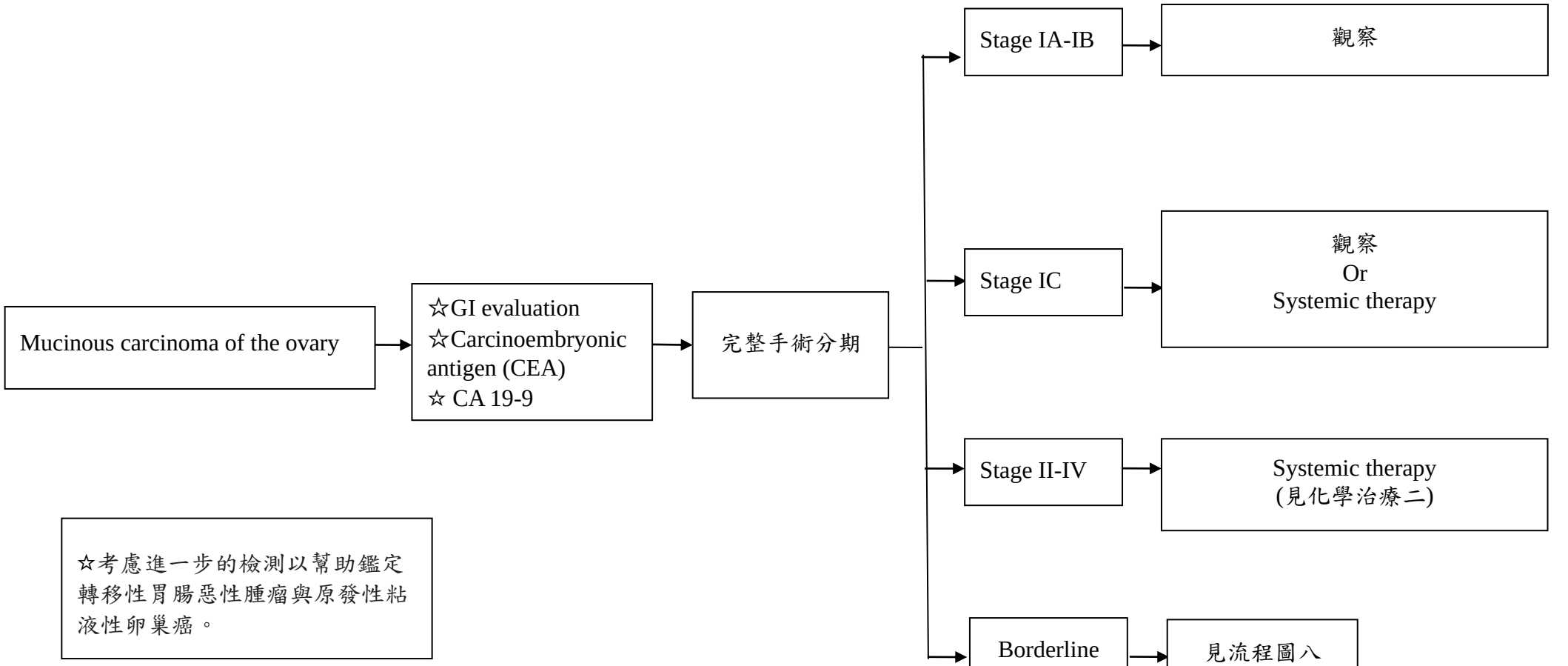
流程圖四

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



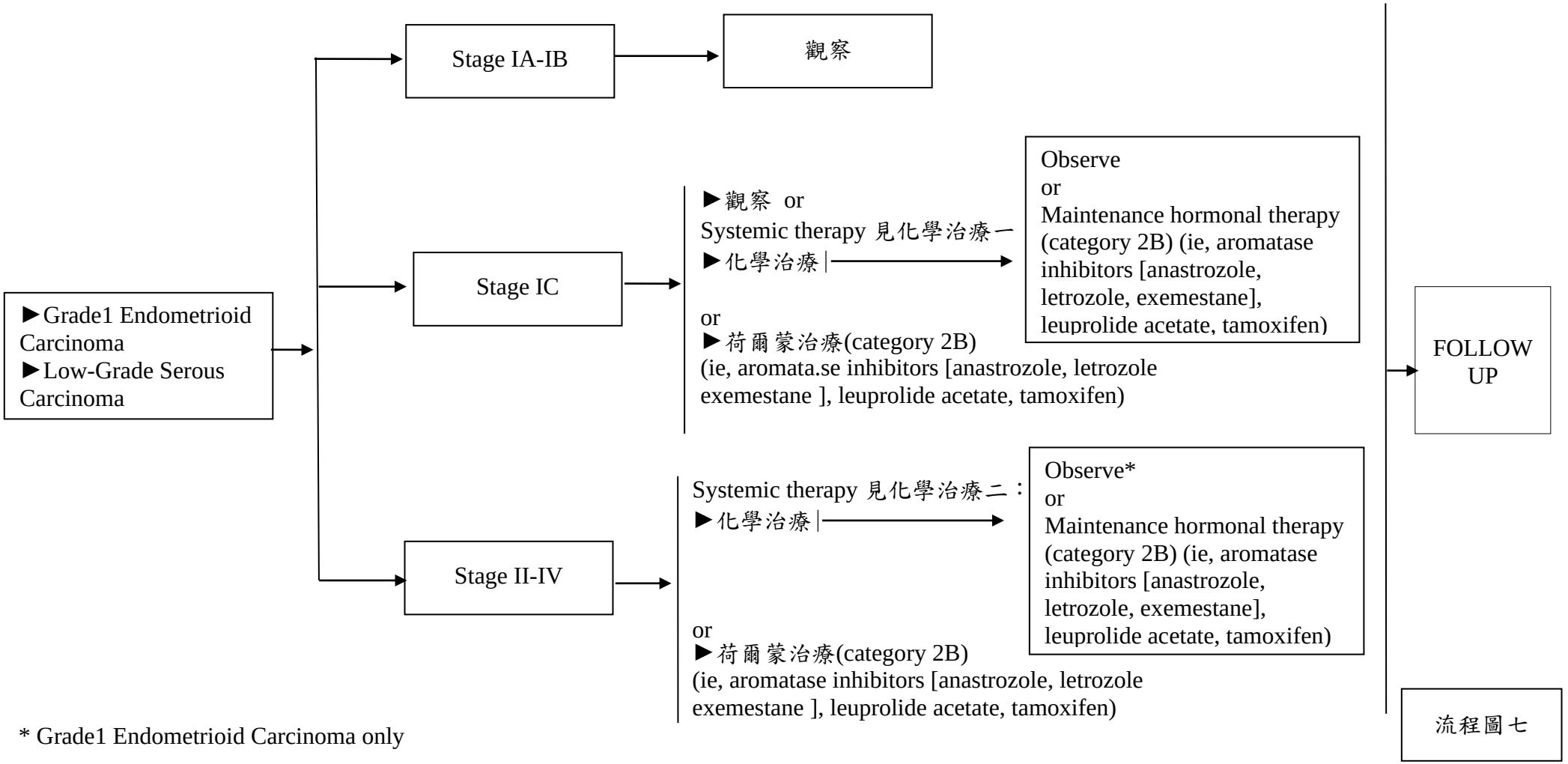
流程圖五

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



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



* Grade1 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
2.理學檢查包括骨盆腔檢查
3.腫瘤分子(Tumor molecular)檢驗(optional)
4.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
5.請參考遺傳風險評估
6.全血球計數檢查、生化檢查、腹部與骨盆腔之電腦斷層掃描、胸部X 光檢查等

→ 疾病復發 →

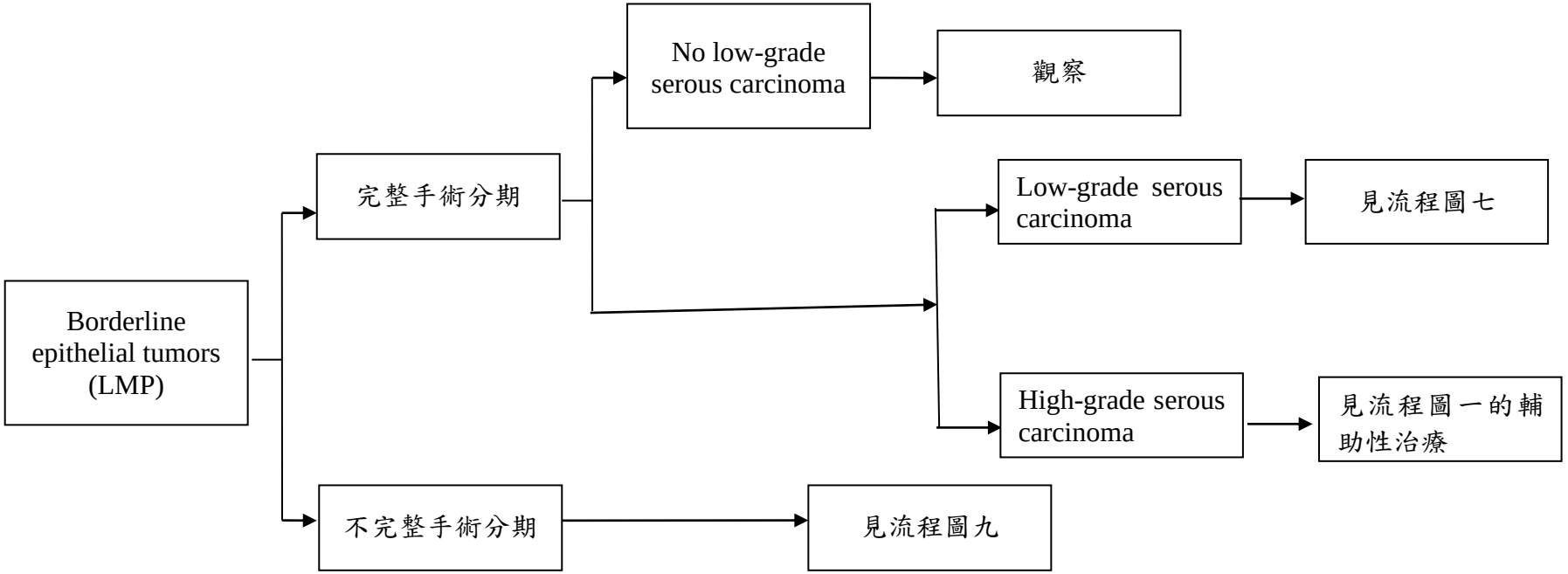
RECURRENT THERAPY

1.臨床試驗
2.Trametinib
3.Binimetinib(category 2B)
4.Dabrafenib + trametinib (for BRAF V600E-positive tumors)
5.荷爾蒙治療
6.化學治療(未曾化療者), 見化學治療二
7.其他 systemic therapy
- For platinum-sensitive disease, 見P30
- For platinum-resistant disease, 見P31

8.觀察

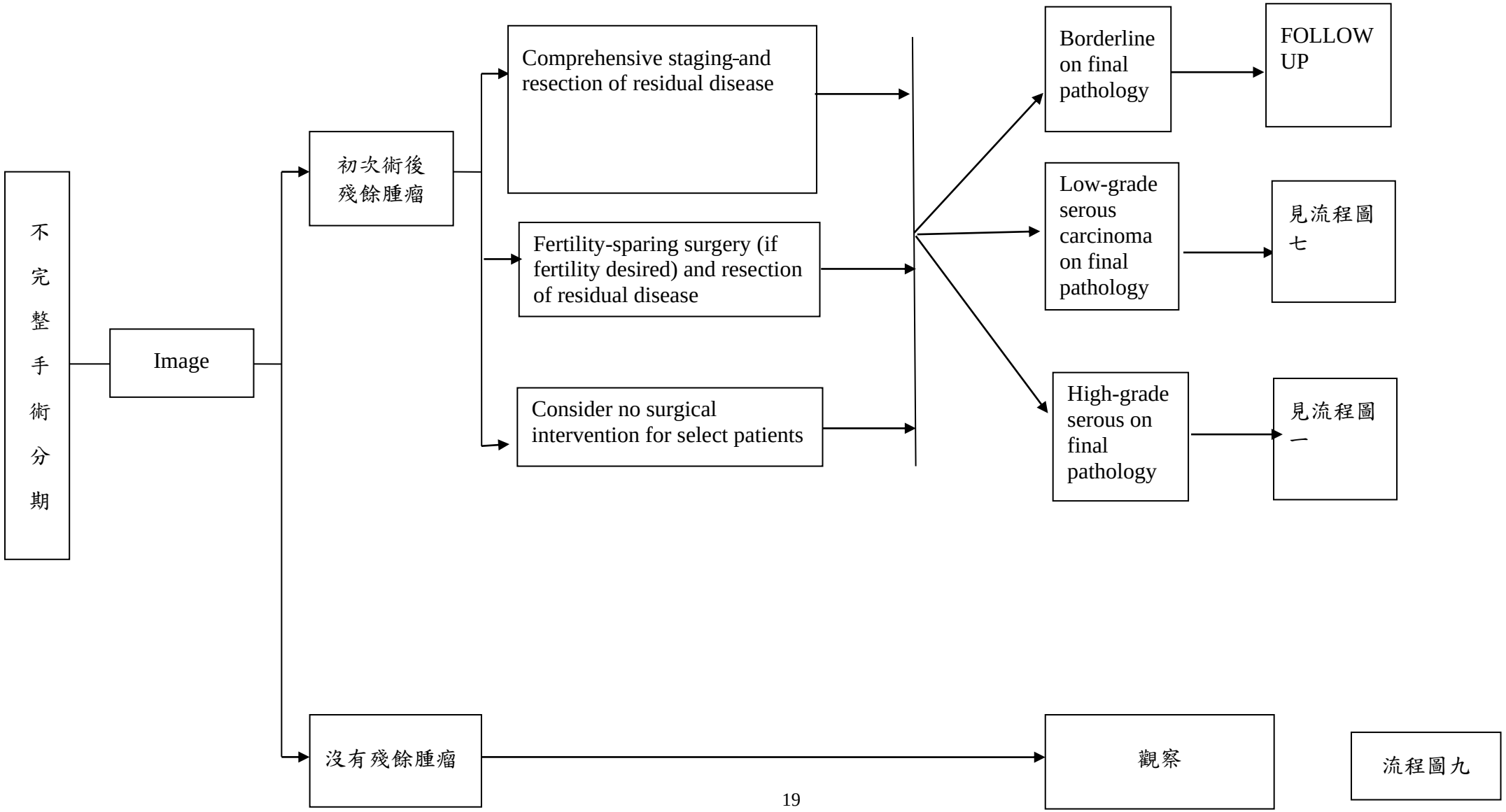
續流程圖七

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

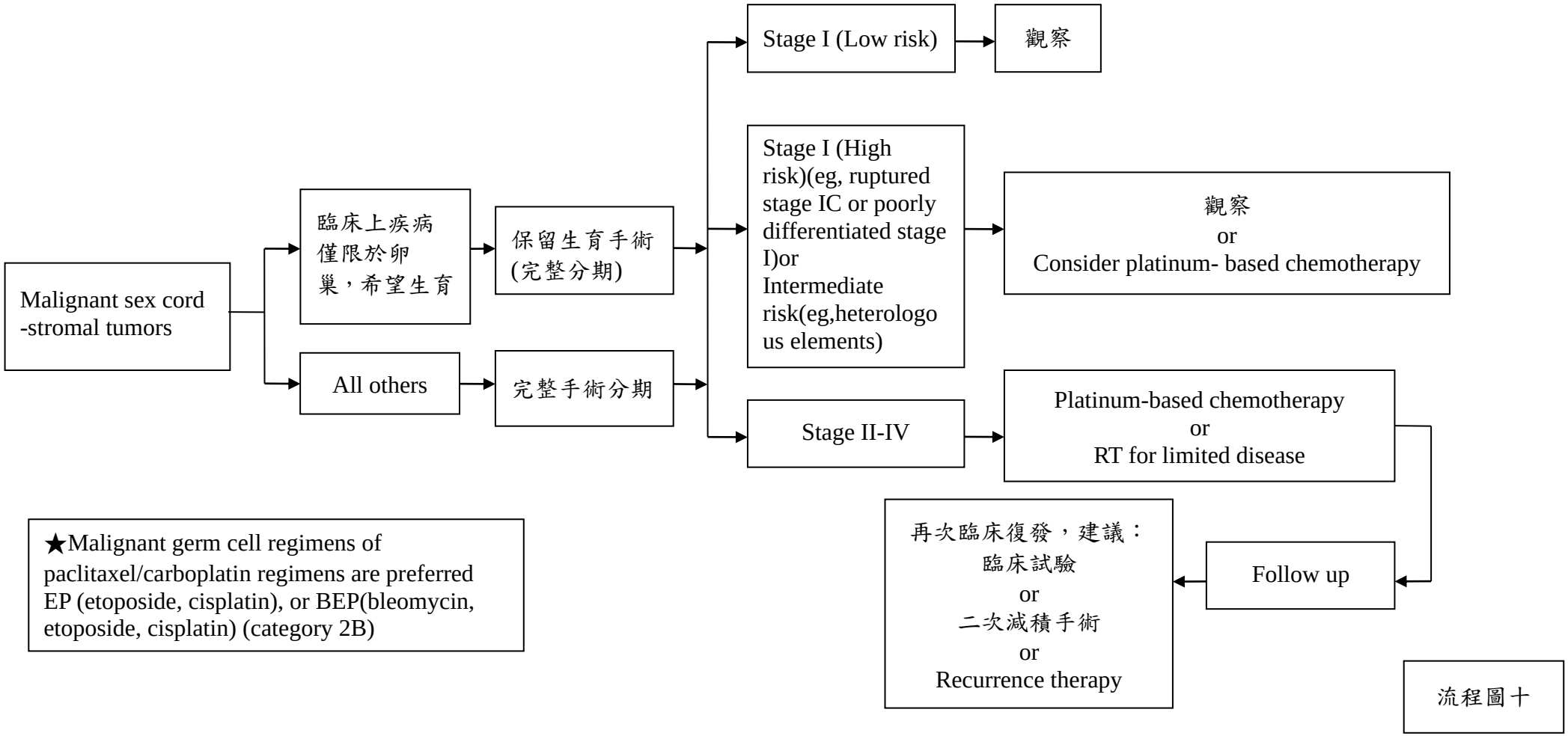


流程圖八

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

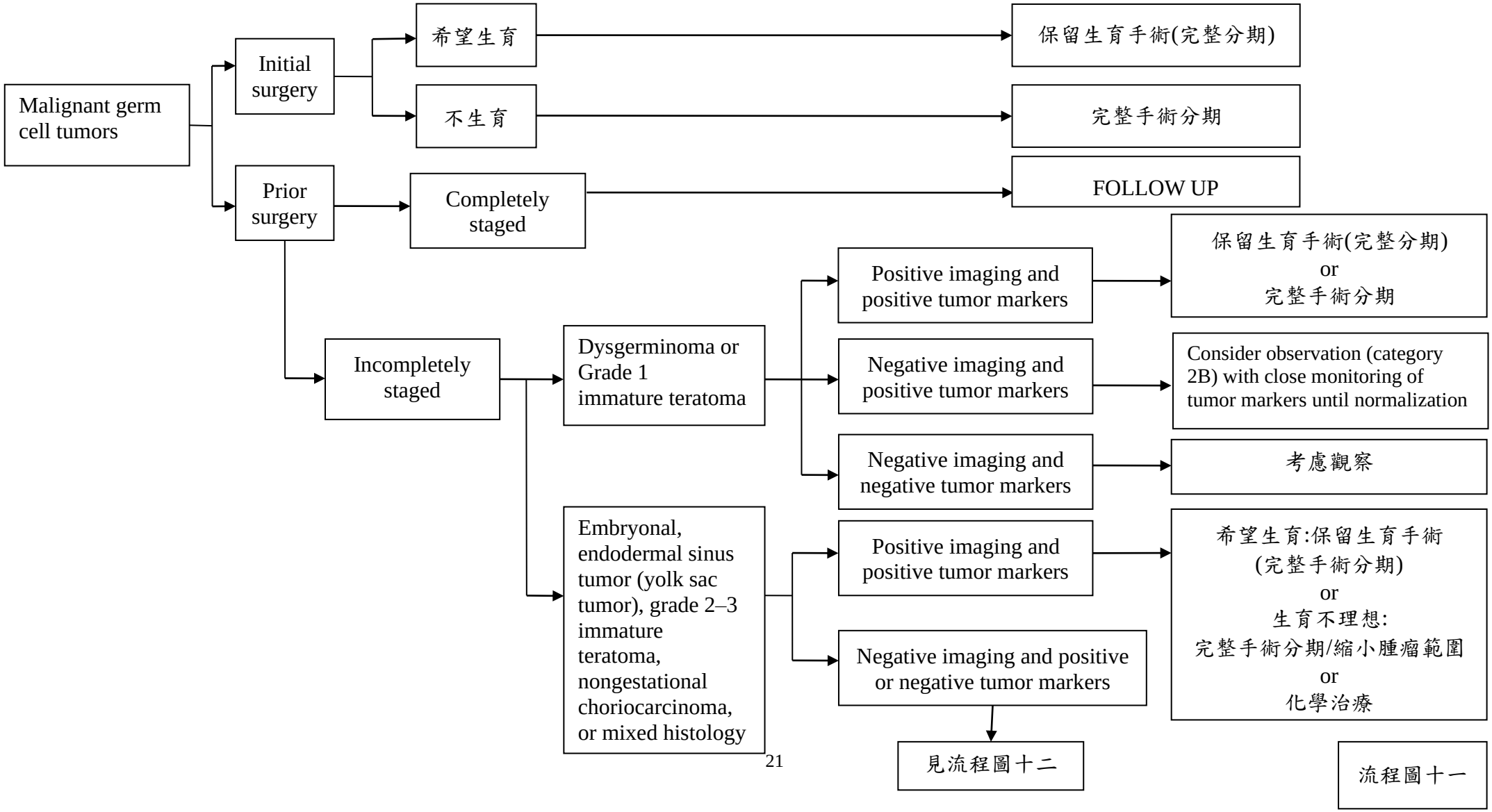


七、其他卵巢癌組織病理學之處置– Malignant sex cord-stromal tumors

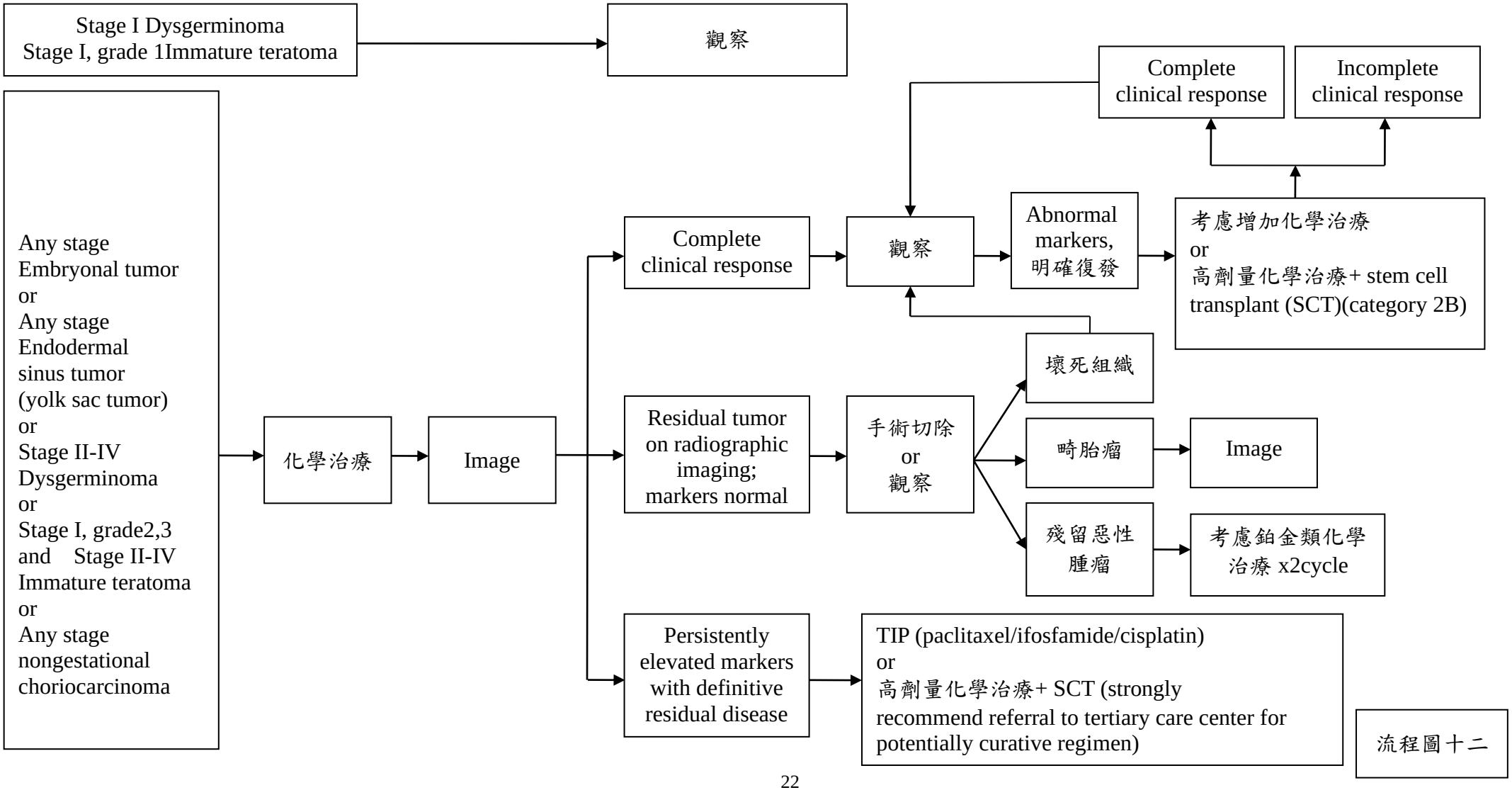


流程圖十

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

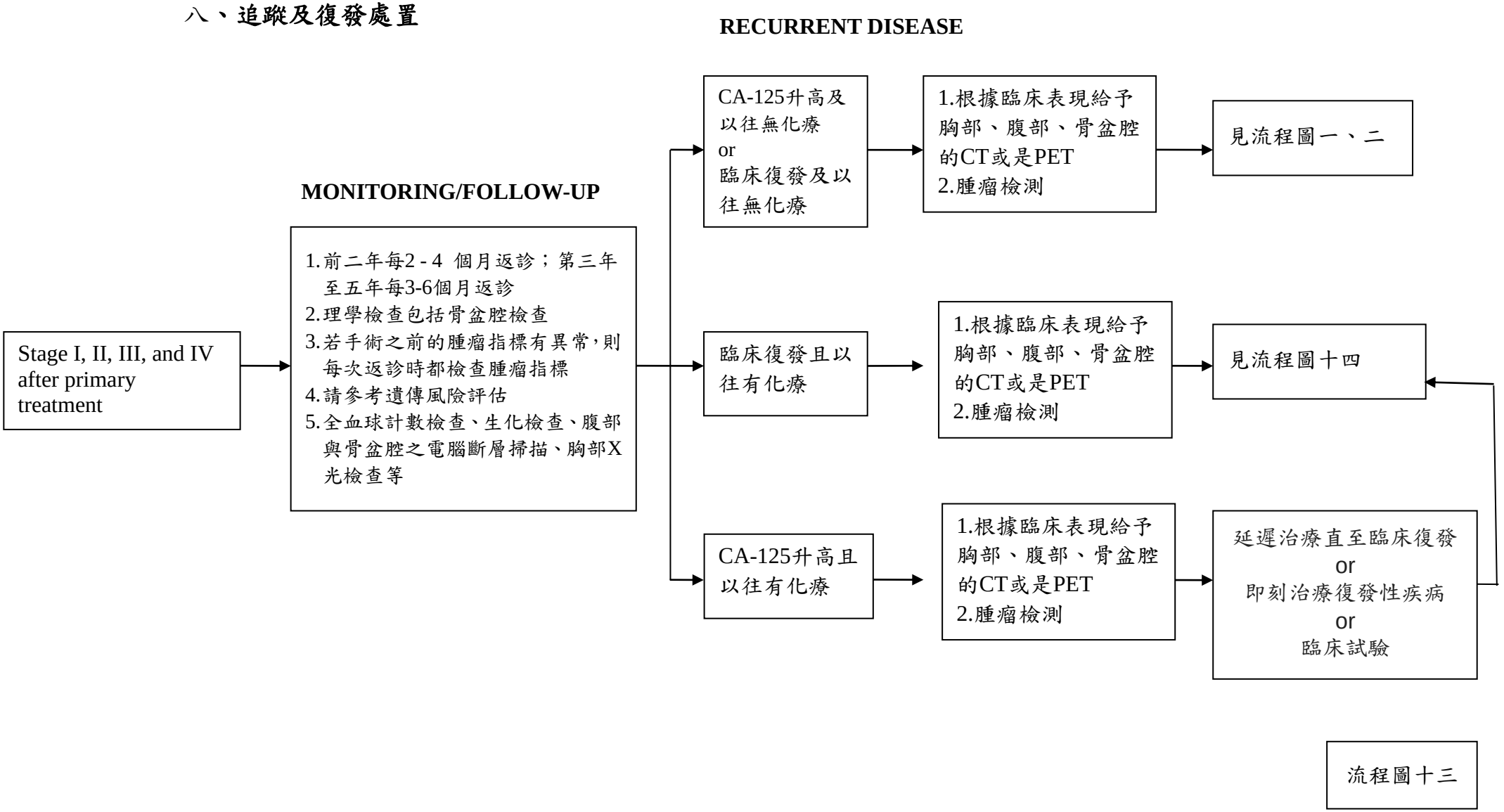


七、其他卵巢癌組織病理學之處置– Malignant germ cell tumors



流程圖十二

八、追蹤及復發處置


RECURRENT DISEASE
MONITORING/FOLLOW-UP
Stage I, II, III, and IV after primary treatment
1.前二年每2 - 4 個月返診；第三年至五年每3-6個月返診
2.理學檢查包括骨盆腔檢查
3.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
4.請參考遺傳風險評估
5.全血球計數檢查、生化檢查、腹部與骨盆腔之電腦斷層掃描、胸部X光檢查等
CA-125升高及以往無化療
or
臨床復發及以往無化療
1.根據臨床表現給予胸部、腹部、骨盆腔的CT或是PET
2.腫瘤檢測
見流程圖一、二
臨床復發且以往有化療
1.根據臨床表現給予胸部、腹部、骨盆腔的CT或是PET
2.腫瘤檢測
見流程圖十四
CA-125升高且以往有化療
1.根據臨床表現給予胸部、腹部、骨盆腔的CT或是PET
2.腫瘤檢測
延遲治療直至臨床復發
or
即刻治療復發性疾病
or
臨床試驗
流程圖十三

復發處置

DISEASE STATUS

THERAPY FOR PERSISTENT DISEASE OR RECURRENCE

Platinum-resistant disease:
Progression on primary, maintenance or recurrence therapy
or
Stable or persistent disease (if not on maintenance therapy)
or
Complete response
And relapse <6 mo after completing chemotherapy

→ 臨床試驗
And/or
Best supportive care
And/or
Recurrence therapy

Platinum-sensitive disease:
完全緩解和完成化療前復發≥6 個月

→ 影像或臨床復發 → 考慮第二次減積手術 → 臨床試驗
And/or
首次復發建議聯合鉑金類化學治療藥物 x 6cycle(peferred)
or
Recurrence therapy
And/or
Best supportive care

→ CA-125 上升
無影像復發 → 臨床試驗
or
延遲治療直至臨床復發
or
立即以鉑金類藥物為基礎的化學治療
And/or
Best supportive care

→ Clinical trial
Or
Maintenance therapy (if partial or complete response)
■Useful in certain circumstances:
►Continue bevacizumab if previously treated with chemotherapy +bevacizumab;
or
►PARPi therapy, if not previously used (category 1 for BRCA mutation carriers)
niraparib or
olaparib or
Rucaparib
or
►OBS

★niraparib or olaparib 用在對於已經完成兩種或更多種鉑金類療法的鉑金類敏感性患者

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			
•High-grade serous •Endometrioid (Grade 2/3) •Clear cell carcinoma •Carcinosarcoma	Preferred Regimens •Paclitaxel 175/carboplatin	Other Recommended Regimens •Carboplatin/liposomal doxorubicin •Docetaxel/carboplatin	Useful in Certain Circumstances •Docetaxel/oxaliplatin/bevacizumab+maintenance bevacizumab (for stage IB/IC) For carcinosarcoma: •Carboplatin/ifosfamide •Cisplatin/ifosfamide •Paclitaxel/ifosfamide (category 2B)
Mucinous Carcinoma (stage IC)	Preferred Regimens •5-FU/leucovorin/oxaliplatin •Capecitabine (Xeloda)/oxaliplatin •Paclitaxel 175/carboplatin	Other Recommended Regimens •Carboplatin/liposomal doxorubicin •Docetaxel/carboplatin	Useful in Certain Circumstances •Docetaxel/oxaliplatin/bevacizumab+maintenance bevacizumab (category 2B)
Low-Grade Serous (stage IC)/Grade I Endometrioid (stage IC)	Preferred Regimens •Paclitaxel 175/carboplatin±maintenance letrozole(category 2B) or other hormonal.therapy(category 2B) •Hormone therapy (aromatase inhibitors [anastrozole, letrozole, exemestane]) (category 2B)	Other Recommended Regimens •Carboplatin/liposomal doxorubicin ±maintenance letrozole (category 2B) or other hormonal therapy (category 2B) •Docetaxel/carboplatin±maintenance letrozole (category 2B) or other hormonal therapy (category 2B) •Hormone therapy (leuprolide acetate, tamoxifen) (category 2B)	Useful in Certain Circumstances •Docetaxel/oxaliplatin/bevacizumab+maintenance bevacizumab (category 2B)

Stage II-IV

STAGE II–IV DISEASE			
•High-grade serous •Endometrioid (Grade 2/3) •Clear cell carcinoma •Carcinosarcoma	Preferred Regimens •Paclitaxel 175/carboplatin •Paclitaxel/carboplatin/bevacizumab + maintenance bevacizumab (ICON-7 & GOG-218)	Other Recommended Regimens •Paclitaxel weekly/carboplatin weekly •Docetaxel/carboplatin •Carboplatin/liposomal doxorubicin •Paclitaxel weekly/carboplatin q3weeks •Docetaxel/carboplatin/bevacizumab +maintenance bevacizumab(GOG-218)	Useful in Certain Circumstances •Docetaxel/oxaliplatin/bevacizumab+maintenance bevacizumab •IP/IV paclitaxel/cisplatin (for optimally debulked stage II–III disease) •For carcinosarcoma: Carboplatin/ifosfamide Cisplatin/ifosfamide Paclitaxel/ifosfamide (category 2B)
Mucinous Carcinoma	Preferred Regimens •5-FU/leucovorin/oxaliplatin ± bevacizumab (category 2B for bevacizumab) •Capecitabine/oxaliplatin ± bevacizumab (category 2B for bevacizumab) •Paclitaxel 175/carboplatin •Paclitaxel/carboplatin/bevacizumab + maintenance bevacizumab(ICON-7 & GOG-218)	Other Recommended Regimens •Paclitaxel weekly/carboplatin weekly •Docetaxel/carboplatin •Carboplatin/liposomal doxorubicin •Paclitaxel weekly/carboplatin q3weeks •Docetaxel/carboplatin/bevacizumab +maintenance bevacizumab(GOG-218)	Useful in Certain Circumstances •Docetaxel/oxaliplatin/bevacizumab+maintenance bevacizumab
Low-Grade Serous/Grade I Endometrioid	Preferred Regimens •Paclitaxel 175/carboplatin±maintenance letrozole(category 2B) or other	Other Recommended Regimens •Paclitaxel weekly/carboplatin weekly •Docetaxel/carboplatin±maintenance	Useful in Certain Circumstances •Docetaxel/oxaliplatin/bevacizumab+maintenance bevacizumab (category 2B)

	hormonal therapy (category 2B) •Paclitaxel/carboplatin/bevacizumab + maintenance bevacizumab (ICON-7 & GOG-218) •Hormone therapy (aromatase inhibitors [anastrozole, letrozole, exemestane]) (category 2B)	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)

化學治療二

Primary Systemic Therapy Recommended Dosing

IV/IP Paclitaxel/cisplatin

- Paclitaxel 135 mg/m2 IV continuous infusiong 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

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, 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

Docetaxel/carboplatin

- Docetaxel 60 – 75 mg/m2 IV followed by carboplatinc 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 carboplatinm 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

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 Cisplatin/gemcitabine Targeted Therapy (single agents) Bevacizumab	Carboplatin/docetaxel Carboplatin/ paclitaxel (weekly) Capecitabine Carboplatin Cisplatin Cyclophosphamide Doxorubicin Ifosfamide Irinotecan Melphalan Oxaliplatin Paclitaxel Paclitaxel, albumin bound Pemetrexed Vinorelbine Targeted Therapy Niraparib/bevacizumab Niraparib Olaparib Pazopanib (category 2B) Rucaparib Hormone Therapy Aromatase inhibitors (anastrozole, exemestane, letrozole)	For mucinous carcinoma: • 5 -FU/leucovorin/oxaliplatin ± bevacizumab (category 2B for bevacizumab) • Capecitabine/oxaliplatin ± bevacizumab (category 2B for bevacizumab) Carboplatin/paclitaxel, albumin bound (for confimed taxane hypersensitivity) Carboplatin/paclitaxels (for age >70) Irinotecan/cisplatin (for clear cell carcinoma) Targeted Therapy (single agents) Dabrafenib + trametinib (for BRAF V600E-positive tumors) Entrectinib or larotrectinib (for NTRK gene fusion-positive tumors) Selpercatinib (for RET gene fusion-positive tumors)

	Leuprolide acetate Megestrol acetate Tamoxifen	For Low-Grade Serous Carcinoma • Trametinib • Binimetinib (category 2B) Hormone Therapy Fulvestrant (for low-grade serous carcinoma) Immunotherapy 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 ≧10 mutations/megabase)

Recurrence Therapy for Platinum-Resistant Disease (alphabetical order)		
Preferred Regimens	**Other Recommended Regimens**	**Useful in Certain Circumstances**
Cytotoxic Therapy Cyclophosphamide (oral)/bevacizumab Docetaxel Etoposide, oral Gemcitabine Liposomal doxorubicin Liposomal doxorubicin/bevacizumab Paclitaxel (weekly) Paclitaxel (weekly)/bevacizumab Topotecan Topotecan/bevacizumab	Cytotoxic Therapy **Capecitabine** Carboplatin* Carboplatin/docetaxel Carboplatin/paclitaxel (weekly) Carboplatin/gemcitabine± bevacizumab Carboplatin/liposomal doxorubicin± bevacizumabi Carboplatin/paclitaxel± bevacizumab Oxaliplatin Paclitaxel Paclitaxel, albumin bound Pemetrexed Sorafenib/topotecan Vinorelbine	Carboplatin/paclitaxel (for age >70) Carboplatin/paclitaxel, albumin bound (for confirmed taxane hypersensitivity) Immunotherapy Dostarlimab-gxly (for dMMR/MSI-H recurrent or advanced tumors) Pembrolizumab (for MSI-H or dMMR solid tumors or TMB-H tumors≧10 mutations/megabase and no satisfactory alternative treatment options)

Targeted Therapy (single agents) Bevacizumab Mirvetuximab soravtansine-gynx (for FRα-expressing tumors)	Cyclophosphamide Doxorubicin Gemcitabine/bevacizumab Gemcitabine/cisplatin Ifosfamide Irinotecan Ixabepilone/bevacizumab (category 2B) Melphalan Targeted Therapy (single agents) Niraparib Olaparib Pazopanib (category 2B) Rucaparib Hormone Therapy Aromatase inhibitors (anastrozole, exemestane, letrozole) Leuprolide acetate Megestrol acetate Tamoxifen	Hormone Therapy Fulvestrant (for low-grade serous carcinoma) Targeted Therapy (single agents) Dabrafenib + trametinib (for BRAF V600E-positive tumors) Entrectinib or larotrectinib (for NTRK gene fusion-positive tumors) Mirvetuximab soravtansine-gynx/bevacizumab (for FRα-expressing tumors) (category 2B) Selpercatinib (for RET gene fusion-positive tumors) For Low-Grade Serous Carcinoma • Trametinib • Binimetinib (category 2B)

MALIGNANT GERM CELL TUMORS				
Primary Therapy	Preferred Regimens ・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.	Other Recommended Regimens ・None		Useful in Certain Circumstances ・Etoposide/carboplatin (for select patients with stage IB – 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	Preferred Regimens (Potentially Curative) ・High-dose chemotherapy ・TIP (paclitaxel, ifosfamide, cisplatin)	Other Recommended Regimens (Palliative Only) ・Etoposide/cisplatin (EP), if not previously used ・Docetaxel ・Docetaxel/carboplatin ・Etoposide (oral) ・Etoposide/ifosfamide /cisplatin (VIP) ・ Gemcitabine/paclitaxel/oxaliplatin ・ Gemcitabine/	・Paclitaxel/ifosfamide ・Pembrolizumab (if MSI-H/dMMR or TMB-H) ・VeIP (vinblastine, ifosfamide, cisplatin) ・VAC (vincristine, dactinomycin, cyclophosphamide) ・Supportive care	

		oxaliplatin ・Paclitaxel ・Paclitaxel/carboplatin ・Paclitaxel/gemcitabine	
MALIGNANT SEX CORD-STROMAL TUMORS			
Primary Therapy	Preferred Regimens ・Paclitaxel/carboplatin	Other Recommended Regimens ・Etoposide/cisplatin (EP)	Useful in Certain Circumstances ・BEP (category 2B)
Recurrence Therapy	Preferred Regimens ・Paclitaxel/carboplatin	Other Recommended Regimens ・EP, if not previously used ・Paclitaxel/ifosfamide ・Docetaxel ・Paclitaxel ・Supportive care only ・Targeted therapy Bevacizumabe (single agent)	Useful in Certain Circumstances ・Aromatase inhibitors (ie, anastrozole, exemestane, letrozole) ・Leuprolide acetate (for granulosa cell tumors) ・Tamoxifen ・BEP (category 2B) ・VAC(category 2B)

Neoadjuvant therapy

Cisplatin+Paclitaxel

Cisplatin	(75-100)mg/m^2	iv	d1
Paclitaxel	(135/175)mg/m^2	iv	d1
q 3w			

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; 363:943-953September 2, 2010

Carboplatin+Paclitaxel

Carboplatin	AUC(4-6)	iv	d1
Paclitaxel	(135/175)mg/m^2	iv	d1
q 3w			

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.

Paclitaxel+ Doxorubicin liposome

Paclitaxel	(135/175)mg/m^2	iv	d1
Doxorubicin liposome	(25-45)mg/m^2	iv	d1
q 3w			

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

Bevacizumab (Avastin)+/-Chemotherapy

Bevacizumab	7.5-15mg/kg iv	d1
Repeat cycle every 3 weeks		

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

Cisplatin+Cyclophopsamide(For stage I,II)

Cisplatin	(75-100)mg/m^2	iv	d1
Cyclophosphamide	750mg/m^2	iv	d1
q3wx 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+Cyclophopsamide(For stage I,II)

Carboplatin	AUC (4-6)	iv	d1
Cyclophosphamide	(750-1000)mg/m^2	iv	d1
q3w x 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.

Cisplatin+Paclitaxel(For stage <III ,自費)

Cisplatin	(75-100)mg/m^2	iv	d1
Paclitaxel	(135/175)mg/m^2	iv	d1
q 3w x 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.

Carboplatin+Paclitaxel(For stage <III ,自費)

Carboplatin	AUC (4-6)	iv	d1
Paclitaxel	(135/175)mg/m^2	iv	d1
q 3w x 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.

Bevacizumab (Avastin)+/-Chemotherapy

Bevacizumab	7.5-15mg/kg iv	d1
Repeat cycle every 3 weeks		

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.

Olaparib(Lynparza)

Olaparib(Lynparza)	300mg po	BID
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

Adjuvant second line therapy

Cisplatin

Cisplatin	(75-100)mg/m^2 iv	d1
wk x 6 wks		

Aghajanian C, Blank SV, Goff BA, et al. OCEANS: A randomized, double-blind, placebo-controlled phase III trial of chemotherapy with or without bevacizumab in patients with platinum-sensitive recurrent epithelial ovarian, primary peritoneal, or fallopian tube cancer. J Clin Oncol 2012;30:2039-2045.

Carboplatin

Carboplatin	AUC (4-6) iv	d1
q3w x 6 cycles		

Aghajanian C, Blank SV, Goff BA, et al. OCEANS: A randomized, double-blind, placebo-controlled phase III trial of chemotherapy with or without bevacizumab in patients with platinum-sensitive recurrent epithelial ovarian, primary peritoneal, or fallopian tube cancer. J Clin Oncol 2012;30:2039-2045.

Paclitaxel

Paclitaxel	(50-80)mg/m^2 iv	d1
q3w x 6 cycles		

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

Paclitaxel	135-175mg/m^2 iv	d1
Q3w		

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

Doxorubicin liposome	(25-45)mg/ m^2 iv	d1
q3w x 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+Ifosfamide

Cisplatin	(50-100)mg/m^2 iv	d1
Ifosfamide	(3-5)g/m^2 iv	d1
q3w x 6 cycles		

1.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. Available at:http://www.ncbi.nlm.nih.gov/pubmed/1732425.
2.Kondagunta GV, Bacik J, Donadio A, et al. Combination of paclitaxel, ifosfamide, and cisplatin is an effective second-line therapy for patients with relapsed testicular germ cell tumors. J Clin Oncol 2005;23:6549-6555. Available at:http://www.ncbi.nlm.nih.gov/pubmed/16170162.

Carboplatin+Ifosfamide

Carboplatin	AUC (4-6) iv	d1
Ifosfamide	(3-5)g/m^2 iv	d1
q3w x 6 cycles		

1.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. Available at:http://www.ncbi.nlm.nih.gov/pubmed/1732425.
2.Kondagunta GV, Bacik J, Donadio A, et al. Combination of paclitaxel, ifosfamide, and cisplatin is an effective second-line therapy for patients with relapsed testicular germ cell tumors. J Clin Oncol 2005;23:6549-6555. Available at:http://www.ncbi.nlm.nih.gov/pubmed/16170162.

Doxorubicin liposome +Carboplatin

Doxorubicin liposome	(25-45) mg/ m^2 iv	d1
Carboplatin	AUC (4-6) iv	d1

q3w x 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.

Paclitaxel+ Doxorubicin liposome

Paclitaxel	80mg/m^2	iv	d1
Doxorubicin liposome	(25-45) mg/m^2	iv	d1
wk x 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

Topotecan(自費)

Topotecan	(0.5-1.25)mg/ m^2 iv	d1
wk x 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	(0.75-1.25)mg/ m^2 iv	d1
q3w x 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	50-100mg/m^2	iv	d1
Topotecan	0.5-1.25mg/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 (4-6)	iv	d1
Topotecan	0.5-1.25mg/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 (Avastin)+/-Chemotherapy

Bevacizumab	7.5-15mg/kg iv	d1
Repeat cycle every 3 weeks		

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 therapy

Gefitinib +Paclitaxel

Gefitinib(自費)	2pc		d1
Paclitaxel	80mg/m^2	iv	d1

Fortunato Ciardiello2, Rosa Caputo, Roberto Bianco, et al. Antitumor Effect and Potentiation of Cytotoxic Drugs Activity in Human Cancer Cells by ZD-1839 (Iressa), an Epidermal Growth Factor Receptor-selective Tyrosine Kinase Inhibitor1 Clin Cancer Res May 2000 6; 2053

Etoposide

Etoposide	1pc(oral)1#
QD x 7 day ~ 28 day	

Rose PG, Blessing JA, Mayer AR, Homesley HD. Prolonged oral etoposide as second-line therapy for platinum-resistant and platinum-sensitive ovarian carcinoma: a Gynecologic Oncology Group study. J Clin Oncol 1998;16:405-410.

Cyclophopsamide

Cyclophosphamide	1pc (oral)1#
QD x 7 day ~ 28day	

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.

Gemcitabine+ Doxorubicin liposome

Gemcitabine	650-1000mg/m^2	iv	d1
Doxorubicin liposome	25-45mg/m2	iv	d1
weekx3 rest 1 week x 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.

Bevacizumab (自費)+**Cyclophosphamide**

Bevacizumab	5-10mg/kg q2weeks	iv	d1
Cyclophosphamide	1#(50mg) qd 5days	iv	d1

1.Robert A. Burger, Michael W. Sill, Bradley J. Monk, et al. Phase II Trial of Bevacizumab in Persistent or Recurrent Epithelial Ovarian Cancer or Primary Peritoneal Cancer: A Gynecologic Oncology Group Study.JCO November 20, 2007 vol. 25 no. 33 5165-5171
2.Carol Aghajanian⇓, Stephanie V. Blank, Barbara A. Goff,et al. OCEANS: A Randomized, Double-Blind, Placebo-Controlled Phase III Trial of Chemotherapy With or Without Bevacizumab in Patients With Platinum-Sensitive Recurrent Epithelial Ovarian, Primary Peritoneal, or Fallopian Tube Cancer.JCO June 10, 2012 vol. 30 no. 17 2039-2045

paclitaxel

Paclitaxel	80mg/m^2	iv	d1
wk x 6 wks			

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

Doxorubicin liposome	(25-45)mg/m^2 iv	d1
q4w x 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(自費) **+ Doxorubicin liposome**

Carboplatin	AUC (4-6) iv	d1
Doxorubicin liposome	(25-45) mg/m^2 iv	d1
q4w x 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.

Topotecan(自費)

Topotecan	0.5-1.25mg/m^2 iv	d1
wk x 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.

paclitaxel

Paclitaxel	(50-80)mg/m^2 iv	d1
Monthly		

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.

Bevacizumab (Avastin)+/-Chemotherapy

Bevacizumab	7.5-15mg/kg iv	d1
Repeat cycle every 3 weeks		

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

Paclitaxel+cisplatin

Paclitaxel	135mg/m2	iv	d1
cisplatin	100mg/m2	ip	d2
Q3w x 6 cycles			

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; 335:1950-1955December 26, 1996

Cisplatin IP

cisplatin	75- 100mg/m2	ip	d1
Q3w x 6 cycles			

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; 335:1950-1955December 26, 1996

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
21 days intervals x 3-4course		

BEP 5 day regimen		
Etoposide	100 mg/m^2	Day1-5
Cisplatin	20 mg/m^2	Day1-5
± Bleomycin	30 units	Per week
21 days intervals 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
Taxol	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).

十、放射線治療

Principles of Radiation Therapy for Ovarian cancer

Indication:

- Post-operative Stage ≧ IC Gr.3 and if not a chemotherapy candidate and <2cm residual tumor
  - 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

Note: Tomotherapy preferred(Patient have to pay for daily image-guidance.)

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)

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

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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.
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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.
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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.
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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.
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12. Bristow RE, Karlan BY. Ovulation induction, infertility, and ovarian cancer risk. Fertilil 1996; 66:499-507.
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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 + 6-8 次的化療	
第 III 期	OP + C/T	完成手術 + 6-8 次的化療	
第 IV 期	OP + C/T	接受手術或 C/T 4-8 次完治。 接受『安寧照護』	