



# **Ovarian Cancer**

## **Including Fallopian Tube Cancer**

## **and Primary Peritoneal Cancer**

Version 1.2015



## 一、本共識依下列參考資料修改版本：

NCCN Clinical Practice Guidelines in Oncology- Ovarian -Fallopian Tube -Primary Peritoneal Cancer V.2.2015

2009年Revised FIGO staging for carcinoma of the Ovarian -Fallopian Tube -Primary Peritoneum

## 二、制訂人員：

婦產科：魏銘洲醫師、蕭聖謀醫師、吳文毅醫師  
孫序東醫師

放射腫瘤：熊佩韋醫師、吳樂榮醫師、謝忱希醫師

組織病理：羅承裕醫師

影像醫學：黃智旺醫師

核子醫學科：吳彥雯醫師

個管師：鄭玉琴護理師



CLINICAL PRESENTATION

WORK-UP

PRIMARY TREATMENT <sup>g,h,i,j</sup>

Suspicious <sup>a</sup>/palpable pelvic mass detected on abdominal/ pelvic exam and/or ascites, abdominal distention, and/or Symptoms such as bloating, pelvic or abdominal pain, difficulty eating or feeling full quickly or urinary symptoms (urgency or frequency)<sup>b</sup> without other obvious source of malignancy

- Obtain family history<sup>c</sup> and consider family history evaluation<sup>c,d</sup>
- Abdominal/ pelvic exam
- GI evaluation as clinically indicated
- Ultrasound and/or abdominal/ pelvic CT as clinically indicated<sup>e</sup>
- 磁 Chest imaging
- CA-125 , or other tumor markers as clinically indicated<sup>f</sup>
- Complete blood count (CBC), chemistry profile with liver function test (LFTs)

Laparotomy/ Total abdominal hysterectomy (TAH) / Bilateral salpingo- oophorectomy (BSO) with comprehensive staging<sup>j</sup> or unilateral salpingo-oophorectomy (USO) (Clinical Stage IA or IC, all grades with comprehensive staging if patient desires fertility)  
or  
Cytoreductive surgery<sup>j</sup> if clinical stage II, III,IV  
or  
Consider neoadjuvant chemotherapy<sup>k</sup> (category 1)/primary interval cytoreduction<sup>h</sup> (diagnosis by fine-needle aspiration [FNA],biopsy, or paracentesis) for patients with bulky stage III/ IV who are poor surgical candidates due to high-risk comorbidity conditions or disease factors.

[See Pathologic Staging \(OV-3\)](#)

Diagnosis by previous surgery or tissue biopsy (cytopathology)

- Obtain family history and consider family history evaluation
- Ultrasound and/or abdominal/pelvic CT/MRI as clinically indicated<sup>e</sup>
- Chest imaging
- CA-125 or other tumor markers as clinically indicated<sup>f</sup>
- CBC, chemistry profile with LFTs
- Institutional pathology review
- Refer for genetic risk evaluation<sup>c,d</sup>

[See Findings and Primary Treatment \(OV-2\)](#)

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<sup>a</sup> Im SS, Gordon AN, Buttin BM, et al. Obstet Gynecol 2005;105:35-41. [See Discussion.](#)

<sup>b</sup> Goff BA, Mandel L,Drescher CW, et al. Cancer 2007;109:221-227.

<sup>c</sup> [See NCCN Guidelines for Genetic/Familial High-Risk Assessment: Breast and Ovarian and NCCN Guidelines for Genetic/Familial High-Risk Assessment: Colorectal.](#)

<sup>d</sup>Primary treatment should not be delayed for a genetic counseling referral.

<sup>e</sup>PET/CT scan or MRI may be indicated for indeterminate lesions if results will alter management.

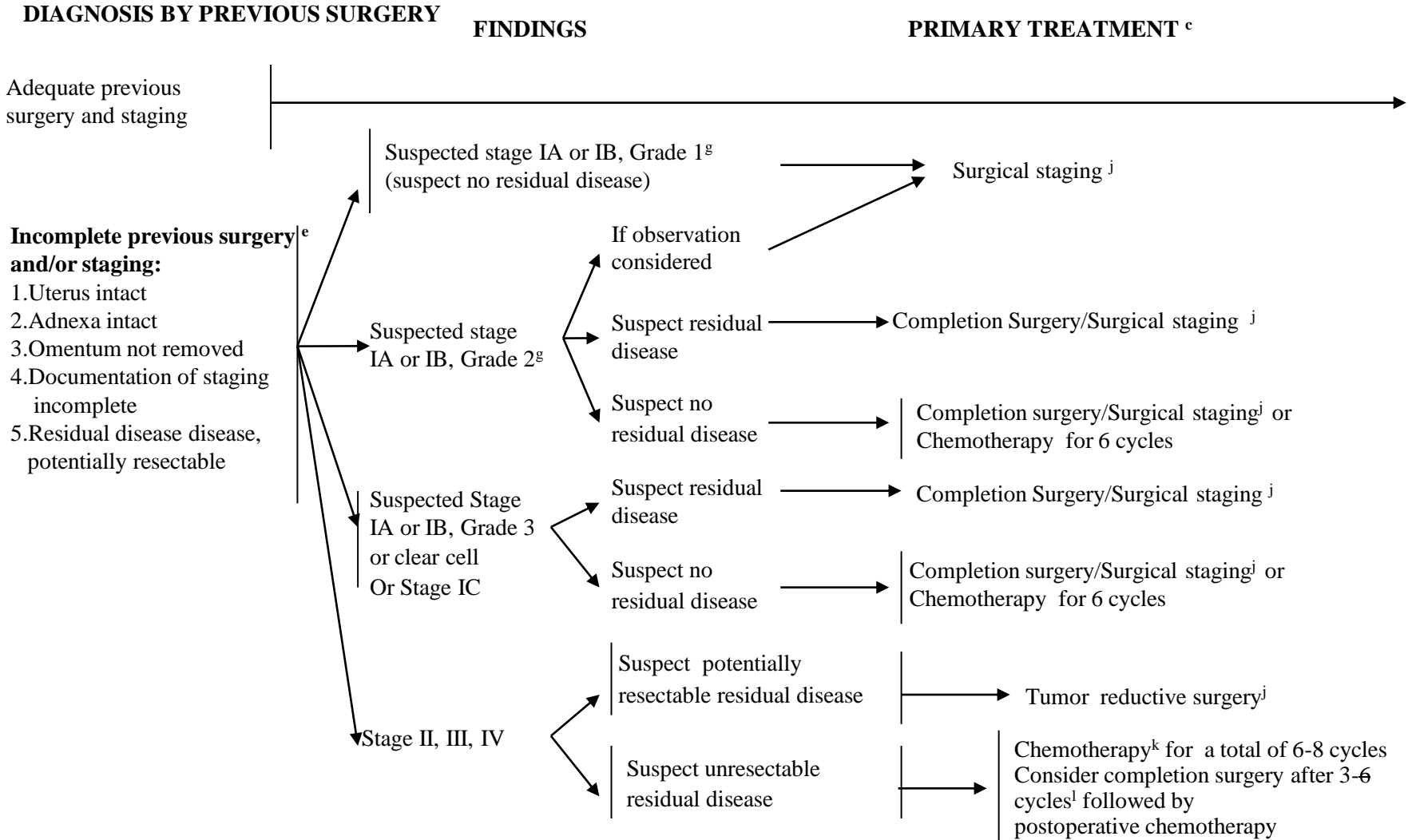
<sup>f</sup>See [Discussion](#) for usefulness of diagnostic tests.

<sup>h</sup> Standard recommendation includes a patient evaluation by a gynecologic oncologist prior to initiating chemotherapy. Published data demonstrate that primary assessment and debulking by a gynecologic oncologist result in a survival advantage. Patients being evaluated for neoadjuvant chemotherapy should be seen by a fellowship-trained gynecologic oncologist prior to being considered a poor surgical candidate. A referral to a gynecologic oncologist is also recommended for management of occult serous tubal intraepithelial carcinomas.

<sup>i</sup>All women undergoing surgery for ovarian cancer should be counseled about the clinical benefit associated with combined IV and IP chemotherapy administration prior to surgery. [NCI Clinical Announcement.](#)

<sup>j</sup>[See Principles of Surgery \(OV-A\).](#)

<sup>k</sup>[See Principles of Chemotherapy \(OV-B\)](#) and [Management of Drug Reactions \(OV-C\).](#)



See Pathologic staging (OV-3)

第OV-2頁

<sup>h</sup> Standard recommendation includes a patient evaluation by a gynecologic oncologist. Published data demonstrate that primary assessment and debulking by a gynecologic oncologist result in a survival advantage. Patients being evaluated for neoadjuvant chemotherapy should be seen by a fellowship-trained gynecologic oncologist prior to being consider a poor nonsurgical candidate.

<sup>j</sup> See Principles of primary Surgery (OV-A).

<sup>k</sup> See Principles of Chemotherapy (OV-B) and Management of Drug Reactions (OV-C).

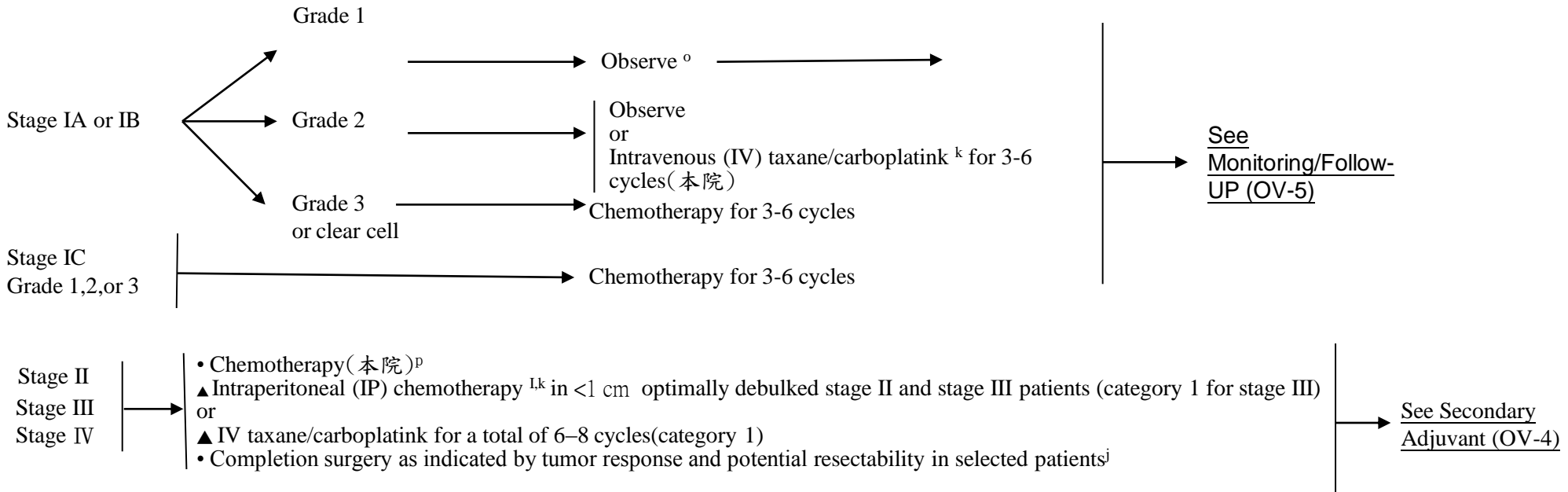
<sup>l</sup> Based on clinical judgement of gynecologic oncologist, surgery may be performed after considered a poor nonsurgical candidate.

<sup>m</sup> Completion surgery after 3 cycles is preferred; however, surgery may be performed after 4–6 cycles based on the clinical judgment of the gynecologic oncologist.



**PATHOLOGIC STAGING <sup>i</sup>**

**PRIMARY CHEMOTHERAPY/ PRIMARY ADJUVANT <sup>i</sup>**



<sup>i</sup> All women undergoing surgery for ovarian cancer should be counseled about the clinical benefit associated with combined IV and IP chemotherapy administration prior to surgery.

<sup>j</sup> See Principles of primary Surgery (OV-A).

<sup>k</sup> See Principles of Chemotherapy (OV-B) and Management of Drug Reactions (OV-C).

<sup>l</sup> Some pathologists recommend that ovarian cancer be graded either low-grade (most grade 1 serous tumors) or high-grade (most grade 2 or 3 serous tumors). See FIGO Guidelines (ST-5).

<sup>m</sup> Patients receiving primary chemotherapy will be monitored as follows:

1. Pelvic exams at least every 2 cycles
2. Interim CBC with platelets as indicated
3. Chemistry profiles if indicated
4. CA-125 levels or other tumor markers as clinically indicated prior to each cycle of chemotherapy
5. Radiographic imaging if indicated.

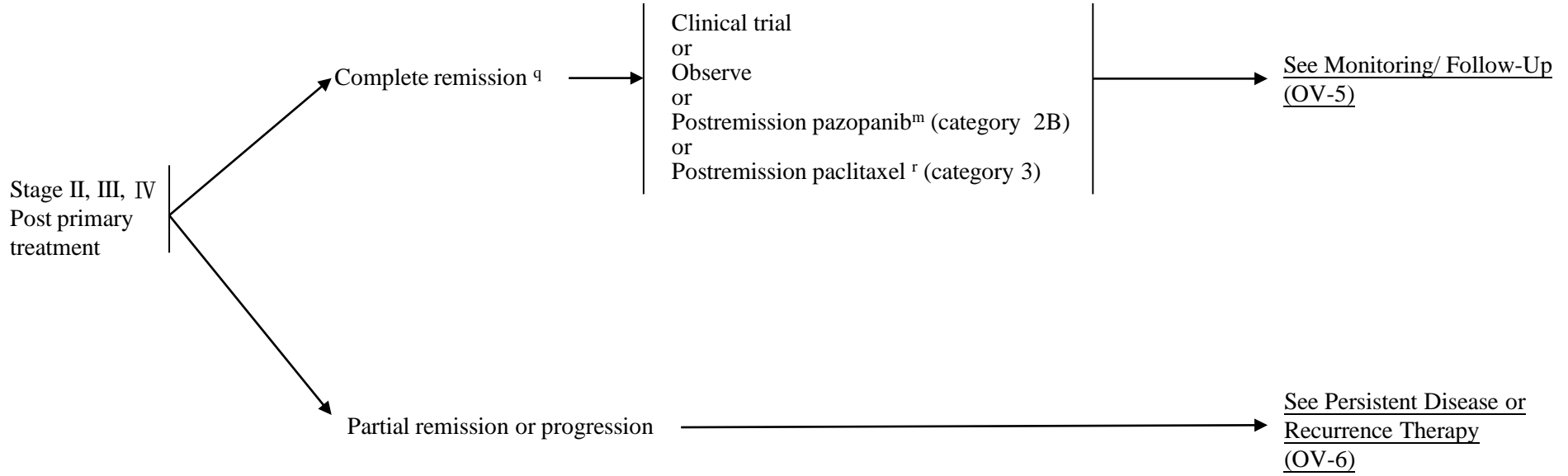
<sup>o</sup> See Discussion for more details about treatment of low-grade tumors.

<sup>p</sup> See specific regimens on Primary Chemotherapy/Primary Adjuvant Therapy Regimens for Stage II-IV (OV-B 3 of 3).



STAGE II, III, IV  
POST PRIMARY TREATMENT

SECONDARY ADJUVANT



<sup>q</sup> No objective evidence of disease (ie, negative physical exam, negative CA-125, negative CT with < 1 cm lymph nodes).

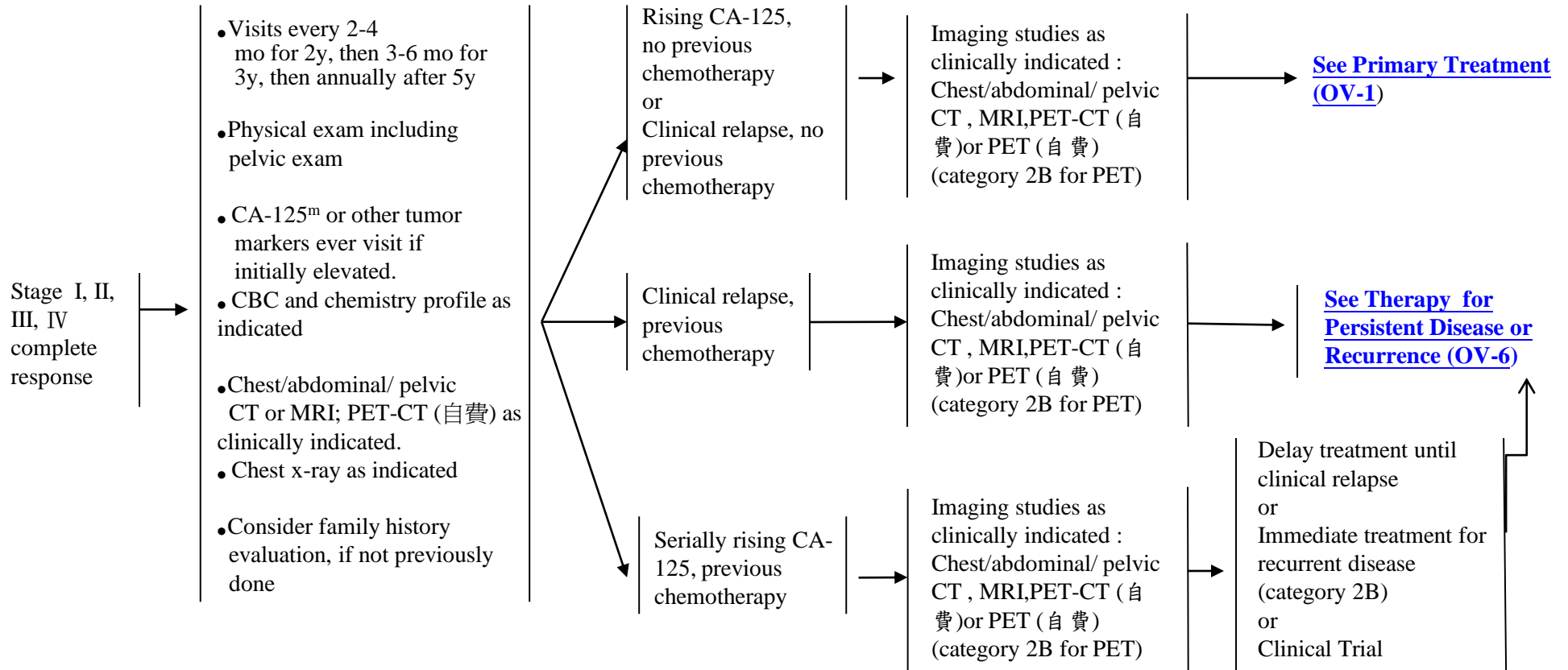
<sup>r</sup> See Discussion for doing.



STAGE I-IV COMPLETE RESPONSE

RECURRENT DISEASE†

MONITORING/FOLLOW-UP



†See [NCCN Guidelines for Genetic/Familial High-Risk Assessment: Breast and Ovarian](#) and [NCCN Guidelines for Genetic/Familial High-Risk Assessment: Colorectal](#).

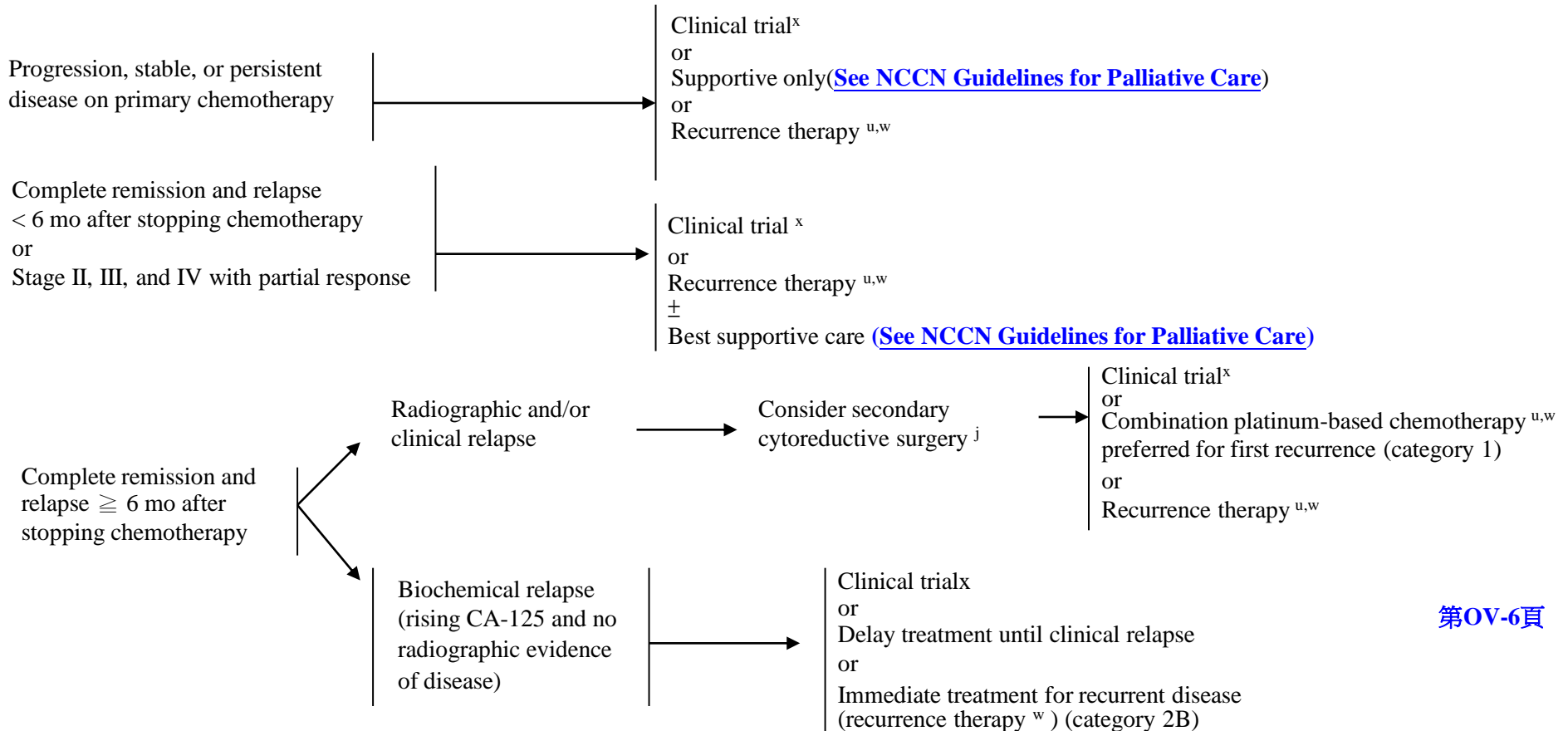
‡There are data regarding the utility of CA-125 for monitoring of ovarian cancer after completion of primary therapy. See [The Society of Gynecologic Oncology \(SGO\) position statement](#) and [Discussion](#).

§Consider symptom management and best supportive care. See [NCCN Guidelines for Palliative Care](#). Refer for palliative care assessment, if appropriate.



DISEASE STATUS<sup>c</sup>

THERAPY FOR PERSISTENT DISEASE OR RECURRENCE <sup>u,v,w</sup>



<sup>c</sup>See NCCN Guidelines for Genetic/Familial High-Risk Assessment: Breast and Ovarian and NCCN Guidelines for Genetic/Familial High-Risk Assessment: Colorectal.

<sup>j</sup>See Principles of Surgery (OV-A).

<sup>u</sup>Patients who progress on 2 consecutive therapy regimens without evidence of clinical benefits have diminished likelihood of benefiting from additional therapy. Decisions to offer clinical trials, supportive care only, or additional therapy should be made on a highly individual basis.

<sup>v</sup>See Ancillary Palliative Surgical Procedures in Principles of Surgery (OV-A 3 of 3).

<sup>w</sup>See Acceptable Recurrence Therapies (OV-D).

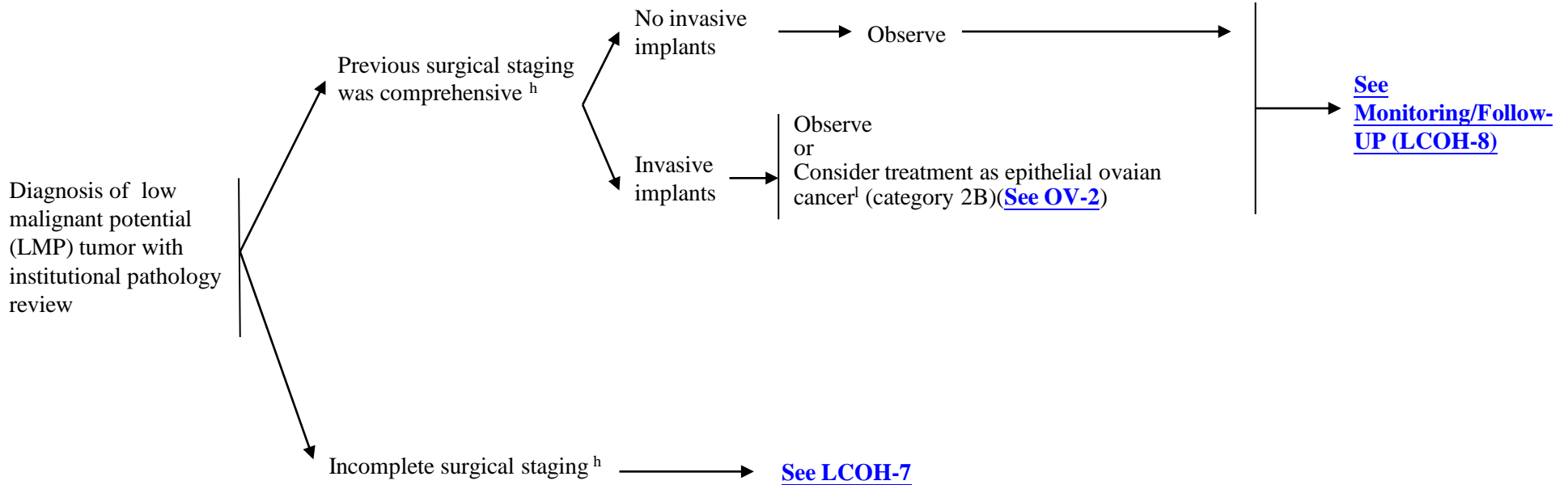
<sup>x</sup>Clinical trials with newer agents should be strongly considered.





CLINICAL PRESENTATION

PRIMARY THERAPY<sup>k</sup>



<sup>h</sup>See Principles of Surgery (OV-A).

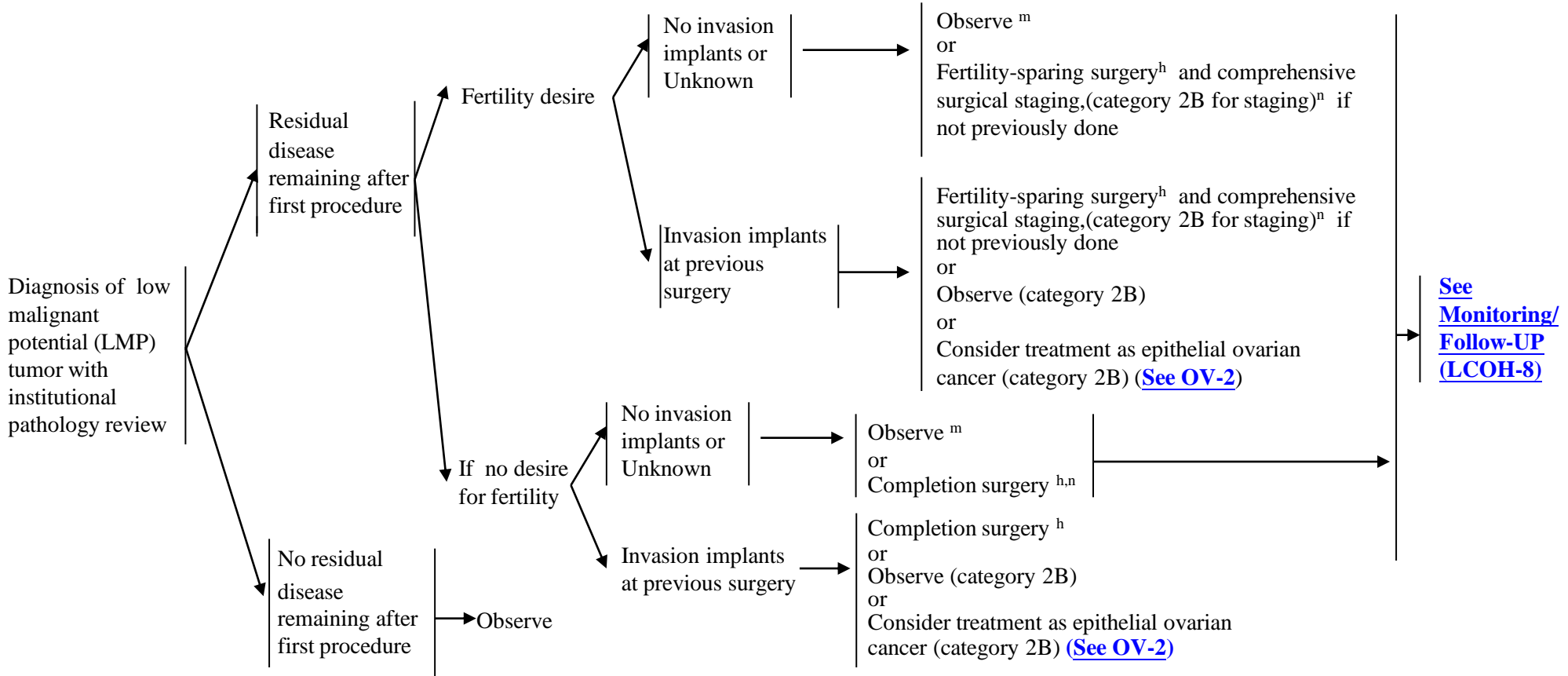
<sup>k</sup>Standard recommendation includes a patient evaluation by a gynecologic oncologist.

<sup>l</sup>Chemotherapy (IV or IP) has not been shown to be beneficial in ovarian low malignant potential tumors (borderline epithelial ovarian tumors).



CLINICAL PRESENTATION

PRIMARY THERAPY<sup>k</sup>



<sup>h</sup>See Principles of Surgery (OV-A).

<sup>k</sup>Standard recommendation includes a patient evaluation by a gynecologic oncologist.

<sup>l</sup>Chemotherapy (IV or IP) has not been shown to be beneficial in ovarian low malignant potential tumors borderline epithelial ovarian tumors).

<sup>m</sup>Observation is a reasonable option regardless of whether fertility is desired.

<sup>n</sup>For pathologically proven LMP, lymph node evaluation may be considered on a case-by-case basis.

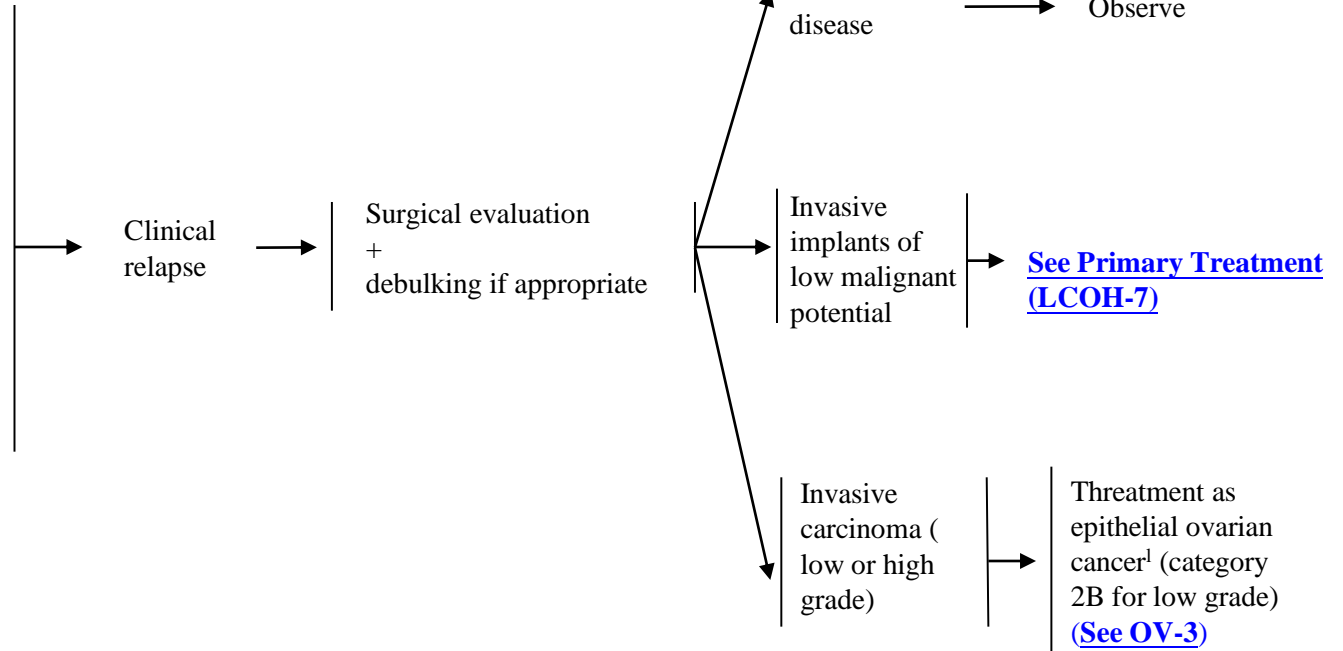


MONITORING/ FOLLOW-UP

RECURRENT DISEASE

RECURRENT THERAPY

- Visits exam every 3-6 mo for up to 5y, then annually
- Physical exam including pelvic exam
- Ultrasound as indicated for patients with fertility-sparing surgery
- CA-125<sup>o</sup> or other tumor markers every visit if initially elevated
- CBC or chemistry profile as indicated
- After completion of childbearing in patients who underwent unilateral salpingo-oophorectomy, consider completion surgery (category 2B)



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<sup>1</sup>Chemotherapy (IV or IP) has not been shown to be beneficial in ovarian low malignant potential tumors (borderline epithelial ovarian tumors).

<sup>o</sup>There are data regarding the utility of CA-125 for monitoring of ovarian cancer after completion of primary therapy. [See The Society of Gynecologic position statement](#) and [Discussion](#).



## Staging

**Table 1**  
**American Joint Committee on Cancer (AJCC); TNM and FIGO Staging for Ovarian and Primary Peritoneal Cancer (7th ed.,2010)**

TNM	FIGO	Surgical-Pathologic Findings	TNM	FIGO	
TX		Primary tumor cannot be assessed	<b>T3c</b>	<b>III C</b>	Peritoneal metastasis beyond pelvis more than 2 cm in greatest dimension and/or regional lymph node metastasis.
T0		No evidence of primary tumor			
<b>T1</b>	<b>I</b>	Tumor limited to ovaries (one or both)			Regional Lymph Nodes (N)
<b>T1a</b>	<b>IA</b>	Tumor limited to one ovary; capsule intact, no tumor on ovarian surface. No malignant cells in ascites or peritoneal washings.	Nx		
<b>T1b</b>	<b>IB</b>	Tumor limited to both ovaries; capsule intact, no tumor on ovarian surface. No malignant cells in ascites or peritoneal washings.	N0		No regional lymph node metastasis
<b>T1c</b>	<b>IC</b>	Tumor limited to one or both ovaries with any of the following; capsule ruptured, tumor on ovarian surface, malignant cells in ascites or peritoneal washings.	N1	<b>III C</b>	Regional lymph node metastasis
<b>T2</b>	<b>II</b>	Tumor involves one or both ovaries with pelvic extension.			Distant metastasis (M)
<b>T2a</b>	<b>IIA</b>	Extension and/or implants on uterus and/or tube(s). No malignant cells in ascites or peritoneal washings.	M0		No distant metastasis
<b>T2b</b>	<b>IIB</b>	Extension and/or implants on other pelvic tissues. No malignant cells in ascites or peritoneal washings.	M1	<b>IV</b>	Distant metastasis
<b>T2c</b>	<b>IIC</b>	Pelvic extension and/or implants (T2a or T2b) with malignant cells in ascites or peritoneal washings.			Note: Liver capsule metastasis is T3/Stage III; liver parenchymal metastasis, M1/Stage IV. Pleural effusion must have positive cytology for M1/Stage IV.
<b>T3</b>	<b>III</b>	Tumor involves one or both ovaries with microscopically confirmed peritoneal metastasis outside the pelvis.			
<b>T3a</b>	<b>III A</b>	Microscopic peritoneal metastasis beyond pelvis (no macroscopic tumor).			
<b>T3b</b>	<b>III B</b>	Microscopic peritoneal metastasis beyond pelvis 2 cm or less in greatest dimension.			



## Staging

*Table 1 (Continued)*

American Joint Committee on Cancer (AJCC);

TNM and FIGO Staging for Ovarian and Primary Peritoneal Cancer (7th ed.,2010)

### Stage Grouping

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 IIC	T2c	N0	M0
Stage III	T3	N0	M0
Stage IIIA	T3a	N0	M0
Stage IIIB	T3b	N0	M0
Stage IIIC	T3c	N0	M0
	Any T	N1	M0
Stage IV	Any T	AnyN	M1

The staging system for ovarian and primary peritoneal cancer is also used for malignant germ cell tumors, malignant sex cord-stromal tumors, and carcinosarcoma (malignant mixed Müllerian tumors).

Note: For histologic grade and histopathological type, see AJCC staging manual.

第ST-2頁

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## Staging

*Table 2*

American Joint Committee on Cancer (AJCC); TNM and FIGO Staging for Fallopian Tube Cancer (7th ed.,2010)

TNM	FIGO	Surgical-Pathologic Findings	TNM	FIGO	
TX		Primary tumor cannot be assessed			
T0		No evidence of primary tumor			
Tis*		Carcinoma in situ (limited to tube mucosa)			
<b>T1</b>	<b>I</b>	Tumor limited to the fallopian tube(s)			
<b>T1a</b>	<b>IA</b>	Tumor limited to one tube, without penetration the serosal surface; no ascites.	<b>T3c</b>	<b>III C</b>	Peritoneal metastasis outside the pelvis and more than 2 cm in greatest diameter.
<b>T1b</b>	<b>IB</b>	Tumor limited to both tubes , without penetration the serosal surface; no ascites.			
<b>T1c</b>	<b>IC</b>	Tumor limited to one or both tubes with extension onto or through the tubal serosa, or with malignant cells in ascites or peritoneal washings.			
<b>T2</b>	<b>II</b>	Tumor involves one or both fallopian tubes with pelvic extension.			
<b>T2a</b>	<b>IIA</b>	Extension and/or metastasis to the uterus and/or ovaries.			
<b>T2b</b>	<b>IIB</b>	Extension to other pelvic structures.			
<b>T2c</b>	<b>IIC</b>	Pelvic extension with malignant cells in ascites or peritoneal washings.			
<b>T3</b>	<b>III</b>	Tumor involves one or both fallopian tubes, with peritoneal implants outside the pelvis.			
<b>T3a</b>	<b>III A</b>	Microscopic peritoneal metastasis outside the pelvis.			
<b>T3b</b>	<b>III B</b>	Microscopic peritoneal metastasis outside the pelvis 2 cm or less in greatest dimension.			
					Regional Lymph Nodes (N)
			Nx		Regional lymph nodes cannot be assessed
			N0		No regional lymph node metastasis
			N1	<b>III C</b>	Regional lymph node metastasis
					Distant metastasis (M)
			M0		No distant metastasis
			M1	<b>IV</b>	Distant metastasis (excludes metastasis within the peritoneal cavity)

\* Note: FIGO no longer includes Stage 0 (Tis)

Note: Liver capsule metastasis is T3/Stage III; liver parenchymal metastasis, M1/Stage IV. Pleural effusion must have positive cytology for M1/Stage IV.



## Staging

*Table 2 (Continued)*

American Joint Committee on Cancer (AJCC);  
TNM and FIGO Staging for Fallopian Tube Cancer (7th ed.,2010)

### Stage Grouping

Stage 0	Tis	N0	M0
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 IIC	T2c	N0	M0
Stage III	T3	N0	M0
Stage IIIA	T3a	N0	M0
Stage IIIB	T3b	N0	M0
Stage IIIC	T3c	N0	M0
	Any T	N1	M0
Stage IV	Any T	Any N	M1

\* Note: FIGO no longer includes Stage 0 (Tis)

Note: For histologic grade and histopathological type, see AJCC staging manual.

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## 六、Updated on 2015/08/27

內容：