卵巢癌診療指引

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參考資料：

Ovarian Cancer NCCN Guidelines V4.2017

2011 年國家衛生研究院-婦癌臨床診療指引

全民健康保險藥品給付規定 行政院衛生署一百零五年版(30051_2)

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Ovarian Cancer(Including Fallopian Tube Cancer and Primary Peritoneal Cancer)

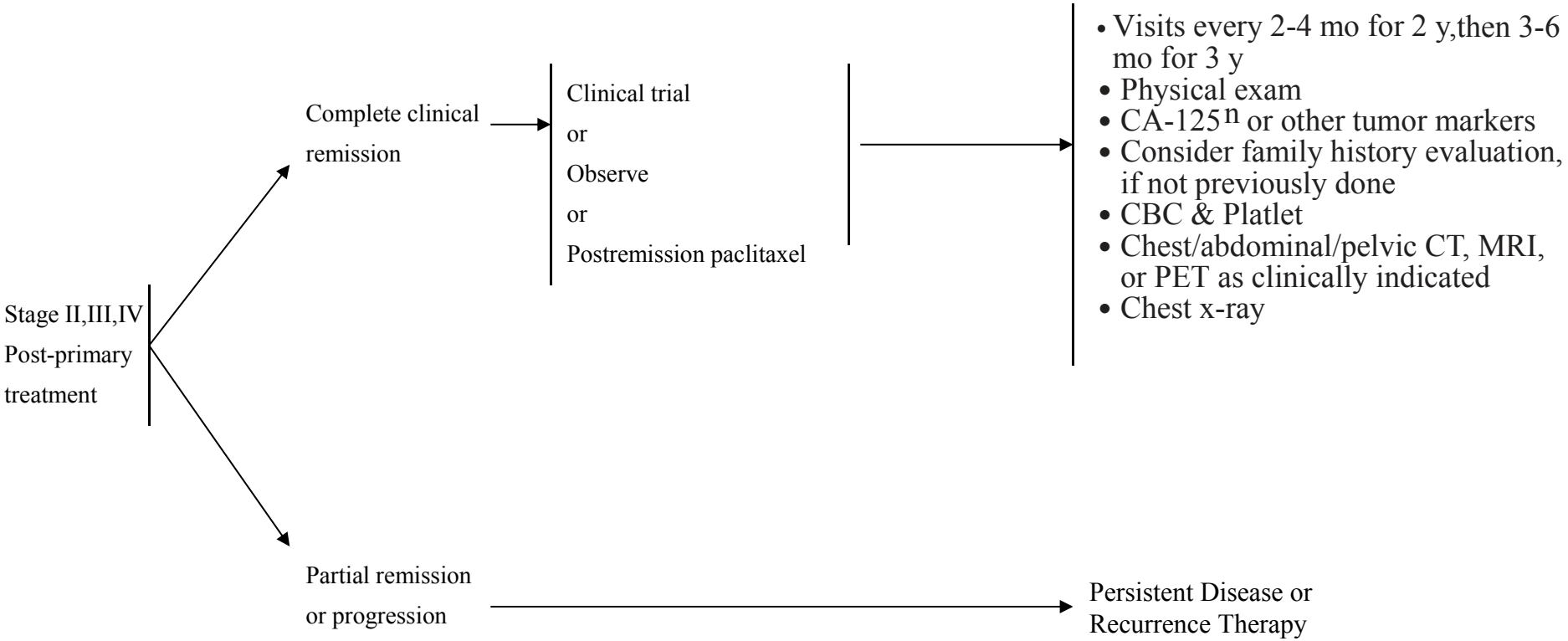
CLINICAL PRESENTATION	WORK UP	PRIMARY TREATMENT		
◆Suspicious/palpable pelvic mass detected on abdominal ◆Pelvic exam and/or ascites,abdominal distention, ◆Bloating ◆Pelvic or abdominal pain,difficulty eating or feeding full quickly,or urinary symptoms ◆Diagnosis by previous surgery or tissue biopsy	●History ●Physcal exam ●Chest imaging ●CBC & Platelet ●Liver function test ●Ultrasound and/or abdominal/pelvic CT ●CA-125 and/or CA-199	Stage IA or IB,grade 1	Surgical staging	Patholoigic staging
		Stage IA or IB,grade 2	Surgical staging(If observation considered)	
			Completion surgery/surgical staging(Residual disease)	
			Chemotherapy for 6 cycles or completion surgery/surgical staging(No residual disease)	
		Stage IA or IB,grade 3 or clear cell or stageIC	Completion surgery/surgical staging(Residual disease)	
			Chemotherapy for 6 cycles or completion surgery/surgical staging(No residual disease)	
		Stage II,III,IV	Tumor reductive surgery(No potentially ,no residua disease)	
			Chemotherapy for a total of 6-8 cycles Consider completion surgery after 3-6 cycles followed by postoperative chemotherapy (Unresectable residual disease)	

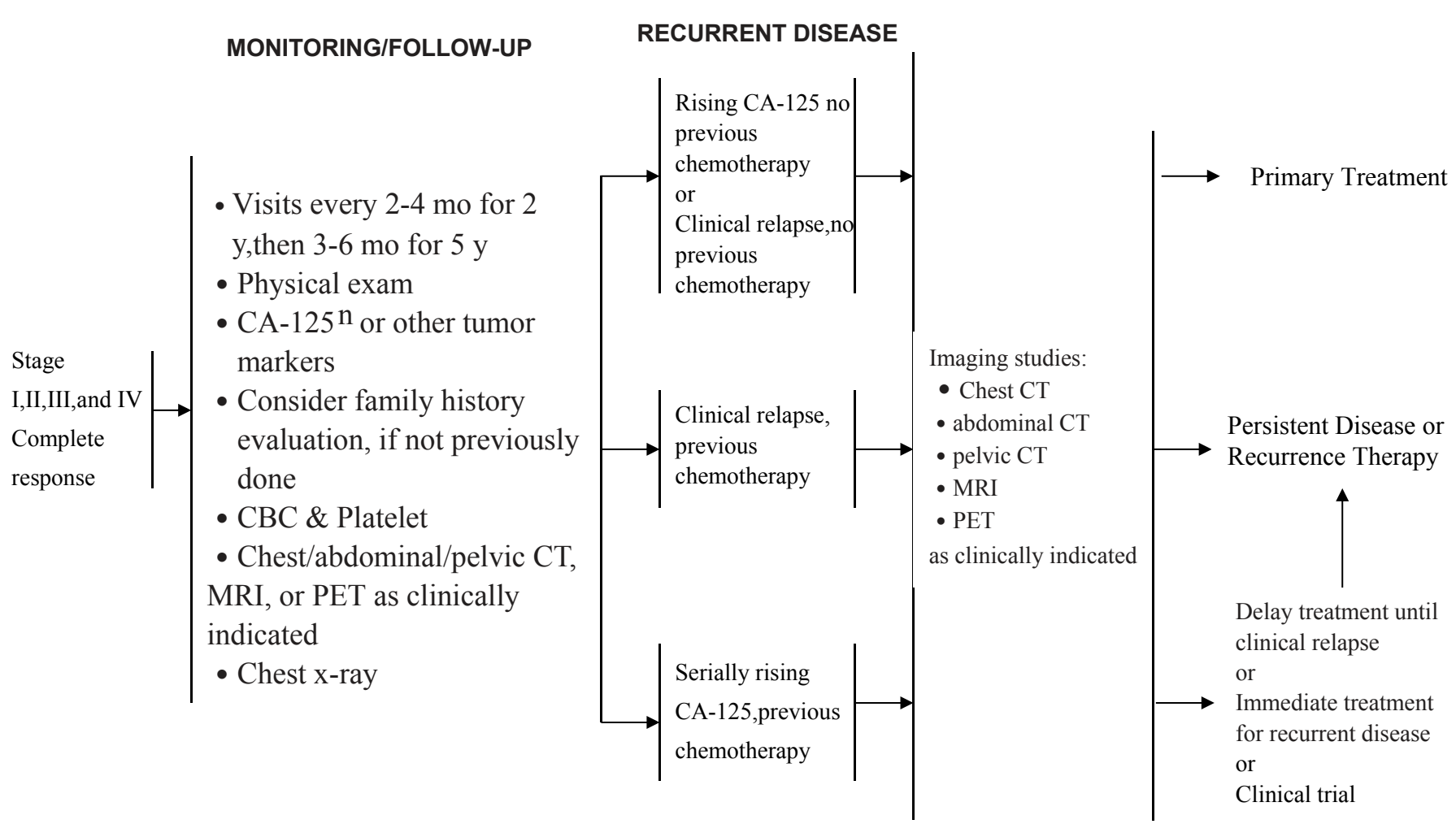
PATHOLOGIC STAGING		PRIMARY CHEMOTHERAPY/PRIMARY ADJUVANT THERAPY	Monitoring/Follow-Up
Stage IA or IB	Grade 1	Observe	• Visits every 2-4 mo for 2 y,then 3-6 mo for 3 y • Physical exam • CA-125 n or other tumor markers • Consider family history evaluation, if not previously done • CBC & Platlet • Chest/abdominal/pelvic CT, MRI,PET as clinically indicated • Chest x-ray
	Grade 2	Observe or Taxol/Carboplatin for 3-6 cycles	
	Grade 3 or clear cell	Taxol /Carboplatin for 3-6 cycles	
Stage IC	Geade1,2,3	Taxol /Carboplatin for 3-6 cycles	
Stage II		• Chemotherapy Taxol /Carboplatin for a total 3-6 cycles • Completion surgery as indicated by tumor response and potential resectability in selected patients	
Stage III			
Stage IV		Palliative C/T Taxol+Carboplatin	

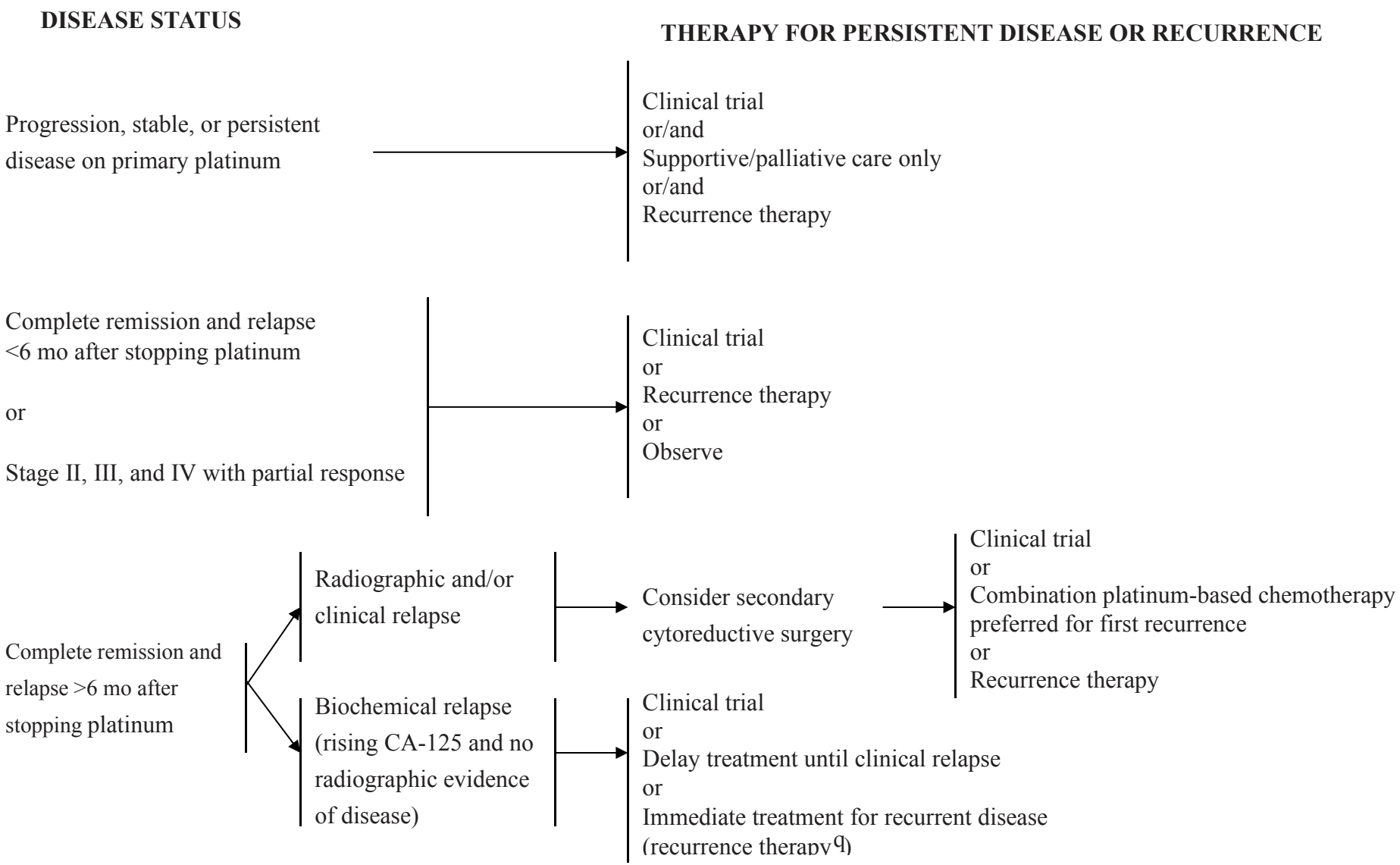
STAGE II,III,IV
POST-PRIMARY YREATMENT

SECONDARY ADJUVANT THERAPY

MONITORING/FOLLOW-UP:




STAGE I-IV COMPLETE RESPONSE
MONITORING/FOLLOW-UP
RECURRENT DISEASE
Stage I,II,III,and IV Complete response
• Visits every 2-4 mo for 2 y,then 3-6 mo for 5 y
• Physical exam
• CA-125 n or other tumor markers
• Consider family history evaluation, if not previously done
• CBC & Platelet
• Chest/abdominal/pelvic CT, MRI, or PET as clinically indicated
• Chest x-ray
Rising CA-125 no previous chemotherapy or Clinical relapse,no previous chemotherapy
Clinical relapse, previous chemotherapy
Serially rising CA-125,previous chemotherapy
Imaging studies:
• Chest CT
• abdominal CT
• pelvic CT
• MRI
• PET
as clinically indicated
Primary Treatment
Persistent Disease or Recurrence Therapy
Delay treatment until clinical relapse or Immediate treatment for recurrent disease or Clinical trial

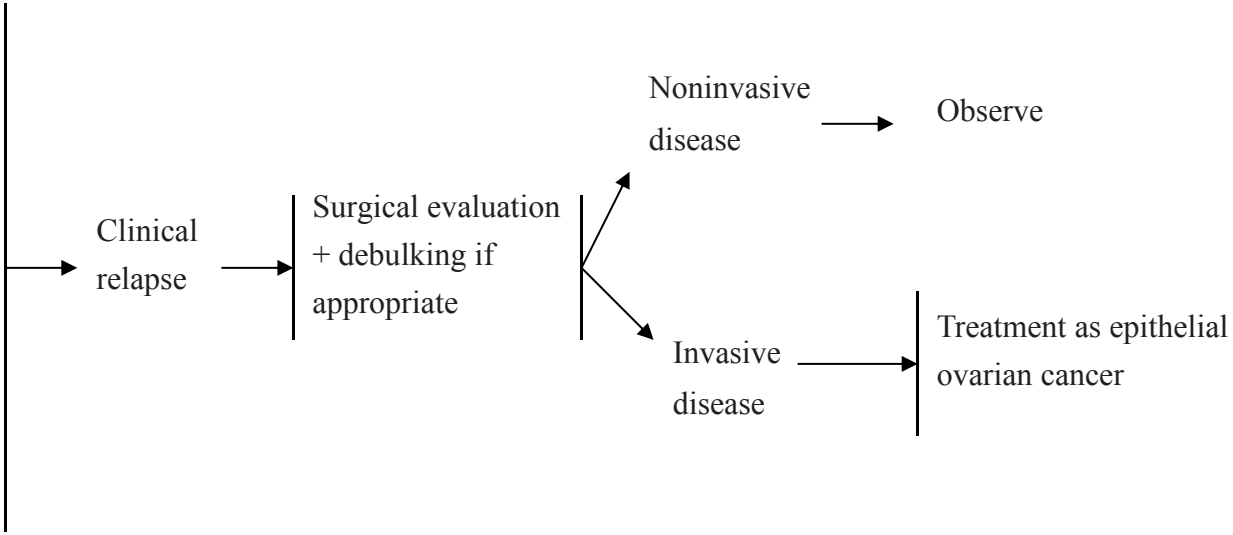

DISEASE STATUS
THERAPY FOR PERSISTENT DISEASE OR RECURRENCE
Progression, stable, or persistent disease on primary platinum
Clinical trial
or/and
Supportive/palliative care only
or/and
Recurrence therapy
Complete remission and relapse <6 mo after stopping platinum
or
Stage II, III, and IV with partial response
Clinical trial
or
Recurrence therapy
or
Observe
Complete remission and relapse >6 mo after stopping platinum
Radiographic and/or clinical relapse
Consider secondary cytoreductive surgery
Clinical trial
or
Combination platinum-based chemotherapy preferred for first recurrence
or
Recurrence therapy
Biochemical relapse (rising CA-125 and no radiographic evidence of disease)
Clinical trial
or
Delay treatment until clinical relapse
or
Immediate treatment for recurrent disease
(recurrence therapy9)

CLINICAL PRESENTATION			PRIMARY TREATMENT		
Diagnosis of low malignant potential (LMP) lesion with institutional pathology review	Previous surgical staging was comprehensive		No invasive	Observe	Monitoring/ Folloe-up
			Invasive	Observe or Consider treatment as epithelial ovarian cancer	
	Incomplete surgical staging	Fertility desired	No invasive Implants or unknown	Observe or Fertility-sparing surgery and comprehensive surgical staging, if not previously done	
			Invasive implants at previous surgery	Fertility-sparing surgery and comprehensive surgical staging, if not previously done or Observe or Consider treatment as epithelial ovarian cancer	
		If no desire for fertility	No invasive Implants or unknown	Completion surgery or Observe or Consider treatment as epithelial ovarian cancer	
			Invasive implants at previous surgery		

MONITORING/FOLLOW-UP

- Visits every 2-4 mo for 2 y,then 3-6 mo for 5 y
- Physical exam
- CA-125[n] or other tumor markers
- Consider family history evaluation, if not previously done
- CBC & Platelet
- Chest/abdominal/pelvic CT, MRI, or PET as clinically indicated
- Chest x-ray

RECURRENT DISEASE



PRINCIPLES OF PRIMARY SURGERY (1 of 3)

In general, a vertical midline abdominal incision should be used in patients with a suspected malignant ovarian neoplasm.[2] Intraoperative pathologic evaluation with frozen sections may assist in management.
Quantify the extent of initial and residual disease, and document in operative notes.

Ovarian cancer apparently confined to an ovary or to the pelvis

The following procedures should be considered part of the surgical management of patients with ovarian cancer apparently confined to an ovary or to the pelvis:
On entering the abdomen, aspiration of ascites or peritoneal lavage should be performed for peritoneal cytologic examinations.
All peritoneal surfaces should be visualized, and any peritoneal surface or adhesion suspicious for harboring metastasis should be selectively excised or biopsied. In the absence of any suspicious areas, random peritoneal biopsies should be taken from the pelvis, paracolic gutters, and undersurfaces of the diaphragm (diaphragm scraping for Papanicolaou stain is an acceptable alternative).
Hysterectomy, bilateral salpingectomy, and bilateral oophorectomy should be performed with every effort made to keep an encapsulated mass intact during removal.
USO for patients desiring to preserve fertility may be considered in select patients.
Omentectomy should be performed.
Aortic lymph node dissection should be performed by stripping the nodal tissue from the vena cava and the aorta bilaterally to at least the level of the inferior mesenteric artery and preferably to the level of the renal vessels.
Pelvic lymph nodes should be dissected. Removal of lymph nodes overlying and medial to the external iliac and hypogastric vessels, from the obturator fossa anterior to the obturator nerve, and overlying and anterolateral to the common iliac vessel is preferred.
In LMP, although data show upstaging with lymphadenectomy and omentectomy, other data show that this surgery does not affect overall survival.

Ovarian cancer involving the upper abdomen

In general, the following procedures should be part of the surgical management of patients with ovarian cancer involving the upper abdomen in an effort to achieve maximal cytoreduction. Residual disease <1 cm defines optimal cytoreduction; however, maximal effort should be made to remove all gross disease.
Aspiration of ascites or peritoneal lavage should be performed for peritoneal cytologic examinations. For obvious disease beyond ovaries,cytologic assessment of ascites and/or lavage specimens would not alter stage or manag ers.
Hysterectomy, bilateral salpingectomy, and bilateral oophorectomy should be performed.
All involved omentum should be removed.
Suspicious and/or enlarged nodes should be resected, if possible.
Those patients with tumor nodules outside the pelvis 2 cm (presumed stage IIIB) should have bilateral pelvic and para-aortic lymph node dissection as previously described.

PRINCIPLES OF PRIMARY SURGERY (2 of 3)

Procedures that may be considered for optimal surgical cytoreduction (in all stages) may include:
Radical pelvic dissection
Diaphragm or other peritoneal surface stripping
Splenectomy
Partial hepatectomy
Cholecystectomy
Partial gastrectomy
Partial cystectomy
Ureteroneocystostomy
Distal pancreatectomy
Appendectomy

Special Circumstances

In early-stage disease, minimally invasive techniques may be considered to achieve the surgical principles described on OV-A 1 of 3. Minimally invasive surgery performed by an experienced gynecologic oncologist may be considered in selected patients, particularly for an incidental finding of ovarian cancer during prophylactic oophorectomy.
For patients with apparent early-stage disease and/or good risk tumors (early-stage invasive epithelial tumors, LMP lesion, malignant germcell tumors, or malignant sex cord-stromal tumors) who wish to preserve fertility, USO preserving the uterus and contralateral ovary (fertility- sparing surgery) can be considered. Comprehensive surgical staging should still be performed to rule out occult higher stage disease.
Primary invasive mucinous tumors of the ovary are uncommon; thus, the upper and lower GI tract should be carefully evaluated to rule out an occult GI primary with ovarian metastases.
Appendectomy should be performed in all mucinous tumors and considered in all patients with epithelial malignancies suspicious for involvement of the appendix by metastases.
Patients with low-volume residual disease after surgical cytoreduction for invasive epithelial ovarian or peritoneal cancer are potentialcandidates for IP therapy. In these patients, consideration should be given to placement of IP catheter with initial surgery.

PRINCIPLES OF PRIMARY SURGERY (3 of 3)

Ancillary Palliative Surgical Procedures
These procedures may be appropriate in select patients:
Paracentesis
Thoracentesis/pleurodesis
Ureteral stents/nephrostomy
Surgical relief of intestinal obstruction
Gastrostomy tube
Vascular access device
Indwelling peritoneal or pleural catheter
Intestinal stents
Video-assisted thoracoscopy

PRINCIPLES OF CHEMOTHERAPY
(FOR OVARIAN, FALLOPIAN TUBE, AND PRIMARY PERITONEAL CANCER)(1of 2)

General:

Patients with ovarian, fallopian tube, or peritoneal cancer should be encouraged to participate in clinical trials during all aspects of their diagnosis and treatment.

Goals of systemic therapy should be discussed with patients prior to initiation of any therapy

Prior to recommending chemotherapy, requirements for adequate organ function and performance status should be met.

Patients should be observed closely and treated for any complications during chemotherapy. Appropriate blood chemistry tests should be monitored. Appropriate dose reductions and modifications of chemotherapy should be performed depending on toxicities experienced and goals of therapy.

After completion of chemotherapy, patients should be assessed for response during and following treatment and monitored for any long-term complications.

Chemosensitivity/resistance and/or other biomarker assays are being used in some NCCN Member Institutions for decisions related to future chemotherapy in situations where there are multiple equivalent chemotherapy options available. The current level of evidence is not sufficient to supplant standard-of-care chemotherapy.

For patients with newly diagnosed ovarian, fallopian tube, or primary peritoneal cancer:

If they are eligible for chemotherapy, patients should be informed about the different options that are available--that is, IV chemotherapy, a combination of IP and IV chemotherapy, or a clinical trial--so they can decide which is the most the appropriate option. (See OV-D for dosing and schedule of these regimens).

Prior to the administration of the combined IP and IV regimen, patients must be apprised of the increased toxicities with the combined regimen when compared to using IV chemotherapy alone (increased myelosuppression, renal toxicities, abdominal pain, neuropathy, gastrointestinal toxicities, metabolic toxicities, and hepatic toxicities).

Patients considered for the IP cisplatin and IP/IV paclitaxel regimen should have normal renal function prior to starting, a medically appropriate performance status based on the future toxicities of the IP/IV regimen, and no prior evidence of medical problems that could significantly worsen during chemotherapy (eg, pre-existing neuropathy).

Prior to receiving and after receiving each cycle of IP cisplatin, adequate amounts of IV fluids need to be administered in order to prevent renal toxicity. After each cycle has been completed, patients need to be monitored carefully for myelosuppression, dehydration, electrolyte loss, end-organ toxicities (such as renal and hepatic damage), and all other toxicities. Patients often require IV fluids postchemotherapy in the outpatient setting to prevent or help treat dehydration.

Refer to the original references (See Discussion) for full toxicity data, doses, schedule, and dose modifications.

PRINCIPLES OF CHEMOTHERAPY
(FOR OVARIAN, FALLOPIAN TUBE, AND PRIMARY PERITONEAL CANCER)(2of 2)

For patients who have recurrent ovarian, fallopian tube, or primary peritoneal cancer:

Refer to the original references for full toxicity data, doses, schedule, and dose modifications.

Patients should be informed about the following:

1) Availability of clinical trials, including the risks and benefits of various treatments, which will depend on the number of prior lines of chemotherapy the patient has received, and

2) The patient's performance status, end-organ status, and pre-existing toxicities from prior regimens. If appropriate, palliative care should also be discussed as a possible treatment choice.

Because of prior platinum exposure, myelosuppression occurs more frequently with any myelotoxic agent given in the recurrent setting.

With repeat use of either carboplatin and/or cisplatin, patients are at an increased risk of developing a hypersensitivity reaction (also called an allergic reaction) that could be life threatening. Thus, patients should be counseled about the risk that a hypersensitivity reaction may occur, educated about the signs and symptoms of hypersensitivity reactions, treated by medical staff who know how to manage hypersensitivity reactions, and treated in a medical setting where appropriate medical equipment is available in case of an allergic reaction.

Before any chemotherapy drug is given in the recurrent setting, the clinician should be familiar with the drug's metabolism (ie, renal, hepatic) and should make certain that the patient is an appropriate candidate for the drug (eg, that the patient has adequate renal or hepatic function).

Clinicians should be familiar with toxicity management and appropriate dose reduction.

The schedule, toxicity, and potential benefits of any treatment should be thoroughly discussed with the patient and caregivers. Patient education should also include a discussion of precautions and measures to reduce the severity and duration of complications.

MANAGEMENT OF DRUG REACTIONS (1 of 5)

Overview:

Virtually all drugs used in oncology have the potential to cause adverse drug reactions while being infused, which can be classified as either infusion or allergic reactions.

Infusion reactions are often characterized by milder symptoms (eg, hot flushing, rash).

Hypersensitivity (allergic) reactions are often characterized by more severe symptoms (eg, shortness of breath, generalized hives/itching, changes in blood pressure).

Symptoms can overlap, whether caused by infusion or allergic reactions. In addition, patients can have mild allergic reactions or severe infusion reactions.

Most adverse drug reactions that occur are mild reactions, but more severe reactions can occur

Anaphylaxis is a rare type of very severe allergic reaction that can occur with the platinum and taxane agents (and others less commonly), can cause cardiovascular collapse, and can be life threatening.

Drug reactions can occur either during the infusion or following completion of the infusion (and can even occur days later).

Reactions can occur with either IV or IP administration.

In gynecologic oncology treatment, drugs that more commonly cause adverse reactions include carboplatin, cisplatin, docetaxel, liposomal doxorubicin, oxaliplatin, and paclitaxel.

Adverse reactions associated with taxane drugs (ie, docetaxel,paclitaxel) and biotherapeutic agents tend to be infusion related often attributed to cremophor in paclitaxel and tend to occur during the first few cycles of treatment (although they can be seen during any infusion regardless of how many previous cycles were administered).

Adverse reactions associated with platinum drugs (ie, carboplatin, cisplatin), a true allergy, tend to occur following re-exposure to the inciting drug or less commonly at the completion of initial chemotherapy (ie, cycle 6 of a planned 6 treatments).[3]

Preparation for a possible drug reaction

Patients and their families need to be counseled about the ossibility of a drug reaction, and about the signs and symptoms of an adverse reaction (either infusion or allergic). Patients should be told to report any signs and symptoms of a drug reaction, especially after they have left the clinic.

Clinicians and nursing staff should be prepared for the possibility of a drug reaction every time a patient is infused with a drug.

Standing orders should be written for immediate intervention in case a severe drug reaction occurs.

The treatment area should have appropriate medical equipment in case of a life-threatening reaction.

Epinephrine (intramuscular 0.3 mL of 1 mg/mL solution/Epipen) should be used for any patient experiencing hypotension (systolic BP of <90 mm Hg) with or without other symptoms of an allergic/hypersensitivity reaction during or shortly after any chemotherapy drug treatment. In the setting of acute cardiopulmonary arrest, standard resuscitation (ACLS) procedures should be followed.

Desensitization refers to a process of rendering the patient less likely to respond to an allergen and can be considered for patients who have had drug reactions.

Although desensitization is more commonly used after allergic drug reactions, it can also be used after infusion reactions.

If a mild reaction has previously occurred to a platinum agent, great caution should be undertaken if desensitization is pursued

If a patient has previously had a very severe life-threatening reaction, the implicated drug should not be used again unless under guidance of an allergist or specialist with desensitization experience.

MANAGEMENT OF DRUG REACTIONS (2 of 5)

Infusion Reactions

Symptoms include: hot flushing, rash, fever, chest tightness, mild blood pressure changes, back pain, and chills.

Symptoms usually can be treated by decreasing the infusion rate and resolve quickly after stopping the infusion.

However, patients who have had mild reactions to carboplatin, cisplatin, or oxaliplatin may develop more serious reactions even when the platinum drug is slowly infused; therefore, consider consultation with an allergist.

More common with paclitaxel (27% of patients); however, mild reactions can occur with liposomal doxorubicin.[10]

If an infusion reaction has previously occurred to a taxane:
For mild infusion reactions (eg, flushing, rash, chills), patients may be rechallenged with the taxane if:

1) the patient, physician, and nursing staff are all comfortable with this plan;
2) the patient has been counseled appropriately; and
3) emergency equipment is available in the clinic area.

Typically the taxane infusion can be re-started at a much slower rate, and the rate can be slowly increased as tolerated as per the treating clinician's judgment.[7,11] Note that this slow infusion is different from desensitization.

Many institutions have nursing policies that stipulate how to reinfuse the drug if the patient has had a prior infusion reaction.

Allergic Reactions (ie, True Drug Allergies)

Symptoms include: rash, edema, shortness of breath, syncope or pre-syncope, chest pain, tachycardia, hives/itching, changes in blood pressure, nausea, vomiting, chills, and changes in bowel function. Patients with severe reactions may have the following symptoms: cardiac problems, bronchospasm, blood pressure changes that require treatment, and feeling of impending doom.

Symptoms continue to persist after stopping infusion and/or after treatment interventions.

More common with platinum drugs such as carboplatin (16% of patients), cisplatin, and oxaliplatin.[11] Mild reactions can occur with platinum agents.[11]

Patients who are at higher risk of developing a hypersensitivity (allergic) reaction include those in the following settings:
Re-introduction of the drug after a period of no exposure and following multiple cycles of the drug during the first and subsequent exposures
Intravenous administration of the drug rather than oral or intraperitoneal administration
With allergies to other drugs
Those who have previously had a reaction

If an allergic reaction has previously occurred:
Consider consultation with an allergist (or qualified medical or gynecologic oncologist) and skin testing for patients who have experienced a platinum reaction (eg, carboplatin-hypersensitivity reaction).[11-13]

Patients who have had mild reactions may develop more serious reactions even when the platinum drug is slowly infused.[11] The desensitization treatment of these patients should be managed by a physician with expertise and experience in platinum desensitization.

For very severe life-threatening reactions (ie, anaphylaxis), the implicated drug should not be used again unless under guidance of an allergist or specialist with desensitization experience.

For more severe reactions--such as those involving blood pressure changes, dyspnea, tachycardia, widespread urticaria, hypoxia--the treating clinician should consult an allergist prior to rechallenge.

If it is appropriate to give the drug again, patients should be desensitized prior to resuming chemotherapy even if the symptoms have resolved.

Patients must be desensitized with each infusion if they previously had a drug reaction.

MANAGEMENT OF DRUG REACTIONS (3 of 5)

REFERNCE

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Immunol 2008;122:574-580.
2.Dizon DS, Sabbatini PJ, Aghajanian C, et al. Analysis of patients with epithelial ovarian cancer or fallopian tube carcinoma retreated with cisplatin after the development of a carboplatin allergy. Gynecol Oncol 2002;84:378-382.
3.Markman M, Kennedy A, Webster K, et al. Clinical features of hypersensitivity reactions to carboplatin. J Clin Oncol 1999;17:1141-1145.
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[9]Markman M, Hsieh F, Zanotti K, et al. Initial experience with a novel desensitization strategy for carboplatin-associated hypersensitivity reactions. J Cancer Research Clin Oncol 2004;130:25-28.
[10]Gabizon AA. Pegylated liposomal doxorubicin: metamorphosis of an old drug into a new form of chemotherapy. Cancer Invest 2001;19:424-436.
[11]Lenz HJ. Management and preparedness for infusion and hypersensitivity reactions. Oncologist 2007;12:601-609.
[12]Markman M, Zanotti K, Peterson G, et al. Expanded experience with an intradermal skin test to predict for the presence or absence of carboplatin hypersensitivity. J Clin Oncol 2003;21:4611-4614.
[13]Zanotti KM, Rybicki LA, Kennedy AW, et al. Carboplatin skin testing: A skin-testing protocol for predicting hypersensitivity to carboplatin chemotherapy. J Clin Oncol 2001;19:3126-3129.

MANAGEMENT OF DRUG REACTIONS (4 of 5)

<table>
<tr><th colspan="4">DRUG REACTION TO PLATINUM AGENTS</th></tr>
<tr><th>REACTION</th><th></th><th colspan="2">MANAGEMENT/TREATMENT</th></tr>
<tr><td rowspan="2">Mild reaction
(hot flushing, rash, pruritus)</td><td>First exposure
(platinum naïve)</td><td>●Decrease the infusion rate
◆Symptoms often resolve quickly after stopping infusion
●Administer antihistamine</td><td>●Consider allergy consultation
●If staff agree and vital signs remain stable,rechallenge with platinum drug
◆Adiminister premedication with antihistamine,corticosteroids,H2 blockers.</td></tr>
<tr><td>Second or further exposure</td><td>●Stop infusion
●Administer antihistamine to treat symptoms
●Corticosteroid ± IM epinephrine if symptoms do not quickly resolve.</td><td rowspan="2">●Allergist consultation, if possible
●Do not rechallenge/readminister drug until evaluated by allergist or specialist with desensitization expertise
●Potential candidate for desensitization with each infusion</td></tr>
<tr><td colspan="2">Severe reaction
(shortness of breath, changes in blood pressure requiring treatment, dyspnea, GI symptoms [nausea, vomiting])</td><td>●Stop infusion
●Administer oxygen, nebulized bronchodilators, H2 blockers, corticosteroid; IM epinephrine 4 if needed</td></tr>
<tr><td colspan="2">Life-threatening reaction 2 (ie, anaphylaxis)
(acute onset, generalized hives, respiratory compromise, severe hypotension, GI symptoms [nausea, vomiting])</td><td>●Stop infusion
●Administer IM epinephrine, oxygen, nebulized bronchodilators. H2 blockers, corticosteroid
●Saline bolus, if needed</td><td>●Do not rechallenge/readminister drug until evaluated by allergist or specialist with desensitization expertise
●Potential candidate for desensitization with each infusion under guidance of an allergist or specialist with desensitization expertise</td></tr>
</table>

MANAGEMENT OF DRUG REACTIONS (5 of 5)

DRUG REACTION TO TAXANE, LIPOSOMAL DOXORUBICIN, OR BIOTHERAPEUTIC AGENTS			
REACTION	**MANAGEMENT/TREATMENT**		
Mild reaction (hot flushing, rash, pruritus,pain in chest/abdominal/[elvis/back)	●Stop infusion ◆Symptoms often resolve quickly after stopping infusion ●Administer antihistamine to treat stmptoms	●If staff agree and vital signs remain stable, rechallenge with drug at slower infusion rate ◆Administer premedication with antihistamine, corticosteroids, H2 blockers	●If repeat mild reaction, then do not rechallenge/readminister ●Potential candidate for desensitization with each infusion
Severe reaction (shortness of breath, changes in blood pressure requiring treatment, dyspnea, GI symptoms [nausea, vomiting]), pain in chest/abdominal/[elvis/back,feeling of impending doom/anxiety/something wrong]	●Stop infusion ●Administer oxygen, nebulized bronchodilators, H2 blockers, corticosteroid; IM epinephrine 4 if needed	●Do not rechallenge/readminister drug until evaluated by allergist or specialist with desensitization expertise ●Potential candidate for desensitization with each infusion	
Life-threatening reaction 2 (ie, anaphylaxis) (acute onset, generalized hives, respiratory compromise, severe hypotension, GI symptoms [nausea, vomiting]), pain in chest/abdominal/[elvis/back], feeling of impending doom/anxiety/something wrong]	●Stop infusion ●Administer IM epinephrine, oxygen, nebulized bronchodilators. H2 blockers, corticosteroid	●Do not rechallenge/readminister drug until evaluated by allergist or specialist with desensitization expertise ●As reactions can occur suddenly and be life threatening, desensitization should be done with each infusion under guidance of an allergist or specialist with desensitization expertise	

PRIMARY CHEMOTHERAPY/PRIMARY ADJUVANT THERAPY REGIMENS

1. Paclitaxel(Taxol)175 mg/m^2 IV over 3 hours followed by carboplatin AUC 5- 7.5 IV over 1 hour Day 1.Repeat every 3 weeks x 6 cycles.
2. Decetaxel 75mg/m2 for 1hour+carboplatin Auc 5 IV over 1hour
3. Liposomal doxorubicin 40-50mg/m2 IV over 30mins every 21days
4. Topofecan1.25-1.5mg/m2 IV over 30mins on day1-5 every 21days
5. Bevacizumab15mg/kg IV 90mins for first cycle than 60mins for second cycle finally 30mins for subsequence infusion every 21 days

CHEMOTHERAPY FOR RECURRENCE AND METASTASIS

REFERENCE

Agents	Cytotoxic Therapy	Hormonal Therapy	Targeted Therapy	Radiation Therapy
Preferred Agents	**Combination if platinum sensitive:** **1.Carboplatin/paclitaxel** **2.Decetaxel+Carboplatin** **Single-agent non-platinum-based if platinum:** **3.Liposomal doxorubicin** **4.Topotecan**		**5.Bevacizumab**	
Other Potentially Active Agents	**Single agents:** Capecitabine Ifosfamide			Palliative localized radiation therapy

1Parmar 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.
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3 Strauss HG, Henze A, Teichmann A, et al. Phase II trial of docetaxel and carboplatin in recurrent platinum-sensitive ovarian, peritoneal and tubal cancer. Gynecol Oncol 2007;104:612-616.
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	FIGO	PRIMARY TUMOR (T)
TX		Primary tumor cannot be assessed
T0		No evidence of primary tumor
T1	I	Tumor limited to ovaries (one or both)
T1a	IA	Tumor limited to one ovary; capsule intact, no tumor on ovarian surface. No malignant cells in ascites or peritoneal washings
T1b	IB	Tumor limited to both ovaries; capsules intact, no tumor on ovarian surface. No malignant cells in ascites or peritoneal washings
T1c	IC	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
T2	II	Tumor involves one or both ovaries with pelvic extension and/or implants
T2a	IIA	Extension and/or implants on uterus and/or tube(s). No malignant cells in ascites or peritoneal washings
T2b	IIB	Extension to and/or implants on other pelvic tissues. No malignant cells in ascites or peritoneal washings
T2c	IIC	Pelvic extension and/or implants (T2a or T2b) with malignant cells in ascites or peritoneal washings
T3	III	Tumor involves one or both ovaries with microscopically confirmed peritoneal metastasis outside the pelvis
T3a	IIIA	Microscopic peritoneal metastasis beyond pelvis (no macroscopic tumor)
T3b	IIIB	Macroscopic peritoneal metastasis beyond pelvis 2 cm or less in greatest dimension
T3c	IIIC	Peritoneal metastasis beyond pelvis more than 2 cm in greatest dimension and/or regional lymph node metastasis
		Note: Liver capsule metastasis T3/Stage III; liver parenchymal metastasis M1/ Stage IV. Pleural effusion must have positive cytology for M1/Stage IV.

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REGIONAL LYMPH NODES (N)		
NX		Regional lymph nodes cannot be assessed
N0		No regional lymph node metastasis
N1	IIIC	Regional lymph node metastasis
DISTANT METASTASIS (M)		
M0		No distant metastasis (no pathologic M0; use clinical M to complete stage group)
M1	IV	Distant metastasis (excludes peritoneal metastasis)

STAGE

STAGE			
GROUP	T	N	M
I	T1	N0	M0
IA	T1a	N0	M0
IB	T1b	N0	M0
IC	T1c	N0	M0
II	T2	N0	M0
IIA	T2a	N0	M0
IIB	T2b	N0	M0
IIC	T2c	N0	M0
III	T3	N0	M0
IIIA	T3a	N0	M0
IIIB	T3b	N0	M0
IIIC	T3c Any T	N0 N1	M0 M0
IV	Any T	Any N	M1
Stage unknown			