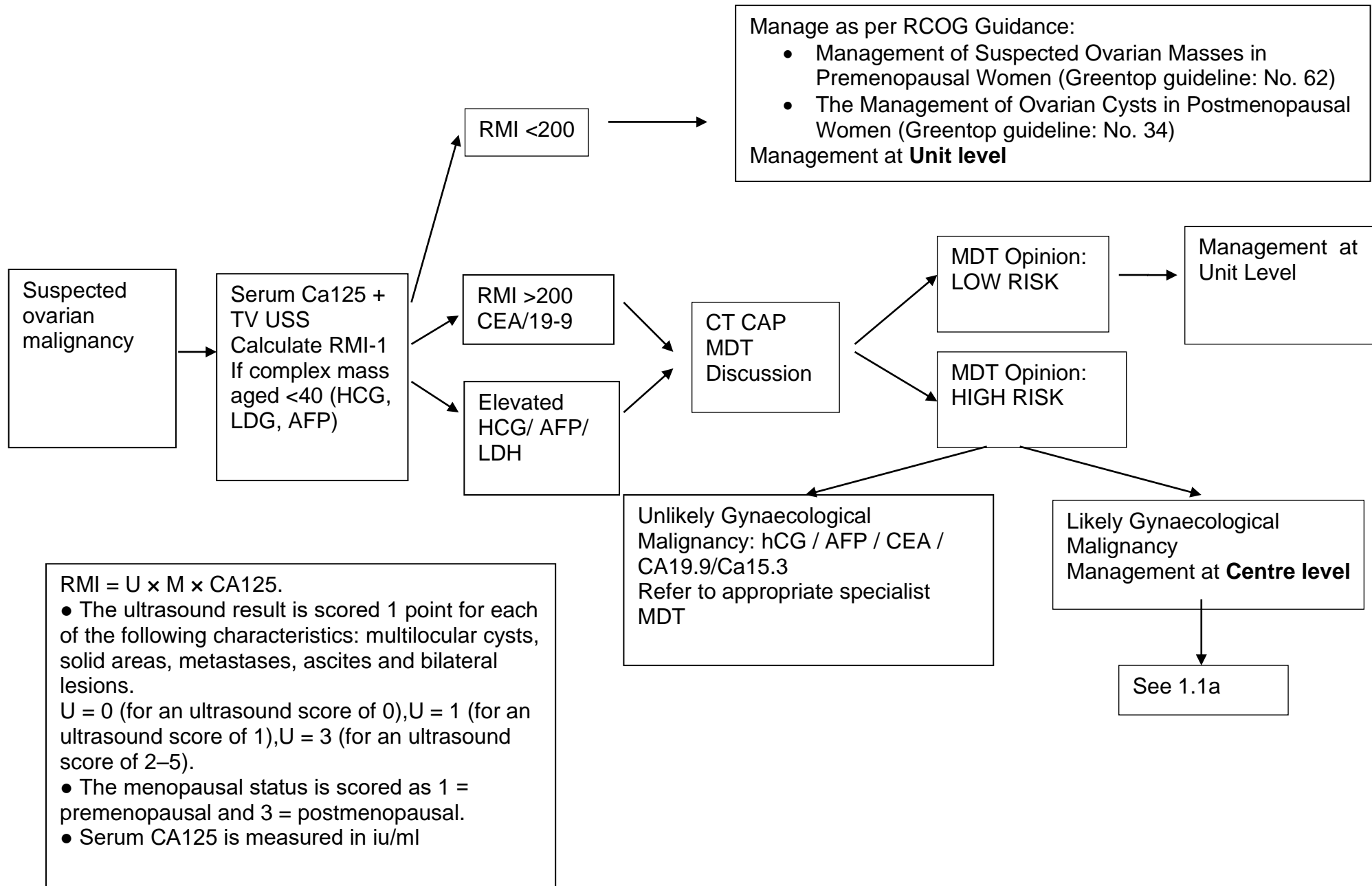


**II) Ovarian, Fallopian Tube and Primary Peritoneal Cancer
– Clinical Guideline**

UHDB/GYNONC/09:22/O2

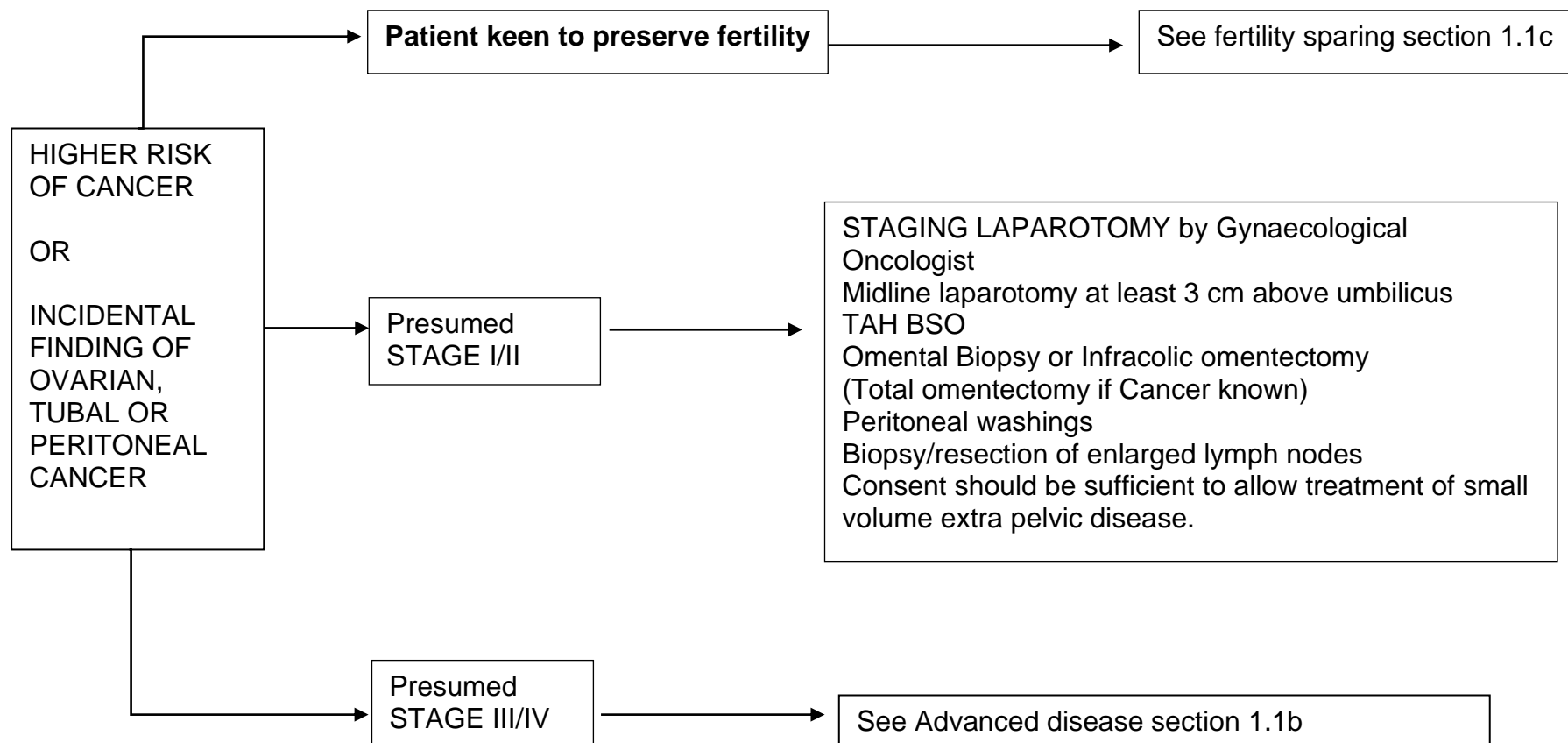
1.0 Management of suspected Ovarian/tubal/peritoneal malignancy



RMI = U × M × CA125.

- The ultrasound result is scored 1 point for each of the following characteristics: multilocular cysts, solid areas, metastases, ascites and bilateral lesions.
- U = 0 (for an ultrasound score of 0), U = 1 (for an ultrasound score of 1), U = 3 (for an ultrasound score of 2–5).
- The menopausal status is scored as 1 = premenopausal and 3 = postmenopausal.
- Serum CA125 is measured in iu/ml

1.1a Management of ovarian/tubal/peritoneal cancer



1.1b Management of advanced disease

PRIMARY DEBULKING SURGERY

YES

Suspected stage III/IV disease
Check CA125:CEA Ratio if <25 needs Image guided biopsy or Diagnostic laparoscopy for confirmation

OR

Incidental findings for histologically proven stage III/IV disease

There is no unresectable tumour extent.
Complete debulking to no residual tumour seems feasible with reasonable morbidity, taking into account the patient's status.
Patient accepts potential supportive measures as blood transfusions or stoma.

NO

Image guided biopsy or Diagnostic laparoscopy

NACT REVIEW AFTER 3 CYCLES

Complete debulking to no residual tumour seems feasible with reasonable morbidity, taking into account the patient's status.
And at least stable disease

NO

NACT REVIEW AFTER 3 EXTRA CYCLES

Complete debulking to no residual tumour seems feasible with reasonable morbidity, taking into account the patient's status.
And at least stable disease

PRIMARY CHEMOTHERAPY ONLY

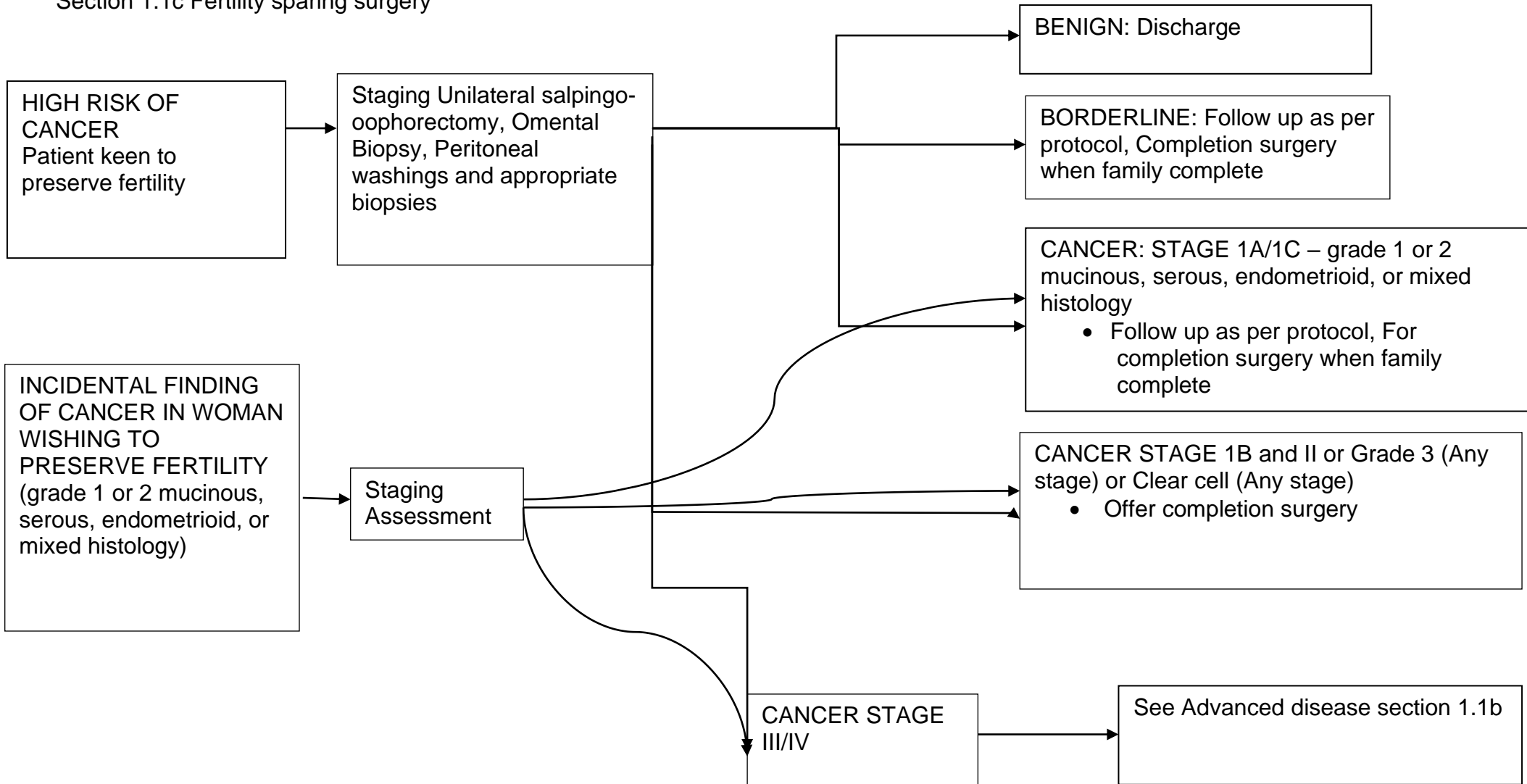
NO

YES

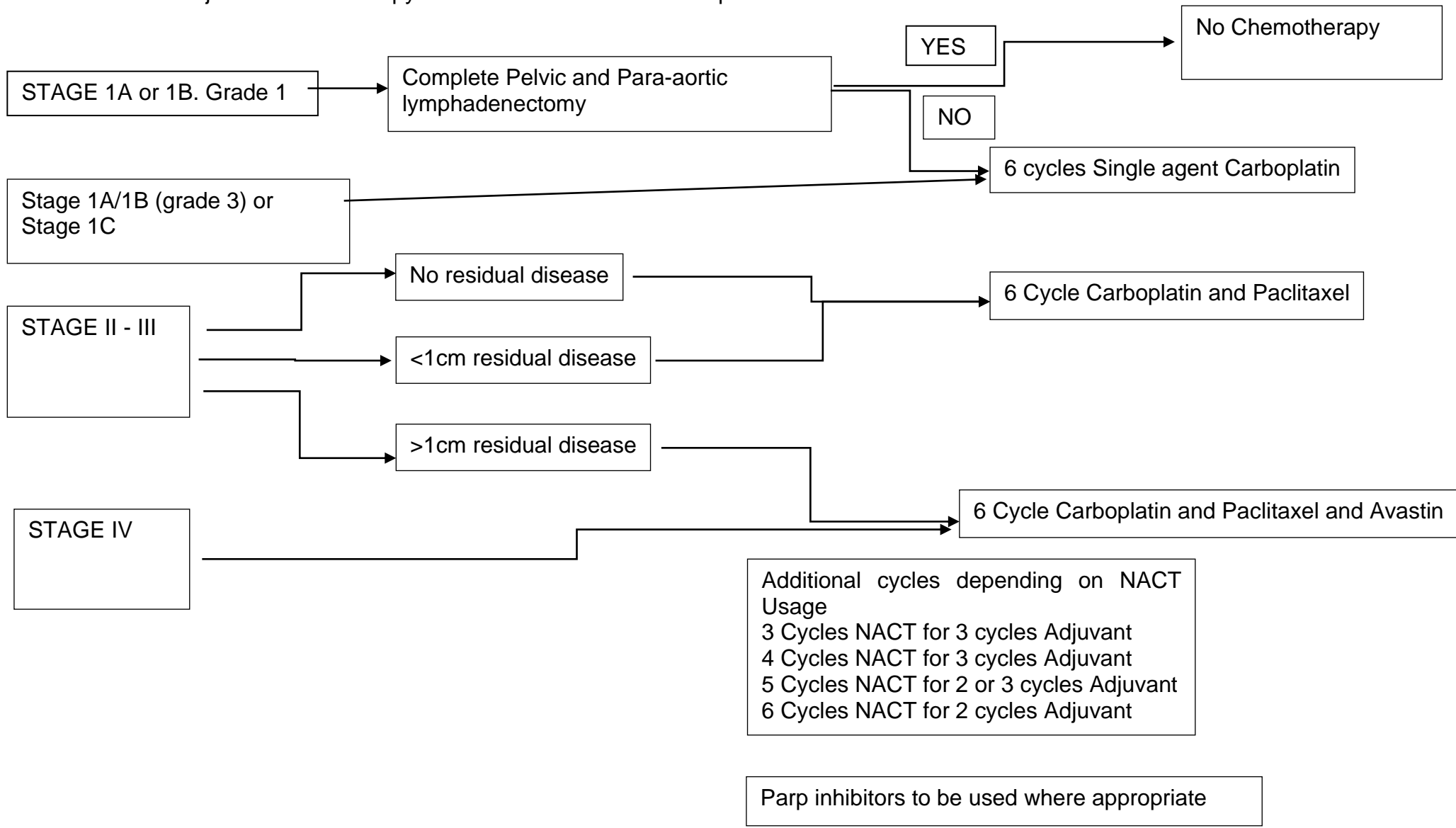
INTERVAL DEBULKING

YES

Section 1.1c Fertility sparing surgery



Section 1.1d: Adjuvant chemotherapy for Serous and Non Serous Epithelial ovarian cancer



Ovarian Cancer

General

The flow diagrams enclosed act as a guide for referral and management of patients with suspected ovarian, fallopian tube or primary peritoneal cancer. For the purpose of these guidelines these will be referred to as "Ovarian cancer". Specific referrals relate to primary care team to hospital base and from unit level to cancer centre.

1. Primary Care Team Management.

- 1.1 Patient suspected of ovarian malignancy would be referred on a 2-week cancer wait form
- 1.2 If patients have had an ultrasound scan as part of their assessment in the primary care, then a copy of the scan result is to accompany the patient.

2. Hospital Assessment.

- 2.1 A transvaginal/transabdominal ultrasound scan is the initial investigation. Tumour markers (that include a CA125, CEA, CA19.9, AFP, HCG, LDH) are organised after there has been a suspicion of ovarian malignancy on the basis of the initial ultrasound scan. Details of which tumour marker are organised is discussed in the flow diagram.
- 2.2 The risk of malignancy index (RMI) is calculated and appropriate referrals as shown on the flow diagram to the cancer centre are then made. Those with an RMI >200 will have a CT Chest/abdo/pelvis and are reviewed in the Gynaecology MDT to determine their risk of malignancy.
- 2.3 All patients suspected of ovarian cancer should have:-
- 2.4 FBC
U&Es
LFTs
Tumour Markers as above and according to flow diagram.

3. Staging

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- 3.1 Staging is according to the FIGO classification (updated 2014). At the MDT discussion, each patient will be managed individually whether a laparotomy/diagnostic biopsy is taken to confirm the diagnosis. Staging is normally undertaken at laparotomy, but may be presumed by imaging if only biopsy is considered.
4. Management of patients with Primary ovarian cancer
- 4.1 Patients with apparent stage 1 disease on CT scan with RMI>200 should be offered staging consisting of peritoneal washings/ascitic sampling taken prior to manipulation of the tumour, bilateral salpingo-oophorectomy, total hysterectomy, and assessment of the para-colic spaces, and the sub-diaphragmatic spaces bilaterally, omentectomy, and pelvic and bilateral para-aortic lymph node assessment up to the level of the insertion of the ovarian vessels in the absence of peritoneal dissemination. In patients with mucinous histology lymph node sampling can be omitted but the appendix should be removed if considered to be macroscopically abnormal. Frozen section can be considered where unexpected advanced disease is found. Consent should be sufficient to allow treatment of small volume extra pelvic disease.
- 4.2 Primary Debulking surgery is treatment of choice in patients with advanced ovarian cancer (Stage II-IIIc) (except those which fall in the criteria for neoadjuvant therapy as below). It should include a full-length midline laparotomy with total abdominal hysterectomy, bilateral salpingo-oophorectomy, total omentectomy, removal of enlarged LN and excision of all other visible evidence of tumour. The aim of primary debulking surgery is to achieve complete visible resection of tumour (No visible residual disease)
- 4.3 Criteria for patients for consideration of neoadjuvant chemotherapy in advanced cancer.**
- 4.4 Primary surgery is recommended in patients who can be debulked upfront to no residual tumour with a reasonable complication rate. Risk-benefit ratio is in favour of primary surgery when:
- There is no unresectable tumour extent
 - Complete debulking to no residual tumour seems feasible with reasonable morbidity, taking into account the patient's status.
 - Patient accepts potential supportive measures as blood transfusions or stoma.
- Criteria against abdominal debulking are:
- Diffuse deep infiltration of the root of small bowel mesentery
 - Diffuse carcinomatosis of the small bowel involving such large parts that resection would lead to short bowel syndrome (remaining bowel < 1.5 m)

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- Diffuse involvement/deep infiltration of Stomach/duodenum (limited excision is possible), and Head or middle part of pancreas (tail of the pancreas can be resected);
- Involvement of truncus coeliacus, hepatic arteries, left gastric artery (coeliac nodes can be resected).

Metastatic (stage IVB) disease may be resectable. Such as:

- o Inguinal lymph nodes
- o Retrocrural or paracardiac nodes
- o Focal parietal pleural involvement
- o Isolated parenchymal lung metastases
- o Splenic metastases
- o Superficial Parenchymal liver metastases
- o Single deep liver metastasis, depending on the location

Certain disease is unresectable:

- Central or multisegmental parenchymal liver metastases,
- Multiple parenchymal lung metastases (preferably histologically proven),
- Non-resectable lymph node metastases,
- Multiple brain metastases.

Upfront treatment with Neo-Adjuvant chemotherapy should be considered in patients:

- 1) Aged >80 years and/or associated with significant medical co-morbidities.
- 2) Extensive or non-resectable upper abdominal disease.
- 3) Extra abdominal non-resectable Stage 4 disease. (Pleural effusion alone or the presence of para-cardiac lymph nodes should not be considered contraindication for primary surgery)
- 4) Significant mesenteric, small bowel serosal involvement and peritoneal involvement as assessed by CT scan or diagnostic laparoscopy
- 5) Large volume ascites with serum albumin <30g/l

4.5

Perioperative management of novel agents prior to surgery:

- Bevacizumab: In patients receiving neo-adjuvant chemotherapy including Bevacizumab, Bevacizumab should be omitted for one cycle prior to cytoreductive surgery to ensure that at least 28 (ideally 40 days) have passed prior to surgery. (Half live of bevacizumab is 20 days – ideal treatment free period should be 6 or better still 8 weeks)
- PARP inhibitors: No specific time interval is defined between elective surgery and discontinuation of oral PARP therapy.

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- Anti-Hormonal agents: If ovarian cancer progresses with antihormonal therapy, treatment should be stopped at decision to operate to reduce the risk of thromboembolic morbidity

4.6 Contraindications to debulking surgery include:

- progressive disease on NACT,
- worsening performance status,
- severe cardiovascular disease
- Patient choice

4.7 All ovarian cancer patients having neo-adjuvant chemotherapy should initially undergo image guided tissue biopsy to confirm diagnosis. In exceptional cases Cytology with a CEA:CA125 ratio of >25 can be used after MDT review.

4.8 Neoadjuvant chemotherapy for advanced ovarian cancer patients should include carboplatin and paclitaxel given at 3 weekly intervals. Consideration should be given for inclusion into relevant trials.

4.9 All patients having neoadjuvant chemotherapy should be discussed at the MDT following 3 cycles of chemotherapy to assess suitability for delayed debulking surgery. If debulking is not appropriate they should be reviewed after a further 3 cycles.

4.10 In patients wishing to preserve fertility, conservative surgery may be considered with stage 1 disease after careful discussion at the Multi-Disciplinary Meeting according to section 1.1c

5. **Peri-operative Surgical considerations.**

All patients should be adequately informed pre-operatively about the risks and benefits of ovarian cancer surgery; about the most common complications and their management; and also future steps of their journey. This is obtained via patient information leaflets and multi-disciplinary input. All patients undergoing Ultra radical cytoreductive surgery should be preoperatively assessed to allow risk stratification to tailor management and proactively act against expected risks.

5.1 Where possible all patients should be offered prehabilitation prior to cytoreductive surgery.

5.2 Mechanical bowel preparation alone is not routinely recommended. If mechanical bowel preparation is performed, this should be done in combination with oral antibiotics to decrease postoperative complications.

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- 5.3 Pre-operative patients bathing or showering with antiseptic solutions such as chlorhexidine gluconate has no benefit in reducing surgical site infections and is therefore not recommended over a shower or bath with common soap. Pre-operative hair shaving is not recommended. Surgical site antisepsis should be performed using 4% chlorhexidine gluconate with alcohol.
- 5.4 Patient Positioning: Safe positioning requires planning and good communication between members of the operating room team and should be checked periodically. For cytoreductive surgery the operation should be performed on an operating table and not an trolley. Intravascular lines, the endotracheal tube, urinary catheter, epidural catheter, and any other devices/equipment should be secured before any movement, and their position and function reassessed after repositioning. The arms may be positioned either by the side of the patient, or abducted and placed on an arm board. Abduction of more than 90 degrees should be avoided.
- 5.5 Surgical Retraction: The shortest blades possible should be used for adequate retraction without nerve or muscle compression. Rolled laparotomy swabs may be placed between the retractor and abdominal wall to reduce nerve compression, especially in thin patients.
- 5.6 Anaesthesia, Intra-operative and Post-operative Volume and Replacement Blood Transfusion and Oncologic Outcome: Iron supplementation for correction of anaemia should be considered (IV or oral depending on timing, availability, and patient's profile). There is no well-defined threshold for blood transfusion in advanced ovarian cancer surgery. Since many patients need chemotherapy, more liberal transfusion thresholds may be used. Tranexamic acid should be considered peri-operatively to reduce blood loss. The use of intravenous albumin should not be considered as a substitute for nutritional support. Hypoalbuminemia should not be used as a single marker for patient selection for surgery but as guidance for pre-operative optimization of patients. Balanced crystalloids should be used for routine fluid replacement. Continuous temperature monitoring is recommended. Methods to actively warm patients should be applied. Administration of surgical antibiotic prophylaxis is recommended in the 2-hour time window before surgical incision, while considering the half-life of the antibiotic and repeated as required. Routine prolonged surgical antibiotic prophylaxis after completion of the operation for the purpose of preventing surgical site infections is not recommended.
- 5.7 Post-Splenectomy Management. All patients with ovarian cancer post-splenectomy should receive vaccinations against *S. pneumoniae* (pneumococcus), *H. influenzae* type b, and *N. meningitidis* (meningococcus) approximately 2 weeks after surgery. Annual vaccination against seasonal influenza virus is strongly recommended in post-splenectomy patients. Patient education regarding higher susceptibility to certain infections is strongly recommended in post-splenectomy patients and antibiotics used as trust guidance.

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- 5.8 Post operative pain management: A multi-modal approach to post-operative analgesia, including systemic and regional techniques, should be used for ovarian cancer surgery. There is evidence that epidurals provide benefits in addition to analgesia and these should be considered. Prolonged use of opioids is not recommended. Rectus sheath catheters should be consider if an Epidural has not been used.
- 5.9 Perioperative thromboprophylaxis and management of post operative thromboembolic events: Patients undergoing cytoreductive surgery for ovarian cancer, without additional risk factors such as thrombophilia or prior thromboembolic events, should receive prolonged postoperative thromboprophylaxis with low molecular weight heparin at prophylactic doses for 28 days. Peri-operative mechanical thromboprophylaxis should be considered in addition to pharmacological thromboprophylaxis. Post-operative thromboprophylaxis with 2.5mg apixaban twice daily for up to 28 days after ovarian debulking procedures, could be considered as an equally effective alternative to the traditional thromboprophylaxis with prophylactic doses of low molecular weight heparin in low-risk patients with ovarian cancer. Higher risk patients should be managed in accordance with trust guidelines.
- 5.10 In patients at high risk for cardiovascular events due, for example, to previous ischemic heart disease, stents, or cerebrovascular disease, who are receiving antiplatelet monotherapy with aspirin and require ovarian cancer surgery, aspirin should be continued peri-operatively and intra-operatively. In patients at low risk for cardiovascular events who are receiving antiplatelet monotherapy with aspirin, it should be stopped 7 to 10 days before ovarian cancer surgery (III, B). Clopidogrel should be stopped 7 days prior to surgery.
6. BRCA and HRD Testing
- 6.1 Pathogenic or likely-pathogenic germline BRCA1/2 variants play a key role in the pathogenesis of epithelial ovarian cancer. In the pre-PARP inhibitor era, germline testing to identify pathogenic BRCA variants was driven by a positive family history of certain cancers and offered benefits to individual patients and wider family members in terms of future reproductive, cancer prevention and surveillance strategies. Recent studies showing the prevalence of pathogenic BRCA germline mutations in patients with high-grade serous ovarian cancer of 13-15% as well as the recognition of the clinically significant role of therapeutic PARP inhibition in BRCA deficient tumours has led to an expansion in demand for germline BRCA testing. There are currently two methods by which BRCA testing may be undertaken.
- **Germline testing** is undertaken on blood samples and will detect inherited pathogenic variants, including the large duplications/deletions which are not reliably detectable on tumour testing. Thus, germline testing results carries implications for family members.
 - **Tumour testing** involves extracting DNA from the ovarian tumour and subjected to test for pathogenic variants. Around two-third of the mutations detected in tumour will be of germline (inherited) origin, however about one-third will be found to be somatic (tumour only – not inherited) mutations. Therefore, tumour testing results may have implications for family members in some, but not all instances.

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Current criteria for BRCA testing in the national test directory for England allows germline testing in all stage, non-mucinous epithelial ovarian cancer and tumour testing for somatic mutations in advanced stage, high-grade serous ovarian cancer alone.

However, evidence supports testing in high-grade endometrioid cancer as well. 2. Current testing in England is confined to BRCA1/2 genes only. It is likely that in the future, additional genes such as RAD51C, RAD51D, BRIP1 will be included as evidence accumulates. 3. Tumour testing is confined to patients with advanced stage ovarian cancer as current evidence of benefit from PARP inhibition is confined to stage III and IV disease. Testing should be performed as early in the patients pathway as acceptable. Consent for Tumour testing is obtained when consenting for surgery or Image guided biopsy by the Gynaecological oncologist co-ordinating care. Germline testing can be arranged by any members of the MDT by referral to the family history service.

7. Adjuvant Chemotherapy

- 7.1 All chemotherapy usage should follow any agreed East Midlands Guidance in the first instance. Where this is not available local guidance as below should be considered.
- 7.2 Patients with tumours of borderline malignancy do not require any adjuvant chemotherapy.
- 7.3 Stage 1 disease (NICE guideline CG122)
- 1) Low risk disease (Stage 1a & 1b, Grade 1 & 2) – Are not offered adjuvant chemotherapy if they have been fully staged including paraaortic and pelvic lymphadenectomy.
 - 2) High Risk disease (grade 3 or Stage 1c) - Offer chemotherapy with single agent carboplatin given 3 weekly for 6 cycles.
 - 3) Discuss the risk and benefits of adjuvant chemotherapy in women with suboptimal staging and appear to have stage 1 disease.
- 7.4 Advanced disease (Stage II-IV)
- 7.5 Chemotherapy using Carboplatin/Paclitaxel or Carboplatin single agent as per NICE guidelines. Carboplatin should be given to target AUC=5 or 6 based on EDTA, GFR assessment. Paclitaxel 175mg/m² is given as an outpatient regimen on a 3-weekly basis for 6 cycles.

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- 7.6 Patients with high risk of progression post-surgery (with >1 cm residual disease post-surgery or FIGO stage IV disease)- In addition to Caboplatin/Paclitaxel chemotherapy, bevacizumab 7.5 mg/kg given IV every 3 weeks for 5 or 6 cycles and then bevacizumab continued on its own for 12 additional cycles or until progression of disease. Patients must be warned that use of Bevacizumab at dose of 7.5mg/kg is off label (NICE advice [ESUOM21]).
- 7.7 Bevacizumab is also now NICE approved at a dose of 15mg/kg also and although indications are not clear this can be considered especially in patients with Stage 3 or 4 cancer with homologous recombination deficiency to allow Olaparib maintenance therapy as per PAOLA trial. Whilst there is no proven benefit in adding Bevacizumab to PARPi, subgroup analysis of PAOLA showed additional benefit.
- 7.8 PARBi inhibitors should be used for all eligible patients. In those with HRD, the Olaparib can be considered (potentially with Bevacizumab as above), if not Niraparib can be used for anybody without residual/recurrent disease following surgery done or with continued response shown in unoperated patients.
- 7.9 Recurrence.
- 7.9.1 Role of surgery
- 7.9.2 Secondary cytoreductive surgery is controversial and patients need to be informed that three prospective randomised trials have showing differing results with two supportive of and one finding poorer outcomes following secondary cytoreductive surgery and chemotherapy compared to chemotherapy alone.
- 7.9.3
- 7.9.4 Factors associated with a benefit from secondary surgery are:
- AGO algorithm
- I. Performance status 0
 - II. Progression free interval >6 months after completion of last platinum therapy
 - III. No visible residual disease at first surgery or stage I/II (if cytoreduction unknown)
 - IV. High probability of achieving complete cytoreduction
 - V. Absence of ascites (Cut off of <500 ml on USS or CT scan)
- iMODEL algorithm
1. Performance status 0-1
 2. Progression free interval ≥16 months after completion of last platinum therapy
 3. No visible residual disease at primary surgery.
 4. High probability of achieving complete cytoreduction
 5. Absence of ascites

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6. CA125 \leq 105
7. Earlier stage at diagnosis better

- 7.9.5 In general surgery should only be considered at first relapse but depending on patient history and factors further cytoreduction may be appropriate. Additionally, maximum effort cytoreductive surgery was only instituted in 2014 at UHDB and patients who were obtained suboptimal cytoreduction prior to that point may benefit from secondary surgery if other patients factors are supportive.
- 7.9.6 Palliative surgery for bowel obstruction could be discussed after failure of conservative treatment and after careful consideration of the patient's overall prognosis, quality of life, previous treatments, future therapeutic options and co-morbidities. Iatrogenic induced short bowel syndrome with the necessity of long life total parenteral nutrition should be avoided and plans for surgery should be agreed within the gynaecology MDT. For the management of bowel obstruction please see the joint Gynaecological Oncology / Colorectal guideline.

a) Role of chemotherapy

- 7.10 Almost 75-80% of the patients with ovarian cancer will relapse due to the nature of the disease. Chemotherapy is the mainstay of treatment in relapsed ovarian cancer. Progression free interval (PFI) since the completion of chemotherapy is the most important factor in determining the response to second line treatment. All chemotherapy usage should follow any agreed East Midlands Guidance in the first instance. Where this is not available local guidance as below should be considered.

Patients traditionally fell broadly into the following two groups

- I. Platinum sensitive- Relapse $>$ 6 months after completion of last chemotherapy
(Partially platinum sensitive- Relapse between 6-12 months)
- II. Platinum resistant- Relapse $<$ 6 months after completion last chemotherapy
(Platinum refractory- Disease that doesn't respond to initial platinum based
Chemotherapy.

Increasingly the differences between platinum sensitive and platinum resistant disease is less clear cut and as such treatment decisions need to be considered more holistically than just the PFI.

For patients more likely to respond to platinum consider:

OPERATIONAL POLICY

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- Carboplatin+Paclitaxel (ICON4 trial)
- Caboplatin+ Gemcitabine (AGO-OVAR/NCICCTC/EORTC)
- Caboplatin only can be considered in paclitaxel sensitive patients
- Carboplatin+ Pegylated Liposomal Doxorubicin (Caelyx®) (CALYPSO trial).
- Pegylated Liposomal doxorubicin (Caleyx) or Paclitaxel (if intolerant to platinum compounds & first line regimen contained paclitaxel)
- From 2nd line treatment onwards, if there is response of at least >30% with no rising CA 125, PARPI maintenance can be started within 8 weeks of last Platinum based chemotherapy. Options are Niraparib or Rucaparib for anybody, Olaparib for BRCA 1 or 2 patients. (In the current setting PARPi can be used only once in a lifetime, change can be done to different PARPi only due to toxicity, but within first 3 months only.)

For patients less likely to respond to platinum consider:

- Paclitaxel
- Pegylated Liposomal Doxorubicin (Caelyx®)
- Topotecan
- Cyclophosphamide

c. Radiotherapy.

May be used in selected cases of recurrence but should not be used as adjuvant treatment.

7.10.1 Miscellaneous.

7.11 Germ Cell Tumours:
>Stage 2 treated by surgery (If fertility desired for fertility sparing surgery even if advanced) followed by BEP x 3 + EP x 1.

7.11.1.1 Krukenberg Tumours:
Debulking surgery followed by appropriate referral.

7.11.1.2 Ovarian Sarcoma:
Debulking surgery followed by chemotherapy.

7.11.2 **Management of patients for drainage of ascites** (Refer to Appendix 4)

7.11.3 **Follow up** (Refer to Appendix 2)

Sources

ESGO Ovarian Cancer Surgery Guidelines Early stage

ESGO Ovarian Cancer Surgery Guidelines Advanced stage

British Gynaecological Cancer Society (BGCS) Epithelial Ovarian / Fallopian Tube / Primary Peritoneal Cancer Guidelines: Recommendations for Practice

RCOG Green top guidelines: Ovarian Cysts in Postmenopausal Women (Green-top Guideline No. 34) & Ovarian Masses in Premenopausal Women, Management of Suspected (Green-top Guideline No. 62)

NICE Ovarian cancer: recognition and initial management Clinical guideline [CG122] April 2011

NICE Ultra-radical (extensive) surgery for advanced ovarian cancer Interventional procedures guidance [IPG470] November 2013

European Society of Gynaecological Oncology guidelines for the peri-operative management of advanced ovarian cancer patients undergoing debulking surgery July 2021

British Gynaecological Cancer Society/British Association of Gynaecological Pathology consensus for germline and tumour testing for BRCA1/2 variants in ovarian cancer in the United Kingdom January 2021

Appendix A: FIGO staging- Ovarian cancer (2014)

STAGE I: Tumor confined to ovaries

- IA Tumor limited to 1 ovary, capsule intact, no tumor on surface, negative washings.
- IB Tumor involves both ovaries otherwise like IA.
- IC Tumor limited to 1 or both ovaries
 - IC1 Surgical spill
 - IC2 Capsule rupture before surgery or tumor on ovarian surface.
 - IC3 Malignant cells in the ascites or peritoneal washings.

STAGE II: Tumor involves 1 or both ovaries with pelvic extension (below the pelvic brim) or primary peritoneal cancer

- IIA Extension and/or implant on uterus and/or Fallopian tubes
- IIB Extension to other pelvic intraperitoneal tissues

STAGE III: Tumor involves 1 or both ovaries with cytologically or histologically confirmed spread to the peritoneum outside the pelvis and/or metastasis to the retroperitoneal lymph nodes

- IIIA (Positive retroperitoneal lymph nodes and /or microscopic metastasis beyond the pelvis)
 - IIIA1 Positive retroperitoneal lymph nodes only
 - IIIA1(i) Metastasis \leq 10 mm
 - IIIA1(ii) Metastasis $>$ 10 mm
 - IIIA2 Microscopic, extrapelvic (above the brim) peritoneal involvement \pm positive retroperitoneal lymph nodes
- IIIB Macroscopic, extrapelvic, peritoneal metastasis \leq 2 cm \pm positive retroperitoneal lymph nodes. Includes extension to capsule of liver/spleen.
- IIIC Macroscopic, extrapelvic, peritoneal metastasis $>$ 2 cm \pm positive retroperitoneal lymph nodes. Includes extension to capsule of liver/spleen.

STAGE IV: Distant metastasis excluding peritoneal metastasis

IVA Pleural effusion with positive cytology

IVB Hepatic and/or splenic parenchymal metastasis, metastasis to extraabdominal organs (including inguinal lymph nodes and lymph nodes outside of the abdominal cavity)

Other major recommendations are as follows:

- Histologic type including grading should be designated at staging
- Primary site (ovary, Fallopian tube or peritoneum) should be designated where possible
- Tumors that may otherwise qualify for stage I but involved with dense adhesions justify upgrading to stage II if tumor cells are histologically proven to be present in the adhesions

All pathology reports should include a provisional pathological staging of disease prior to MDT discussion.

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Appendix B: Ultra radical surgery Enhanced recovery pathway.

ROYAL DERBY NHS FOUNDATION TRUST
ENHANCED RECOVERY PATHWAY - EXPECTED MAJOR CYTOREDUCTIVE SURGERY FOR OVARIAN CANCER.

Ward:
Consultant:
Admission Date:
Predicted date of discharge:

Patient Label

	Actions	Date	Sign	Name
PRE OPERATION	Ultra radical surgery patient information			
	Physiotherapy Review+Incentive spirometry			
	Dietetic telephone input (Telephone or review in pre op clinic)			
	Stoma care nurse review			
	CPET test			
PREPARATION	If splenectomy expected - Vaccinations given 2 weeks prior to surgery			
	Anaesthetic review			
	Preoperative maximisation of Hb.			
	Book ITU/HDU			
	Cross match 4 units of blood			
	Inform transfusion practitioners of Need of FFP (Will need pre op weight)			
OPERATION	Operation Day Date:			
	Admit to ITU/HDU			
	Incentive Spirometry to be started on ICU			

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	Enoxaparin 10PM/4 hours post surgery			
DAY 1	Day 1 Post Op Date:			
	Chest Physio			
	Sit out of bed (as appropriate)			
	Dietetic assessment- Start NJ feed plus free fluids and start Meritene shakes. Do not delay feeding secondary to nausea; aspirate the gastric port if the patient feels nauseous			
	Replace Epidural if ineffective			
	Stoma nurse to perform post op check. Ward staff to check and drain stoma 4 hourly, Change stoma pouch if leaks			
DAY 2	Day 2 Post Op Date:			
	Chest Physio			
	Sit out of bed for 4 hours in 2 sittings (Morning and Evening)			
	Walk 10m			
	Continue NJ feed as per dietetic regimen			
	Commence soft diet if no vomiting like mashed potatoes, porridge, soup, custard etc. Start food charts			
	Replace Epidural if ineffective			
Ward staff to check and drain stoma 4 hourly, Change stoma pouch if leaks				
DAY 3	Day 3 Post Op Date:			
	Chest Physio			
	Sit out of bed for 4 hours in 2 sittings (Morning and Evening)			
	1st Walk 20m			
	2nd Walk 20m			
	CXR- Drain if Effusion and symptomatic Plan for removal of Epidural - Prescribe Paracetamol, NSAID, PPI, Tramadol, SC Morphine if no contraindications and oral intake tolerated			

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	Continue NJ feed and continue to built up diet as per dietician's plan			
	Ward staff to check and drain stoma 4 hourly, Change stoma pouch if leaks			
	Action	Date	Sign	Name
DAY 4	Day 4 Post Op Date:			
	Patient to be independent with Incentive spirometry			
	1st Walk 30m			
	2nd Walk 30m			
	3rd Walk 30m			
	Remove Epidural if tolerating oral intake; give regular analgesics, stop infusion 1000 hours and remove epidural at 1400			
	Continue NJ feed, increase oral intake as tolerated. Continue food charts			
Ward staff to check and drain stoma 4 hourly, Change stoma pouch if leaks				
DAY 5	Day 5 Post Op Date:			
	Patient to be independent with Incentive spirometry			
	1st Walk 60m			
	2nd Walk 60m			
	3rd Walk 60m			
	Continue NJ feed, increase oral intake as tolerated			
	Remove Epidural if not already done; give all regular analgesics, stop infusion 1000 hours, remove epidural at 1400 hours			
	Ward staff to check and drain stoma 4 hourly, Change stoma pouch if leaks			
DAY 6	Day 6 Post Op Date:			
	Transfer to Ward 209			
	Continue NJ feed, increase oral intake as tolerated			
	Patient to continue with incentive spirometer until achieving pre-op level consistently			

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	Independently mobile on ward (Physio to refer to OT if needed)			
	Discharge planning			
	Ward staff to check and drain stoma 4 hourly, Change stoma pouch if leaks. Practice stoma pouch change and drain with patient			
DAY 7	Day 7 Post Op Date:			
	Patient to start Physiotherapy exercises 1-2 as long as both drains are removed			
	Stop NJ feed after dietetic review. Continue to increase oral diet as per dietician's plan			
	Ward staff to check and drain stoma 4 hourly, Change stoma pouch if leaks. Practice stoma pouch change and drain with patient			
DAY 8	Day 7 Post Op Date:			
	Patient to continue Physiotherapy exercises 1-2			
	Continue to increase oral diet as per dietician's plan			
	Ward staff to check and drain stoma 4 hourly, Change stoma pouch if leaks. Practice stoma pouch change and drain with patient			
DAY 9	Day 7 Post Op Date:			
	Patient to continue Physiotherapy exercises 1-2			
	Continue to increase oral diet as per dietician's plan			
	Discharge planning with involvement of Physiotherapist, Dietician, stoma nurse and Incharge Consultant			
	Ward staff to check and drain stoma 4 hourly, Change stoma pouch if leaks. Practice stoma pouch change and drain with patient			
DAY 10	Day 7 Post Op Date:			

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	Patient to continue Physiotherapy exercises 1-2			
	Continue to increase oral diet as per dietician's plan			
	Discharge planning with involvement of Physiotherapist, Dietician, stoma nurse and Incharge Consultant			
	Splenectomy vaccintions via Gp if appropriate within 1 week			
	Ward staff to check and drain stoma 4 hourly, Change stoma pouch if leaks. Practice stoma pouch change and drain with patient			

DERBY GYNAECOLOGICAL CANCER CENTRE

Documentation Control

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Division sign off:	30/08/2022			
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Key contact:	Cindy Meijer			