

**British Gynaecological Cancer Society recommendations for women with gynaecological cancer who received non-standard care during the COVID-19 pandemic**

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## **Abstract**

During the COVID-19 pandemic, pressures on clinical services required adaptation to how care was prioritised and delivered for women with gynaecological cancer. This document discusses potential 'salvage' measures when treatment has deviated from the usual standard of care. The British Gynaecological Cancer Society convened a multi-disciplinary working group to develop recommendations for the onward management and follow-up of women with gynaecological cancer who have been impacted by a change in treatment during the pandemic. These recommendations are presented for each tumour type and for healthcare systems, and the impact on gynaecological services are discussed. It will be important that patient concerns about the impact of COVID-19 on their cancer pathway are acknowledged and addressed for their ongoing care.

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## Background

During the COVID-19 pandemic, there have been significant pressures on clinical services that required adaptation to how care was delivered for women with gynaecological cancer.<sup>1</sup> There have been occasions when it was necessary for treatment to deviate from what would be considered standard of care, due to clinical resource availability, increased risk from COVID-19 infection and prioritisation frameworks.<sup>2-7</sup> In the international COIDSurg study, 17% of 4722 women undergoing surgery for gynaecological cancer had alteration in first line treatment, including treatment delay or adaptation of surgery.<sup>8</sup>

In the United Kingdom, the COVID-19 pandemic severely impacted on gynaecological cancer services resulting in the need for prioritisation of care<sup>1</sup>. There was a loss of anaesthetic and intensive care availability with many centres having extremely limited or even no surgical capacity, while many staff members were redeployed to acute services. There was also national prioritisation of radiotherapy and systemic therapy availability, with alteration of regimens to reduce the risks of COVID-19 infection when immunocompromised.

The British Gynaecological Cancer Society convened a multi-disciplinary working group to develop recommendations for the onward management of women with gynaecological cancer who have been impacted by a change in treatment. This document discusses 'salvage' measures based on expert opinion with recommendations presented by tumour type and for healthcare systems.

1 **Recommendations on Diagnostic Pathways and the Duty of Candour**

2 The COVID-19 pandemic has led to increased numbers of women presenting  
3 with advanced gynaecological cancer and often as an emergency. This may have  
4 been due to a lack of medical access because of resource pressures, or due to a  
5 delay in presentation because of patient concerns about accessing medical care  
6 during the pandemic, particularly impacting on frailer patients. Whilst  
7 acknowledging their presentation may have been delayed, these women should  
8 be managed according to established national and international guidelines.

9

10 When there has been a delay or variation in treatment, there is a duty of candour  
11 to discuss with patients how their care varied from the normal pathway, whether  
12 this has potential impact on the survival benefits of treatment and the  
13 implications for their ongoing care.<sup>9</sup>

14

15

16 **Recommendations for Ovarian Cancer**

17 The COVID-19 pandemic led to significant issues in operating capacity, with  
18 many centres altering their 'usual' clinical practice according to COVID-19  
19 infection rates and availability of high dependency units for post-operative care.

20

21 *Patients with newly diagnosed ovarian cancer*

- 22 1. Due to reduced operating capacity, many centers deferred primary surgery  
23 and some women were not offered surgery either in the primary or interval  
24 setting. As a result, some women may have missed the opportunity to

1 undergo cytoreductive surgery and their prognosis may have been impacted  
2 as a result.<sup>10</sup>

- 3
- 4 • Although evidence is not available, it is recommended that women  
5 who did not have primary or planned interval surgery should be  
6 offered surgery after six cycles of treatment (or within three months  
7 of the last cycle of treatment). If currently receiving maintenance  
8 treatment, including PARP inhibitors or bevacizumab, treatment  
9 would have to be interrupted in the peri-operative period.
- 10 • Women who started maintenance treatment after six cycles of  
11 chemotherapy and remain in remission should continue maintenance  
12 treatment and be considered for surgery at progression if appropriate  
13 candidate.
- 14 • Women who are on maintenance treatment and have residual disease  
15 can continue on maintenance treatment beyond 2 years until  
16 progression.
- 17 • Women with asymptomatic disease should be considered for surgery  
18 or can continue maintenance treatment. If a patient has stable disease  
19 on treatment, careful consideration should be given before stopping  
20 the maintenance drugs.
- 21
- 22 • Women with a symptomatic pelvic-abdominal mass should be  
23 considered for surgery regardless of the time from chemotherapy.
- 24

- 1           • Additional post-operative chemotherapy following delayed surgery  
2           (after 6 cycles of neoadjuvant chemotherapy) is not routinely  
3           recommended, but may be considered depending on time from last  
4           platinum-based chemotherapy, tumour burden at surgery, residual  
5           disease, pathologic response scores and chemotherapy toxicity. An  
6           ongoing study looking at the timing of interval cytoreductive surgery  
7           (after 3 or 6 cycles) will provide more evidence and help with the  
8           decision-making process (NCT 03579394).
- 9
- 10   2. Due to lack of intensive care availability, patients assessed as frail or high  
11   risk for peri-operative morbidity (as per local guidelines and practice) may  
12   not have been offered surgery during the surges of the pandemic. It is  
13   recommended that these patients be re-evaluated for fitness to undergo  
14   radical surgery when the COVID-19 prevalence changes. Once vaccination is  
15   established and infection rates drop, the concomitant risk of COVID-19  
16   related morbidity from surgery should also reduce.<sup>11</sup> Age alone should not  
17   be a deciding factor for surgery regardless of COVID-19.
- 18
- 19   3. Many centres altered their systemic therapy schedules due to the potential  
20   risks for patients in the post-operative and neo-adjuvant settings. For  
21   example, some women stopped chemotherapy after 4 cycles and others were  
22   not offered maintenance treatment with bevacizumab. These changes might  
23   impact overall survival, particularly for women with stage IV or bulky  
24   residual disease. It is advised that women who discontinued chemotherapy  
25   after 4 cycles should continue on routine follow-up. Eligible women who



1 have not been offered maintenance bevacizumab or PARP inhibitors should  
2 continue with routine surveillance and be considered for PARP inhibitors,  
3 where appropriate at relapse.

4  
5 *Patients with recurrent ovarian cancer*

6 1. During the COVID-19 pandemic some women with recurrent disease missed  
7 the opportunity to undergo secondary surgery which may have an impact on  
8 their survival.<sup>12 13</sup> Women with operable disease who did not have  
9 secondary debulking surgery should be considered for surgery at a further  
10 relapse if deemed appropriate candidate. Secondary surgery after 3 cycles of  
11 chemotherapy should not be routinely offered as there is no prospective  
12 randomised data supporting this approach. Such surgery should be  
13 considered on an individual basis where the treating team considers there is  
14 a clear benefit. For patients who did not have surgery at diagnosis, the  
15 Arbeitsgemeinschaft Gynaekologische Onkologie (AGO) and iMODEL scores,  
16 used to predict operability at first recurrence of ovarian cancer, do not apply  
17 and will not be the accurate tools to identify surgical candidates at relapse.<sup>14</sup>

18 15

19  
20 2. Systemic therapy for relapsed ovarian cancer remains platinum-based  
21 chemotherapy (at least 4 cycles) followed by a PARP inhibitor for  
22 responders.<sup>16</sup> In the UK, funding criteria during the COVID-19 pandemic did  
23 allow the use of PARP inhibitors without prior chemotherapy in exceptional  
24 circumstances. If patients were using PARP inhibitors as a treatment as  
25 opposed to a maintenance therapy, this should be continued for as long as

1 deemed clinically appropriate. Similarly, if patients were on bevacizumab  
2 maintenance they should continue for as long as they benefit or the  
3 treatment is funded. Chemotherapy can then be considered in the event of  
4 future progression.

5  
6 3. Women with low grade ovarian cancer who had surgery deferred should be  
7 offered debulking surgery if deemed appropriate surgical candidates. Where  
8 possible these women should be managed as per established guidelines.

9  
10 4. Some women have been treated on the basis of “positive” peritoneal cytology  
11 instead of a biopsy. In some cases, this approach might have led to a mis-  
12 diagnosis and/or a delay in determination of BRCA status. A biopsy remains  
13 the gold standard, but in certain cases it is acceptable to use a cell block to  
14 obtain a diagnosis including immunophenotyping where there is no easily  
15 accessible tissue to biopsy. Somatic testing for BRCA variants or homologous  
16 recombination deficiency (HRD) testing should be considered either on a  
17 biopsy or surgical specimen, but in selected cases may be possible where  
18 there is adequate DNA in the cell block.

## 19 20 **Recommendations for Uterine Cancer**

21 1. Low-grade, early-stage endometrial cancer was categorised as a lower  
22 priority for surgery during the pandemic, since a delay of more than 4  
23 weeks in treatment initiation was unlikely to impact on survival.<sup>17</sup> When  
24 operating theatre capacity was limited, women were commenced on  
25 progestogen therapy until surgery was possible. However, in some

1 patients there might have been inadequate tumour response or  
2 progression, or there may have been non-concordant histological findings  
3 between a low-grade endometrial sample and a high-grade tumour on the  
4 definitive surgical specimen.

5 • Women who commenced endocrine therapy due to lack of surgical  
6 availability should have definitive surgery ideally within three months  
7 of starting hormonal therapy or as soon as surgical capacity allows.  
8 There should be clinical review and repeat imaging after a maximum  
9 of three months with non-responders prioritized for surgery.

10 • There should be a robust failsafe system for ensuring all patients who  
11 had surgery deferred are tracked.

12 • Once surgical treatment is complete, there should be no change to  
13 standard ongoing management with adjuvant therapy based on the  
14 final histopathological findings. Molecular classification, if available,  
15 may help to identify patients with low risk tumours who may avoid  
16 adjuvant treatment.<sup>18</sup>

17  
18 2. Many women with endometrial cancer have co-morbidities that put them  
19 at a higher risk of mortality from COVID-19 including obesity, diabetes and  
20 cardio-vascular disease.<sup>19 20</sup> Surgery may have been contraindicated or  
21 deferred during the pandemic, particularly when high dependency  
22 availability was very limited and there was less support for optimising  
23 patients including bariatric and pre-treatment optimisation services.

24 • Re-evaluation of disease status should be undertaken including  
25 imaging to assess whether there has been disease progression.

- Women who commenced progestogen therapy due to co-morbidities that contra-indicated surgery should be reviewed to assess whether optimisation for surgery is possible or whether definitive radiotherapy is an option.

3. Due to the need to prioritise surgical time, there may have been a reduction in the number of patients who underwent surgical staging of lymph nodes. While this may have been a change in practice for some centres which would have resulted in an increase in the use of pelvic radiotherapy, established adjuvant treatment algorithms are based on whether nodal status is known or unknown.<sup>18</sup> Therefore, no change from standard ongoing management is recommended.

4. Adjuvant treatment may have been omitted when it was unlikely to impact on overall survival, and, in particular, vaginal brachytherapy was not available in some centres. Patients may also have decided not to have adjuvant therapy due to concerns about having additional treatment during the pandemic. Therefore there will be a cohort of women who are at higher risk of relapse, particularly of loco-regional recurrence if vaginal vault brachytherapy or external beam radiotherapy was omitted.<sup>21 22</sup> Whereas low-grade, low risk endometrial cancer most frequently recurs in the vaginal vault within the first 2 years, loco-regional recurrence including lymph node metastases may occur later in intermediate and high-intermediate risk tumours.<sup>23 24</sup>

- 1 • Patients at increased risk of local recurrence should have regular  
2 clinical review with the aim of detecting a salvageable  
3 asymptomatic recurrence. They should not be recommended for  
4 patient-initiated follow-up.
- 5 • Surveillance imaging at 6 months and 18 months post-surgery  
6 should be considered for women with high-intermediate and high-  
7 risk disease who have not had external beam radiotherapy or  
8 nodal staging.

9

## 10 **Recommendations for Cervical Cancer**

### 11 *Patients with early-stage cervical cancer*

12 In the United Kingdom, there was suspension of the cervical screening programme  
13 during the initial phase of the COVID-19 pandemic. Delayed assessment may have  
14 resulted in women presenting with symptomatic or more advanced stage of disease.  
15 Surgery for early cervical cancer remained a high priority throughout the pandemic.<sup>1</sup>  
16 However, some women who had local excision of early-stage disease had completion  
17 surgery delayed or modified due to the increased risk of peri-operative mortality from  
18 major procedures when COVID-19 infection rates were high.<sup>25</sup>

19

- 20 • When surgical management including lymph node assessment varied  
21 from usual care pathways, closer surveillance should be considered with  
22 MRI imaging for 2 years.

23

### 24 *Patients treated with radiotherapy*

1 Definitive radiotherapy for cervical cancer involves a course of external beam  
2 radiotherapy followed by intracavitary brachytherapy. Lack of resources, including  
3 anaesthetic support or theatre capacity, may have necessitated changes to the  
4 intracavitary brachytherapy treatment pathway, using altered fractionation or referring  
5 to another hospital. Delays may have occurred due to lack of brachytherapy  
6 availability or due to patients having COVID-19 infection. It may even have been  
7 necessary to use additional external beam radiotherapy in place of brachytherapy.<sup>1</sup>  
8 There would be no significant impact to patient outcome if the change in  
9 brachytherapy fractionation still delivered treatment doses that met the GEC-ESTRO  
10 dose tolerances for tumour and organs at risk<sup>26 27</sup> A prolonged total treatment time  
11 with significant delay between external beam radiotherapy and brachytherapy will  
12 have a higher risk of persistent or recurrent disease, while omitting brachytherapy  
13 further reduces cure rates.<sup>28-30</sup> For patients with this higher risk of local recurrence,  
14 surveillance including MRI imaging may detect salvageable persistent or recurrent  
15 disease<sup>31</sup>.

16

- 17 • No change to standard ongoing surveillance is required if the total tumour  
18 dose was consistent with GEC-ESTRO guidelines.
- 19 • Where there was a long gap with a total treatment time greater than 56  
20 days, when lower tumour doses were delivered or when adjuvant  
21 radiotherapy was omitted, increased surveillance with MRI imaging six-  
22 monthly over the following 2 years is recommended.
- 23 • It is recommended that patients in whom intra-uterine brachytherapy  
24 was omitted or who had incomplete treatment should be evaluated by an  
25 examination under anaesthetic and biopsy for consideration of

1 completion surgery if there is persistent disease at 12-14 weeks after  
2 completing radiotherapy (subject to surgical capacity), provided there are  
3 no distant metastases on imaging.

4

## 5 **Recommendations for Vulval Cancer**

### 6 *Initial treatment*

7 Apart from seeing more delayed diagnoses and more advanced presentation of  
8 vulval carcinoma during the COVID-19 pandemic, most gynaecological cancer  
9 centres in the United Kingdom maintained standard management of this disease.  
10 However, some hospitals may have encountered difficulty in accessing nuclear  
11 medicine resources for Technetium-99m sentinel lymph node procedures for  
12 small (<4 cm) tumours without clinical lymphadenopathy. Centres may also  
13 have proceeded with radical vulval surgery, but omitted systematic  
14 inguinofemoral lymphadenectomy for larger tumours in order to reduce surgical  
15 morbidity and COVID-related perioperative risks. As a consequence, there may  
16 be some women with vulval cancer who did not undergo standard surgical  
17 lymph node staging.

18

19 Groin node recurrence risk is greatest in the first two years after diagnosis,  
20 particularly during the first 12 months. Therefore, the morbidity associated with  
21 delayed surgical inguinal lymph node staging, performed some months after  
22 primary vulval surgery, may outweigh the benefit of the diminishing probability  
23 of early diagnosis of nodal involvement. One study suggested that three-monthly  
24 ultrasound of the groins for two years following negative sentinel node

1 dissection was cost-effective in the detection of lymph node metastasis following  
2 sentinel lymph node assessment.<sup>32</sup>

3

- 4 • Patients whose surgery excluded surgical lymph node staging may  
5 therefore be monitored with at least three-monthly clinical and  
6 ultrasound review until 12-24 months following surgery, aimed at early  
7 detection of nodal metastases.

8

9 *Surveillance*

10 The lack of clinical capacity and the risk to patients of in-person appointments  
11 during peak periods of the pandemic resulted in some patients missing follow up  
12 appointments or having virtual consultations.

- 13 • Due to the field change effect of pre-disposing conditions, in-person  
14 follow up with vulvoscopy/visual inspection should be re-instated as soon  
15 as possible <sup>33 34</sup>.

- 16 • Patients should be encouraged to self-manage and report new lesions or,  
17 in those with lichen sclerosus, new symptoms or lesions that do not start  
18 to respond to daily clobetasol propionate 0.05% ointment within 2 weeks.  
19 Patients should be reviewed urgently in these situations.

20

21

22 **Recommendations for Gynaecological Cancer Follow Up**

23 Due to the need to reduce in-person hospital attendances, alternative follow up  
24 models were introduced with increased use of remote consultations and patient-  
25 initiated follow-up.<sup>34</sup> This was a necessary change during the pandemic and a



1 positive consequence has been more widespread experience of these models of  
2 care. However, the need for rapid change in practice may have meant there was a  
3 loss of risk stratification and some women were not included in the decision to  
4 have ongoing patient-initiated follow-up. Patients have reported feeling  
5 abandoned by the sudden change and many have had a long period without face-  
6 to-face review.

7  
8 There is a particular risk that there has been reduced detection of additional  
9 needs for vulnerable patients or safeguarding issues, and there have been  
10 increased numbers of patients who have been lost to follow-up.

- 11
- 12 • Ongoing development of patient-initiated and remote consultation
  - 13 models should be supported.
  - 14 • Centres should ensure women are appropriately selected and counselled
  - 15 for their ongoing follow up plan.

16  
17

18 **Recommendations on COVID-19 Vaccination**

19 Vaccination significantly reduces the risks of infection and should be encouraged  
20 for all women planned for and undergoing cancer treatment.<sup>35-37</sup> When national  
21 vaccination programmes have a longer interval between vaccinations, clinicians  
22 may expedite the second dose of vaccine for patients undergoing treatment for  
23 cancer.<sup>38</sup> A third vaccination may be indicated for patients who were previously  
24 immunocompromised depending on national policy..

25

## 1 **Supportive Care and Patient Perspectives**

2 The challenges delivering care during the COVID-19 pandemic have profoundly  
3 impacted on holistic and psychological support for patients and their families. At  
4 a time of high uncertainty and anxiety for women with gynaecological cancer, the  
5 necessary reduction in direct patient contact will have affected their relationship  
6 with the clinical team. Many women had their care managed by a different team,  
7 or even in a different centre, and there may have been challenging palliative care  
8 decisions. This will impact on our ongoing rapport and communication with  
9 patients and it is essential to prioritise reinstatement of supportive care services.

10

### 11 *Patient perspectives*

12 COVID-19 has significantly affected cancer patients and family members. In a  
13 study including 1251 patients from 16 countries, the European Society of  
14 Gynecological Oncology -European Network of Gynecological Cancer Advocacy  
15 Groups (ENGAGE) found women were more fearful of cancer progression (71%)  
16 than developing COVID-19. Many patients, however, had high level anxiety that  
17 the disruption and uncertainty resulting from the pandemic would lead to  
18 changes to their cancer treatment with 33% reporting modification to their  
19 treatment or follow-up.<sup>39</sup>

20

21 Studies have reported high levels of patient anxiety and a perception of medical  
22 abandonment during the pandemic.<sup>40-43</sup> A qualitative analysis of 800 online  
23 forum posts with UK gynaecology cancer charities shows that patients are  
24 extremely anxious about the impact of these changes to their current and future  
25 cancer care and contacted cancer charities to avoid burdening health care staff

1 [personal communication S. Sundar, June 2021]. It will be important for health  
2 care professionals to acknowledge and address these concerns as services  
3 recover so they may provide reassurance and appropriate care to their patients.

4

5 *Clinical Nurse Specialists*

6 Significant changes in care occurred when many nurse specialists were  
7 redeployed to support the general nursing demands of the pandemic, leaving  
8 women without appropriate essential support. The clinical nurse specialist will  
9 be pivotal to drive and support an effective “restart and recovery” agenda,  
10 delivering effective remote assessment, helping patients navigate new  
11 technology, and advocating for patients.<sup>44 45</sup> The nurse specialist workforce is  
12 highly skilled, often with a deep understanding of the needs for individual patients.  
13 Educating patients about the benefits of therapeutic well-being events and support  
14 groups as well as referral to specialist psychological support should help to address  
15 aspects of psychological distress<sup>46</sup>.

16

17

- 18 • Centres should recognise the need for additional clinical nurse specialist  
19 and holistic support resources for patients and carers in the recovery  
20 period.

21

22

23

24 **Implications for Gynaecology Oncology Services**

1 Once hospitals start to recover from the acute pressures of the pandemic, there  
2 will be a significant backlog of patients awaiting investigations and surgery.<sup>47</sup>  
3 There is likely to be a surge of referrals for patients who have deferred  
4 presentation, and a higher proportion with advanced disease. Due to clinical  
5 pressures, there may have been delay or even cessation of screening and  
6 surveillance programmes, while prophylactic surgery was deferred. Centres  
7 should aim to reinstate these preventative services as soon as possible.

8  
9 The alteration in clinical pathways and working practices may have impacted on  
10 team dynamics, with a risk of increased stress, anxiety and sickness. Workforce  
11 planning and holistic support to staff should be prioritised during the recovery  
12 period. It is likely that training will have been impacted with many trainees  
13 redeployed to alternative roles, and it will be important to optimise ongoing  
14 training opportunities.

## 15 16 **Gynaecological Cancer Research**

17 At the beginning of the pandemic, most UK sites paused active trial recruitment  
18 with research staff redeployed to COVID-19 wards. There were amendments to  
19 many trials to allow for remote monitoring and consent. After the pandemic,  
20 there will be residual clinical pressures with significant pressure on the  
21 availability of imaging and research biopsies. Currently COVID-19 studies remain  
22 prioritised with resources diverted away from cancer research. The immediate  
23 priorities should include resource-sparing trials including chemotherapy-sparing  
24 regimens, de-escalation radiotherapy schedules, and registration, data-collection  
25 and bio-bank studies.

1

2 **Conclusions**

3 COVID -19 has resulted in unprecedented disruption to cancer care requiring

4 rapid and flexible adaptation to our delivery of care for women with

5 gynaecological cancer. Almost no evidence exists on how best we can restore

6 outcomes for women adversely impacted when care deviated from standard

7 practice. With new coronavirus variants rapidly evolving, there may need to be

8 future adaptation to these recommendations. We hope that our consensus

9 document will help guide women and clinicians on best options for 'salvage' and

10 follow-up. Careful data collection into outcomes will provide insight into how

11 these measures work in practice and provide valuable learning for future surges.

12

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