Supplementary: Patterns of care survey questionnaire

Dear respondent,

You are invited to participate in a survey, entitled, "Exploring Ovarian Cancer Clinical Practice". This study is being conducted by the International Cancer Benchmarking Partnership (ICBP).

The ICBP is a global collaboration of researchers, policymakers, data experts and clinicians seeking to explore differences in cancer survival across high-income countries with similar health systems (these include: The UK, Ireland, Denmark, Norway, Canada, Australia and New Zealand). Amongst a number of exploratory modules, this research is examining how international differences in 'access to optimal treatment' may be contributing to observed differences in ovarian cancer outcomes across ICBP countries.

The purpose of this study is to explore factors that may be impacting quality of and access to ovarian cancer treatment internationally, such as differences in surgical practice, administration of systemic therapy and health systems barriers to optimal patient care. Your participation in the survey will help the ICBP to better understand observed differences in ovarian cancer survival and contribute towards evidence-based policy recommendations to improve patient outcomes globally.

We estimate it will take about 15 minutes of your time to complete the questionnaire. There are 4 sections to fill out. Your responses will be completely anonymized. We have taken all reasonable measures to protect your identity and responses. You may receive this survey from multiple sources – please only respond once.

This survey has been designed and disseminated in association with the following ICBP clinical Working Group members, whose involvement and insight have been integral to the development of this study (see names below).

If you have any questions or concerns, please email Charles Norell from the ICBP at: charles.norell@cancer.org.uk

Signed,

ICBP Research Team:

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SECTION 1: Demographics

Q1. In which jurisdiction do you clinically practice?

England, UK	☐
Scotland, UK	☐
Wales, UK	☐
Northern Ireland, UK	☐
Republic of Ireland	☐
Norway	☐
Denmark	☐
Western Australia, Australia	☐
New South Wales, Australia	☐
Victoria, Australia	☐
Canada *Please state province:*	☐
None of the above	☐

Q2. Age:

35-39 ☐ 40-49 ☐ 50-59 ☐ 60-69 ☐ >70☐

Q3. Years since obtaining your Certificate of Gynaecological Oncology (CGO) accreditation or completing specialty training:

<5 ☐ 5-9 ☐ 10-14 ☐ 15-19 ☐ >20 ☐

Q4. What best describes your profession or specialty? If more than one applies to you, please select the option most appropriate to your sub-specialty:

Gynaecological oncologist (covering surgery AND systemic therapy)	☐
Subspecialty accredited gynaecological oncology surgeon	☐
Medical oncology	☐
Clinical/radiation oncology	☐
OBGYN	☐
Other (please specify):	☐

Q5. Type of practice:

☐ % public ☐ % private

Q6. Which, if any, clinical guidelines do you use to inform your ovarian cancer treatment recommendations?

National Comprehensive Cancer Network (NCCN)	☐
American Society of Clinical Oncology (ASCO)	☐
National Institute for Health and Care Excellence (NICE)	☐
British Gynaecological Cancer Society (BGCS)	☐
Scottish Intercollegiate Guidelines Network (SIGN)	☐
Northern Ireland Cancer Network (NICAN)	☐
Norwegian Directorate of Health (NDH)	☐
Danish Gynaecologic Cancer Group (DGCG)	☐
European Society for Medical Oncology (ESMO)	☐
Alberta Health Services (AHS)	☐
British Columbia Cancer (BCC)	☐
Cancer Care Ontario (CCO)	☐
Cancer Council Australia (CCA)	☐
New South Wales (NSW) Department of Health	☐
New Zealand Ministry of Health	☐
Local/hospital guidelines	☐
If other, please specify:	☐

This survey relates to cases of advanced epithelial ovarian, tubal and primary peritoneal cancer. All three will be referred to as "EOC" in this document.

If you do not perform surgery as part of your clinical practice, please proceed to SECTION 3.

SECTION 2: Surgical Practice

Q7. How many patients did you operate on in 2018 with advanced EOC? _____

Please indicate whether: Estimate ☐ OR Database confirmed ☐

Q8. What percentage of your patients with advanced EOC who had surgery underwent primary surgery followed by chemotherapy?_____%

Q9. What percentage with advanced EOC who had survery underwent neoadjuvant chemotherapy/interval debulking? _____%

Q10. In patients fit for surgery how do you decide on neoadjuvant chemotherapy or primary surgery? (select as many as appropriate)

Based on findings at preoperative CT scan	☐
Always select neoadjuvant chemotherapy if the patient accepts it	☐
Always select primary surgery unless patient has nonresectable disease outside the abdominal cavity	☐

If '<u>based on findings from preoperative CT scan</u>', which of the following findings would make you decide on neoadjuvant chemotherapy INSTEAD OF primary surgery? (select as many as appropriate)

Full thickness diffuse diaphragmatic disease	☐
Omental disease involving transverse colon, stomach, spleen or tail of pancreas	☐
Bulky pelvic disease involving rectosigmoid	☐
Disease involving base of mesentery	☐
Bulky pelvic lymph node	☐
Bulky para-aortic lymph nodes	☐
Bulky retroperitoneal lymph nodes above renal vessels	☐
Large volume, confluent peritoneal disease	☐
Widespread peritoneal disease, ascites and no pelvic mass	☐
Liver lesion (capsule/subcapsule)	☐
Liver lesion (parenchymal in potentially resectable area)	☐
Disease at porta hepatis	☐
Nonresectable metastasis outside abdominal cavity	☐
Other site of disease in the abdominal cavity - Please specify:	☐

Q11. What do you consider as nonresectable disease outside the abdominal cavity?

Sub-phrenic lymph nodes	☐
Mediastinal lymph nodes	☐
Supraclavicular lymph nodes	☐
Inguinal lymph nodes	☐
Pleural disease	☐
Other locations (please specify):	☐

Q12. What volume of residual disease do you consider optimal debulking?

None visible ☐ <5mm ☐ <10mm ☐ <20mm ☐

Q13. In what percentage of patients with advanced EOC do you achieve optimal debulking (by your criteria)
a) At primary surgery: _____%
b) After neoadjuvant chemotherapy: _____%

Q14. If you have access to this data, what is the average length of time you/your team would spend on an operation for a case of advanced EOC from incision to closure? _____

Q15. How often do you collaborate with colleagues of other subspecialties (e.g. upper GI, hepatobiliary, colorectal) when operating on patients with advanced EOC?

Never	☐
Rarely	☐
Sometimes	☐
Often	☐
Always	☐

If you answered that you 'NEVER or 'RARELY collaborate with colleagues, please select as appropriate from the following reasons why:

You can do all the necessary surgery yourself	☐
You do not have good access to / availability of other surgeons, but would use them if you did have easy access	☐
Other reason(s), please specify:	☐

Q16. What do you consider barriers to optimal debulking (by your criteria) in your patient population with advanced ovarian cancer? (select as many as appropriate)

Older patient population	☐
Medical comorbidities	☐
Nonresectable metastasis outside abdominal cavity	☐
Lack of expertise in ultra-radical debulking procedures	☐
Lack of adequate supportive care (ICU beds)	☐
Lack of operating time in public hospitals	☐
Patient preference	☐
Patient travel distance to centre/other social factors (please specify):	☐

Q17. For patients with advanced EOC, what disease findings at operation would preclude optimal debulking? (select as many as appropriate)

Full thickness diffuse diaphragmatic disease	☐
Omental disease involving transverse colon, stomach, spleen or tail of pancreas	☐
Bulky pelvic disease involving rectosigmoid	☐
Disease involving base of mesentery	☐
Bulky pelvic lymph node	☐
Bulky para-aortic lymph nodes	☐
Bulky retroperitoneal lymph nodes above renal vessels	☐
Large volume, confluent peritoneal disease	☐
Widespread peritoneal disease, ascites and no pelvic mass	☐
Liver lesion (capsule/subcapsule)	☐
Liver lesion (parenchymal in potentially resectable area)	☐
Disease at porta hepatis	☐
Other site of disease in the abdominal cavity - Please specify:	☐

Q18. For patients with advanced EOC (and in whom age and medical fitness are not a contraindication), which procedures would you perform in order to optimally debulk the patient? Which would you perform in association with colleagues from other specialties? Which would you rarely or never perform?

	Procedure	**Performed by you**	**Perform with colleague**	**Rarely or never perform**
1	Small bowel resection	☐	☐	☐
2	Large bowel resection	☐	☐	☐
3	Stripping or resection of diaphragmatic disease	☐	☐	☐
4	Splenectomy	☐	☐	☐
5	Distal pancreatic resection	☐	☐	☐
6	En bloc resection of uterus/peritoneum/rectosigmoid	☐	☐	☐
7	Excision of bulky pelvic nodes/lower para-aortic nodes	☐	☐	☐
8	Excision of bulky upper para-aortic nodes	☐	☐	☐
9	Resection and reimplantation of ureter/ bladder resection	☐	☐	☐
10	Resection of parenchymal liver metastases	☐	☐	☐
11	Ablation of peritoneal implants with CUS, Argon beam or diathermy	☐	☐	☐
12	Mobilisation of liver	☐	☐	☐
13	Resection of liver capsule or	☐	☐	☐

	subcapsular disease			
14	Resection around porta hepatis	☐	☐	☐

Q19. For those procedures above to which you answered "rarely or never perform", what are your reasons?

	Procedure	**Lack of personal expertise**	**Lack of colleagues with expertise**	**Concerns relating to morbidity**	**Concerns relating to patient benefit**	**Lack of equipment**
1	Small bowel resection	☐	☐	☐	☐	☐
2	Large bowel resection	☐	☐	☐	☐	☐
3	Stripping or resection of diaphragmatic disease	☐	☐	☐	☐	☐
4	Splenectomy	☐	☐	☐	☐	☐
5	Distal pancreatic resection	☐	☐	☐	☐	☐
6	En bloc resection of uterus/peritoneum/rectosigmoid	☐	☐	☐	☐	☐
7	Excision of bulky pelvic nodes/lower para-aortic nodes	☐	☐	☐	☐	☐
8	Excision of bulky upper para-aortic nodes	☐	☐	☐	☐	☐
9	Resection and reimplantation of ureter/ bladder resection	☐	☐	☐	☐	☐
10	Resection of parenchymal liver metastases	☐	☐	☐	☐	☐
11	Ablation of peritoneal implants with CUSA, Argon beam or diathermy	☐	☐	☐	☐	☐
12	Mobilisation of liver	☐	☐	☐	☐	☐
13	Resection of liver capsule or subcapsular disease	☐	☐	☐	☐	☐
14	Resection around porta hepatis	☐	☐	☐	☐	☐

For the remaining questions, the definition of "ULTRA-RADICAL SURGERY" is as follows;

"Extensive or ultra-radical surgery for advanced ovarian cancer is a development and extension of standard (radical) surgery. The precise differences between these procedures are not well defined, but some typical features of ultra-radical surgery include: resection of the diaphragm, extensive stripping of the peritoneum, multiple resections of the bowel (excluding localised colonic resection), liver resection, partial gastrectomy, cholecystectomy, splenectomy."

NOTE: "PERITONECTOMY" is included as an ultra-radical procedure, defined as:

"The use of radical surgical procedures (eg: diaphragmatic stripping, splenectomy, distal pancreatectomy, liver tissue resection), combined with removal of macroscopically abnormal peritoneum, in order to achieve complete cytoreduction to zero residual disease, where possible."

Q20. Have you spent time working or training in the following areas (apart from your standard Gynaecological Oncology training) and, if so, for how long in total?

Additional training	*Select if appropriate*	*Length of time (in months)*
Upper GI unit	☐	
Colorectal unit	☐	
Peritonectomy unit	☐	
Urological unit	☐	
Other (please specify):	☐	

Q21. Have you attended hands-on advanced surgical courses or learning from colleagues for abdominal surgery and for how long in total?

Yes ☐ how long for: _____

No ☐

Q22. Have you ever referred a patient for ultra-radical surgery and/or performed the operation with your team?

This does not include referral for cases of pseudomyxoma peritonei, which is an appendiceal tumour and not a primary ovarian tumour.

Yes ☐ How many? ___

No ☐

Q23. To what extent do you agree with 'ultra-radical' surgery for patients with advanced ovarian cancer, either by referring them or performing the operation with your own team?

Strongly agree	☐
Agree	☐
Neither agree nor disagree	☐
Disagree	☐
Strongly disagree	☐

If you <u>strongly agree/agree</u>, patients SHOULD be referred for ultra-radical surgery or have the operation performed by your team based on the following factors being PRESENT: (select if appropriate and describe your indications):

☐ Younger age (state age range you would consider for ultra-radical surgery) _____

☐ Histology type(s) _____

☐ Primary diagnosis _____

☐ Recurrent diagnosis _____

☐ Platinum sensitive _____

☐ Platinum resistant _____

☐ Extent of disease or stage _____

☐ BRCA positive _____

☐ BRCA negative _____

☐ Other indication(s): _____

_____

_____

If you <u>strongly disagree/disagree</u> with ultra-radical surgery, what are your reason(s) for this? (select as many as appropriate);

☐ You do not believe there is sufficient evidence to support ultra-radical surgery

☐ You are concerned about potential morbidity

☐ You are concerned about negative effect on quality of life

☐ There is no ultra-radical surgery service in your city of work or close vicinity

☐ You are concerned that your patient will be lost from your care/follow up

☐ Other reason(s), please state: _____

_____

_____

Q24. Have you ever recommended a patient for HIPEC (Heated IntraPEritoneal Chemotherapy)?

Yes ☐ How many? ___

No ☐

Q25. To what extent do you agree with recommending a patient for HIPEC?

Strongly agree	☐
Agree	☐
Neither agree nor disagree	☐
Disagree	☐
Strongly disagree	☐

If you agree, patients SHOULD be recommended for HIPEC based on the following factors being PRESENT (select as many as appropriate and describe your indications):

☐ Younger age (stage age range you would consider for HIPEC) _____

☐ Histology type(s) _____

☐ Primary diagnosis after neoadjuvant chemotherapy _____

☐ Primary diagnosis at upfront surgery_____

☐ Recurrent diagnosis _____

☐ Platinum sensitive _____

☐ Platinum resistant _____

☐ Extent of disease or Stage _____

☐ BRCA positive _____

☐ BRCA negative _____

☐ Other indication(s): _____

_____

_____

If you disagree with recommending a patient for HIPEC, the reason(s) for this are (select as many as appropriate):

☐ You do not think it is superior to systemic (IV) chemotherapy

☐ You do not think it is superior to standard intraperitoneal (IP) chemotherapy

☐ You do not believe there is sufficient evidence to give HIPEC

☐ You are concerned about potential morbidity

☐ You are concerned about negative effect on quality of life

☐ There is no HIPEC service in your city of work or close vicinity

☐ The practicalities and technical aspects of giving HIPEC are too difficult for you or your medical oncology team

☐ Other reason(s), please state: _____

_____

_____

Q26. Do you refer patients with relapsed disease for secondary cytoreductive surgery or perform the operation with your own team?

Yes ☐ No ☐

If YES, please state the indication(s): _____

_____

_____

If NO, please state your reason(s) why: _____

_____

_____

SECTION 3: Systemic Therapy

Q27. Do you offer your patients Intra-Peritoneal (IP) chemotherapy?

Yes ☐ No ☐

If YES, please state the indications(s):

_____

_____

If NO, please state your reason(s):

Lack of high-quality evidence of efficacy and safety	☐
Lack of national regulatory approval	☐
Concerns relating to morbidity	☐
Concerns relating to patient benefit	☐
Lack of resources	☐
Lack of training	☐
Other reason(s), please specify:	☐

Q28. Do you prescribe Bevacizumab in advanced EOC?

Yes ☐ No ☐

If YES, you do prescribe Bevacizumab, please state the indications(s):

_____

_____

If NO, you do not prescribe Bevacizumab, please state your reason(s):

Lack of high-quality evidence of efficacy and safety	☐
Lack of national regulatory approval	☐
Concerns relating to morbidity	☐
Concerns relating to patient benefit	☐
Lack of funding	☐
Other reason(s), please specify:	☐

Q29. Do you routinely offer BRCA testing to your patients?

Yes ☐ No ☐

If NO, you do not routinely offer BRCA testing, please proceed to Q31.

If YES, you do routinely offer BRCA testing, please answer questions 'a, b & c' below:

a) <u>Which type</u> of patients do you offer BRCA testing to?

All high-grade ovarian cancer patients	☐
All high-grade non-mucinous ovarian cancer patients	☐
All high-grade serous ovarian cancer patients	☐
Based upon family-history or age-related criteria	☐
Other selection factors for BRCA testing (please specify):	☐

b) <u>When</u> do you offer BRCA testing?

Shortly after primary diagnosis	☐
At relapse	☐

c) <u>What type</u> of testing?

Germline only	☐
Somatic and germline if somatic positive	☐

Q30. Do you have access to PARP inhibitors in your clinical practice?

Yes ☐ No ☐

If NO, you do not have access to PARP inhibitors, please proceed to Q32.

If YES, you do have access to PARP inhibitors, please answer to question 'a' below:

For each of the following questions, do not answer YES if your only access is pharmaceutical company facilitated, or via named-patient compassionate use programme - this questionnaire refers to general availability (including in UK via Cancer Drugs Fund)

a) In what clinical context do you have access to PARP inhibitors?

Context	Germline BRCA-positive patients only	Germline BRCA-positive AND tumour-positive patients only	All patients
After response to 2nd line platinum-based chemotherapy	☐	☐	☐
Platinum-sensitive disease	☐	☐	☐
Platinum-resistant disease	☐	☐	☐

Q31. Is there now, or has there been within the last 2 years, a therapeutic trial in the following scenario that you have recruited patients to, either on site or via referral within your jurisdiction?

scenario	Yes	No	Unsure

First line ovarian cancer treatment	☐	☐	☐
Platinum-sensitive relapsed disease	☐	☐	☐
Platinum-resistant disease	☐	☐	☐

SECTION 4: Health System Factors

Q32. Does clinical data collection of treatments and outcomes take place in your jurisdiction?

Yes ☐ No ☐ Unsure ☐

Please indicate whether: Local-level ☐ OR National-level ☐ OR BOTH Local AND National-level ☐

If YES, please provide relevant details on what data is collected:

_____

_____

Q33. What do you consider health system barriers to accessing optimal treatment in your patient population?

Lack of MDT referral	☐
Lack of access to a specialised centre for rural/remote patients	☐
Lack of treatment monitoring (e.g. via national or local clinical data collection)	☐
Lack of timely updates to national clinical practice guidelines	☐
Delays in treatment	☐
Lack of patient access to clinical trials	☐
Lack of adequate hospital staffing	☐
Lack of equipment and/or other resources (please specify):	☐
No barriers	☐

Please provide any further comments in the space below:
