SUPPLEMENTARY INFORMATION

Table 1. Search strategies of the Pragmatic literature review

Question	Search strategy	Number of studies
To identify clinical trials in maintenance therapy after the first line of treatment for ovarian cancer (and articles with expert opinions) and to identify the clinical drivers' maintenance therapy after the first line of treatment for ovarian cancer	'ovarian cancer' AND maintenance AND ('randomized controlled trial'/exp OR 'controlled study'/exp OR 'observational study'/exp OR database OR registry OR registries OR 'systematic review'/exp OR 'meta analysis'/exp OR 'network meta-analysis'/exp OR 'real world evidence'/exp OR 'real world data'/exp)	674
To identify clinical trials in maintenance therapy after the first line of treatment for ovarian cancer (and articles with expert opinions) and to identify the clinical drivers' maintenance therapy after the 1L of treatment for ovarian cancer – patient preferences	'ovarian cancer':ab,ti AND ('patient preference':ab,ti OR 'choice behavior':ab,ti OR 'decision making':ab,ti OR 'patient experience':ab,ti OR 'patient expectation':ab,ti OR 'patient satisfaction':ab,ti OR 'patient perspectives':ab,ti OR 'patient values':ab,ti OR 'quality of life':ab,ti OR 'patient-reported outcomes':ab,ti) AND [article]/lim AND [english]/lim AND [humans]/lim AND 'article'/it AND ('breast cancer'/dm OR 'breast tumor'/dm OR 'endometrium cancer'/dm OR 'ovary cancer'/dm OR 'ovary carcinoma'/dm OR 'ovary tumor'/dm)	1,117
To identify clinical trials in maintenance therapy after the first line of treatment for ovarian cancer (and articles with expert opinions) and to identify the clinical drivers' maintenance therapy after the first line of treatment for ovarian cancer – physician preference	'ovarian cancer':ab,ti AND ('oncologist':ab,ti OR 'physician'/exp) AND ('preference'/exp OR 'choice' OR 'perception'/exp)	131

Table 2. Rounds of anonymous questionnaires

Section		Agenda	Number of questions
Round 1			
	0	Panelists' personal information	2
	1	Testing	3
	2	Choice of frontline treatment	6
	3	Maintenance therapy: specific situations	2
	4	Choice of maintenance therapy after frontline platinum-based regimen	9
	5	Duration and monitoring during maintenance therapy	2
	6	Supportive care during maintenance therapy	1
Round 2			
	0	Panelists' personal information	2
	1	Testing	2
	2	Choice of frontline treatment	6
	3	Maintenance therapy: specific situations	2
	4	Choice of maintenance therapy after frontline platinum-based regimen	6
	5	Duration and monitoring during maintenance therapy	2

6	Supportive care during maintenance therapy	1
Round 3		
0	Panelists' personal information	2
1	Testing	2
2	Choice of frontline treatment	6
3	Maintenance therapy: specific situations	2
4	Choice of maintenance therapy after frontline platinum-based regimen	5
5	Duration and monitoring during maintenance therapy	2
6	Supportive care during maintenance therapy	1

Table 3. Survey questions with an achieved consensus

Question	Variables	Consensus (%)	
		Agreement	Disagreement
Round 1			
Regarding molecular biomarker testing for advanced ovarian cancer patients, how do you agree or disagree with the following statements?	Testing for *BRCA* mutation/homologous recombination deficiency status should be performed as soon as a tissue sample is available	**100.0**	0.0
Regarding molecular biomarker testing for advanced ovarian cancer patients, how do you agree or disagree with the following statements?	Additional core biopsies should be collected for patients receiving neo-adjuvant treatment to enable immediate biomarker testing	**94.0**	6.0
Regarding molecular biomarker testing for advanced ovarian cancer patients, how do you agree or disagree with the following statements?	Biopsy samples for molecular testing could be taken from adnexal OR peritoneal/omental foci, provided there is appropriate tumor sample	**94.0**	6.0
Regarding molecular biomarker testing for advanced ovarian cancer patients, how do you agree or disagree with the following statements?	It is acceptable to start first-line systemic therapy before ordering tests for *BRCA*/ homologous recombination deficiency	**94.0**	6.0
Regarding sequence of biomarkers testing advanced ovarian cancer patients, how do you agree or disagree with the following statements?	Both tests (*BRCA* mutation AND homologous recombination deficiency) should be ordered at the same time upfront	**87.0**	13.0
Regarding sequence of biomarkers testing advanced ovarian cancer patients, how do you agree or disagree with the following statements?	A histological diagnosis of high-grade ovarian cancer is needed before tumor testing for homologous recombination deficiency	**81.0**	19.0

Regarding sequence of biomarkers testing advanced ovarian cancer patients, how do you agree or disagree with the following statements?	Patients with clear cell, endometrioid, or mucinous should be offered somatic tumor testing for mismatch repair	**100.0**	0.0
Regarding appropriate homologous recombination tests for advanced ovarian cancer patients, how do you agree or disagree with the following statements?	homologous recombination deficiency tests used in guiding treatment decision should have been validated in prospective randomized clinical trials	**87.5**	12.5
Regarding appropriate homologous recombination tests for advanced ovarian cancer patients, how do you agree or disagree with the following statements?	It is also acceptable the use of other academic homologous recombination deficiency tests provided a previous validation at least in a randomized clinical trial cohort	**100.0**	0.0
Regarding appropriate homologous recombination tests for advanced ovarian cancerpatients, how do you agree or disagree with the following statements?	Any commercially available tests, regardless as to whether they have been validated in clinical trials, can be used for guiding treatment decisions	12.5	**87.5**
Regarding appropriate homologous recombination tests for advanced ovarian cancerpatients, how do you agree or disagree with the following statements?	homologous recombination deficiency testing should not be replaced by homologous recombination mutation panel testing	**93.8**	6.2
What characteristics are you considering when defining a patient of high-risk in your practice?	Chemotherapy response should be assessed after neoadjuvant chemotherapy to define further systemic treatment decisions	**81.0**	19.0
Regarding adding bevacizumab to first-line platinum-based regimen in patients with high-grade serous or high-grade endometrioid carcinomas with no previous bowel obstruction/sub-occlusion or extensive bowel resection, how do you agree or disagree of the following statements?	Patients with homologous recombination deficiency tumors do not need to automatically receive bevacizumab first line	**82.0**	12.0

Regarding adding bevacizumab to first-line platinum-based regimen in patients with high-grade serous or high-grade endometrioid carcinomas with no previous bowel obstruction/sub-occlusion or extensive bowel resection, how do you agree or disagree of the following statements?	Patients with *BRCA* mutation and/or homologous recombination deficiency tumors should receive bevacizumab first line, regardless of being 'high-risk'	12.0	**88.0**
Regarding adding bevacizumab to first-line platinum-based regimen in patients with high-grade serous or high-grade endometrioid carcinomas with no previous bowel obstruction/sub-occlusion or extensive bowel resection, how do you agree or disagree of the following statements?	Patients with *BRCA* wild-type/unknown and/or homologous recombination proficient/ homologous recombination deficiency unknown tumors AND high-risk disease should receive bevacizumab upfront	**81.0**	19.0
Regarding adding bevacizumab to first-line platinum-based regimen in patients with high-grade serous or high-grade endometrioid carcinomas with no previous bowel obstruction/sub-occlusion or extensive bowel resection, how do you agree or disagree of the following statements?	Previous hyperthermic intraperitoneal chemotherapy downgrades the intention to use bevacizumab	12.0	**88.0**
Regarding adding bevacizumab to first-line platinum-based regimen in patients with high-grade serous or high-grade endometrioid carcinomas with no previous bowel obstruction/sub-occlusion or extensive bowel resection, how do you agree or disagree of the following statements?	If an early good response (cycle 1–3) is achieved in platinum-based chemotherapy (i.e., RECIST or KELIM score), it is accepted that bevacizumab is not added to chemotherapy, so that PARP inhibitor could be used as monotherapy maintenance treatment	**87.0**	13.0
Regarding adding bevacizumab to first-line platinum-based regimen in patients with high-grade serous or high-grade endometrioid carcinomas with no previous bowel obstruction/sub-occlusion or extensive bowel resection, how do you agree or disagree of the following statements?	Patients with high-volume disease and in the need of a rapid response should be offered bevacizumab	**82.0**	18.0

Regarding adding bevacizumab to first-line platinum-based regimen in patients with high-grade serous or high-grade endometrioid carcinomas and previous bowel obstruction/sub-occlusion or extensive bowel resection, how do you agree or disagree of the following statements?	Every effort should be made to gain homologous recombination deficiency and/or BRCA status before starting bevacizumab	**81.0**	19.0
Regarding adding bevacizumab to first-line platinum-based regimen in patients with high-grade serous or high-grade endometrioid carcinomas and previous bowel obstruction/sub-occlusion or extensive bowel resection, how do you agree or disagree of the following statements?	Patients with homologous recombination deficiency tumors do not need to automatically receive bevacizumab first line	**100.0**	0.0
Regarding adding bevacizumab to first-line platinum-based regimen in patients with high-grade serous or high-grade endometrioid carcinomas and previous bowel obstruction/sub-occlusion or extensive bowel resection, how do you agree or disagree of the following statements?	Patients with *BRCA* mutation and/or homologous recombination deficiency tumors should receive bevacizumab first line, regardless of being 'high-risk'	12.0	**88.0**
Regarding adding bevacizumab to first-line platinum-based regimen in patients with low grade carcinomas, how do you agree or disagree of the following statements?	Patients with high-risk disease should receive bevacizumab upfront	**88.0**	12.0
Regarding adding bevacizumab to first-line platinum-based regimen in patients with low grade carcinomas, how do you agree or disagree of the following statements?	Patients with low-grade carcinomas should be preferably referred to clinical trials	**100.0**	0.0
Regarding adding bevacizumab to first-line platinum-based regimen in patients with mucinous/clear cell carcinomas, how do you agree or disagree of the following statements?	Patients with high-risk disease should receive bevacizumab upfront	**88.0**	12.0
Regarding adding bevacizumab to first-line platinum-based regimen in patients with mucinous/clear cell carcinomas, how do you agree or disagree of the following statements?	Patients with high-volume symptomatic ascites that require a paracentesis (even in the absence of other high-risk features) should be offered bevacizumab, independently of tumor histology	**81.0**	19.0

Regarding adding bevacizumab to first-line platinum-based regimen in patients with mucinous/clear cell carcinomas, how do you agree or disagree of the following statements?	Patients with mucinous/clear cell carcinomas should not receive bevacizumab treatment	19.0	**81.0**
Regarding adding bevacizumab to first-line platinum-based regimen in patients with mucinous/clear cell carcinomas, how do you agree or disagree of the following statements?	Patients with mucinous/clear cell carcinomas should be preferably referred to clinical trials	**100.0**	0.0
Regarding bevacizumab schedule, how do you agree or disagree of the following statements	Bevacizumab should be used as in GOG-218 trial (15 mg/kg/3 week) if the intent is to combine with a PARP inhibitor	**82.0**	18.0
Regarding FIGO II, how do you agree or disagree of the following statements?	FIGO II patients should be followed only with active surveillance	**81.0**	19.0
Regarding FIGO II, how do you agree or disagree of the following statements?	FIGO II patients should be preferably referred to participate in clinical trials addressing maintenance therapy	**94.0**	6.0
Regarding stable disease after first-line platinum-based regimen, how do you agree or disagree of the following statements?	For patients already on bevacizumab, they should continue the maintenance with bevacizumab	**100.0**	0.0
Regarding stable disease after first-line platinum-based regimen, how do you agree or disagree of the following statements?	Regardless of previous bevacizumab utilization, patients should receive early second-line regimen (before progression) as in patients with progressive disease	6.0	**94.0**
Regarding stable disease after first-line platinum-based regimen, how do you agree or disagree of the following statements?	Regardless of previous bevacizumab utilization, patients should be preferably referred to clinical trials addressing maintenance therapy	**94.0**	6.0

The decision to use maintenance PARP inhibitor or bevacizumab (or both) should be made at the same time shortly after starting platinum-based chemotherapy	The decision to include bevacizumab and/or PARP inhibitor in the patient's first-line treatment should be made at the same time during receipt of platinum-based chemotherapy	19.0	**81.0**
The decision to use maintenance PARP inhibitor or bevacizumab (or both) should be made at the same time shortly after starting platinum-based chemotherapy	homologous recombination deficiency /*BRCA* results are needed before a final decision on use of maintenance treatment can be made	**88.0**	12.0
For BRCA mutation patients, who are already receiving bevacizumab (as part of the first-line regimen), you would recommend:	Keep bevacizumab AND add PARP inhibitor as maintenance regimen	**88.0**	12.0
For HRD (with BRCA wild type/unknown) patients, who are already receiving bevacizumab (as part of the first-line regimen), you would recommend:	Keep bevacizumab AND add PARP inhibitor as maintenance regimen	**94.0**	6.0
For BRCA mutation patients, not receiving bevacizumab (as part of the first-line regimen), you would recommend:	Add PARP inhibitor as maintenance regimen	**88.0**	12.0
What important factors do you consider when deciding on PARP inhibitor maintenance therapy?	Previous bone marrow toxicity during chemotherapy	**87.0**	13.0
What important factors do you consider when deciding on PARP inhibitor maintenance therapy?	Risk of drug–drug interactions	**94.0**	6.0
What important factors do you consider when deciding on PARP inhibitor maintenance therapy?	Other comorbidities – please comment	**86.0**	14.0
How often do you perform the following methods during maintenance therapy?	Whole body MRI	**81.3**	18.7
How often do you perform the following methods during maintenance therapy?	CT scan thorax + MRI abdomen–pelvis	**81.3**	18.7

How often do you perform the following methods during maintenance therapy?	CA-125	**87.5**	12.5
What supportive measures do you consider relevant in patients receiving maintenance therapy (multiple answers are allowed)	Psychological support by a specialized team should be offered even in the earlier stages of maintenance therapy	**94.0**	6.0
What supportive measures do you consider relevant in patients receiving maintenance therapy (multiple answers are allowed)	Psychological support in individual sessions should be preferred rather than in group sessions	**81.0**	19.0
What supportive measures do you consider relevant in patients receiving maintenance therapy (multiple answers are allowed)	Engagement in physical activities should be stimulated to all patients	**100.0**	0.0
What supportive measures do you consider relevant in patients receiving maintenance therapy (multiple answers are allowed)	Concrete measures followed by prescriptions for physical activities should be offered	**100.0**	0.0
Round 2			
Regarding sequence of biomarkers testing AOC patients, how do you agree or disagree with the following statements?	A separate test for somatic *BRCA* is not required, as this can be collected in the homologous recombination test	**87.5**	12.5
What characteristics are you considering when defining a patient of high risk in your practice?	High-risk advanced ovarian cancer is defined as FIGO III with residual disease (>1 cm) after initial/interval cytoreduction OR FIGO IV	**87.5**	12.5
What characteristics are you considering when defining a patient of high risk in your practice?	Worse chemotherapy response after neoadjuvant chemotherapy may be considered a high-risk characteristic	**81.3**	18.7
What characteristics are you considering when defining a patient of high risk in your practice?	Tumor primary chemosensitivity measured by worse KELIM scores may indicate a high-risk characteristic	**81.3**	18.7

Regarding adding bevacizumab to first-line platinum-based regimen in patients with high-grade serous or high-grade endometrioid carcinomas with no previous bowel obstruction/sub-occlusion or extensive bowel resection, how do you agree or disagree of the following statements?	Patients with *BRCA* wild-type/unknown and/or homologous recombination proficient/ homologous recombination unknown tumors should receive bevacizumab upfront, regardless of being 'high-risk'	18.7	**81.3**
Regarding adding bevacizumab to first-line platinum-based regimen in patients with high-grade serous or high-grade endometrioid carcinomas with no previous bowel obstruction/sub-occlusion or extensive bowel resection, how do you agree or disagree of the following statements?	If an early good response (cycle 1–3) is achieved in platinum-based chemotherapy with bevacizumab, it is accepted that bevacizumab can be discontinued after terminating the chemotherapy, so that PARP inhibitor could be used as monotherapy maintenance treatment	18.7	**81.3**
Regarding adding bevacizumab to first-line platinum-based regimen in patients with high-grade serous or high-grade endometrioid carcinomas with no previous bowel obstruction/sub-occlusion or extensive bowel resection, how do you agree or disagree of the following statements?	Performance status ECOG 2 (versus 0/1) downgrades the intention to use bevacizumab	18.7	**81.3**
Regarding adding bevacizumab to first-line platinum-based regimen in patients with high-grade serous or high-grade endometrioid carcinomas and previous bowel obstruction/sub-occlusion or extensive bowel resection, how do you agree or disagree of the following statements?	Patients with high-risk disease should receive bevacizumab upfront, regardless of *BRCA*/ homologous recombination deficiency status	12.5	**87.5**
Regarding adding bevacizumab to first-line platinum-based regimen in patients with low grade carcinomas, how do you agree or disagree of the following statements?	Patients should receive bevacizumab upfront, regardless of being 'high-risk'	18.7	**81.3**
Regarding FIGO II, how do you agree or disagree of the following statements?	I treat FIGO II as an advanced disease	18.7	**81.3**

The decision to use maintenance PARP inhibitor or bevacizumab (or both) should be made at the same time shortly after starting platinum-based chemotherapy	Response according to RECIST should be considered in addition to homologous recombination deficiency /*BRCA* when making a final decision on maintenance treatment with no need to add other biomarkers	**93.8**	6.2
For HRD (with BRCA wild-type/unknown) patients, not receiving bevacizumab (as part of first-line), you would recommend:	Add PARP inhibitor as a maintenance regimen	**81.3**	18.7
What important factors do you consider when deciding on PARP inhibitor maintenance therapy?	Hepatic impairment	**87.5**	12.5
How do you agree with the following statements?	Isolated recurrent disease can be treated with local therapy before deciding on interrupting maintenance treatment	**93.8**	6.2
How often do you perform the following methods during maintenance therapy?	PET-CT	**87.5**	12.5
What supportive measures do you consider relevant in patients receiving maintenance therapy (multiple answers are allowed)	Psychological support by a specialized team should be offered to caregivers individually	**100.0**	0.0
Round 3			
Regarding adding bevacizumab to first-line platinum-based regimen in patients with high-grade serous or high-grade endometrioid carcinomas with no previous bowel obstruction/sub-occlusion or extensive bowel resection, how do you agree or disagree with the following statements?	Every effort should be made to gain homologous recombination deficiency and/or *BRCA* status before starting bevacizumab	**87.5**	13.5

Regarding adding bevacizumab to first-line platinum-based regimen in patients with high-grade serous or high-grade endometrioid carcinomas with no previous bowel obstruction/sub-occlusion or extensive bowel resection, how do you agree or disagree with the following statements?	Upfront platinum-based chemotherapy with the intention for interval debulking surgery downgrades the intention to use bevacizumab	18.7	**81.3**
Regarding adding bevacizumab to first-line platinum-based regimen in patients with high-grade serous or high-grade endometrioid carcinomas with no previous bowel obstruction/sub-occlusion or extensive bowel resection, how do you agree or disagree with the following statements?	Poor chemosensitivity after 1–3 cycles of initial chemotherapy (e.g., determined by RECIST or KELIM score) should be an indication for adding bevacizumab	**81.3**	18.7
Regarding adding bevacizumab to first-line platinum-based regimen in patients with high-grade serous or high-grade endometrioid carcinomas and previous bowel obstruction/sub-occlusion or extensive bowel resection, how do you agree or disagree with the following statements?	Patients with *BRCA* mutation and/or homologous recombination deficiency tumors who are stage III and in complete (R0) resection after primary debulking surgery should receive bevacizumab first-line, with the intent to add PARP inhibitor	18.7	**81.3**
Regarding adding bevacizumab to first-line platinum-based regimen in patients with high-grade serous or high-grade endometrioid carcinomas and previous bowel obstruction/sub-occlusion or extensive bowel resection, how do you agree or disagree with the following statements?	If an early good response (cycle 1–3) is achieved in platinum-based chemotherapy (i.e., RECIST or KELIM score), it is accepted that bevacizumab is not added to chemotherapy, so that PARP inhibitor could be used as monotherapy maintenance treatment	**87.5**	12.5
Regarding adding bevacizumab to first-line platinum-based regimen in patients with high-grade serous or high-grade endometrioid carcinomas and previous bowel obstruction/sub-occlusion or extensive bowel resection, how do you agree or disagree with the following statements?	High chemosensitivity after 1–3 cycles of initial chemotherapy (e.g., determined by RECIST or KELIM score) should be an indication for prescribing a PARP inhibitor	**87.5**	12.5

Do you consider that the outcomes of ICON-7 and GOG-0218 assessed after primary debulking surgery are transposable to patients treated with neo-adjuvant chemo and interval debulking surgery (e.g., higher benefit in high-risk disease patients)?	Do you consider that the outcomes of ICON-7 and GOG-0218 assessed after primary debulking surgery are transposable to patients treated with neo-adjuvant chemo and interval debulking surgery (e.g., higher benefit in high-risk disease patients)?	**87.5**	12.5
Regarding adding bevacizumab to first-line platinum-based regimen in patients with low-grade carcinomas, how do you agree or disagree with the following statements?	Patients with high-volume symptomatic ascites that require a paracentesis (even in the absence of other high-risk features) should be offered bevacizumab, independently of tumor grade	**81.3**	18.7
Regarding adding bevacizumab to first-line platinum-based regimen in patients with low-grade carcinomas, how do you agree or disagree with the following statements?	Patients with low-grade carcinomas should not receive bevacizumab treatment	6.2	**93.8**
Considering that 75% of the panelists disagreed with the below statement, and keeping in mind the results of the BOOST trial, how do you agree or disagree with the following statement regarding bevacizumab schedule?	Bevacizumab can be used beyond 15 months if I feel my patient is continuing to benefit	12.5	**87.5**
How do you agree or disagree with the following statements?	I treat FIGO IIB as an advanced disease	18.7	**81.3**
What supportive measures do you consider relevant in patients receiving maintenance therapy (multiple answers are allowed)?	Nutritional team should regularly follow the patient, even in the earlier stages of their maintenance therapy	**81.3**	18.7
What supportive measures do you consider relevant in patients receiving maintenance therapy (multiple answers are allowed)?	Psychological support to caregivers, offered by a specialized team, is an essential measure during maintenance therapy	**87.5**	12.5

CT, computed tomography; FIGO, International Federation of Obstetrics and Gynecology; KELIM, CA-125 elimination rate; MRI, magnetic resonance imaging; PARP, poly (ADP-ribose) polymerase; PET, positron emission tomography; RECIST, Response Evaluation Criteria in Solid Tumor