Ovarian cancer survival by stage, histotype, and pre-diagnostic lifestyle

factors, in the prospective UK Million Women Study

SUPPLEMENTARY MATERIAL

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Supplementary Tables

Supplementary Table 1: Classification of tumour histological type

The table shows all ICD-O (International Classification of Diseases for Oncology) codes for ovarian cancer in this study (N=13,222), with the corresponding text diagnoses from ICD-O-2 and three editions of ICD-O-3 (with publication year), and the groupings using in this study. As the number of cases of non-epithelial tumours and unspecified malignant tumours were small, they were grouped with other/unspecified carcinomas for analysis. Abbreviations: NOS, Not Otherwise Specified. *The precise number of cases is omitted for cells in which n<5, in accordance with guidance from the Office for National Statistics.

ICD-O code	Cases	ICD-O-2 (1990)	ICD-O-3 (2000)	ICD-O-3.1 (2013)	ICD-O-3.2 (2020)	Comment					
	EPITHELIAL TUMOURS										
	Serous borderline tumours (n=514)										
84411	<5*	Code not listed	Code not listed	Code not listed	Code not listed	Code not listed in any version. Code indicates Serous tumour with borderline suffix, so assumed to be serous borderline tumour.					
84421	17	Code not listed	Serous cystadenoma, borderline malignancy	Serous cystadenoma, borderline malignancy	Serous borderline tumour, NOS						
84423	357	Serous cystadenoma, borderline malignancy	Code not listed	Code not listed	Code not listed						
84425	12	Code not listed	Code not listed	Code not listed	Code not listed	Code not listed in any version. Closest code is serous cystadenoma of borderline malignancy, so grouped together.					
84513	12	Papillary cystadenoma, borderline malignancy	Code not listed	Code not listed	Code not listed						
84611	<5*	Code not listed	Code not listed	Code not listed	Code not listed	Code not listed in any version. Code indicates Serous tumour with borderline suffix, so assumed to be serous borderline tumour.					
84621	6	Code not listed	Serous papillary cystic tumour of borderline malignancy	Serous papillary cystic tumour of borderline malignancy	Code not listed						
84623	104	Papillary serous cystadenoma, borderline malignancy	Code not listed	Code not listed	Code not listed						
84625	<5*	Code not listed	Code not listed	Code not listed	Code not listed						

	Serous carcinomas (n=6068)									
84413	3,071	Serous cystadenocarcinoma NOS	Serous cystadenocarcinoma NOS	Serous cystadenocarcinoma, NOS	Serous carcinoma, NOS					
84415	<5*	Code not listed	Code not listed	Code not listed	Code not listed	Code not listed in any version. Closest code is Serous carcinoma, so grouped together.				
84503	37	Papillary cystadenocarcinoma NOS	Papillary cystadenocarcinoma NOS	Papillary cystadenocarcinoma, NOS	Papillary cystadenocarcinoma, NOS					
84603	1,585	Papillary serous cystadenocarcinoma	Papillary serous cystadenocarcinoma	Papillary serous cystadenocarcinoma	Low grade serous carcinoma					
84609	<5*	Code not listed	Code not listed	Code not listed	Code not listed	Code not listed in any version. Closest code is Serous carcinoma, so grouped together.				
84613	1,364	Serous surface papillary carcinoma	Serous surface papillary carcinoma	Serous surface papillary carcinoma	High grade serous carcinoma					
90143	7	Code not listed	Serous adenocarcinofibroma	Serous adenocarcinofibroma	Serous adenocarcinofibroma					
			N	Nucinous borderline tumours (n=61	17)					
84701	<5*	Code not listed	Mucinous cystic tumour with moderate dysplasia	Code not listed	Code not listed					
84711	<5*	Code not listed	Code not listed	Code not listed	Code not listed	Code not listed in any version. Code indicates mucinous tumour, with a borderline suffix, so assumed to be mucinous borderline tumour.				
84721	40	Code not listed	Mucinous cystic tumour of borderline malignancy	Mucinous cystic tumour of borderline malignancy	Mucinous cystic tumour of borderline malignancy					
84723	545	Mucinous cystadenoma, borderline malignancy	Code not listed	Code not listed	Code not listed					
84725	8	Code not listed	Code not listed	Code not listed	Code not listed	Code not listed in any version. Closest code is for a mucinous borderline tumour, so grouped together.				
84733	21	Papillary mucinous cystadenoma, borderline malignancy	Code not listed	Code not listed	Code not listed					
84735	<5*	Code not listed	Code not listed	Code not listed	Code not listed	Code not listed in any version. Closest code is for a mucinous borderline tumour, so grouped together.				

	Mucinous carcinomas (n=577)									
84703	235	Mucinous cystadenocarcinoma NOS	Mucinous cystadenocarcinoma NOS	Mucinous cystadenocarcinoma, NOS	Mucinous cystadenocarcinoma, NOS					
84713	12	Papillary mucinous cystadenocarcinoma	Papillary mucinous cystadenocarcinoma	Papillary mucinous cystadenocarcinoma	Code not listed					
84803	296	Mucinous adenocarcinoma	Mucinous adenocarcinoma	Mucinous adenocarcinoma	Mucinous adenocarcinoma					
84805	<5*	Code not listed	Code not listed	Code not listed	Code not listed	Code not listed in any version. Closest code is for a mucinous carcinoma, so grouped together.				
84813	22	Mucin-producing adenocarcinoma	Mucin-producing adenocarcinoma	Mucin-producing adenocarcinoma	Mucin-producing adenocarcinoma					
84903	10	Signet ring cell carcinoma								
				Endometrioid carcinomas (n=797)						
83803	787	Endometrioid carcinoma	Endometrioid adenocarcinoma NOS	Endometrioid adenocarcinoma NOS	Endometrioid adenocarcinoma, NOS					
83813	<5*	Endometrioid adenofibroma, malignant	Endometrioid adenofibroma, malignant	Endometrioid adenofibroma, malignant	Endometrioid adenofibroma, malignant					
83815	<5*	Code not listed	Code not listed	Code not listed	Code not listed	Code not listed in any version. Closest code is for a malignant endometrioid adenofibroma, so grouped together.				
85703	<5*	Adenocarcinoma with squamous metaplasia								
	Clear cell carcinomas (n=517)									
83103	515	Clear cell adenocarcinoma NOS	Clear cell adenocarcinoma NOS	Clear cell adenocarcinoma, NOS	Clear cell adenocarcinoma, NOS					
83133	<5*	Code not listed	Clear cell adenocarcinofibroma	Clear cell adenocarcinofibroma	Clear cell adenocarcinofibroma					

	Carcinosarcomas (n=376)									
89403	<5*	Mixed tumour, malignant NOS	Mixed tumour, malignant NOS	Mixed tumour, malignant, NOS	Mixed tumour, malignant, NOS					
89503	138	Mullerian mixed tumour	Mullerian mixed tumour	Mullerian mixed tumour	Mullerian mixed tumour					
89513	18	Mesodermal mixed tumour	Mesodermal mixed tumour	Mesodermal mixed tumour	Mesodermal mixed tumour					
89803	217	Carcinosarcoma NOS	Carcinosarcoma NOS	Carcinosarcoma, NOS	Carcinosarcoma, NOS					
			Ot	her/ unspecified carcinomas (n=31	56)					
80103	747	Carcinoma NOS	Carcinoma NOS	Carcinoma NOS	Carcinoma, NOS					
80105	<5*	Code not listed	Code not listed	Code not listed	Code not listed	Code not listed in any version. Closest code is for Carcinoma NOS, so grouped together.				
80203	49	Carcinoma, undifferentiated NOS	Carcinoma, undifferentiated NOS	Carcinoma, undifferentiated, NOS	Carcinoma, undifferentiated, NOS					
80209	<5*	Code not listed	Code not listed	Code not listed	Code not listed	Code not listed in any version. Closest code is for Carcinoma, undifferentiated NOS, so grouped together.				
80213	9	Carcinoma, anaplastic type NOS	Carcinoma, anaplastic, NOS	Carcinoma, anaplastic, NOS	Carcinoma, anaplastic, NOS					
80223	<5*	Pleomorphic carcinoma	Pleomorphic carcinoma	Pleomorphic carcinoma	Pleomorphic carcinoma					
80413	16	Small cell carcinoma NOS	Small cell carcinoma NOS	Small cell carcinoma, NOS	Small cell carcinoma, NOS					
80503	33	Papillary carcinoma NOS	Papillary carcinoma NOS	Papillary carcinoma, NOS	Papillary carcinoma, NOS					
80523	<5*	Papillary squamous cell carcinoma	Papillary squamous cell carcinoma	Papillary squamous cell carcinoma	Papillary squamous cell carcinoma					
80703	31	Squamous cell carcinoma NOS	Squamous cell carcinoma NOS	Squamous cell carcinoma, NOS	Squamous cell carcinoma, NOS					
80713	<5*	Squamous cell carcinoma, keratinising NOS	Squamous cell carcinoma, keratinising NOS	Squamous cell carcinoma, keratinizing, NOS	Squamous cell carcinoma, keratinizing, NOS					
80723	<5*	Squamous cell carcinoma, large cell, non-keratinising	Squamous cell carcinoma, large cell, non-keratinising, NOS	Squamous cell carcinoma, large cell, nonkeratinizing, NOS	Squamous cell carcinoma, large cell, nonkeratinizing, NOS					

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81203	6	Transitional cell carcinoma NOS	Transitional cell carcinoma NOS	Transitional cell carcinoma, NOS	Transitional cell carcinoma, NOS	
81403	1,965	Adenocarcinoma NOS	Adenocarcinoma NOS	Adenocarcinoma, NOS	Adenocarcinoma, NOS	
81409	<5*	Code not listed	Code not listed	Code not listed	Code not listed	Code not listed in any version. Closest code is for Adenocarcinoma NOS, so grouped together.
81443	<5*	Adenocarcinoma, intestinal type	Adenocarcinoma, intestinal type	Adenocarcinoma, intestinal type	Adenocarcinoma, intestinal type	
81453	<5*	Carcinoma, diffuse type	Carcinoma, diffuse type	Carcinoma, diffuse type	Carcinoma, diffuse type	
82303	<5*	Solid carcinoma NOS	Solid carcinoma NOS	Solid carcinoma, NOS	Solid carcinoma, NOS	
82403	29	Carcinoid tumour NOS (except of appendix M8240/1)	Carcinoid tumour, NOS	Carcinoid tumour, NOS	Neuroendocrine tumour, NOS	
82433	<5*	Goblet cell carcinoid	Goblet cell carcinoid	Goblet cell carcinoid	Goblet cell carcinoid	
82443	<5*	Composite carcinoid	Composite carcinoid	Mixed neuroendocrine carcinoma	Mixed adenoneuroendocrine carcinoma	
82463	23	Neuroendocrine carcinoma	Neuroendocrine carcinoma, NOS	Neuroendocrine carcinoma, NOS	Neuroendocrine carcinoma, NOS	
82553	<5*	Code not listed	Adenocarcinoma with mixed subtypes	Adenocarcinoma with mixed subtypes	Adenocarcinoma with mixed subtypes	
82603	138	Papillary adenocarcinoma NOS	Papillary adenocarcinoma NOS	Papillary adenocarcinoma, NOS	Papillary adenocarcinoma, NOS	
82903	<5*	Oxyphilic adenocarcinoma	Oxyphilic adenocarcinoma	Oxyphilic adenocarcinoma	Oxyphilic adenocarcinoma	
83203	<5*	Granular cell carcinoma	Granular cell carcinoma	Granular cell carcinoma	Granular cell carcinoma	
83233	23	Mixed cell adenocarcinoma	Mixed cell adenocarcinoma	Mixed cell adenocarcinoma	Mixed cell adenocarcinoma	
83403	<5*	Papillary carcinoma, follicular variant	Papillary carcinoma, follicular variant	Papillary carcinoma, follicular variant	Papillary carcinoma, follicular variant	
84013	<5*	Apocrine adenocarcinoma	Apocrine adenocarcinoma	Apocrine adenocarcinoma	Apocrine adenocarcinoma	
84403	49	Cystadenocarcinoma NOS	Cystadenocarcinoma NOS	Cystadenocarcinoma, NOS	Cystadenocarcinoma, NOS	
85503	<5*	Acinar cell carcinoma	Acinar cell carcinoma	Acinar cell carcinoma	Acinar cell carcinoma	
85603	<5*	Adenosquamous carcinoma	Adenosquamous carcinoma	Adenosquamous carcinoma	Adenosquamous carcinoma	
90003	8	Brenner tumour, malignant	Brenner tumour, malignant	Brenner tumour, malignant	Brenner tumour, malignant	

	NON-EPITHELIAL TUMOURS (n=149)									
85903	<5*	Code not listed	Code not listed	Code not listed	Code not listed	Code not listed in any version. Closest code is for Sex cord-gonadal stromal tumour, NOS (85901), so grouped together.				
86203	61	Granulosa cell tumour, malignant	Granulosa cell tumour, malignant	Granulosa cell tumour, malignant	Adult granulosa cell tumour of ovary					
86313	<5*	Code not listed	Sertoli-Leydig cell tumour, poorly differentiated	Sertoli-Leydig cell tumour, poorly-differentiated	Sertoli-Leydig cell tumour, poorly differentiated					
86503	<5*	Leydig cell tumour, malignant	Leydig cell tumour, malignant	Leydig cell tumour-malignant	Leydig cell tumour, malignant					
87213	<5*	Nodular melanoma	Nodular melanoma	Nodular melanoma	Nodular melanoma					
88003	8	Sarcoma NOS	Sarcoma NOS	Sarcoma, NOS	Sarcoma, NOS					
88033	<5*	Small cell sarcoma	Small cell sarcoma	Small cell sarcoma	Small cell sarcoma					
88103	9	Fibrosarcoma NOS	Fibrosarcoma NOS	Fibrosarcoma, NOS	Fibrosarcoma, NOS					
88503	<5*	Liposarcoma NOS	Liposarcoma NOS	Liposarcoma, NOS	Liposarcoma, NOS					
88513	<5*	Liposarcoma, well differentiated	Liposarcoma, well differentiated	Liposarcoma, well differentiated	Liposarcoma, well differentiated, NOS					
88543	<5*	Pleomorphic liposarcoma	Pleomorphic liposarcoma	Pleomorphic liposarcoma	Pleomorphic liposarcoma					
88903	31	Leiomyosarcoma NOS	Leiomyosarcoma NOS	Leiomyosarcoma, NOS	Leiomyosarcoma, NOS					
89003	<5*	Rhabdomyosarcoma NOS	Rhabdomyosarcoma NOS	Rhabdomyosarcoma, NOS	Rhabdomyosarcoma, NOS					
89333	<5*	Adenosarcoma	Adenosarcoma	Adenosarcoma	Adenosarcoma					
89363	<5*	Code not listed	Gastrointestinal stromal sarcoma	Gastrointestinal stromal sarcoma	Gastrointestinal stromal tumour					
89633	<5*	Rhabdoid sarcoma	Malignant rhabdoid tumour	Malignant rhabdoid tumour	Rhabdoid tumour, NOS					
89903	5	Mesenchymoma, malignant	Mesenchymoma, malignant	Mesenchymoma, malignant	Mesenchymoma, malignant					
90643	<5*	Germinoma	Germinoma	Germinoma	Germinoma					
90713	<5*	Endodermal sinus tumour	Yolk sac tumour	Yolk sac tumour	Yolk sac tumour, NOS					
90803	<5*	Teratoma, malignant NOS	Teratoma, malignant NOS	Teratoma, malignant, NOS	Teratoma, malignant, NOS					

90843	<5*	Dermoid cyst with malignant transformation	Teratoma with malignant transformation	Teratoma with malignant transformation	Teratoma with malignant transformation	
90903	5	Struma ovarii, malignant	Struma ovarii, malignant	Struma ovarii, malignant	Struma ovarii, malignant	
91103	<5*	Mesonephroma, malignant	Mesonephroma, malignant	Mesonephroma, malignant	Mesonephroma, malignant	
93643	<5*	Peripheral neuroectodermal tumour	Peripheral neuroectodermal tumour	Peripheral neuroectodermal tumour	Ewing sarcoma	
			N	MALIGNANT TUMOURS NOS (n=45		
80003	443	Neoplasm, malignant	Neoplasm, malignant	Neoplasm, malignant	Neoplasm, malignant	
80013	6	Tumour cells, malignant	Tumour cells, malignant	Tumour cells, malignant	Tumour cells, malignant	
80043	<5*	Malignant tumour, fusiform cell type	Malignant tumour, spindle cell type	Malignant tumour, spindle cell type	Malignant tumour, spindle cell type	

References

ICD-O-2 (1990): C. Percy, V. Van Holten, C.S. Muir, International Classification of Diseases for Oncology, 2nd Edition (ICD-O-2), World Health Organization, Geneva, 1990.

ICD-O-3 (2000): A. Fritz, C. Percy, A. Jack, K. Shanmugaratnam, L. Sobin, D. Parkin, S. Whelan, International Classification of Diseases for Oncology, 3rd Edition (ICD-O-3), World Health Organization, Geneva, 2000.

ICD-O-3.1 (2013): A. Fritz, C. Percy, A. Jack, K. Shanmugaratnam, L. Sobin, D. Parkin, S. Whelan, International Classification of Diseases for Oncology, 3rd edition, 1st revision (ICD-O-3.1), World Health Organization, Geneva, 2013.

ICD-O-3.2 (2020): A. Fritz, C. Percy, A. Jack, K. Shanmugaratnam, L. Sobin, D. Parkin, S. Whelan, International Classification of Diseases for Oncology, 3rd Edition, 2nd Revision (ICD-O-3.2), 2020. http://www.iacr.com.fr/images/Newsflash/ICD-O-3.2_final_update09102020.xls.

Supplementary Table 2: 1, 5, and 10-year ovarian cancer survival, overall and by tumour stage at diagnosis and histological type

		% surviva	% survival at timepoint (95% Cl				
Ovarian cancer type	Cases	1 year	5 years	10 years			
All ovarian cancer	13,085	76% (75-77)	38% (37-39)	29% (28-30)			
Fully-malignant ovarian cancer	11,954	74% (73-74)	33% (32-34)	23% (22-24)			
(excluding borderline tumours)		, ,	, ,	` ,			
Stage at diagnosis							
Stage I	1853	97% (97-98)	87% (86-89)	81% (79-83)			
Stage II	515	88% (85-91)	62% (58-67)	47% (42-52)			
Stage III	3705	76% (74-77)	26% (24-27)	12% (11-14)			
Stage IV	1758	61% (58-63)	14% (13-16)	7% (5-8)			
Unknown	5254	72% (71-73)	36% (35-38)	28% (27-30)			
Ovarian cancer histotypes							
Serous borderline tumour	514	99% (98-100)	95% (93-97)	92% (89-95)			
Mucinous borderline tumour	617	99% (98-100)	97% (95-98)	96% (94-97)			
Serous carcinoma	6060	80% (79-81)	31% (30-32)	18% (17-19)			
Mucinous carcinoma	575	81% (77-84)	63% (59-67)	57% (53-61)			
Endometrioid carcinoma	797	93% (91-94)	69% (65-72)	59% (55-63)			
Clear cell carcinoma	517	85% (82-88)	54% (50-59)	47% (42-51)			
Carcinosarcoma	376	60% (55-65)	21% (17-25)	17% (13-21)			
Other/ Unspecified	3629	56% (55-58)	21% (20-23)	15% (13-16)			

Note: Table shows ovarian cancer-specific survival at 1, 5, and 10 years from diagnosis, calculated using a lifetable approach, for all Million Women Study participants diagnosed with ovarian cancer, after exclusion of 137 cases diagnosed at death (N= 13,085). The above crude survival data is unadjusted for age, stage, or other factors.

Supplementary Table 3: Histological type and stage at diagnosis of ovarian cancer cases

Ovarian cancer: Histological type	Stage I	Stage II	Stage III	Stage IV	Total, n
Serous borderline tumour, % (n)	84 (214)	6 (14)	10 (26)	0 (0)	254
Mucinous borderline tumour, % (n)	96 (290)	1 (<5*)	2 (5)	1 (<5*)	301
Serous carcinoma, % (n)	9 (396)	6 (269)	61 (2613)	23 (1002)	4280
Mucinous carcinoma, % (n)	69 (247)	5 (17)	18 (64)	8 (28)	356
Endometrioid carcinoma, % (n)	58 (277)	16 (76)	20 (94)	6 (27)	474
Clear cell carcinoma, % (n)	59 (205)	12 (40)	23 (80)	7 (23)	348
Carcinosarcoma, % (n)	14 (30)	13 (29)	60 (133)	14 (30)	222
Other / Unspecified, % (n)	12 (194)	4 (67)	43 (690)	40 (645)	1596
Total, % (n)	24 (1853)	7 (515)	47 (3705)	22 (1758)	7831

Note: Cases with unknown stage at diagnosis (n=5386), and cases diagnosed at death (n=137) have been excluded. Table shows row %. * The precise number of cases is omitted for cells in which n<5, in accordance with guidance from the Office for National Statistics.

Supplementary Table 4: Tumour characteristics and missing data, by year of diagnosis

Tumour characteristic	<2005	2005-2009	2010-2014	2015+	Total
Stage, % (n)					
Stage I	10 (348)	13 (421)	18 (645)	16 (439)	14 (1853)
Stage II	3 (91)	3 (107)	5 (165)	6 (152)	4 (515)
Stage III	16 (590)	21 (702)	35 (1230)	43 (1184)	28 (3706)
Stage IV	7 (243)	7 (250)	18 (625)	23 (644)	13 (1762)
Unknown	65 (2329)	56 (1870)	24 (851)	12 (336)	41 (5386)
Tumour histological type, % (1	1)				
Serous borderline tumour	4 (157)	4 (150)	4 (132)	3 (75)	4 (514)
Mucinous borderline tumour	5 (195)	5 (164)	4 (147)	4 (111)	5 (617)
Serous carcinoma	34 (1234)	41 (1380)	51 (1785)	61 (1669)	46 (6068)
Mucinous carcinoma	6 (212)	5 (162)	3 (117)	3 (86)	4 (577)
Endometrioid carcinoma	9 (331)	6 (216)	4 (151)	4 (99)	6 (797)
Clear cell carcinoma	5 (178)	4 (136)	4 (124)	3 (79)	4 (517)
Carcinosarcoma	3 (96)	3 (106)	3 (108)	2 (66)	3 (376)
Other/ Unspecified	33 (1198)	31 (1036)	27 (952)	21 (570)	28 (3756)
Tumour grade, % per carcino	ma type (n)				
Serous carcinoma					
Grade 1	4 (50)	3 (37)	2 (28)	0.7 (11)	2 (126)
Grade 2	18 (225)	12 (171)	4 (63)	1 (24)	8 (483)
Grade 3	47 (574)	53 (737)	42 (753)	25 (409)	41 (2473)
Unknown	31 (385)	32 (435)	53 (941)	73 (1225)	49 (2986)
Mucinous carcinoma					
Grade 1	23 (49)	24 (39)	33 (39)	41 (35)	28 (162)
Grade 2	19 (40)	23 (37)	27 (32)	27 (23)	23 (132)
Grade 3	20 (43)	14 (22)	12 (14)	7 (6)	15 (85)
Unknown	38 (80)	40 (64)	27 (32)	26 (22)	34 (198)
Endometrioid carcinoma					
Grade 1	10 (34)	13 (28)	22 (33)	28 (28)	15 (123)
Grade 2	24 (79)	32 (69)	45 (68)	44 (44)	33 (260)
Grade 3	35 (116)	35 (75)	26 (40)	17 (17)	31 (248)
Unknown	31 (102)	20 (44)	7 (10)	10 (10)	21 (166)

Notes: Table shows column %. Grade is only shown for serous, mucinous, and endometrioid carcinomas, as clear cell carcinomas and carcinosarcomas are high grade by definition.

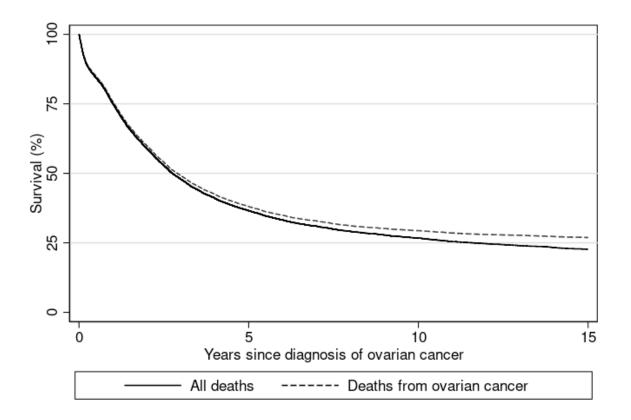
Supplementary Table 5: Additional 1, 5, and 10-year ovarian cancer survival, overall and by tumour stage at diagnosis and histological type, for women who survived the first year after ovarian cancer diagnosis

		% surviva	% survival at timepoint (95% (
Ovarian cancer type	Cases	1 year	5 years	10 years			
All ovarian cancer	9807	79% (78-80)	46% (45-47)	37% (36-39)			
Fully-malignant ovarian cancer	8692	77% (76-77)	40% (39-41)	30% (29-31)			
(excluding borderline tumours)		,	, ,	,			
Stage at diagnosis							
Stage I	1797	98% (97-98)	88% (86-90)	82% (80-84)			
Stage II	449	93% (90-95)	64% (59-69)	51% (45-56)			
Stage III	2793	74% (72-76)	27% (25-29)	15% (13-16)			
Stage IV	1052	63% (60-66)	17% (14-19)	9% (7-12)			
Unknown	3716	77% (76-78)	46% (45-48)	39% (37-40)			
Ovarian cancer histotypes							
Serous borderline tumour	507	99% (98-100)	95% (93-97)	93% (90-95)			
Mucinous borderline tumour	608	99% (98-100)	98% (96-99)	97% (95-98)			
Serous carcinoma	4845	76% (75-77)	32% (31-34)	21% (20-22)			
Mucinous carcinoma	453	91% (88-94)	76% (71-80)	71% (66-75)			
Endometrioid carcinoma	739	91% (89-93)	71% (68-75)	61% (57-65)			
Clear cell carcinoma	438	81% (77-85)	61% (56-66)	54% (49-59)			
Carcinosarcoma	222	65% (59-71)	32% (26-38)	27% (21-33)			
Other/ Unspecified	1995	69% (67-71)	33% (31-35)	25% (23-27)			

Note: Table shows ovarian cancer-specific survival at 1, 5, and 10 years after the first year from diagnosis, calculated using a lifetable approach, for all Million Women Study participants diagnosed with ovarian cancer, after exclusion of 3415 cases who died within the first year (N=9807). The above crude survival data is unadjusted for age, stage, or other factors.

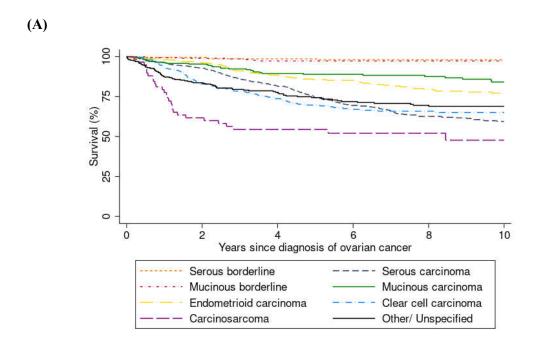
Supplementary Figures

Supplementary Figure 1: Survival by time since diagnosis of ovarian cancer

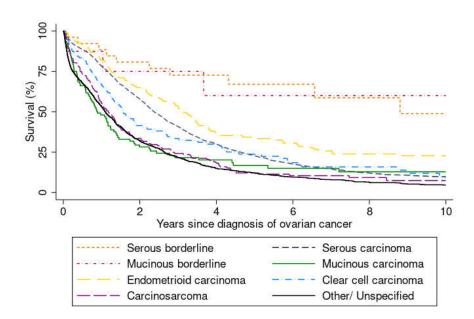


Note: This figure shows the Kaplan-Meier survival curves for survival after diagnosis of ovarian cancer, for all deaths, and for deaths attributed to ovarian cancer, for all Million Women Study participants diagnosed with ovarian cancer, after exclusion of 137 cases diagnosed at death (N=13,085).

Supplementary Figure 2: Ovarian cancer survival by time and histological type in cases diagnosed at (A) Stage I and II and (B) Stage III and IV

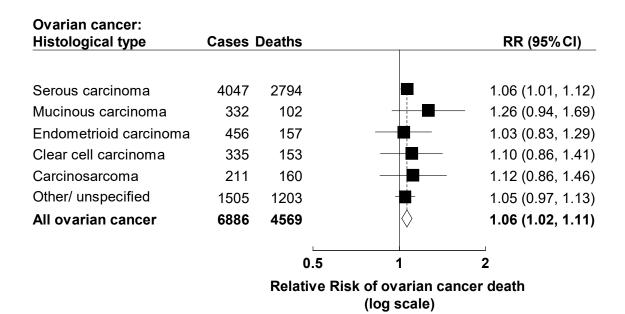


(B)



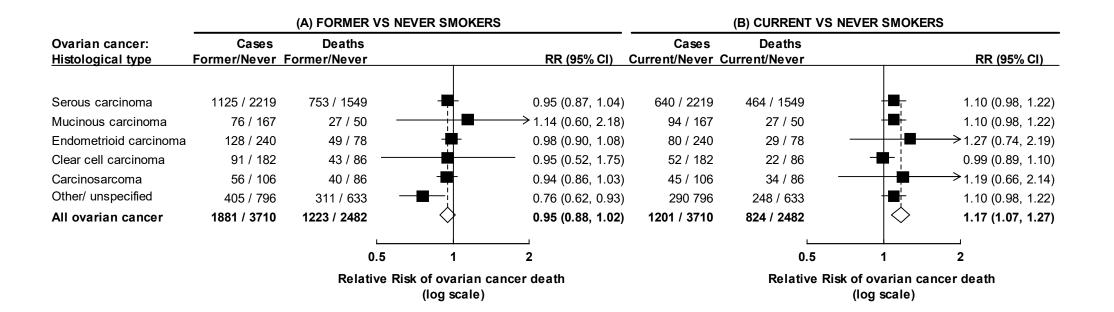
The figure shows the Kaplan-Meier survival curves for survival after diagnosis of ovarian cancer, for deaths attributed to ovarian cancer, by tumour histotype in (A) women diagnosed at Stage I and II and (B) women diagnosed at Stage III and IV, in women with ovarian cancer of known stage (N=7831).

Supplementary Figure 3: The association between BMI (per 5-unit increase) and ovarian cancer survival, by tumour histological type



The figure shows the association between body mass index (BMI, per 5-unit increase) and risk of death from ovarian cancer, by tumour histological type, in Million Women Study participants with invasive ovarian cancer of known stage and with known BMI (n=6886). Likelihood ratio test for heterogeneity by histotype: p = 0.9.

Supplementary Figure 4: The association between smoking and ovarian cancer survival, by tumour histological type



The figure shows the association between smoking (former smokers vs never smokers (A), and current smokers vs never smokers (B)) and risk of death from ovarian cancer, by tumour histological type, in Million Women Study participants with invasive ovarian cancer of known stage and with known smoking history (n=6792). Likelihood ratio test for heterogeneity by histotype: p=0.6.