Carcinoma of the Corpus Uteri

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STAGING

Anatomy

Primary site

The upper two-thirds of the uterus above the level of the internal cervical os is called the corpus. The Fallopian tubes enter at the upper lateral corners of a pear-shaped body. The portion of the muscular organ that is above a line joining the tubouterine orifices is often referred to as the fundus.

Nodal stations

The major lymphatic trunks are the utero-ovarian (infundibulo-pelvic), parametrial and presacral, which drain into the hypogastric, external iliac, common iliac, presacral and para-aortic nodes.

Metastatic sites

The vagina and lungs are the common metastatic sites.

Rules for classification

The FIGO Committee on Gynecologic Oncology, following its meeting in 1988, recommended that endometrial cancer be surgically staged. There should be histologic verification of grading and extent of the tumor.

Staging classification

Notes about the staging

Histopathology – degree of differentiation:

Cases of carcinoma of the corpus should be grouped with regard to the degree of differentiation of the adenocarcinoma as follows:

- G1: $\leqslant$5% of a nonsquamous or nonmorular solid growth pattern
- G2: 6–50% of a nonsquamous or nonmorular solid growth pattern
- G3: >50% of a nonsquamous or nonmorular solid growth pattern

Notes on pathologic grading:

- Notable nuclear atypia, inappropriate for the architectural grade, raises the grade of a Grade 1 or Grade 2 tumor by 1.
- In serous and clear cell adenocarcinomas, nuclear grading takes precedent.
- Adenocarcinomas with squamous differentiation are graded according to the nuclear grade of the glandular component.

Rules related to staging:

- Corpus cancer is now surgically staged, therefore procedures previously used for determination of stages are no longer applicable (e.g. the findings of fractional curettage to differentiate between Stage I and Stage II).
- It is appreciated that there may be a small number of patients with corpus cancer who will be treated primarily with radiation therapy. In these cases, the clinical staging adopted by FIGO in 1971 would still apply, but designation of that staging system would be noted.
- Ideally, width of the myometrium should be measured along with the depth of tumor invasion.

Table 1
Carcinoma of the corpus uteri: **Surgical staging classification** (FIGO nomenclature, Rio de Janeiro, 1988)

Stage Ia*	Tumor limited to the endometrium
Stage Ib*	Invasion to less than half of the myometrium
Stage Ic*	Invasion equal to or more than half of the myometrium
Stage IIa*	Endocervical glandular involvement only
Stage IIb*	Cervical stromal invasion
Stage IIIa*	Tumor invades the serosa of the corpus uteri and/or adnexae and/or positive cytological findings
Stage IIIb*	Vaginal metastases
Stage IIIc*	Metastases to pelvic and/or para-aortic lymph nodes
Stage IVa*	Tumor invasion of bladder and/or bowel mucosa
Stage IVb*	Distant metastases, including intra-abdominal metastasis and/or inguinal lymph nodes

* Either G1, G2 or G3. See section on Rules for classification.

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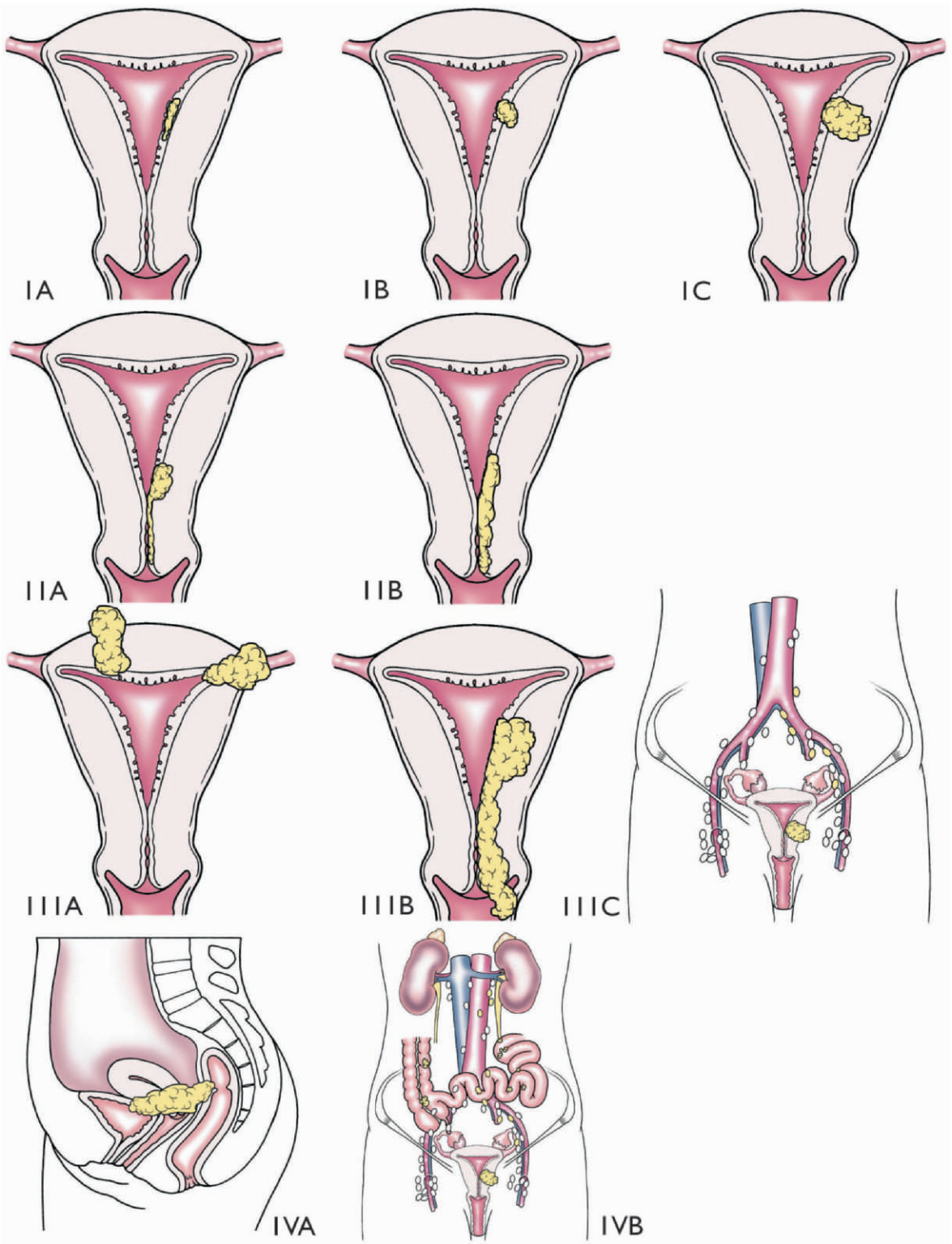

Fig. 1. Carcinoma of the corpus uteri. Staging uterine cancer. Primary tumor and metastases (FIGO).

Histopathology (according to WHO/ISGP[a] classification)

All tumors are to be microscopically verified. The histopathologic types are:

- Endometrioid carcinoma
  - Adenocarcinoma
  - Adenoacanthoma (adenocarcinoma with squamous metaplasia)
  - Adenosquamous carcinoma (mixed adenocarcinoma and squamous cell carcinoma)
- Mucinous adenocarcinoma
- Papillary serous adenocarcinoma
- Clear cell adenocarcinoma
- Adenosquamous carcinoma
- Undifferentiated carcinoma
- Mixed carcinoma

Histopathologic grade (G)

- GX: Grade cannot be assessed
- G1: Well differentiated
- G2: Moderately differentiated
- G3: Poorly or undifferentiated

Table 2
Carcinoma of the corpus uteri: Stage grouping for corpus uteri

FIGO stage	UICC T	N	M
0	Tis	N0	M0
Ia	T1a	N0	M0
Ib	T1b	N0	M0
Ic	T1c	N0	M0
IIa	T2a	N0	M0
IIb	T2b	N0	M0
IIIa	T3a	N0	M0
IIIb	T3b	N0	M0
IIIc	T1	N1	M0
	T2	N1	M0
	T3a	N1	M0
	T3b	N1	M0
IVa	T4	any N	M0
IVb	any T	any N	M1

DEFINITIONS OF TREATMENTS

Treatment definitions are given in Table 4.

Table 3
Carcinoma of the corpus uteri: **Clinical staging classification (1971) (no longer adopted for FIGO classification)**

Stage 0	Atypical endometrial hyperplasia. Carcinoma *in situ*
Stage Ia	The carcinoma is confined to the corpus and the length of the uterine cavity is $\leqslant$8 cm
Stage Ib	The carcinoma is confined to the corpus and the length of the uterine cavity is >8 cm
Stage II	The carcinoma has involved the corpus and the cervix, but has not extended outside the uterus
Stage III	The carcinoma has extended outside the uterus, but not outside the true pelvis
Stage IVa	The carcinoma has extended outside the uterus and involves the mucosa of the bladder or rectum (a bullous edema as such does not permit the case to be allotted to Stage IV)
Stage IVb	The carcinoma has extended outside the true pelvis and spreads to distant organs

DATA ANALYSIS

Summary and comments

The 26th Volume of the Annual Report (AR) notes a total of 9386 patients with corpus cancer submitted for analysis. The number reported continues to increase with each passing volume. Over 42 000 patients have been reported for 5-year survival since the change of the staging which was adopted in 1988. The reported data note continued acceptance of the 1988 FIGO staging which changed reporting from clinical to surgical stage. Volume 22 was the first Report after the staging change and only 43% of the collected patients were surgically staged compared with 94% for this year (4% clinically staged and 2% with missing data). It is appreciated that a small number of patients may not be completely staged due to obesity or co-morbidities, but that number is very small considering the patient population normally seen with this malignancy. As previously documented, most patients (71%) with endometrial cancer have Stage I disease when surgically staged compared with only 50% when clinically staged (Figure 6). Since the number of patients with clinical staging is very small, future references will mainly refer to those who are surgically staged.

Multiple factors are again appreciated to be important prognostically. Age increases with stage. Those patients clinically staged were considerably older than those

[a] ISGP, International Society of Gynecological Pathology

Table 4
Carcinoma of the corpus uteri: Definitions of treatments

Treatment	Definition
None	No treatment
Surgery alone	Surgery as first therapy and no other therapy(ies) within 90 days from the date of surgery. Subsequently, patients can be given any further treatment.
Radiotherapy alone	External radiotherapy and/or intracavitary irradiation as first therapy(ies) and no other therapy(ies) within 90 days from the end of teletherapy/brachytherapy. Subsequently, patients can be given any further treatment.
Radio-surgery	Intracavitary irradiation and/or external radiotherapy as first therapy(ies) and then surgery within 60 days from the end of brachytherapy/teletherapy. Subsequently, patients can be given any further treatment.
Surgery + adjuvant radiotherapy	Surgery as first therapy and then external radiotherapy and/or intracavitary irradiation within 90 days from the date of surgery. Subsequently, patients can be given any further treatment.
Surgery + adjuvant chemotherapy	Surgery as first therapy and then chemotherapy within 90 days from the date of surgery.
Adjuvant hormonal therapy	Surgery or radiotherapy or chemo-radiotherapy as first therapy and then hormonal therapy within 90 days from the end of surgery/radiotherapy/chemo-radiotherapy. Subsequently, patients can be given any further treatment.

surgically staged, which may explain the reason for clinical staging only in the older population. This almost a decade difference in age per stage was also presented in previous volumes.

Grade and in particular myometrial invasion (all stages) appear to increase with age (Tables 12 and 20). Whether or not this is a time sequence and progression of disease or just a later age occurrence is unknown.

Endometrioid carcinoma histotype is present in 84% of patients (Table 23). Poor prognostic cell types (papillary and clear cell) represent only 6% of surgically staged patients, although the 522 reported cases probably represent the largest reported number of these histotypes. Over 1000 of these poor histotypes have been reported in the last two volumes. These data remain constant over the last two volumes. Of the endometrioid types, 86% are early stage (I or II) compared with 59% for papillary and 67% with clear cell types. In Stage III or IV, endometrioid type represents 70% of all cancers while the poor histotypes are more common than those in Stage I and II. Of all Stage I and II, papillary and clear cell represent only 4% of cases while 14% of Stage III and IV are of these histotypes.

As stage increases, adjuvant therapy in addition to surgery is used (Table 24). It is interesting to note that the use of adjuvant radiotherapy has remained relatively constant over the last three volumes. Radiation therapy continues to remain the most commonly used adjunctive therapy. As the stage increases, the use also increases except in Stage IV where chemotherapy is more frequently used. Adjuvant chemotherapy was used in only 2% of patients reported in the last volume; this increased to 13% in this volume. This observer remains surprised by the fact that over one fourth of Stage Ia and over 50% of Stage Ib received adjuvant therapy particularly in view of the data presented here concerning the lack of benefit of adjuvant therapy in early stage disease (see later discussion). Adjuvant chemotherapy was used in almost 10% of Stage Ia cancers and about 8% of Stage Ib disease.

Since the classical surgical staging studies performed in the 1970s and 1980s, lymph node metastasis has been a major factor in staging and subsequent treatment of patients with endometrial cancer. Node metastasis, both to the pelvic and para-aortic areas, is related to the depth of invasion and grade. When depth of invasion is evaluated, lymph node metastasis increases as depth of invasion increases as would be expected. Most of these metastases are to the pelvic nodes but the incidence of para-aortic node involvement increases as depth increases. This is also true for grade. Lymph node metastasis increases in both pelvic and para-aortic nodes as the cancer becomes more poorly differentiated (Tables 13–16). When grade and depth are evaluated together, metastasis increases as the grade and depth increase. Volume 26 notes that with a Grade 1 lesion with endometrium only involvement, there is a 1.43% chance of pelvic node metastasis and only 0.63% chance of para-aortic node metastasis compared with Grade 3 deep invasion of 37% and 13%, respectively (Tables 17, 18).

Survival is obviously stage related. This is true even within a given sub-stage (Figure 4) as Stage Ia patients have a 91% five-year survival compared with 85% for Stage Ic patients. The importance of surgical staging is again noted in comparison with clinical staging (Fig-

Table 5
Carcinoma of the corpus uteri: Patients treated in 1999–2001. Distribution of patients by center and stage

		All	Not available	Stage I	Stage II	Stage III	Stage IV
All centers		9386	579	6260	1071	1190	286
Nigeria	Ibadan (IF Adewole)	2	2	–	–	–	–
South Africa	Cape Town (L van Wijk)	92	26	42	10	10	4
	Pretoria (G Lindeque)	31	3	17	2	4	5
Argentina	Buenos Aires (J Sardi)	69	4	48	5	12	–
	Buenos Aires (R Testa)	50	1	40	6	3	–
	Santa Fe (A Ellena)	5	–	4	–	1	–
Brazil	Porto Alegre (G Py Gomez da Silveira)	28	–	19	6	3	–
	São Paulo (RL Rangel Costa)	6	–	2	1	2	1
	São Paulo (RL Rangel Costa)	53	–	27	14	11	1
Canada	Montreal (L Gilbert)	233	19	171	18	23	2
Chile	Santiago (E Suarez)	26	–	15	7	2	2
Peru	Arequipa (L Medina Fernandez)	8	–	2	4	1	1
United States	Baltimore, MD (RE Bristow)	186	39	86	14	31	16
	Jacksonville, FL (B-E Sevin)	73	1	57	7	6	2
	Nashville, TN (HW Jones)	187	10	133	14	15	15
	Orange, CA (PJ DiSaia)	58	–	35	5	13	5
China	Hong Kong (HYS Ngan)	147	7	100	22	13	5
	Wuhan (S Yu)	15	1	6	2	3	3
India	Bangalore (U Devi)	33	1	23	3	4	2
Indonesia	Medan (M Fauzie Sahil)	5	–	3	1	1	–
Japan	Amagasaki (K Ito)	21	–	12	3	5	1
	Chiba (S Kato)	5	–	1	2	1	1
	Fukuoka (N Tsukamoto)	112	4	81	2	16	9
	Gunma (T Kanuma)	57	–	37	5	12	3
	Kochi (S Takeuchi)	27	–	15	6	4	2
	Kumamoto (H Katabuchi)	56	–	25	14	14	3
	Kurashiki-City (K Fujiwara)	35	2	19	7	6	1
	Nagasaki (T Ishimaru)	43	–	36	5	2	–
	Niigata (Y Aoki)	67	3	43	1	18	2
	Sapporo (N Sakuragi)	58	3	41	4	10	–
	Yonago (J Kigawa)	40	–	27	1	8	4
Korea	Gyeonggi-do (S-Y Park)	7	–	4	–	3	–
	Kyunggi-do (SJ Kim)	23	3	14	4	1	1
	Seoul (HP Lee)	84	2	64	3	12	3
	Seoul (H-S Saw)	16	–	10	2	4	–
	Seoul (JE Mok)	119	3	88	5	22	1
Thailand	Bangkok (C Vipupinyo)	74	3	43	8	17	3
	Bangkok (S Wilailak)	91	3	61	5	18	4
	Songkhla (V Wootipoom)	107	9	64	5	19	10
Turkey	Ankara (A Ayhan)	84	1	67	4	10	2
Pakistan	Islamabad (R Shaheen)	1	–	1	–	–	–

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Table 5, *continued*

		All	Not available	Stage I	Stage II	Stage III	Stage IV
Austria	Graz (M Lahousen)	106	2	68	8	13	15
	Innsbruck (C Marth)	106	5	78	8	12	3
Croatia	Rijeka (H Haller)	111	2	76	16	14	3
	Zagreb (S Jukic)	345	83	182	27	48	5
Czech Republic	Brno (A Dörr)	112	4	68	19	14	7
	Prague (E Kmonícková)	173	15	118	21	17	2
Finland	Oys (P Vuolo-Merilä)	131	11	84	18	16	2
	Turku (T Salmi)	192	3	147	14	21	7
France	Bordeaux (ML Campo)	74	–	59	3	10	2
Germany	Greifswald (G Koehler)	102	6	69	5	16	6
	Hannover (H Kühnle)	89	9	63	5	9	3
	Mainz (H Koelbl)	43	–	27	8	6	2
	Wiesbaden (A du Bois)	94	–	75	8	7	4
	Würzburg (J Dietl)	110	20	55	17	15	3
Greece	Athens (G Magiakos)	42	3	30	3	4	2
	Athens (A Rodolakis)	279	1	211	17	42	8
Italy	Brescia (S Pecorelli)	90	2	59	15	9	5
	Latina (F Maneschi)	9	–	5	2	2	–
	Pinerolo (F Martra)	42	1	33	6	2	–
	Trento (E Arisi)	63	–	47	5	10	1
Poland	Krakow (K Urbanski)	380	21	240	46	73	–
	Warsaw (M Bidzinski)	631	41	411	98	77	4
	Wroclaw (J Kornafel)	328	39	220	44	25	–
Portugal	Coimbra (O Campos)	51	–	36	4	9	2
	Coimbra (C Freire de Oliveira)	106	14	56	25	6	5
	Coimbra (D Pereira da Silva)	94	11	60	10	8	5
	Lisboa (MA Roldão)	323	11	202	66	44	–
Slovakia	Bratislava (L Kállay)	128	4	88	20	13	3
Slovenia	Maribor (I Takac)	116	6	76	11	18	5
Spain	Barcelona (S Dexeus)	62	2	51	3	5	1
	Barcelona (J Pahisa Fabregas)	147	17	98	13	12	7
	Barcelona (A Gil Moreno)	179	–	104	43	29	3
	Las Palmas de Gran Canaria (O Falcon-Vizcaino)	142	–	103	15	23	1
	Madrid (A de Armas Serra)	93	2	74	7	10	–
Sweden	Gothenburg (G Horvath)	442	10	277	70	64	21
	Örebro (B Sorbe)	431	34	318	31	31	17
	Umeå (K Boman)	370	22	299	28	17	4
Switzerland	Basel (W Holzgreve)	51	2	33	7	8	1
UK	Birmingham (KK Chan)	48	13	24	3	7	1
	Cambridge (LT Tan)	206	4	136	28	30	8
Yugoslavia	Nis (M Stanojevic)	154	1	104	31	17	1
Australia	Carlton (MA Quinn)	157	8	113	16	17	3

Table 6
Carcinoma of the corpus uteri: Patients treated in 1999–2001. Distribution of patients (%) by country and mode of treatment (Stage I), $n = 6260$

Country	No. of patients	First line of treatment (%)							
		None	Surgery alone	RT alone	Radio-surgery	Surg + adj RT	Surg + adj CT	Adj HT	Other non-standard
All	6260	–	43	–	1	44	9	–	2
South Africa	59	–	73	2	–	22	3	–	–
Argentina	92	–	58	–	–	40	2	–	–
Brazil	48	–	52	2	–	46	–	–	–
Canada	171	–	82	1	–	16	–	–	1
Chile	15	–	53	–	47	–	–	–	–
Peru	2	–	100	–	–	–	–	–	–
USA	311	1	83	–	–	14	1	–	1
China	106	–	72	–	–	12	14	1	1
India	23	–	39	–	–	61	–	–	–
Indonesia	3	–	67	–	–	33	–	–	–
Japan	337	–	62	1	–	6	21	1	–
Korea	180	1	69	1	–	21	7	–	1
Thailand	168	–	62	–	–	35	3	–	–
Turkey	67	–	81	–	–	18	–	–	1
Pakistan	1	–	–	–	–	100	–	–	–
Austria	146	–	35	–	–	50	4	10	1
Croatia	258	–	36	–	–	64	–	–	–
Czech Republic	186	–	24	3	–	73	1	–	–
Finland	231	1	29	–	–	70	1	–	–
France	59	–	–	–	–	100	–	–	–
Germany	289	–	30	2	–	65	3	–	–
Greece	241	–	67	–	–	28	4	–	–
Italy	144	–	78	–	–	21	1	–	–
Poland	871	–	8	–	3	48	38	–	2
Portugal	354	–	8	1	–	90	1	–	–
Slovakia	88	–	44	–	–	56	–	–	–
Slovenia	76	–	32	–	–	66	3	–	–
Spain	430	–	64	–	2	33	1	–	–
Sweden	894	–	39	–	–	43	7	1	10
Switzerland	33	3	27	–	–	70	–	–	–
UK	160	–	58	–	–	36	6	–	–
Yugoslavia	104	–	–	–	–	100	–	–	–
Australia	113	3	64	–	–	28	3	1	2

ure 5). Surgical Stage I patients have a five-year survival of 90% compared with only 54% of those clinically staged (Figure 7). This strongly suggests that those who are clinically staged have occult disease not appreciated clinically. Well-known data suggest that about 25% of clinical Stage I patients have disease extant to the uterus. This is also true for a grade within a given stage (Figures 8–11). The significance of surgical staging should be self evident, particularly in early stage disease.

Histotypes of endometrial cancers are a well recognized important prognostic factor. Endometrioid tumors (all stages) have a five-year survival of 83% compared with 62% for clear cell and 53% for papillary carcinomas (Figure 12). This is obviously related, to a certain degree, to the fact that poor histotypes have an advanced stage. Even within endometrial Stage I there is a difference in survival, as endometrioid tumors have a 90% five-year survival compared with 85% for clear cell and

Table 7
Carcinoma of the corpus uteri: Patients treated in 1999–2001. Distribution of patients (%) by country and mode of treatment (Stage II), $n = 1071$

Country	No. of patients	First line of treatment (%)							
		None	Surgery alone	RT alone	Radio-surgery	Surg + adj RT	Surg + adj CT	Adj HT	Other non-standard
All	1071	–	14	2	2	66	14	1	1
South Africa	12	–	25	–	–	75	–	–	–
Argentina	11	–	18	–	–	73	9	–	–
Brazil	21	–	–	5	–	90	5	–	–
Canada	18	–	33	6	–	61	–	–	–
Chile	7	–	29	14	57	–	–	–	–
Peru	4	–	75	–	–	25	–	–	–
USA	40	–	43	–	3	50	3	–	–
China	24	–	25	–	4	58	13	–	–
India	3	–	33	–	–	67	–	–	–
Indonesia	1	–	100	–	–	–	–	–	–
Japan	50	–	46	6	–	14	28	4	2
Korea	14	–	29	–	–	43	21	–	7
Thailand	18	–	11	–	6	78	–	–	6
Turkey	4	–	25	–	–	75	–	–	–
Austria	16	–	25	–	–	44	6	25	–
Croatia	43	–	14	–	–	84	–	–	2
Czech Republic	40	–	10	–	–	85	3	–	3
Finland	32	–	3	–	–	97	–	–	–
France	3	–	–	–	–	100	–	–	–
Germany	43	–	16	5	–	74	5	–	–
Greece	20	–	20	–	–	70	10	–	–
Italy	28	–	43	–	–	50	7	–	–
Poland	188	–	4	–	2	45	47	1	2
Portugal	105	–	1	1	1	94	2	1	–
Slovakia	20	–	20	–	–	80	–	–	–
Slovenia	11	–	9	–	–	82	–	9	–
Spain	81	–	14	2	5	75	2	–	–
Sweden	129	–	3	1	1	74	17	–	4
Switzerland	7	–	29	–	–	71	–	–	–
UK	31	–	19	–	–	77	3	–	–
Yugoslavia	31	–	–	39	–	61	–	–	–
Australia	16	–	13	–	6	69	–	–	–

80% for papillary cancers. This holds true for all stages (Figures 13–16).

As previously noted, grade and depth of invasion within any given stage are prognostically important. It appears that grade and depth of invasion are independently important but complement each other. Stage Ia G1 have a 93% five-year survival compared with a Stage Ib G1 of 91%, but Stage Ia G3 has an 80% survival compared with 75% in those with Stage Ic G3 cancers (Figure 19). This is true for all stages (Figures 20–22). Again, knowing surgical staging is extremely important as it relates to prognosis.

Surgery has served historically, not only for diagnosis, but for treatment. Adjunctive therapy has been used for indications that have, in many instances, been ill-defined. Historically, radiation therapy has been used pre- and post-operatively and in some cases routinely. Volume 26 suggests, as do previous volumes, that adjuvant radiation therapy would not be advantageous over surgery alone. In Stage Ia and Ib, surgery alone shows better survival rates

Table 8
Carcinoma of the corpus uteri: Patients treated in 1999–2001. Distribution of patients (%) by country and mode of treatment (Stage III), $n = 1190$

Country	No. of patients	First line of treatment (%)								
		Missing	None	Surgery alone	RT alone	Radio-surgery	Surg + adj RT	Surg + adj CT	Adj HT	Other non-standard
All	1190	–	1	12	2	1	54	25	1	4
South Africa	14	–	7	7	7	–	64	7	–	7
Argentina	16	–	–	25	–	–	44	25	6	–
Brazil	16	–	–	13	–	–	88	–	–	–
Canada	23	–	–	52	–	–	35	9	–	4
Chile	2	–	–	–	–	100	–	–	–	–
Peru	1	–	–	–	100	–	–	–	–	–
USA	65	–	2	34	–	–	43	20	2	–
China	16	–	–	–	–	–	69	25	6	–
India	4	–	–	25	–	–	25	50	–	–
Indonesia	1	–	–	–	–	–	100	–	–	–
Japan	96	2	–	17	1	–	10	64	–	6
Korea	42	–	5	5	–	–	52	31	–	7
Thailand	54	–	–	13	2	2	70	11	2	–
Turkey	10	–	–	–	–	–	70	10	–	20
Austria	25	–	–	32	–	–	32	32	4	–
Croatia	62	–	–	2	–	–	79	15	–	5
Czech Republic	31	–	–	3	23	–	58	6	–	10
Finland	37	–	–	–	–	–	73	27	–	–
France	10	–	–	–	–	–	90	10	–	–
Germany	53	–	2	25	8	–	47	11	2	6
Greece	46	–	–	13	–	–	54	33	–	–
Italy	23	–	–	9	4	–	48	39	–	–
Poland	175	–	–	3	1	2	52	34	1	8
Portugal	67	–	1	3	3	–	81	7	–	4
Slovakia	13	–	–	8	–	–	77	8	–	8
Slovenia	18	–	–	22	–	–	67	11	–	–
Spain	79	1	3	16	3	10	61	5	–	1
Sweden	112	–	–	2	1	–	44	48	–	5
Switzerland	8	–	13	13	–	–	63	13	–	–
UK	37	–	3	27	–	–	43	16	5	5
Yugoslavia	17	–	–	6	12	–	71	12	–	–
Australia	17	–	–	12	6	–	71	6	–	6

compared with those observed in patients treated with surgery plus adjuvant radiotherapy. From these data, it appears that 44% of Stage Ia and Ib patients receive non-beneficial adjuvant therapy. In Stage Ic, radiation does appear to increase survival (75% compared with 86%, Figure 23). In Stage II–IV, the numbers are too small to draw conclusions concerning efficacy of radiation over surgery alone (Figures 24–27).

CONCLUSIONS

Stage

This database continues to validate that surgical stage is an extremely important prognostic factor. Grade and depth of invasion are also important factors. The difference in sub-stage particularly in Stage I appears minimal. Surgical Stage Ia G1, Ib G1, Ia G2, and Ib G2 have a five-year survival of 93.4%, 91.6%, 91.3% and 93.4%,

Table 9
Carcinoma of the corpus uteri: Patients treated in 1999–2001. Distribution of patients (%) by country and mode of treatment (Stage IV), $n = 286$

Country	No. of patients	First line of treatment (%)							
		None	Surgery alone	RT alone	Radio-surgery	Surg + adj RT	Surg + adj CT	Adj HT	Other non-standard
All	286	5	17	5	1	14	43	4	11
South Africa	9	–	56	11	–	–	–	33	–
Brazil	2	–	50	–	–	50	–	–	–
Canada	2	–	–	–	–	50	–	–	–
Chile	2	–	–	–	100	–	–	–	–
Peru	1	–	100	–	–	–	–	–	–
USA	38	5	18	5	3	8	58	–	3
China	8	–	25	13	–	25	13	–	25
India	2	–	–	–	50	50	–	–	–
Japan	26	–	8	–	–	8	62	4	19
Korea	5	–	20	–	–	–	60	–	20
Thailand	17	6	12	6	–	29	24	18	6
Turkey	2	–	–	–	–	–	100	–	–
Austria	18	–	22	–	–	–	72	6	–
Croatia	8	25	25	–	–	38	–	–	13
Czech Republic	9	22	11	33	–	22	–	–	11
Finland	9	22	11	–	–	–	67	–	–
France	2	–	–	–	–	–	50	–	50
Germany	18	11	17	17	–	22	6	–	28
Greece	10	–	10	–	–	20	50	–	20
Italy	6	–	17	–	–	–	83	–	–
Poland	4	–	25	–	–	–	25	–	50
Portugal	12	8	17	–	–	–	33	–	42
Slovakia	3	–	–	–	–	67	–	–	33
Slovenia	5	–	20	–	–	20	40	20	–
Spain	12	8	33	–	–	17	25	8	8
Sweden	42	–	2	–	–	14	76	–	7
Switzerland	1	–	–	–	–	–	100	–	–
UK	9	11	33	–	–	22	22	11	–
Yugoslavia	1	–	–	100	–	–	–	–	–
Australia	3	–	67	33	–	–	–	–	–

respectively (Figure 19). This is very similar to data from Volumes 23, 24, and 25. It appears that it is time to consider combining some of these groups as treatment and survival are the same. This would make staging less cumbersome. Stage Ic, particularly Grade 2 and 3, do carry a worse prognosis and should be sub-staged. Interestingly, Stage Ic G1 has a five-year survival of 90.6%.

Age

Multivariate analysis further defines important factors, and age continues to be an important prognostic factor within a given stage. Those who are 80 years of age or older have a considerably worse prognosis. To a certain degree, this may relate to a lack of surgical staging in these individuals and less aggressive therapy post-operatively. Unfortunately, the data cannot validate this commonly accepted premise.

Prognostic factors

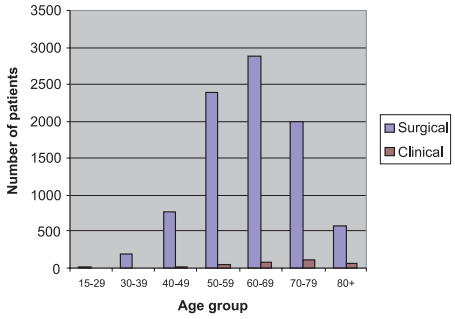
Multivariate analysis continues to note that histotypes – particularly papillary serous and to a lesser extent clear cell cancers – do carry a worse prognosis than endometrioid tumors. Grade and depth of invasion remain to be independent prognostic factors in endometrial cancer.

Therapy

Surgery remains the primary therapy for endometrial cancer, although adjuvant radiotherapy continues to be used even in early-stage disease. The last several volumes would suggest radiation therapy in early-stage disease (Stage Ia, Ib, G1, 2) does not improve survival. Even in Stage II, its benefit appears minimal at best.

Table 10
Carcinoma of the corpus uteri: Review of the 5-year survival rates reported in Volumes 16–26

Vol.	Year	Patients	Survival (%)
16	1962–68	14506	63.0
17	1969–72	10720	65.4
18	1973–75	11501	66.6
19	1976–78	13581	67.7
20	1979–81	14906	65.1
21	1982–86	19402	69.7
22	1987–89	13040	72.7
23	1990–92	7350	73.4
24	1993–95	6260	76.5
25	1996–98	7496	77.6
26	**1999–2001**	**8110**	**80.0**
Total		**126872**	



Age group	Surgical	Clinical
15–29	18	1
30–39	195	4
40–49	765	14
50–59	2384	51
60–69	2875	91
70–79	1990	121
80+	580	76

Fig. 2. Carcinoma of the corpus uteri: patients treated in 1999–2001. Age distribution by mode of staging.

Table 11
Carcinoma of the corpus uteri: Patients treated in 1999–2001. Distribution of patients by stage/age group/mode of staging.

Age group	Surgical staging		Clinical staging	
	%	No. of patients	%	No. of patients
Stage I				
15–29	91.7	11	8.3	1
30–39	97.2	138	2.8	4
40–49	99.1	532	0.9	5
50–59	98.8	1746	1.2	22
60–69	98.2	2089	1.8	39
70–79	96.1	1365	3.9	55
80+	87.5	379	12.5	54
Stage II				
15–29	100.0	3	–	–
30–39	100.0	27	–	–
40–49	96.9	94	3.1	3
50–59	97.4	260	2.6	7
60–69	97.1	331	2.9	10
70–79	94.0	265	6.0	17
80+	90.1	91	9.9	10
Stage III				
15–29	100.0	4	–	–
30–39	100.0	23	–	–
40–49	96.0	119	4.0	5
50–59	95.4	310	4.6	15
60–69	93.8	365	6.2	24
70–79	89.2	282	10.8	34
80+	93.5	87	6.5	6
Stage IV				
15–29	–	–	–	–
30–39	100.0	7	–	–
40–49	95.2	20	4.8	1
50–59	90.7	68	9.3	7
60–69	83.3	90	16.7	18
70–79	83.9	78	16.1	15
80+	79.3	23	20.7	6

Table 12
Carcinoma of the corpus uteri: Patients treated in 1999–2001. Mean age by myometrial invasion in surgically staged patients

Myometrial invasion	Patients (*n*)	Mean age
Unknown	1079	67.5
M0	1116	58.6
M $\leqslant$ 50%	3814	61.5
M > 50%	2798	64.9
Total	8807	62.9

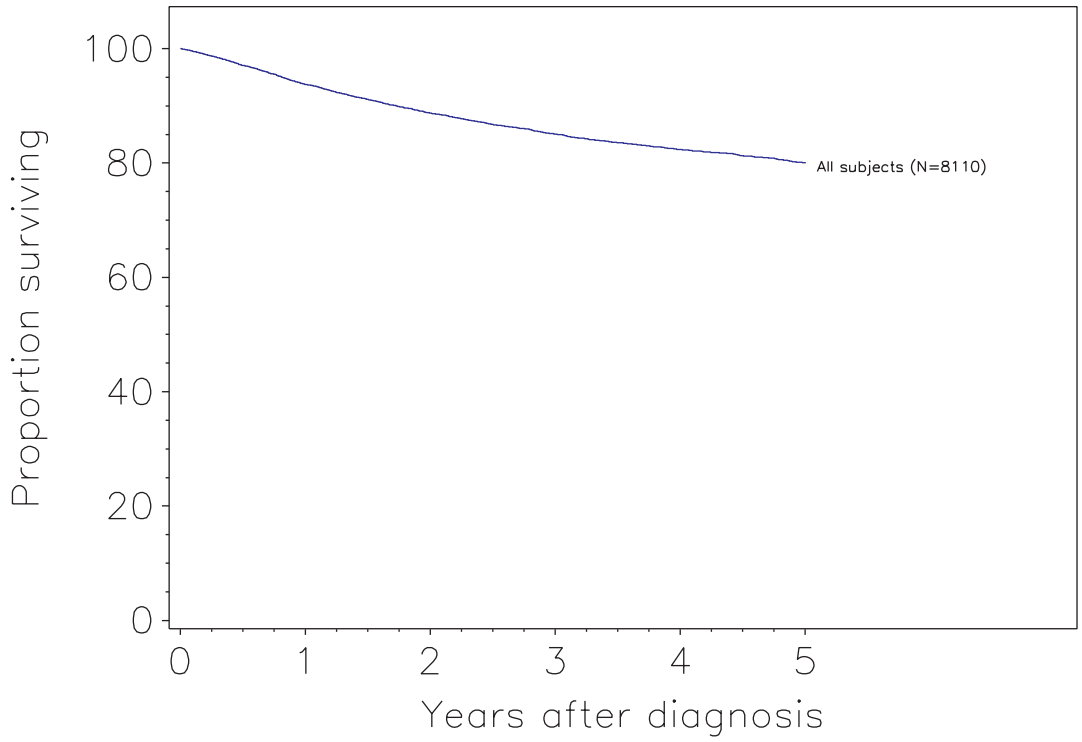
Table 13
Carcinoma of the corpus uteri: Patients treated in 1999–2001. Lymphnodal status[a]

Myometrial invasion	P–A– (%)	P+A– (%)	P–A+ (%)	P+A+ (%)
Unknown	97.42	1.81	0.17	0.60
M0	94.20	3.40	0.60	1.80
M ⩽ 50%	93.88	4.56	0.62	0.94
M > 50%	73.90	18.41	1.56	6.14

[a] P–, P+: negative, positive pelvic nodes;
A–, A+: negative, positive aortic nodes;
M0: no myometrial invasion;
M ⩽ 50%: myometrial invasion ⩽50%;
M > 50%: myometrial invasion >50%.

Table 14
Carcinoma of the corpus uteri: Patients treated in 1999–2001. Lymphnodal status in G1 patients

Myometrial invasion	P–A– (%)	P+A– (%)	P–A+ (%)	P+A+ (%)
M0	98.57	1.08	–	0.36
M ⩽ 50%	97.56	2.14	0.31	–
M > 50%	88.89	8.89	0.37	1.85



	Patients (*n*)	Mean age (yrs)	Overall survival (%) at				
			1 year	2 years	3 years	4 years	5 years
All subjects	8110	63.1	93.8	88.7	85.1	82.3	80.0

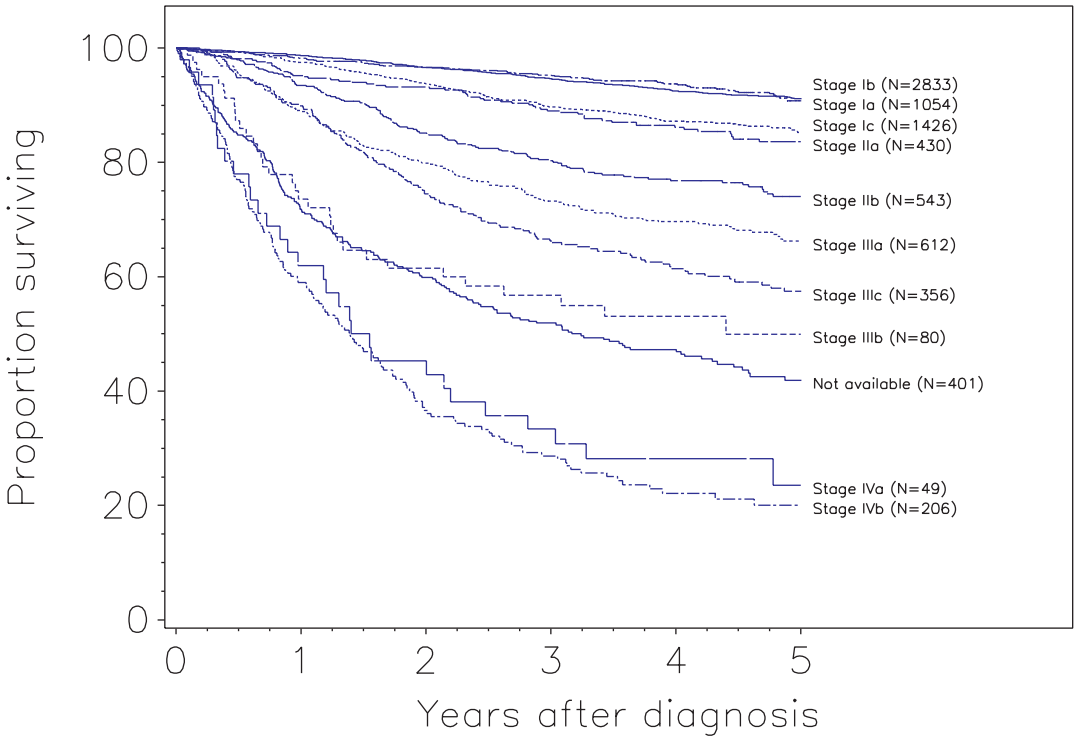
Fig. 3. Carcinoma of the corpus uteri: patients treated in 1999–2001. Overall survival, $n = 8110$.

Table 15
Carcinoma of the corpus uteri: Patients treated in 1999–2001. Lymphnodal status in G2 patients

Myometrial invasion	P–A– (%)	P+A– (%)	P–A+ (%)	P+A+ (%)
M0	91.20	6.40	1.60	0.80
M ⩽ 50%	93.61	4.63	0.32	1.44
M > 50%	78.15	15.97	0.84	5.04

Table 16
Carcinoma of the corpus uteri: Patients treated in 1999–2001. Lymphnodal status in G3 patients

Myometrial invasion	P–A– (%)	P+A– (%)	P–A+ (%)	P+A+ (%)
M0	83.93	10.71	–	5.36
M ⩽ 50%	87.89	7.81	2.34	1.95
M > 50%	59.89	27.51	2.87	9.74



Stage	Patients (*n*)	Mean age (yrs)	Overall survival (%) at					Hazards ratio[a] (95% CI)
			1 year	2 years	3 years	4 years	5 years	
Ia	1054	59.0	98.2	96.6	95.3	93.7	90.8	Reference
Ib	2833	62.1	98.7	96.6	94.6	92.5	91.1	0.9 (0.7–1.2)
Ic	1426	66.2	97.5	93.7	89.7	87.2	85.4	1.4 (1.1–1.8)
IIa	430	63.8	95.2	93.2	89.0	86.0	83.3	1.8 (1.3–2.5)
IIb	543	63.8	93.5	85.3	80.3	76.7	74.2	2.8 (2.1–3.7)
IIIa	612	63.0	89.0	79.9	73.3	69.4	66.2	4.4 (3.4–5.8)
IIIb	80	67.0	73.5	61.6	56.7	52.7	49.9	7.3 (4.8–10.9)
IIIc	356	61.6	89.9	74.5	66.3	61.5	57.3	6.2 (4.7–8.2)
IVa	49	64.5	63.4	46.7	34.4	29.1	25.5	14.0 (9.2–21.2)
IVb	206	63.9	59.5	37.0	29.0	22.3	20.1	16.1 (12.2–21.3)

[a] Hazards ratio and 95% CI obtained from a Cox model adjusted for age, stage and country

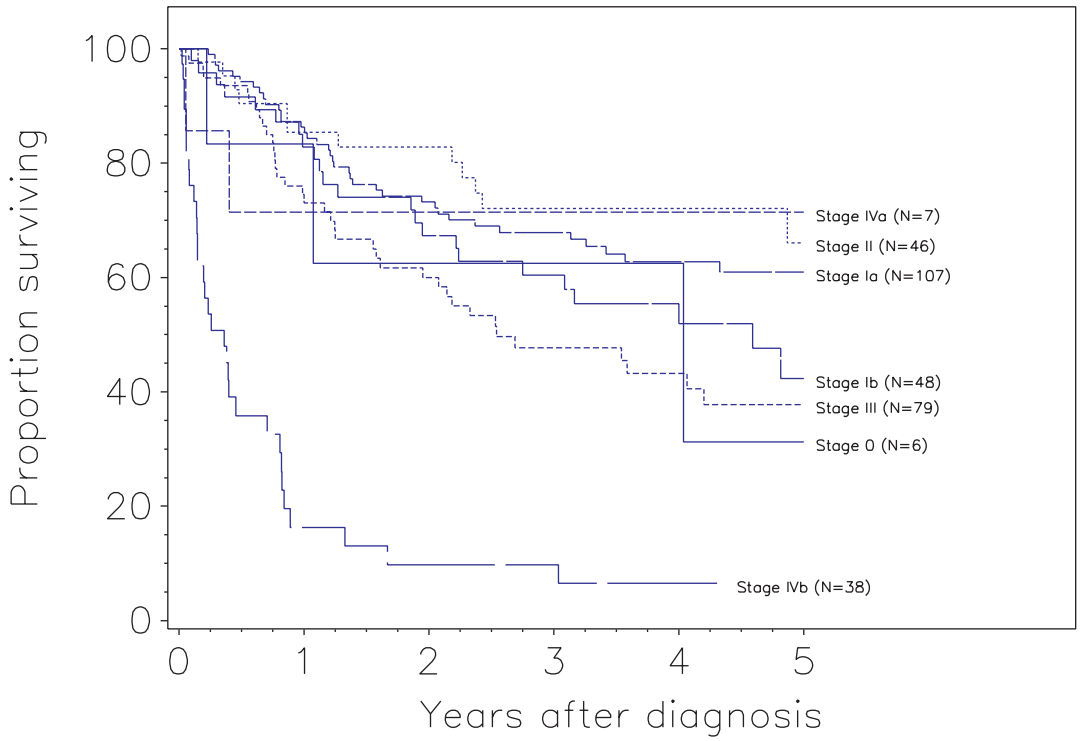
Fig. 4. Carcinoma of the corpus uteri: patients treated in 1999–2001. Survival by FIGO surgical stage, $n = 7990$.

Table 17
Carcinoma of the corpus uteri: Patients treated in 1999–2001. Percentage of *positive pelvic nodes* by grade and myometrial invasion (with both positive and negative aortic nodes)

Myometrial invasion	G1 (%)	G2 (%)	G3 (%)
M0	1.43	7.20	16.07
M ⩽ 50%	2.14	6.07	9.77
M > 50%	10.74	21.01	37.25

Table 18
Carcinoma of the corpus uteri: Patients treated in 1999–2001. Percentage of *positive aortic nodes* by grade and myometrial invasion (with both positive and negative pelvic nodes)

Myometrial invasion	G1 (%)	G2 (%)	G3 (%)
M0	0.36	2.40	5.36
M ⩽ 50%	0.31	1.76	4.30
M > 50%	2.22	5.88	12.61



Stage	Patients (*n*)	Mean age (yrs)	Overall survival (%) at					Hazards ratio[a] (95% CI)
			1 year	2 years	3 years	4 years	5 years	
0	6	70.8	81.8	58.4	58.4	58.4	29.2	3.6 (0.8–16.4)
Ia	107	69.8	86.5	73.2	67.6	62.2	60.3	Reference
Ib	48	74.1	83.0	67.5	60.4	54.6	42.5	1.2 (0.6–2.1)
II	46	70.1	86.0	83.5	72.5	72.5	67.7	0.7 (0.4–1.4)
III	79	67.6	75.3	60.9	48.2	43.7	37.7	2.9 (1.7–4.9)
IVa	7	61.7	66.7	66.7	66.7	66.7	66.7	1.7 (0.3–8.5)
IVb	38	69.7	19.4	11.7	11.7	7.0	–	11.3 (6.4–20.0)

[a] Hazards ratio and 95% CI obtained from a Cox model adjusted for age, stage and country

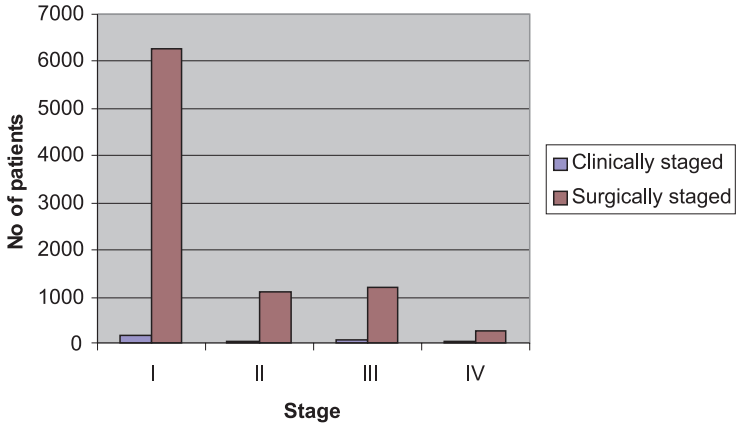
Fig. 5. Carcinoma of the corpus uteri: patients treated in 1999–2001. Survival by clinical stage, $n = 331$.

Table 19
Carcinoma of the corpus uteri: Patients treated in 1999–2001. Mean age by stage and mode of staging

Staging	Stage	Patients (*n*)	Mean age (yrs)
Missing		221	64.5
Surgical	I	6260	62.7
	II	1071	63.8
	III	1190	63.0
	IV	286	64.3
Clinical	0	8	67.9
	I	172	71.7
	II	47	70.1
	III	84	67.8
	IV	47	68.5

Table 20
Carcinoma of the corpus uteri: Patients treated in 1999–2001. Mean age by grade of differentiation and mode of staging

	Grade	Patients (*n*)	Mean age (yrs)
Surgical	Gx	446	62.9
	G1	3291	61.1
	G2	3433	63.6
	G3	1637	65.2
	Total	8807	62.9
Clinical	Gx	79	68.9
	G1	85	69.6
	G2	106	70.9
	G3	88	70.6
	Total	358	70.1



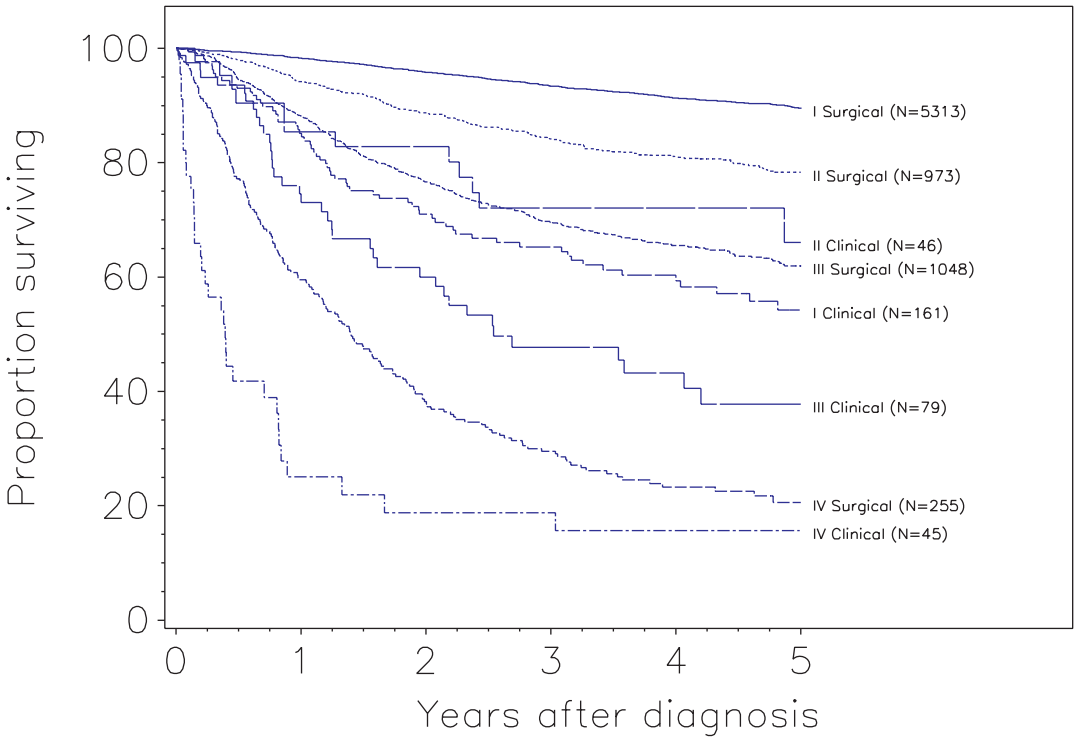
Staging	Stage I[a]		Stage II		Stage III		Stage IV		Missing data	Total	
	n	%	*n*	%	*n*	%	*n*	%		*n*	%
Clinically staged	180	50.3	47	13.1	84	23.5	47	13.1	–	358	100.0
Surgically staged	6260	71.0	1071	12.2	1190	13.5	286	3.2	–	8807	100.0
Missing data	–	–	–	–	–	–	–	–	221	221	–
Total	6440		1118		1274		333		221	9386	100.0

[a] Includes 8 stage 0 patients.

Fig. 6. Carcinoma of the corpus uteri: patients treated in 1999–2001. Distribution of patients by stage and mode of staging (clinical and surgical).

Table 21
Carcinoma of the corpus uteri: Patients treated in 1999–2001. Distribution of patients by stage and grade of differentiation in surgically staged patients

Grade	Stage Ia		Stage Ib		Stage Ic		Stage IIa		Stage IIb		Stage IIIa		Stage IIIb		Stage IIIc		Stage IVa		Stage IVb	
	n	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%
Gx	77	6.1	98	2.9	70	4.3	17	3.5	41	6.9	51	7.4	9	9.9	42	10.3	9	16.4	32	13.9
G1	760	60.1	1488	44.4	492	29.9	157	32.7	136	23.0	165	23.8	12	13.2	48	11.8	9	16.4	24	10.4
G2	306	24.2	1372	41.0	758	46.1	223	46.5	262	44.3	273	39.4	32	35.2	145	35.7	17	30.9	45	19.5
G3	121	9.6	392	11.7	326	19.8	83	17.3	152	25.7	204	29.4	38	41.8	171	42.1	20	36.4	130	56.3



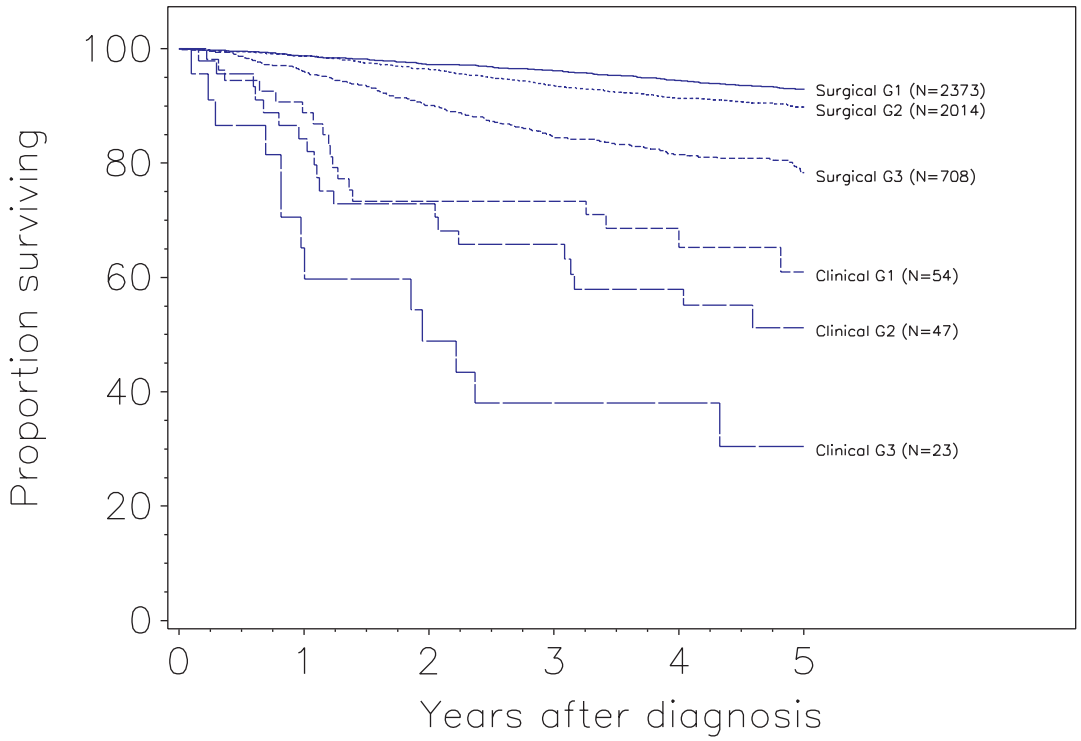
Stage	Patients (*n*)	Mean age (yrs)	Overall survival (%) at					Hazards ratio[a] (95% CI)
			1 year	2 years	3 years	4 years	5 years	
I Surgical	5313	62.6	98.3	95.8	93.4	91.3	89.6	Reference
II Surgical	973	63.8	94.3	88.8	84.2	80.8	78.3	2.2 (1.9–2.6)
III Surgical	1048	62.8	88.2	76.7	69.6	65.4	61.9	4.9 (4.2–5.6)
IV Surgical	255	64.0	60.2	38.8	30.0	23.6	21.1	15.0 (12.5–17.9)
I Clinical	161	71.1	85.3	71.0	65.1	59.8	53.5	4.0 (3.0–5.2)
II Clinical	46	70.1	86.0	83.5	72.5	72.5	67.7	3.0 (1.7–5.3)
III Clinical	79	67.6	75.3	60.9	48.2	43.7	37.7	9.8 (6.9–13.8)
IV Clinical	45	68.4	26.2	19.6	19.6	15.3	15.3	39.4 (27.4–56.8)

[a] Hazards ratio and 95% CI obtained from a Cox model adjusted for age, stage and country

Fig. 7. Carcinoma of the corpus uteri: patients treated in 1999–2001. Survival by mode of staging, $n = 7920$.

Table 22
Carcinoma of the corpus uteri: Patients treated in 1999–2001. Mean age by stage and grade of differentiation in surgically staged patients

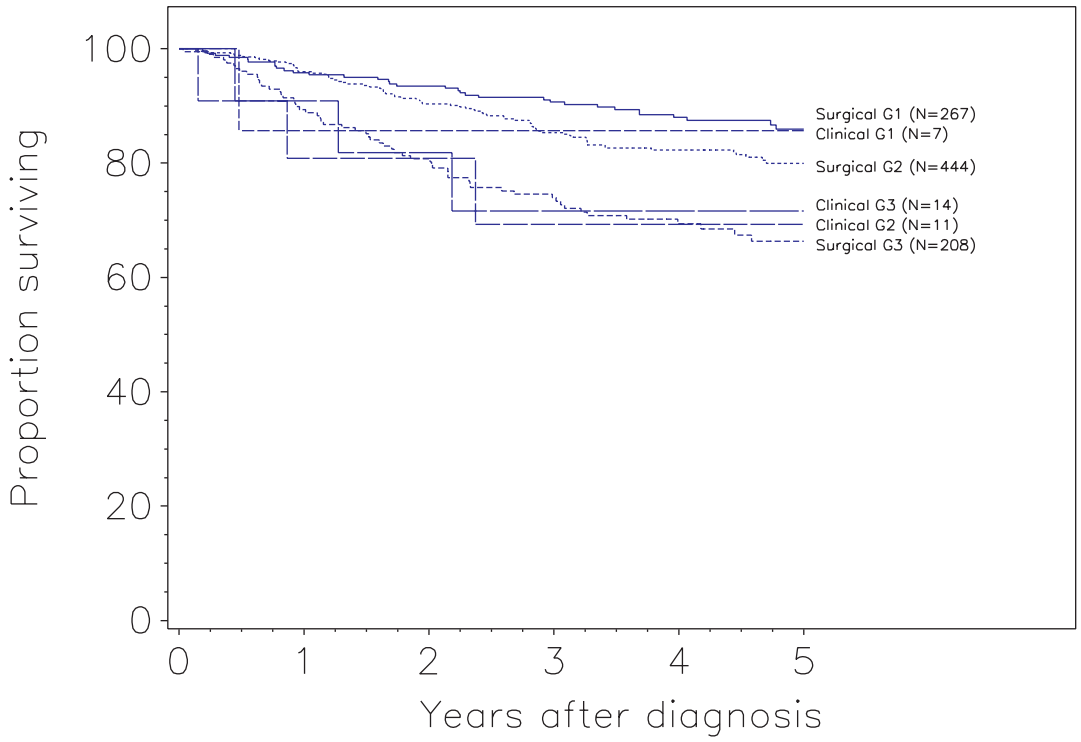
Grade	Stage Ia	Stage Ib	Stage Ic	Stage IIa	Stage IIb	Stage IIIa	Stage IIIb	Stage IIIc	Stage IVa	Stage IVb
Gx	59.1	62.5	64.7	62.5	64.9	65.9	61.7	62.1	59.1	65.4
G1	57.5	61.5	65.8	59.9	63.7	59.8	64.7	59.0	70.1	59.5
G2	61.3	62.5	66.8	64.5	63.8	62.6	67.2	60.4	65.1	66.8
G3	65.7	64.1	66.2	69.3	63.7	66.5	68.8	63.3	64.5	63.9



Stage	Patients (*n*)	Mean age (yrs)	Overall survival (%) at					Hazards ratio[a] (95% CI)
			1 year	2 years	3 years	4 years	5 years	
Surgical G1	2373	61.1	98.8	97.3	96.2	94.4	92.9	Reference
Surgical G2	2014	63.6	98.7	96.4	93.6	91.2	89.9	1.4 (1.1–1.7)
Surgical G3	708	64.9	96.1	90.1	84.6	81.5	78.9	2.8 (2.2–3.6)
Clinical G1	54	70.4	88.8	73.2	73.2	67.8	59.8	3.0 (1.7–5.1)
Clinical G2	47	71.6	84.6	73.0	65.6	57.6	50.4	6.2 (3.7–10.6)
Clinical G3	23	72.5	66.7	50.0	38.9	38.9	29.2	11.4 (6.1–21.4)

[a] Hazards ratio and 95% CI obtained from a Cox model adjusted for age, stage and country

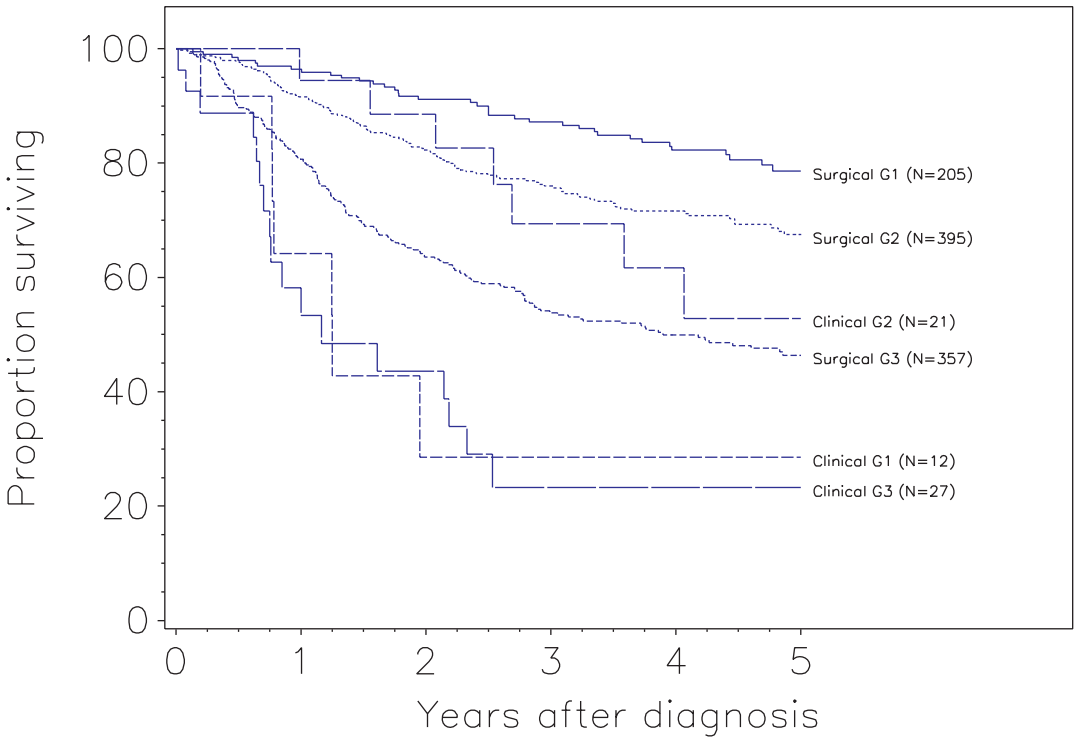
Fig. 8. Carcinoma of the corpus uteri: patients treated in 1999–2001. Survival in Stage I patients by grade of differentiation and mode of staging, $n = 5219$.



Grade	Patients (*n*)	Mean age (yrs)	Overall survival (%) at					Hazards ratio[a] (95% CI)
			1 year	2 years	3 years	4 years	5 years	
Surgical G1	267	61.5	95.8	93.5	90.7	87.9	86.0	Reference
Surgical G2	444	64.2	96.0	90.4	85.4	82.1	80.0	1.3 (0.9–2.0)
Surgical G3	208	65.6	89.5	80.9	73.9	69.1	66.0	2.3 (1.4–3.5)
Clinical G1	7	67.9	85.7	85.7	85.7	85.7	85.7	1.2 (0.2–9.1)
Clinical G2	11	72.6	81.0	81.0	68.5	68.5	68.5	2.8 (0.8–10.2)
Clinical G3	14	73.3	92.0	82.8	72.5	72.5	72.5	2.7 (0.8–9.5)

[a] Hazards ratio and 95% CI obtained from a Cox model adjusted for age, stage and country

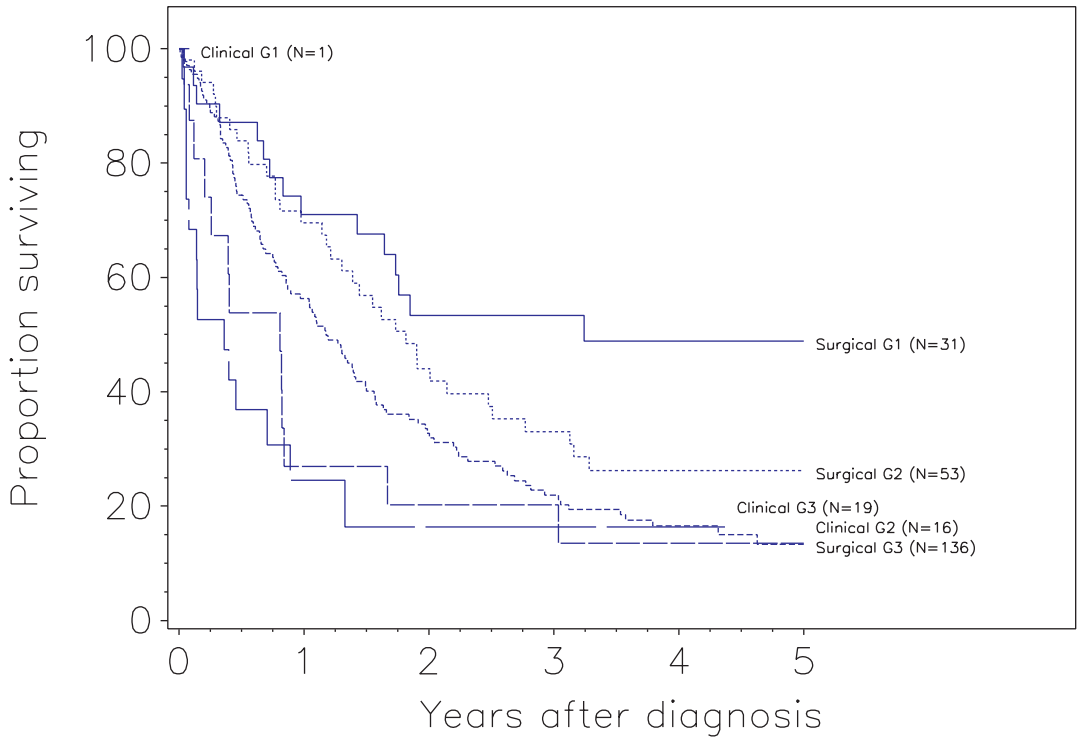
Fig. 9. Carcinoma of the corpus uteri: patients treated in 1999–2001. Survival in Stage II patients by grade of differentiation and mode of staging, $n = 951$.



Grade	Patients (*n*)	Mean age (yrs)	Overall survival (%) at					Hazards ratio[a] (95% CI)
			1 year	2 years	3 years	4 years	5 years	
Surgical G1	205	59.3	96.5	91.2	87.3	82.2	78.6	Reference
Surgical G2	395	62.1	91.6	82.2	75.9	71.3	67.3	1.7 (1.2–2.5)
Surgical G3	357	65.4	80.6	63.6	53.9	50.1	46.4	3.2 (2.2–4.6)
Clinical G1	12	67.2	65.2	32.6	32.6	32.6	32.6	7.3 (3.2–16.5)
Clinical G2	21	66.6	94.9	89.1	69.3	61.2	50.0	3.3 (1.4–7.8)
Clinical G3	27	67.1	59.2	44.4	23.5	23.5	23.5	7.2 (3.8–13.6)

[a] Hazards ratio and 95% CI obtained from a Cox model adjusted for age, stage and country

Fig. 10. Carcinoma of the corpus uteri: patients treated in 1999–2001. Survival in Stage III patients by grade of differentiation and mode of staging, $n = 1017$.



Grade	Patients (*n*)	Mean age (yrs)	Overall survival (%) at					Hazards ratio[a] (95% CI)
			1 year	2 years	3 years	4 years	5 years	
Surgical G1	31	61.8	71.0	54.1	54.1	49.2	49.2	Reference
Surgical G2	53	65.5	70.6	44.9	33.7	26.5	26.5	1.4 (0.7–2.6)
Surgical G3	136	64.1	56.7	33.0	22.1	16.5	13.4	2.3 (1.3–4.2)
Clinical G1	1	82.0	–	–	–	–	–	–
Clinical G2	16	67.6	29.0	21.8	21.8	13.1	13.1	4.1 (1.6–10.6)
Clinical G3	19	70.1	22.2	14.8	14.8	14.8	–	5.7 (2.1–15.2)

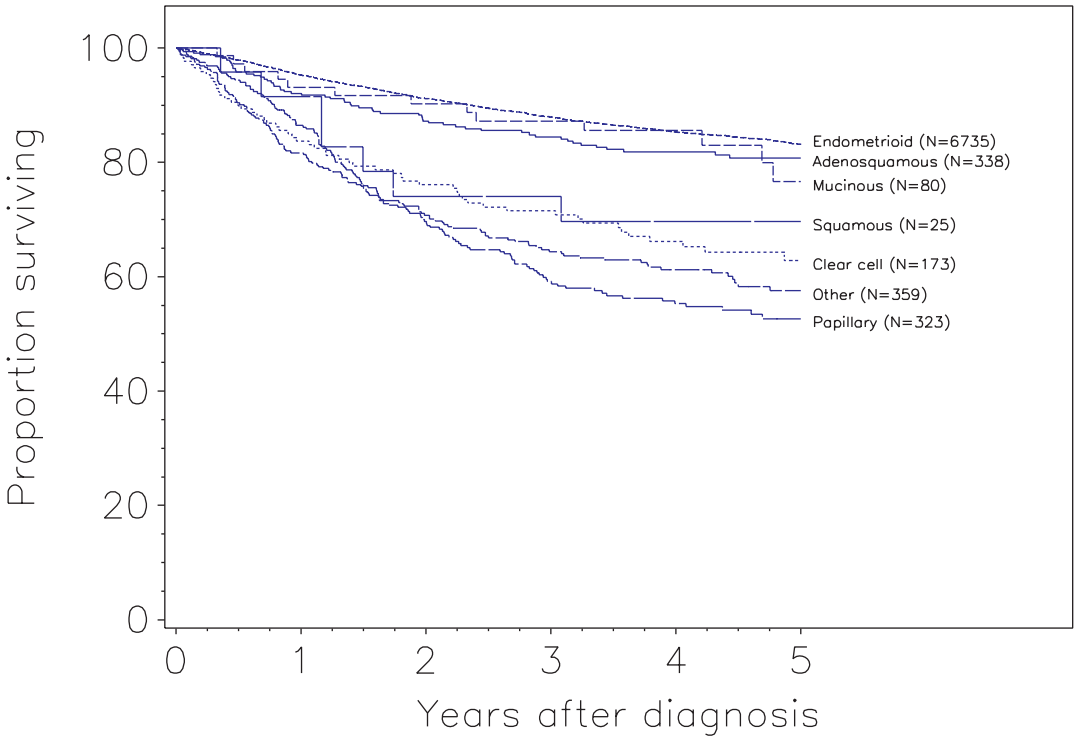
[a] Hazards ratio and 95% CI obtained from a Cox model adjusted for age, stage and country

Fig. 11. Carcinoma of the corpus uteri: patients treated in 1999–2001. Survival in Stage IV patients by grade of differentiation and mode of staging, $n = 256$.

Table 23
Carcinoma of the corpus uteri: Patients treated in 1999–2001. Percentage of histopathological type in early and advanced stages in surgically staged patients

Histotype	Stage I–II[a]			Stage III–IV[a]		
	n	% in Stage	% in Histo	*n*	% in Stage	% in Histo
Endometrioid	6312	86.50	86.1	1021	70.12	13.9
Adenosquamous	375	5.14	78.1	105	7.21	21.9
Mucinous	60	0.82	69.0	27	1.85	31.0
Papillary	203	2.78	58.7	143	9.82	41.3
Clear cell	118	1.62	67.0	58	3.98	33.0
Squamous	19	0.26	76.0	6	0.41	24.0
Other	210	2.88	68.6	96	6.59	31.4

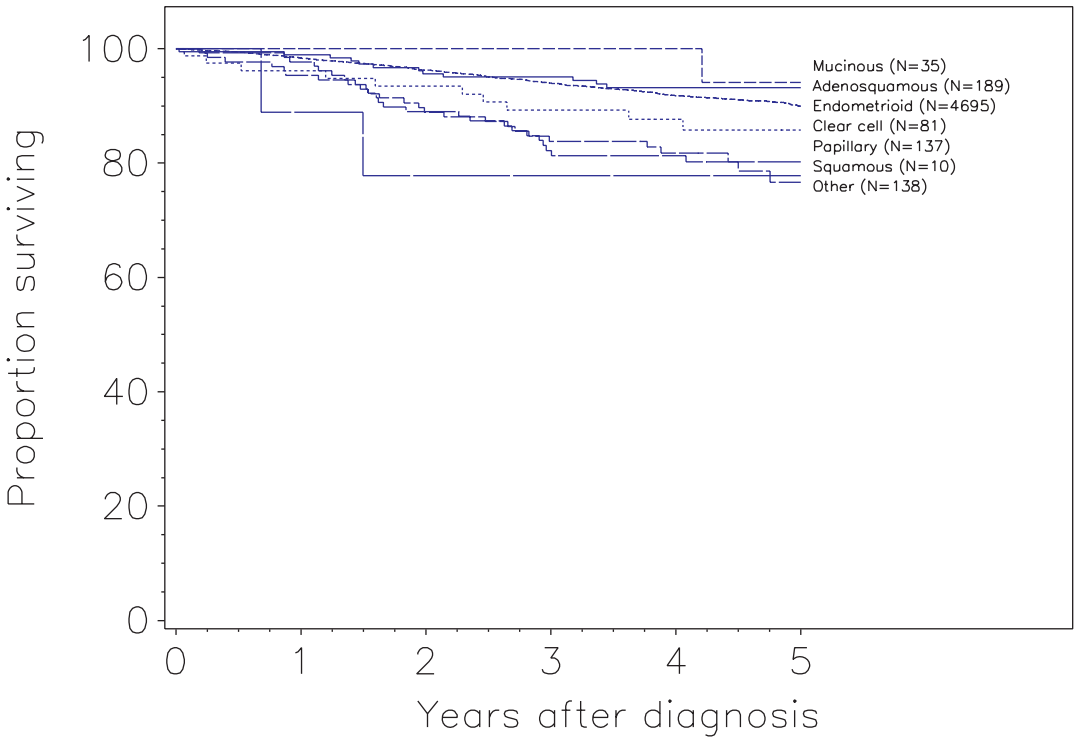
[a] % in Stage: percentage within the same stage group; % in Histo: percentage within the same histological type.



Histotype	Patients (*n*)	Mean age (yrs)	Overall survival (%) at					Hazards ratio[a] (95% CI)
			1 year	2 years	3 years	4 years	5 years	
Endometrioid	6735	62.8	95.3	91.2	87.9	85.3	83.2	Reference
Adenosquamous	338	62.5	92.1	87.3	84.5	81.7	80.6	1.1 (0.8–1.4)
Mucinous	80	62.3	93.3	90.4	87.4	85.6	77.0	0.7 (0.4–1.3)
Papillary	323	68.3	86.5	69.8	59.1	55.2	52.6	1.8 (1.5–2.2)
Clear cell	173	66.3	83.7	76.1	71.4	65.9	62.5	1.8 (1.3–2.3)
Squamous	25	64.3	91.7	74.2	74.2	68.9	68.9	1.0 (0.5–2.1)
Other	359	64.3	82.0	70.9	64.5	61.3	57.7	1.8 (1.4–2.1)

[a] Hazards ratio and 95% CI obtained from a Cox model adjusted for age, stage and country

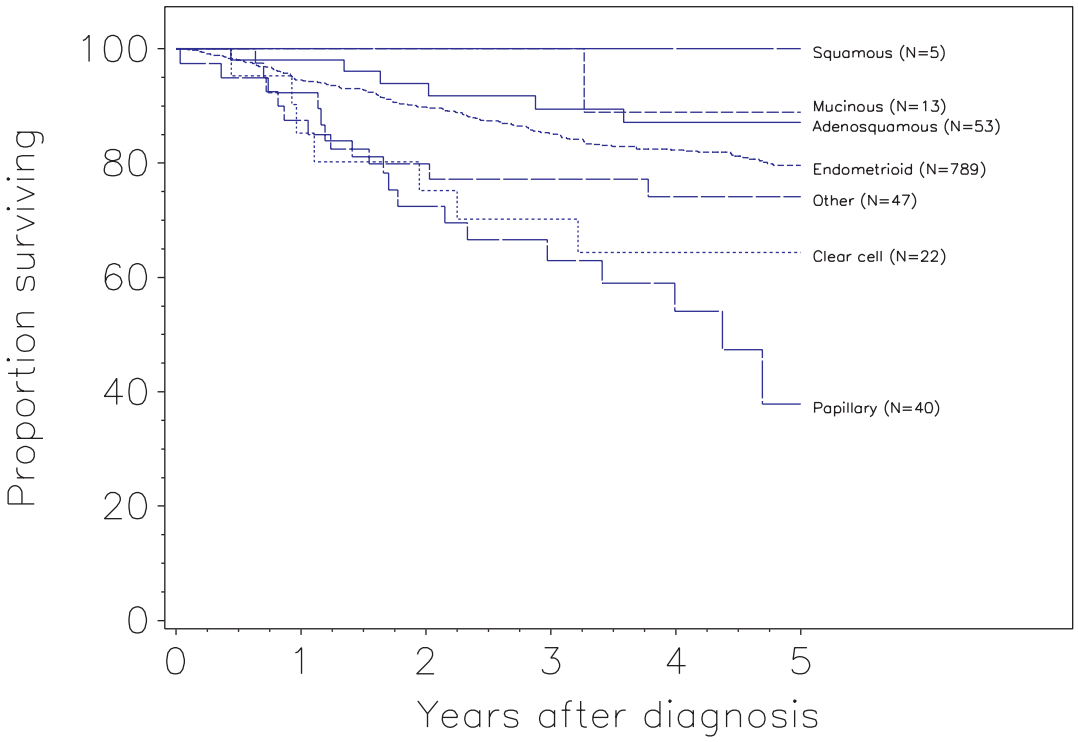
Fig. 12. Carcinoma of the corpus uteri: patients treated in 1999–2001. Survival by histological type in surgically staged patients, $n = 8033$.



Histotype	Patients (*n*)	Mean age (yrs)	Overall survival (%) at					Hazards ratio[a] (95% CI)
			1 year	2 years	3 years	4 years	5 years	
Endometrioid	4695	62.4	98.4	96.3	94.0	91.8	90.1	Reference
Adenosquamous	189	62.7	98.9	95.6	95.0	93.1	93.1	0.8 (0.5–1.4)
Mucinous	35	60.0	100.0	100.0	100.0	100.0	93.3	0.4 (0.1–2.9)
Papillary	137	67.9	97.7	89.0	82.3	81.4	79.9	2.0 (1.3–3.0)
Clear cell	81	66.4	96.1	93.4	89.1	87.5	85.1	1.1 (0.6–2.0)
Squamous	10	66.4	89.5	78.3	78.3	78.3	78.3	2.3 (0.6–9.5)
Other	138	62.8	95.5	89.1	84.0	82.0	77.3	2.3 (1.5–3.5)

[a] Hazards ratio and 95% CI obtained from a Cox model adjusted for age, stage and country

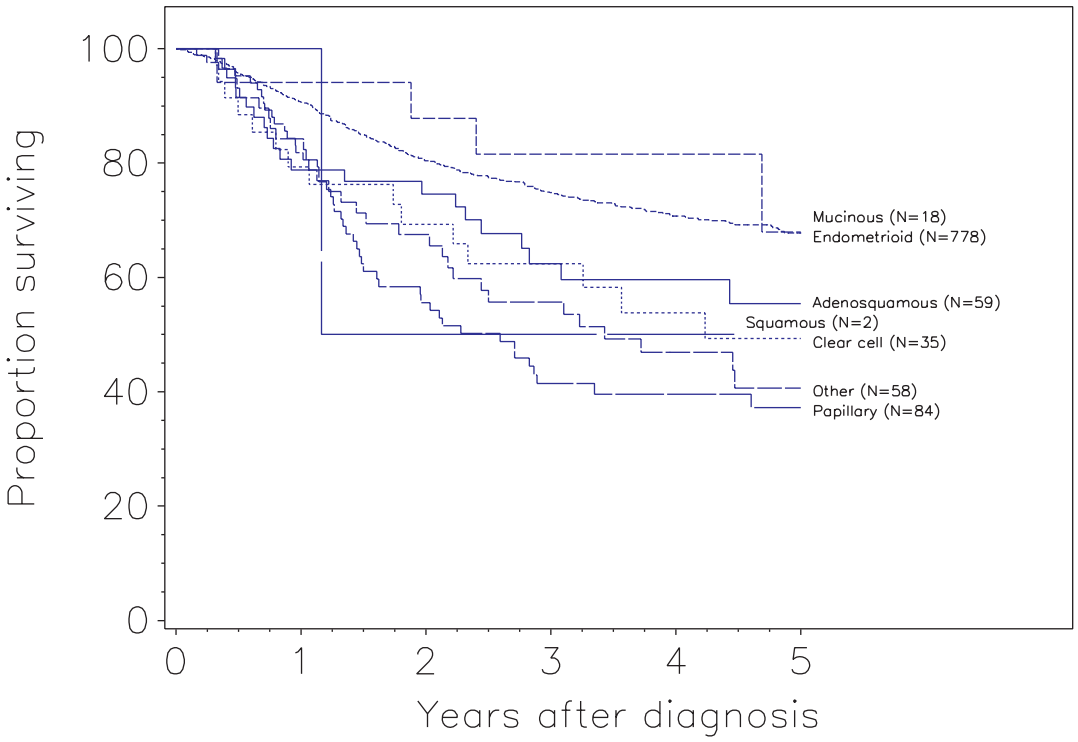
Fig. 13. Carcinoma of the corpus uteri: patients treated in 1999–2001. Survival in FIGO Stage I patients by histological type, $n = 5285$.



Histotype	Patients (*n*)	Mean age (yrs)	Overall survival (%) at					Hazards ratio[a] (95% CI)
			1 year	2 years	3 years	4 years	5 years	
Endometrioid	789	63.7	94.6	89.8	85.2	82.1	79.5	Reference
Adenosquamous	53	61.0	98.1	93.9	89.5	86.9	86.9	0.8 (0.4–2.0)
Mucinous	13	65.5	100.0	100.0	100.0	88.9	88.9	0.5 (0.1–3.6)
Papillary	40	69.3	92.0	72.2	62.6	54.2	40.7	3.3 (1.9–5.6)
Clear cell	22	66.1	85.4	75.3	70.1	63.4	63.4	2.7 (1.2–5.8)
Squamous	5	58.8	100.0	100.0	100.0	100.0	100.0	–
Other	47	63.5	88.4	80.6	77.7	74.7	74.7	1.6 (0.8–3.1)

[a] Hazards ratio and 95% CI obtained from a Cox model adjusted for age, stage and country

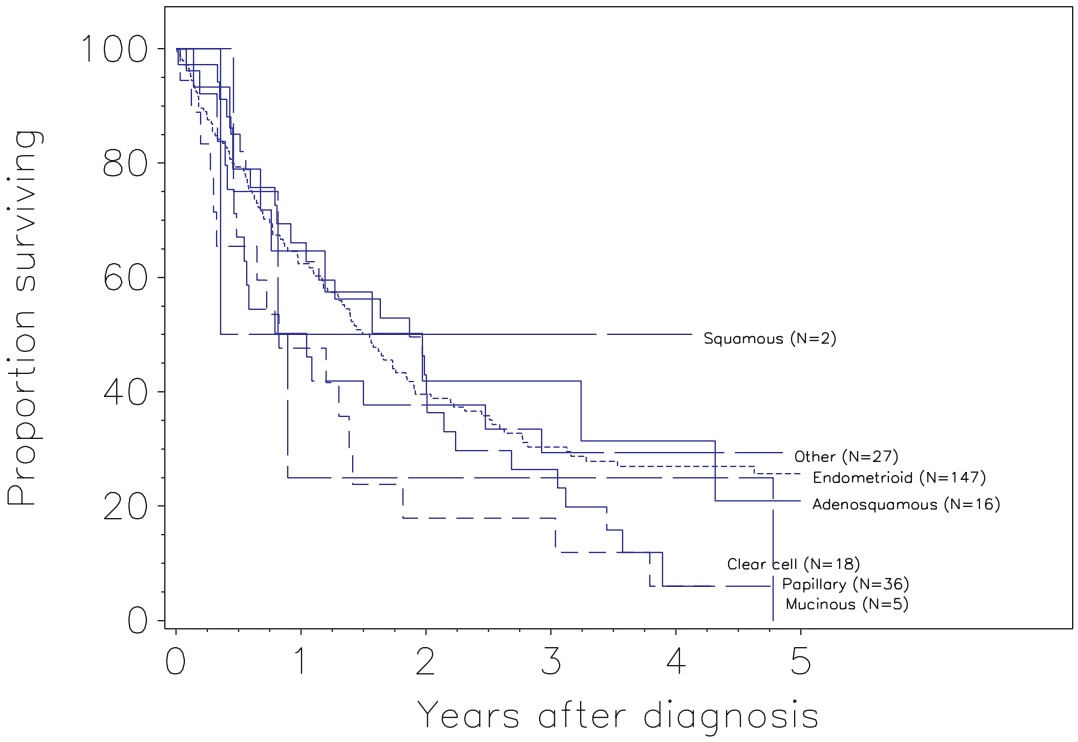
Fig. 14. Carcinoma of the corpus uteri: patients treated in 1999–2001. Survival in FIGO Stage II patients by histological type, $n = 969$.



Histotype	Patients (*n*)	Mean age (yrs)	Overall survival (%) at					Hazards ratio[a] (95% CI)
			1 year	2 years	3 years	4 years	5 years	
Endometrioid	778	61.9	90.7	80.5	74.9	70.7	67.7	Reference
Adenosquamous	59	61.6	78.6	74.5	62.5	59.4	55.2	1.6 (1.0–2.5)
Mucinous	18	59.4	94.3	88.2	81.9	81.9	69.3	0.6 (0.2–1.8)
Papillary	84	67.9	81.8	56.0	41.7	40.0	37.7	1.9 (1.4–2.6)
Clear cell	35	64.1	79.4	69.7	62.2	53.6	48.5	1.8 (1.0–3.2)
Squamous	2	82.0	100.0	50.0	50.0	50.0	–	0.5 (0.1–3.8)
Other	58	67.8	84.1	67.3	55.2	46.0	38.9	1.5 (1.0–2.3)

[a] Hazards ratio and 95% CI obtained from a Cox model adjusted for age, stage and country

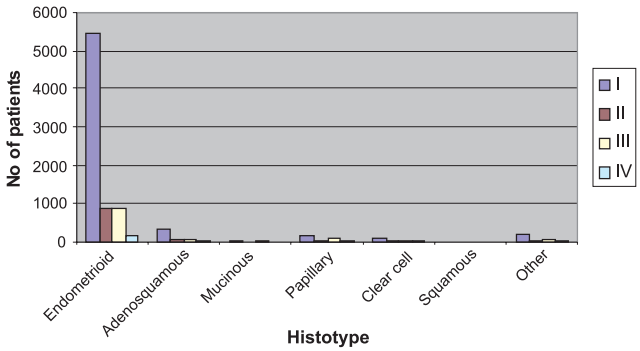
Fig. 15. Carcinoma of the corpus uteri: patients treated in 1999–2001. Survival in FIGO Stage III patients by histological type, $n = 1034$.



Histotype	Patients (*n*)	Mean age (yrs)	Overall survival (%) at					Hazards ratio[a] (95% CI)
			1 year	2 years	3 years	4 years	5 years	
Endometrioid	147	63.7	62.6	40.1	30.7	27.1	25.8	Reference
Adenosquamous	16	56.1	66.7	43.1	43.1	32.4	19.4	1.0 (0.5–2.0)
Mucinous	5	62.2	33.3	33.3	33.3	33.3	–	0.6 (0.1–2.8)
Papillary	36	66.8	67.2	43.7	26.9	7.7	–	1.2 (0.7–1.8)
Clear cell	18	65.8	48.6	18.2	18.2	6.1	–	1.6 (0.9–2.9)
Squamous	2	52.5	50.0	50.0	50.0	50.0	–	0.7 (0.1–5.1)
Other	27	65.4	52.9	39.7	30.9	30.9	–	1.3 (0.7–2.4)

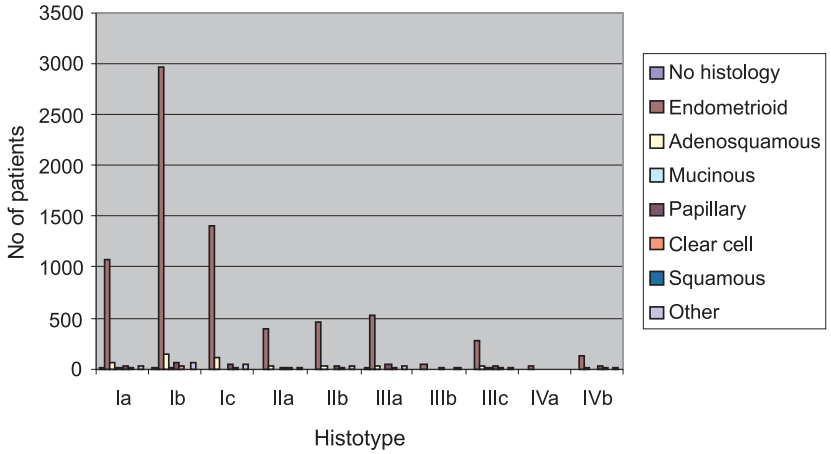
[a] Hazards ratio and 95% CI obtained from a Cox model adjusted for age, stage and country

Fig. 16. Carcinoma of the corpus uteri: patients treated in 1999–2001. Survival in FIGO Stage IV patients by histological type, $n = 251$.



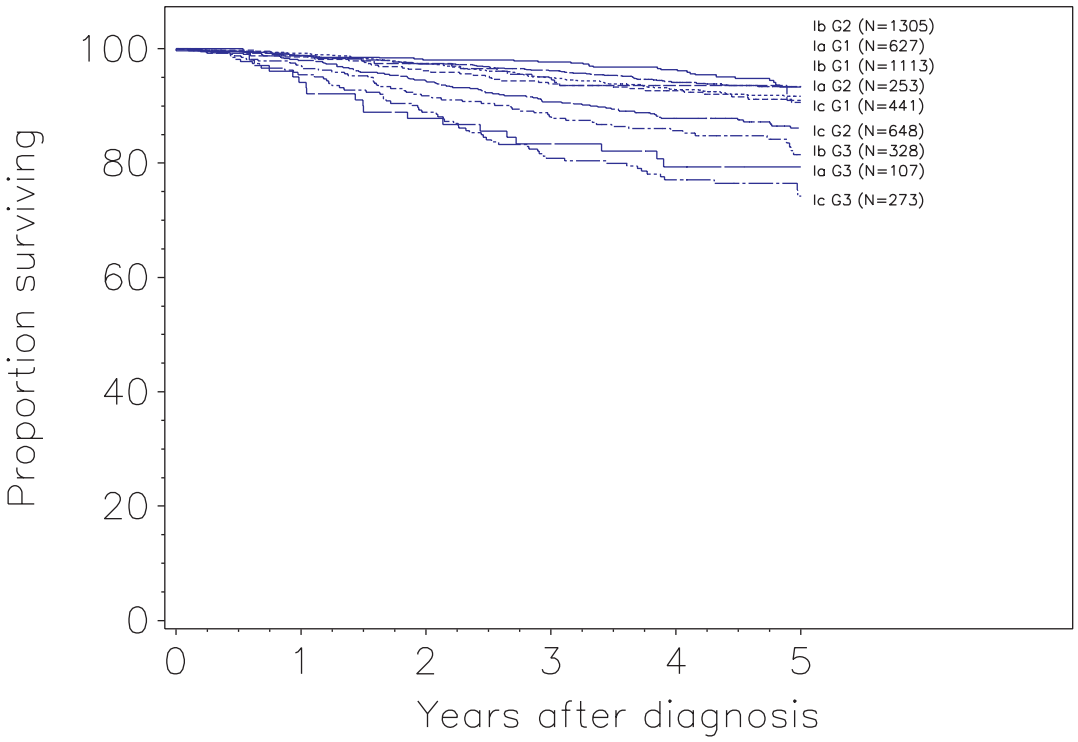
Histotype	Stage			
	I	II	III	IV
Endometrioid	5450	862	860	161
Adenosquamous	312	63	83	22
Mucinous	45	15	20	7
Papillary	157	46	102	41
Clear cell	91	27	39	19
Squamous	13	6	3	3
Other	163	47	67	29

Fig. 17. Carcinoma of the corpus uteri: patients treated in 1999–2001. Surgical stage distribution by histopathological type.



Histotype	Stage Ia	Stage Ib	Stage Ic	Stage IIa	Stage IIb	Stage IIIa	Stage IIIb	Stage IIIc	Stage IVa	Stage IVb	Total
No histology	11	14	4	3	2	10	3	3	1	3	54
Endometrioid	1075	2968	1407	396	466	522	59	279	30	131	7333
Adenosquamous	62	150	100	31	32	44	5	34	4	18	480
Mucinous	17	22	6	7	8	6	2	12	4	3	87
Papillary	37	72	48	16	30	55	10	37	3	38	346
Clear cell	25	43	23	11	16	17	1	21	8	11	176
Squamous	4	5	4	3	3	2	1	–	–	3	25
Other	33	76	54	13	34	37	10	20	5	24	306

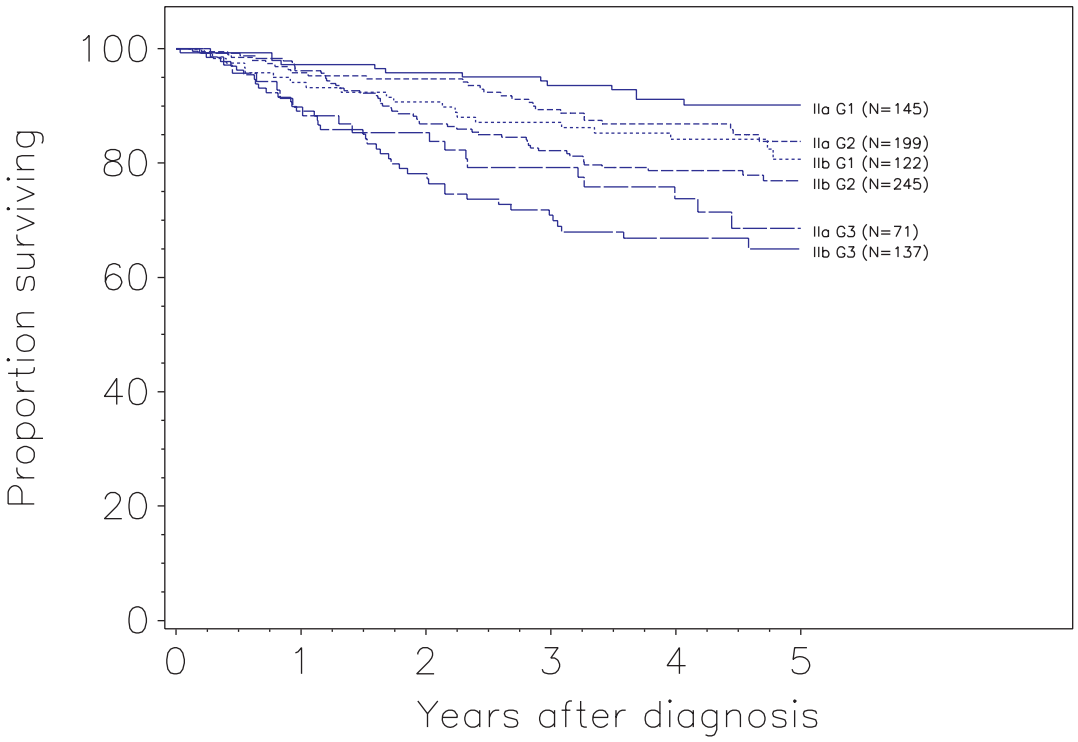
Fig. 18. Carcinoma of the corpus uteri: patients treated in 1999–2001. Distribution of patients by histopathological type and surgical stage.



Stage/grade	Patients (*n*)	Mean age (yrs)	Overall survival (%) at					Hazards ratio[a] (95% CI)
			1 year	2 years	3 years	4 years	5 years	
Ia G1	627	57.1	98.9	98.0	97.7	96.3	93.4	Reference
Ib G1	1113	62.4	99.2	97.4	94.9	92.8	91.6	1.3 (0.7–2.3)
Ic G1	441	65.8	98.6	96.2	93.9	92.7	90.6	3.3 (1.9–5.9)
Ia G2	253	60.6	98.8	97.4	95.0	93.3	91.3	1.2 (0.8–1.8)
Ib G2	1305	61.4	98.8	97.3	96.2	94.0	93.4	1.0 (0.7–1.5)
Ic G2	648	66.7	98.0	94.4	90.7	87.7	86.3	2.3 (1.5–3.6)
Ia G3	107	65.9	94.2	88.0	83.5	79.5	79.5	1.0 (0.6–1.7)
Ib G3	328	63.9	97.2	91.8	88.1	85.6	82.0	1.7 (1.1–2.5)
Ic G3	273	65.7	95.5	88.9	80.8	77.1	74.9	3.6 (2.4–5.6)

[a] Hazards ratio and 95% CI obtained from a Cox model adjusted for age, stage and country

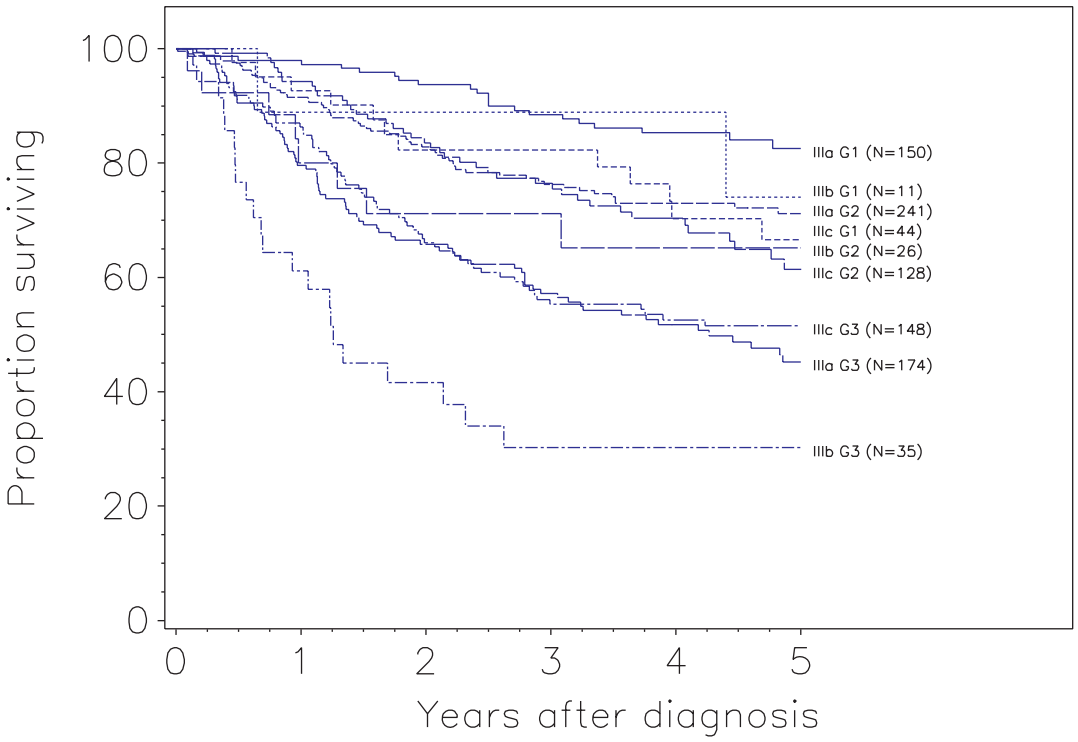
Fig. 19. Carcinoma of the corpus uteri: patients treated in 1999–2001. Survival in Stage I patients by surgical stage and grade of differentiation, $n = 5095$.



Stage/grade	Patients (*n*)	Mean age (yrs)	Overall survival (%) at					Hazards ratio[a] (95% CI)
			1 year	2 years	3 years	4 years	5 years	
IIa G1	145	60.5	97.2	95.8	93.6	91.1	89.9	Reference
IIb G1	122	62.8	94.1	90.7	87.1	84.1	81.2	1.3 (0.7–2.6)
IIa G2	199	64.0	95.9	94.7	89.4	86.7	83.7	2.1 (1.0–4.3)
IIb G2	245	64.3	96.2	86.9	82.2	78.5	76.9	1.5 (0.7–2.9)
IIa G3	71	69.8	89.9	85.4	79.1	73.6	68.3	2.0 (1.1–3.5)
IIb G3	137	63.5	89.3	78.4	71.0	66.5	64.9	3.5 (1.9–6.6)

[a] Hazards ratio and 95% CI obtained from a Cox model adjusted for age, stage and country

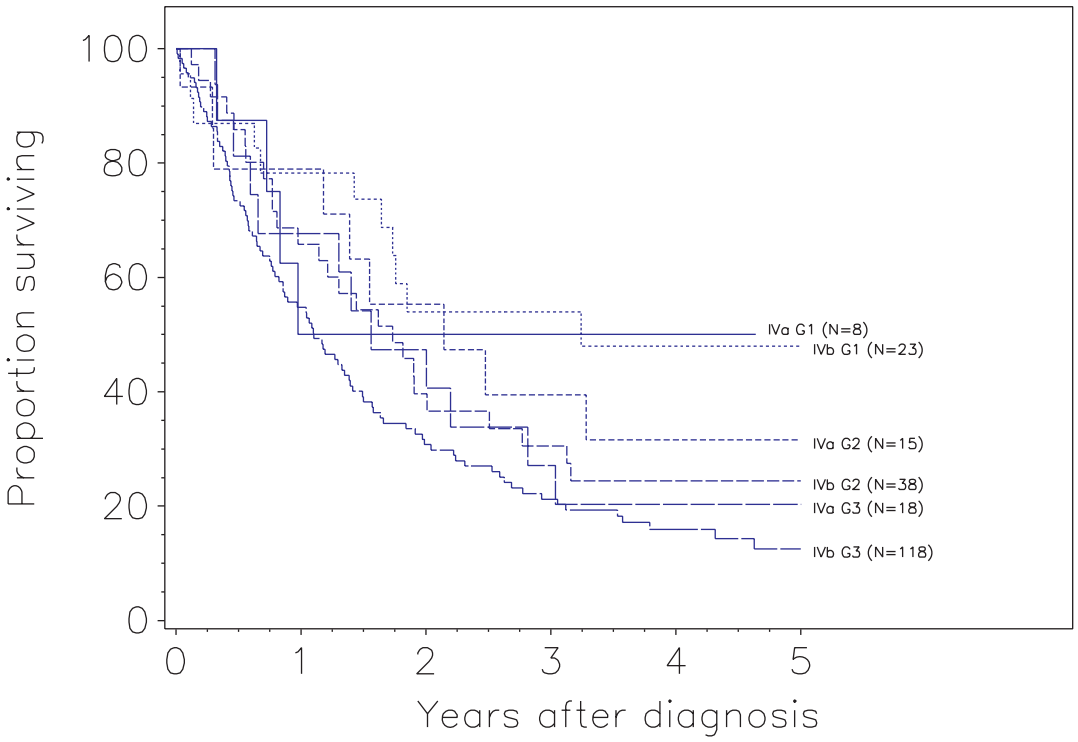
Fig. 20. Carcinoma of the corpus uteri: patients treated in 1999–2001. Survival in Stage II patients by surgical stage and grade of differentiation, $n = 919$.



Stage/grade	Patients (*n*)	Mean age (yrs)	Overall survival (%) at					Hazards ratio[a] (95% CI)
			1 year	2 years	3 years	4 years	5 years	
IIIa G1	150	59.2	98.0	93.7	88.5	85.1	82.5	Reference
IIIb G1	11	64.4	90.0	90.0	90.0	90.0	75.0	1.9 (1.2–3.1)
IIIc G1	44	58.5	92.9	82.7	82.7	70.7	66.8	3.8 (2.3–6.1)
IIIa G2	241	62.3	91.4	82.7	76.2	72.7	71.1	0.9 (0.2–4.0)
IIIb G2	26	66.8	80.0	71.4	71.4	64.6	64.6	3.3 (1.4–8.0)
IIIc G2	128	60.6	94.4	83.6	76.4	70.0	61.0	6.0 (3.2–11.3)
IIIa G3	174	66.4	79.7	66.0	57.5	51.7	45.1	2.2 (1.1–4.6)
IIIb G3	35	69.2	61.2	41.3	30.6	30.6	30.6	2.2 (1.3–3.8)
IIIc G3	148	63.3	86.2	66.0	55.2	52.6	51.4	3.7 (2.3–6.2)

[a] Hazards ratio and 95% CI obtained from a Cox model adjusted for age, stage and country

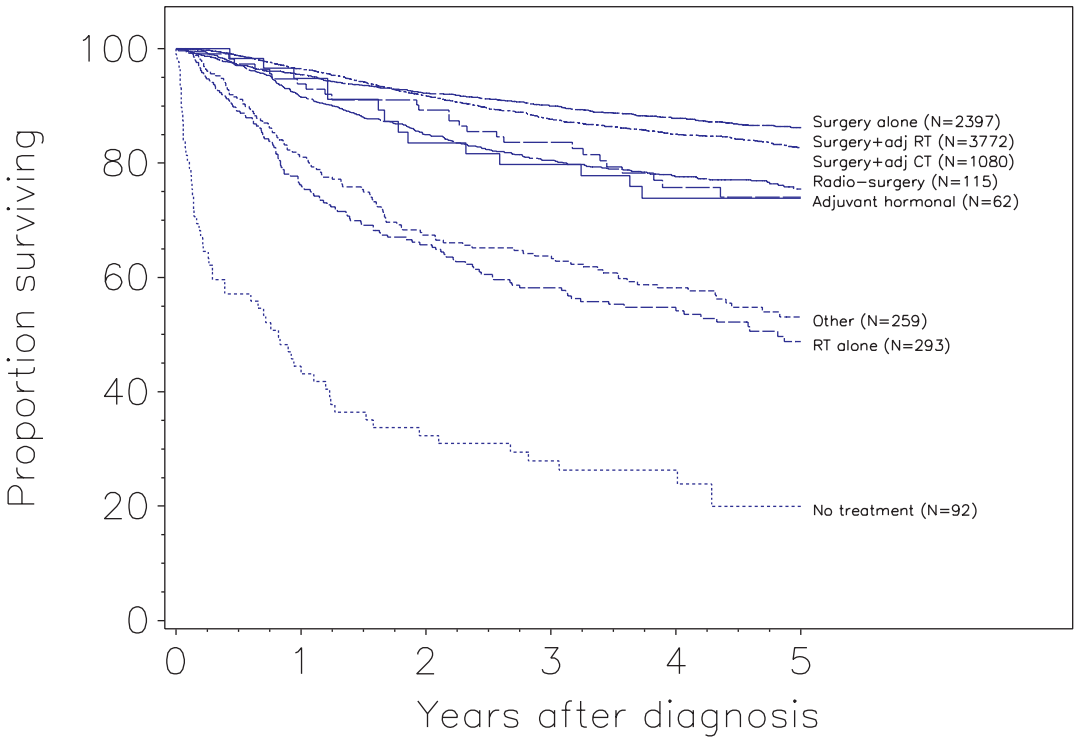
Fig. 21. Carcinoma of the corpus uteri: patients treated in 1999–2001. Survival in Stage III patients by surgical stage and grade of differentiation, $n = 957$.



Stage/grade	Patients (*n*)	Mean age (yrs)	Overall survival (%) at					Hazards ratio[a] (95% CI)
			1 year	2 years	3 years	4 years	5 years	
IVa G1	8	69.8	50.0	50.0	50.0	50.0	–	Reference
IVb G1	23	59.0	78.3	55.2	55.2	48.3	48.3	1.7 (0.5–5.9)
IVa G2	15	63.7	79.3	56.7	40.5	32.4	32.4	1.9 (0.6–6.5)
IVb G2	38	66.2	67.1	40.3	31.0	24.1	24.1	1.3 (0.4–4.5)
IVa G3	18	65.1	69.7	48.8	27.9	20.9	20.9	1.8 (0.6–5.9)
IVb G3	118	64.0	54.8	30.8	21.4	15.9	12.1	3.1 (1.0–9.4)

[a] Hazards ratio and 95% CI obtained from a Cox model adjusted for age, stage and country

Fig. 22. Carcinoma of the corpus uteri: patients treated in 1999–2001. Survival in Stage IV patients by surgical stage and grade of differentiation, $n = 220$.



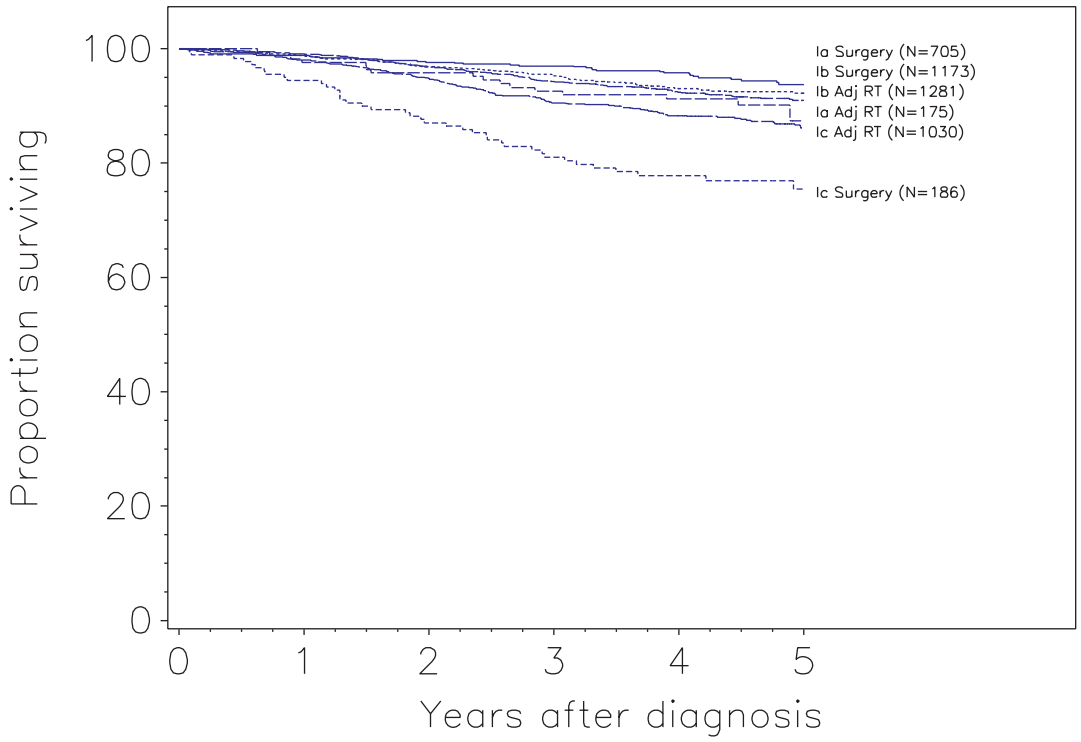
Treatment	Patients (*n*)	Mean age (yrs)	Overall survival (%) at					Hazards ratio[a] (95% CI)
			1 year	2 years	3 years	4 years	5 years	
No treatment	92	67.2	46.5	33.8	29.1	27.1	19.4	3.8 (2.8–5.3)
Surgery alone	2397	61.5	95.5	92.2	90.0	87.8	86.1	Reference
Radiotherapy alone	293	70.9	76.5	66.0	58.4	54.6	48.6	1.1 (0.8–1.5)
Radio-surgery	115	62.0	93.9	89.3	83.5	75.2	73.5	0.9 (0.5–1.4)
Surgery + adj RT	3772	63.8	96.5	91.8	87.7	85.0	82.8	0.8 (0.7–0.9)
Surgery + adj CT	1080	61.8	91.7	85.1	80.6	77.6	75.7	0.9 (0.7–1.1)
Adjuvant HT	62	62.4	94.9	83.8	80.0	74.0	74.0	0.6 (0.4–1.1)
Other	259	66.4	81.3	67.7	64.0	58.3	53.1	1.5 (1.2–2.0)

[a] Hazards ratio and 95% CI obtained from a Cox model adjusted for age, stage and country

Fig. 23. Carcinoma of the corpus uteri: patients treated in 1999–2001. Survival by mode of treatment, $n = 8070$.

Table 24
Carcinoma of the corpus uteri: Patients treated in 1999–2001. Surgical stage distribution by mode of treatment

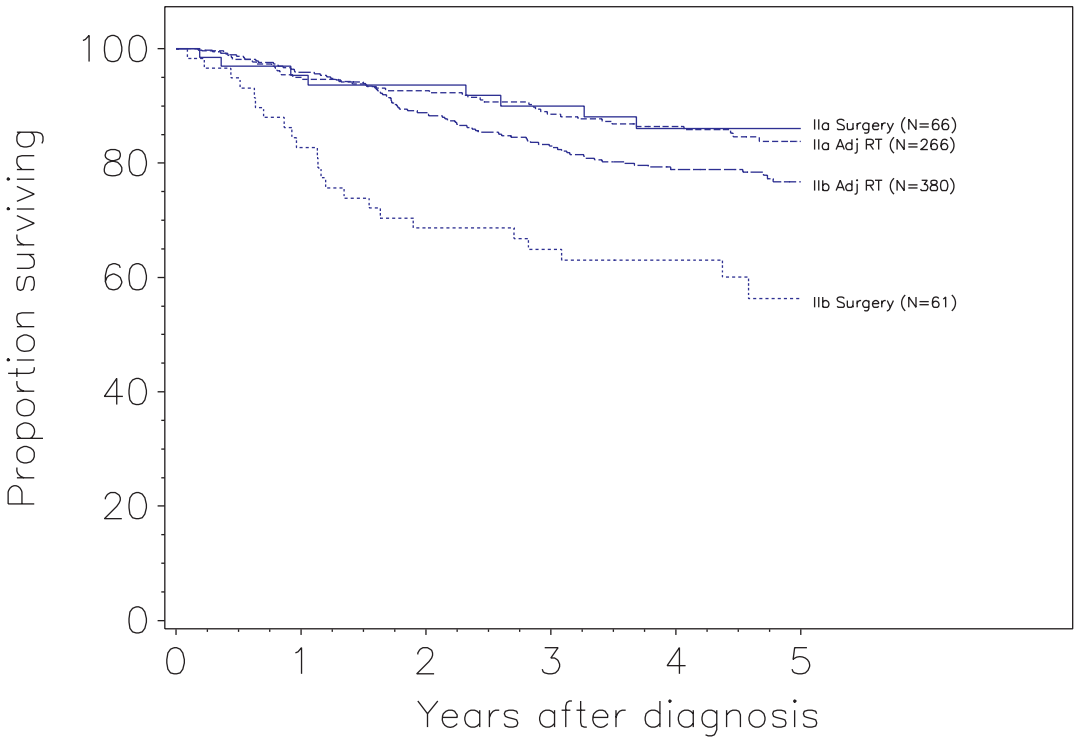
Treatment	Stage Ia		Stage Ib		Stage Ic		Stage IIa		Stage IIb		Stage IIIa		Stage IIIb		Stage IIIc		Stage IVa		Stage IVb	
	n	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%
Surgery alone	885	71.5	1568	47.7	234	14.4	77	16.6	70	12.5	96	14.3	10	14.3	33	8.4	11	22.9	37	18.0
Surg + adj RT	192	9.9	1384	42.1	1187	72.9	298	64.2	412	73.3	391	58.1	34	48.6	212	53.8	12	25.0	27	13.1
Surg + adj CT	122	9.9	253	7.7	177	10.9	80	17.2	67	11.9	160	23.8	20	28.6	122	31.0	17	35.4	107	51.9
Adjuvant HT	2	0.2	16	0.5	8	0.5	2	0.4	7	1.3	2	0.3	2	2.9	5	1.3	–	–	11	5.3
Other	36	2.9	65	2.0	22	1.4	7	1.5	6	1.1	24	3.6	4	5.7	22	5.6	8	16.7	24	11.7



Stage/treatment	Patients (*n*)	Mean age (yrs)	Overall survival (%) at					Hazards ratio[a] (95% CI)
			1 year	2 years	3 years	4 years	5 years	
Ia Surgery	705	57.7	98.8	97.6	97.0	95.7	93.6	Reference
Ib Surgery	1173	61.5	98.8	96.8	95.3	93.0	92.2	1.1 (0.7–1.6)
Ic Surgery	186	69.8	94.5	87.1	81.1	77.5	75.4	2.2 (1.4–3.6)
Ia Adjuvant RT	175	62.8	97.6	95.8	92.7	91.3	88.1	1.6 (0.9–2.9)
Ib Adjuvant RT	1281	62.6	99.1	96.9	94.3	92.4	91.0	1.3 (0.9–2.0)
Ic Adjuvant RT	1030	65.7	98.0	94.8	90.6	88.3	86.3	1.7 (1.1–2.4)

[a] Hazards ratio and 95% CI obtained from a Cox model adjusted for age, stage and country

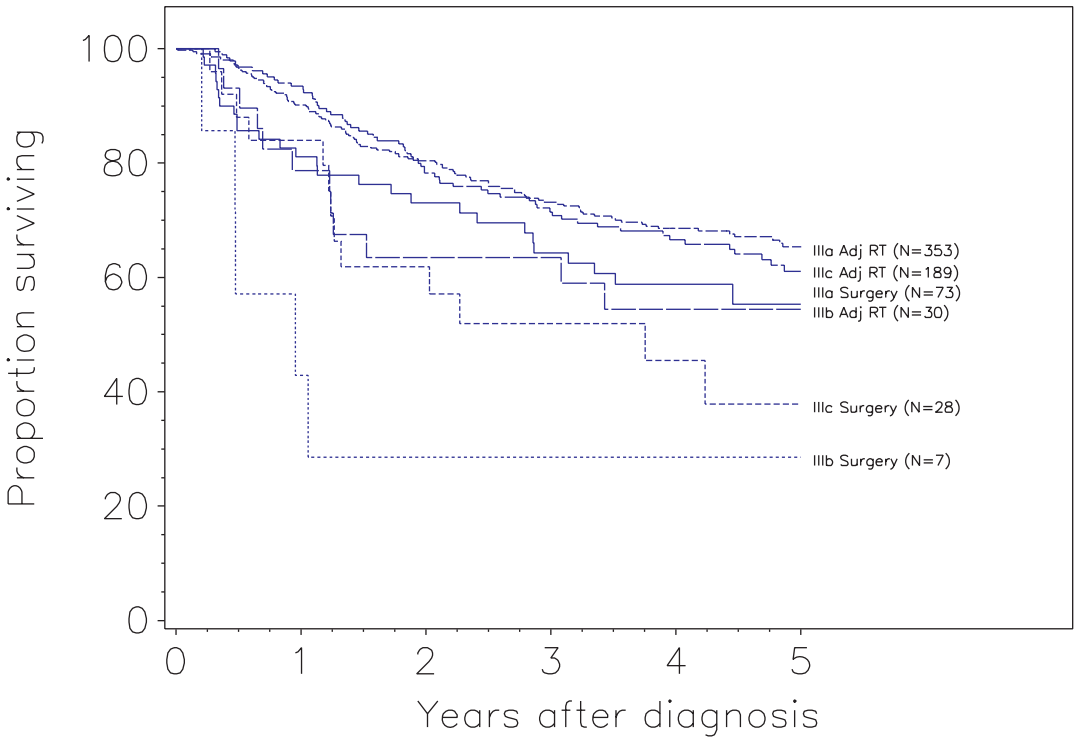
Fig. 24. Carcinoma of the corpus uteri: patients treated in 1999–2001. Survival in Stage I patients by surgical stage and mode of treatment, $n = 4550$.



Stage/treatment	Patients (*n*)	Mean age (yrs)	Overall survival (%) at					Hazards ratio[a] (95% CI)
			1 year	2 years	3 years	4 years	5 years	
IIa Surgery	66	61.5	95.2	93.5	89.8	85.7	85.7	Reference
IIb Surgery	61	63.2	82.9	68.8	65.2	63.1	56.4	3.2 (1.4–7.3)
IIa Adjuvant RT	266	64.2	95.1	92.7	88.6	86.3	83.6	0.8 (0.4–1.8)
IIb Adjuvant RT	380	63.8	95.9	88.9	83.0	78.7	76.8	1.2 (0.6–2.5)

[a] Hazards ratio and 95% CI obtained from a Cox model adjusted for age and country

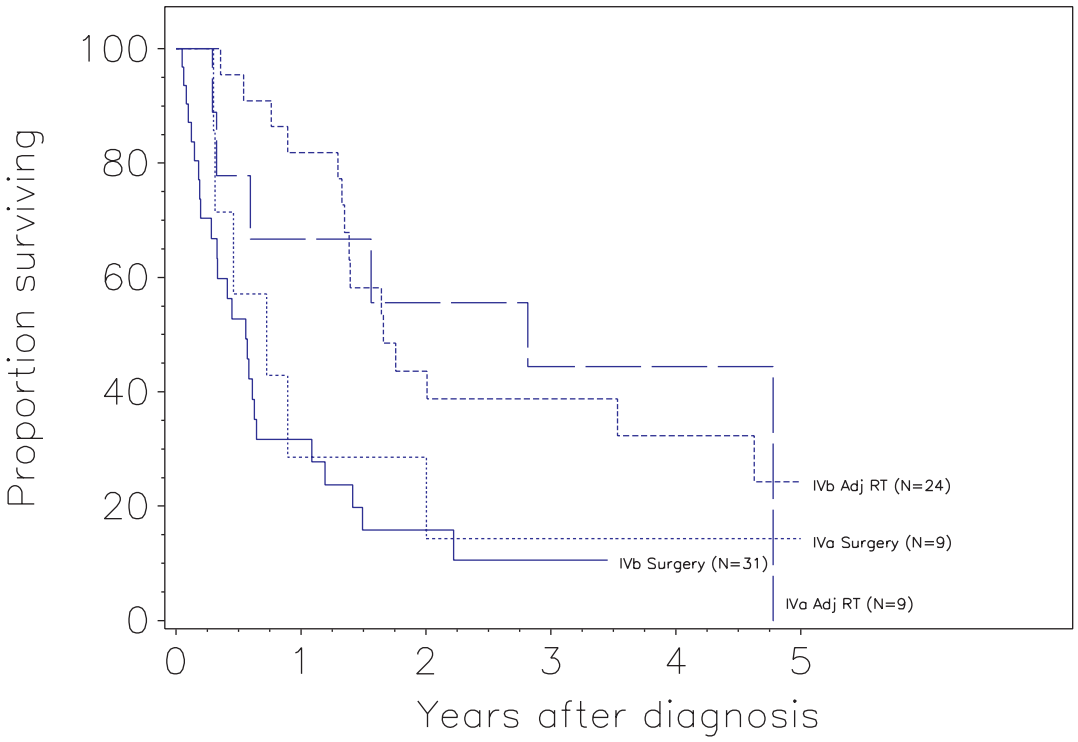
Fig. 25. Carcinoma of the corpus uteri: patients treated in 1999–2001. Survival in Stage II patients by surgical stage and mode of treatment, $n = 773$.



Stage/treatment	Patients (*n*)	Mean age (yrs)	Overall survival (%) at					Hazards ratio[a] (95% CI)
			1 year	2 years	3 years	4 years	5 years	
IIIa Surgery	73	66.5	81.2	73.2	64.7	58.4	55.2	Reference
IIIb Surgery	7	75.1	42.9	28.6	28.6	28.6	28.6	2.5 (0.9–6.9)
IIIc Surgery	28	66.2	84.6	62.3	52.0	45.8	37.5	1.5 (0.8–3.0)
IIIa Adjuvant RT	353	63.1	90.1	80.4	73.1	68.3	65.2	0.8 (0.5–1.3)
IIIb Adjuvant RT	30	65.2	78.9	63.5	63.5	54.1	54.1	0.9 (0.5–1.9)
IIIc Adjuvant RT	189	61.4	93.5	78.3	71.6	66.7	60.8	0.9 (0.5–1.4)

[a] Hazards ratio and 95% CI obtained from a Cox model adjusted for age and country

Fig. 26. Carcinoma of the corpus uteri: patients treated in 1999–2001. Survival in Stage III patients by surgical stage and mode of treatment, $n = 680$.



Stage/treatment	Patients (*n*)	Mean age (yrs)	Overall survival (%) at					Hazards ratio[a] (95% CI)
			1 year	2 years	3 years	4 years	5 years	
IVa Surgery	31	66.5	32.2	16.1	10.7	–	–	Reference
IVb Surgery	9	62.8	37.5	37.5	18.8	18.8	18.8	3.0 (0.5–17.0)
IVa Adjuvant RT	24	63.7	82.6	44.8	39.6	33.0	24.7	0.4 (0.1–2.3)
IVb Adjuvant RT	9	67.2	66.7	55.6	44.4	44.4	–	0.6 (0.1–3.7)

[a] Hazards ratio and 95% CI obtained from a Cox model adjusted for age and country

Fig. 27. Carcinoma of the corpus uteri: patients treated in 1999–2001. Survival in Stage IV patients by surgical stage and mode of treatment, $n = 73$.

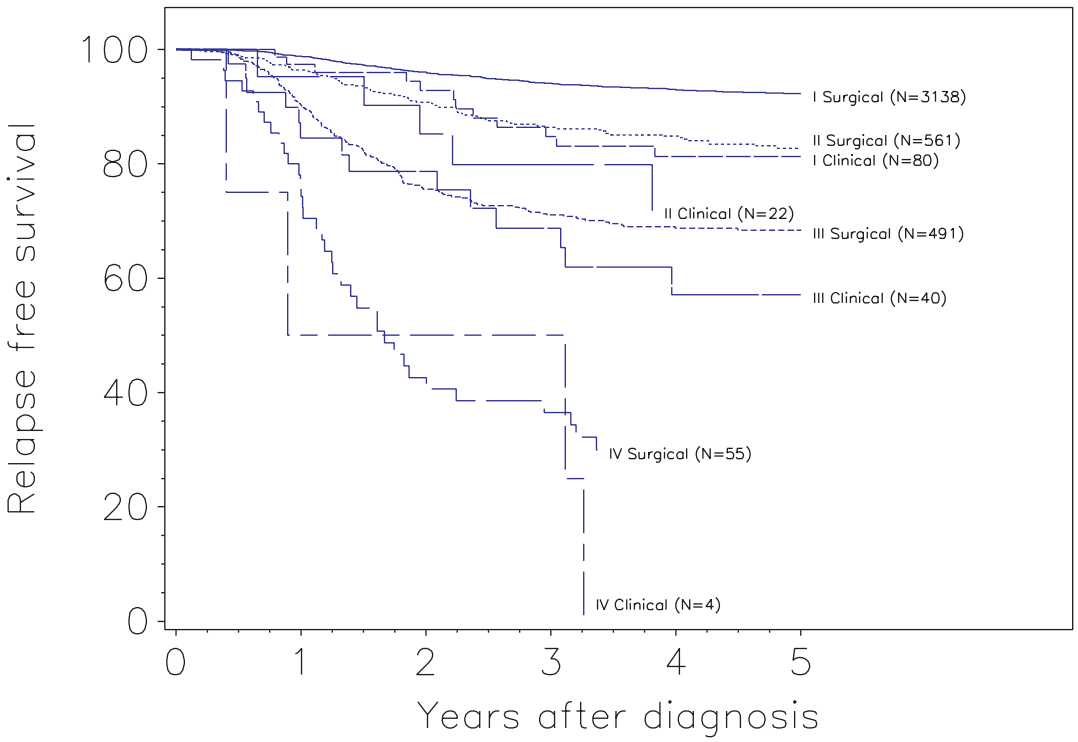
Table 25
Carcinoma of the corpus uteri: Patients treated in 1999–2001. Outcome of follow-up

Vital status	Patients (*n*)	Percentage (%)
Alive (NOS)	1060	12.0
Alive disease free	5706	64.3
Alive with disease	504	5.7
Dead	1600	18.0

Table 26
Carcinoma of the corpus uteri: Patients treated in 1999–2001. Response to treatment by stage

Response[a]	Stage Ia		Stage Ib		Stage Ic		Stage IIa		Stage IIb		Stage IIIa		Stage IIIb		Stage IIIc		Stage IVa		Stage IVb	
	n	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%
Missing	379	30.0	999	29.8	382	23.2	129	26.9	141	23.9	191	27.6	16	17.6	131	32.3	18	32.7	69	29.9
CR	775	61.3	2156	64.4	1102	67.0	304	63.3	375	63.5	370	53.4	34	37.4	172	42.4	11	20.0	31	13.4
PR	11	0.9	30	0.9	14	0.9	7	1.5	16	2.7	20	2.9	7	7.7	18	4.4	7	12.7	21	9.1
SD	7	0.6	7	0.2	4	0.2	3	0.6	4	0.7	14	2.0	5	5.5	6	1.5	2	3.6	11	4.8
PD	14	1.1	18	0.5	27	1.6	8	1.7	18	3.0	46	6.6	20	22.0	26	6.4	11	20.0	64	27.7
Not assessable	78	6.2	140	4.2	117	7.1	29	6.0	37	6.3	52	7.5	9	9.9	53	13.1	6	10.9	35	15.2

[a] CR: complete response; PR: partial response; SD: stable disease; PD: progressive disease.



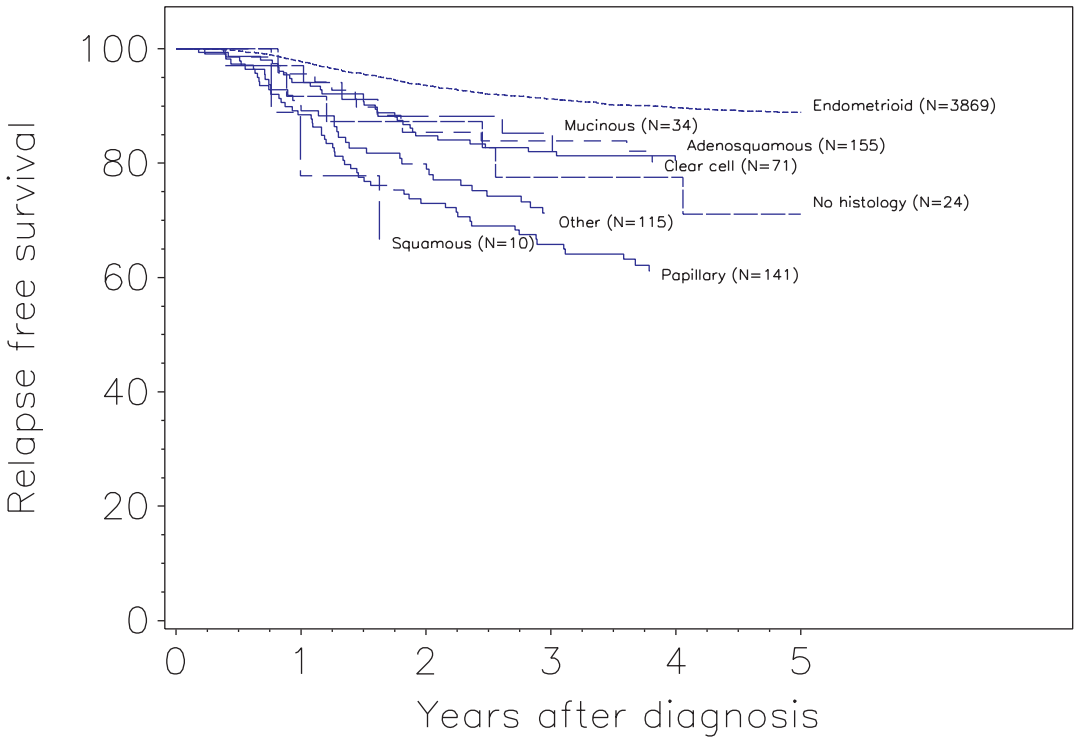
Stage/treatment	Patients (*n*)	Mean age (yrs)	Relapse-free survival (%) at					Hazards ratio[a] (95% CI)
			1 year	2 years	3 years	4 years	5 years	
I Surgical	3138	62.3	98.8	96.0	94.1	93.0	92.3	Reference
II Surgical	561	63.4	96.4	90.8	86.3	84.7	82.5	2.2 (1.7–2.9)
III Surgical	491	61.8	90.5	75.7	71.1	68.8	68.4	5.2 (4.2–6.4)
IV Surgical	55	62.7	75.9	42.8	36.7	29.8	29.8	16.3 (11.2–23.8)
I Clinical	80	66.7	97.4	93.1	85.0	81.5	81.5	2.1 (1.2–3.8)
II Clinical	22	68.1	95.2	85.2	79.5	72.3	72.3	3.3 (1.3–8.2)
III Clinical	40	65.1	84.4	78.7	69.1	57.2	57.2	5.7 (3.3–9.8)
IV Clinical	4	67.0	50.0	50.0	50.0	–	–	23.1 (8.2–64.7)

[a] Hazards ratio and 95% CI obtained from a Cox model adjusted for age, stage and country

Fig. 28. Carcinoma of the corpus uteri: patients treated in 1999–2001. Relapse-free survival by mode of staging, $n = 4391$.

Table 27
Carcinoma of the corpus uteri: Patients treated in 1999–2001. Relapses by stage

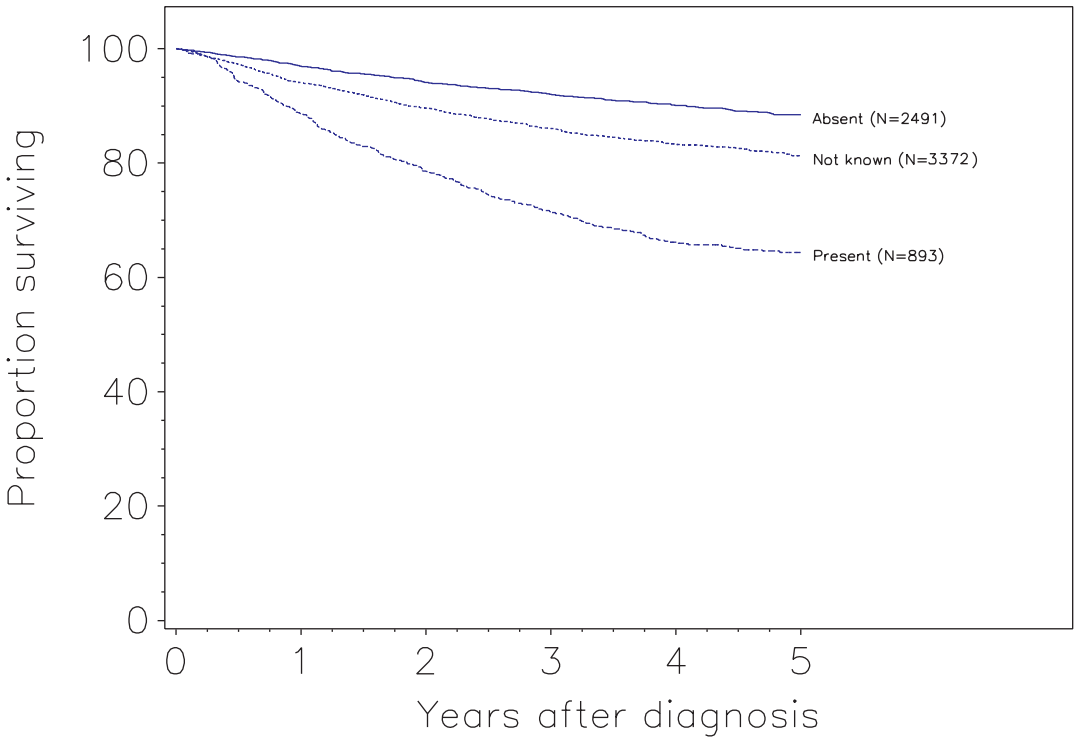
Relapse	Stage Ia		Stage Ib		Stage Ic		Stage IIa		Stage IIb		Stage IIIa		Stage IIIb		Stage IIIc		Stage IVa		Stage IVb	
	n	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%
Local (regional)	32	40.5	110	51.9	53	33.5	17	27.0	35	36.5	53	35.8	13	46.4	39	27.7	3	23.1	18	26.9
Metastatic	29	36.7	71	33.5	79	50.0	32	50.8	47	49.0	68	45.9	12	42.9	75	53.2	5	38.5	35	52.2
Local and metastatic	12	15.2	20	9.4	20	12.7	8	12.7	10	10.4	17	11.5	2	7.1	19	13.5	4	30.8	11	16.4
Missing site	6	7.6	11	5.2	6	3.8	6	9.5	4	4.2	10	6.8	1	3.6	8	5.7	1	7.7	3	4.5
Total	79		212		158		63		96		148		28		141		13		67	



Histotype	Patients (*n*)	Mean age (yrs)	Relapse-free survival (%) at					Hazards ratio[a] (95% CI)
			1 year	2 years	3 years	4 years	5 years	
Endometrioid	3869	62.3	97.8	93.7	91.2	89.7	88.8	Reference
Adenosquamous	155	61.1	94.1	84.8	82.1	80.5	80.5	1.8 (1.2–2.7)
Mucinous	34	61.2	97.1	88.1	85.1	81.6	81.6	1.2 (0.5–2.7)
Papillary	141	67.3	88.6	73.0	65.8	61.2	61.2	2.4 (1.8–3.3)
Clear cell	71	64.3	95.7	85.5	84.0	80.4	80.4	1.2 (0.7–2.1)
Squamous	10	63.8	78.9	67.7	67.7	67.7	67.7	2.7 (0.9–8.5)
Other	115	62.8	90.2	80.0	70.4	70.4	70.4	2.1 (1.4–3.1)

[a] Hazards ratio and 95% CI obtained from a Cox model adjusted for age, stage and country

Fig. 29. Carcinoma of the corpus uteri: patients treated in 1999–2001. Relapse-free survival by histological type, $n = 4419$.



Lymphnodal space involvement	Patients (*n*)	Mean age (yrs)	Overall survival (%) at					Hazards ratio[a] (95% CI)
			1 year	2 years	3 years	4 years	5 years	
Absent	2491	61.0	97.0	94.2	92.0	90.0	88.4	Reference
Present	893	63.0	88.7	78.7	71.6	66.1	64.2	3.8 (3.2–4.5)
Not known	3372	62.8	94.1	89.6	86.1	83.3	81.3	2.1 (1.8–2.5)

[a] Hazards ratio and 95% CI obtained from a Cox model adjusted for age and country

Fig. 30. Carcinoma of the corpus uteri: patients treated in 1999–2001. Overall survival by lymphovascular space involvement, $n = 6756$.

Table 28
Carcinoma of the corpus uteri: Patients treated in 1999–2001. Multivariate analysis

Strata	Hazards ratios (95% CI)[a]			
	Stage I	Stage II	Stage III	Stage IV
Age				
Aged ⩽50	Reference	Reference	Reference	Reference
Aged 50+	1.84 (1.17–2.89)	3.37 (1.46–7.77)	1.88 (1.18–2.99)	1.87 (1.05–3.33)
Histological type				
Endometrioid	Reference	Reference	Reference	Reference
Adenosquamous	0.73 (0.43–1.26)	0.82 (0.35–1.91)	1.24 (0.77–2.00)	0.92 (0.44–1.91)
Mucinous	0.28 (0.04–2.08)	0.53 (0.07–3.93)	0.69 (0.25–1.95)	0.49 (0.10–2.49)
Papillary	1.41 (0.92–2.15)	2.88 (1.62–5.10)	1.75 (1.24–2.48)	1.00 (0.61–1.64)
Clear cell	0.83 (0.44–1.58)	1.96 (0.88–4.33)	1.50 (0.84–2.65)	1.59 (0.84–3.01)
Squamous	3.12 (0.77–12.7)	–	0.74 (0.10–5.38)	0.89 (0.11–7.43)
Other	1.64 (1.06–2.52)	1.25 (0.62–2.51)	1.67 (1.09–2.55)	1.17 (0.58–2.36)
No histology	0.28 (0.04–2.00)	–	2.10 (1.04–4.24)	0.97 (0.25–3.74)
Lymphovascular space involvement				
Absent	Reference	Reference	Reference	Reference
Present	2.01 (1.46–2.77)	1.21 (0.71–2.06)	2.07 (1.44–2.98)	1.09 (0.55–2.17)
Unknown	1.44 (1.11–1.88)	1.61 (1.04–2.48)	1.41 (0.94–2.11)	0.94 (0.46–1.96)
Grade				
Grade 1	Reference	Reference	Reference	Reference
Grade 2	1.32 (1.05–1.65)	1.31 (0.86–2.00)	1.62 (1.10–2.39)	1.33 (0.68–2.60)
Grade 3	2.45 (1.89–3.17)	2.14 (1.34–3.42)	2.44 (1.65–3.60)	2.55 (1.36–4.78)
Grade unknown	1.96 (1.23–3.11)	1.87 (0.90–3.88)	1.85 (1.10–3.13)	1.96 (0.82–4.65)
Myometrial invasion				
No myometrial invasion	Reference	Reference	Reference	Reference
Myometrial invasion ⩽50%	1.26 (0.89–1.77)	3.66 (0.48–27.8)	1.26 (0.57–2.80)	0.90 (0.27–2.98)
Myometrial invasion >50%	2.00 (1.40–2.87)	6.14 (0.81–46.5)	1.71 (0.79–3.69)	1.31 (0.43–4.01)
Unknown	1.95 (1.27–2.97)	7.51 (0.95–59.3)	3.10 (1.37–7.02)	3.38 (1.06–10.82)

[a] From Cox proportional hazard regression model, also adjusted for country