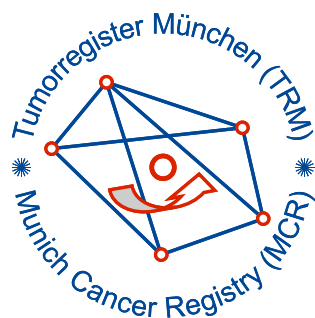


Munich Cancer Registry



- ▶ Incidence and Mortality
- ▶ Selection Matrix
- ▶ Homepage
- ▶ *Deutsch*

ICD-10 C54: Corpus cancer

Survival

Year of diagnosis	1988-1997	1998-2019
Patients	2,111	11,650
Diseases	2,111	11,651
Cases evaluated	1,896	9,461
Creation date	01/27/2021	
Database export	01/07/2021	
Population (females)	2.48 m	



Munich Cancer Registry
Cancer Registry Bavaria - Upper Bavaria Regional Center
at Klinikum Grosshadern/IBE
Marchioninstr. 15
Munich, 81377
Germany

<https://www.tumorregister-muenchen.de/en>

https://www.tumorregister-muenchen.de/en/facts/surv/sC54__E-ICD-10-C54-Corpus-cancer-survival.pdf

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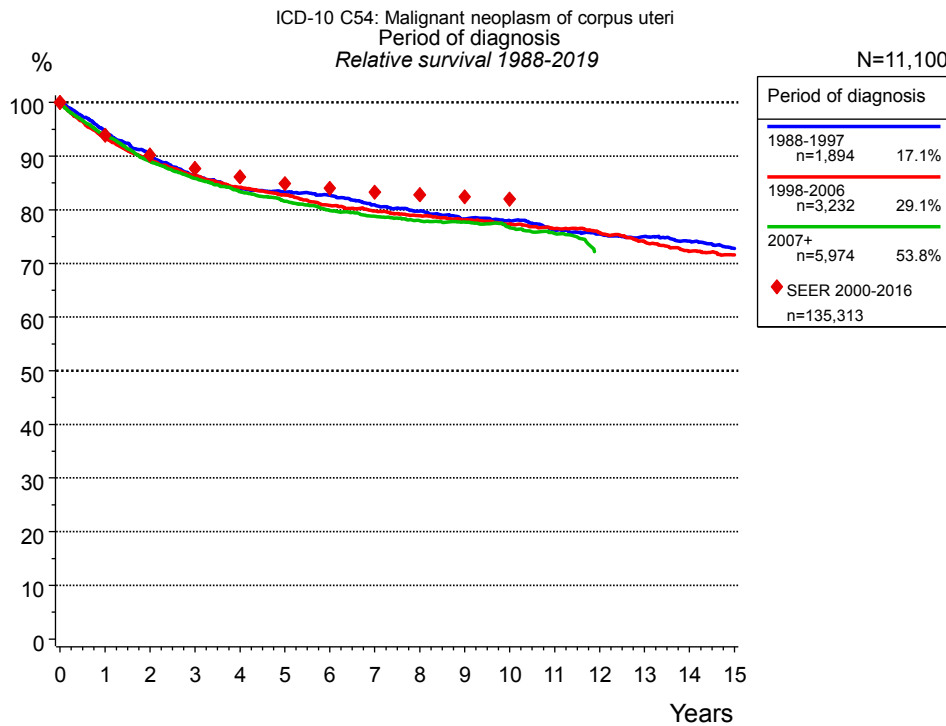


Figure 1a. Relative survival of patients with corpus cancer by period of diagnosis. Included in the evaluation are 11,100 cases diagnosed between 1988 and 2019.

The survival results of the SEER program (Surveillance, Epidemiology, and End Results) of the American National Cancer Institute (NCI) are summarized as the period of diagnosis from 2000 to 2016, and are represented by colored diamonds in order to facilitate comparisons between MCR and SEER.

The presented survival curves are derived from clinical records with valid follow-up informations, which means that death certificate cases (DCO) cases are omitted from the analysis. With this one restriction, the MCR has provided population-based statistics since 1998, collecting data on all cancer cases in the region of southern Bavaria. Historical data of previous time periods can be heavily selected, therefore, univariate survival comparisons of the presented time periods must be carefully considered. Nonetheless, all calculable survival curves are depicted to facilitate the comparison of long time follow-up analyses of relative survival between particular cancers.

Years	Period of diagnosis					
	1988-1997 n=1,894		1998-2006 n=3,232		2007+ n=5,974	
	obs. %	rel. %	obs. %	rel. %	obs. %	rel. %
0	100.0	100.0	100.0	100.0	100.0	100.0
1	92.3	94.8	91.2	93.4	92.1	94.0
2	85.4	90.1	85.2	89.2	85.5	89.0
3	79.8	86.4	80.6	86.3	80.8	85.8
4	75.4	83.8	76.9	84.2	76.9	83.3
5	73.0	83.3	73.9	82.7	73.7	81.6
6	70.6	82.7	70.5	80.8	70.6	79.8
7	67.2	80.9	68.0	79.7	68.1	78.8
8	64.4	79.8	65.7	78.9	65.9	78.0
9	61.4	78.3	63.4	78.1	64.3	77.8
10	59.5	78.0	61.2	77.3	61.8	76.6
11	56.5	76.3	58.9	76.5	59.5	75.6
12	54.2	75.5	56.7	75.7		
13	52.2	75.0	53.9	74.1		
14	50.0	74.2	51.0	72.3		
15	47.4	72.8	49.0	71.6		
Median	13.9		14.5			

Table 1b. Observed (obs.) and relative (rel.) survival of patients with corpus cancer by period of diagnosis for period 1988-2019 (N=11,100).

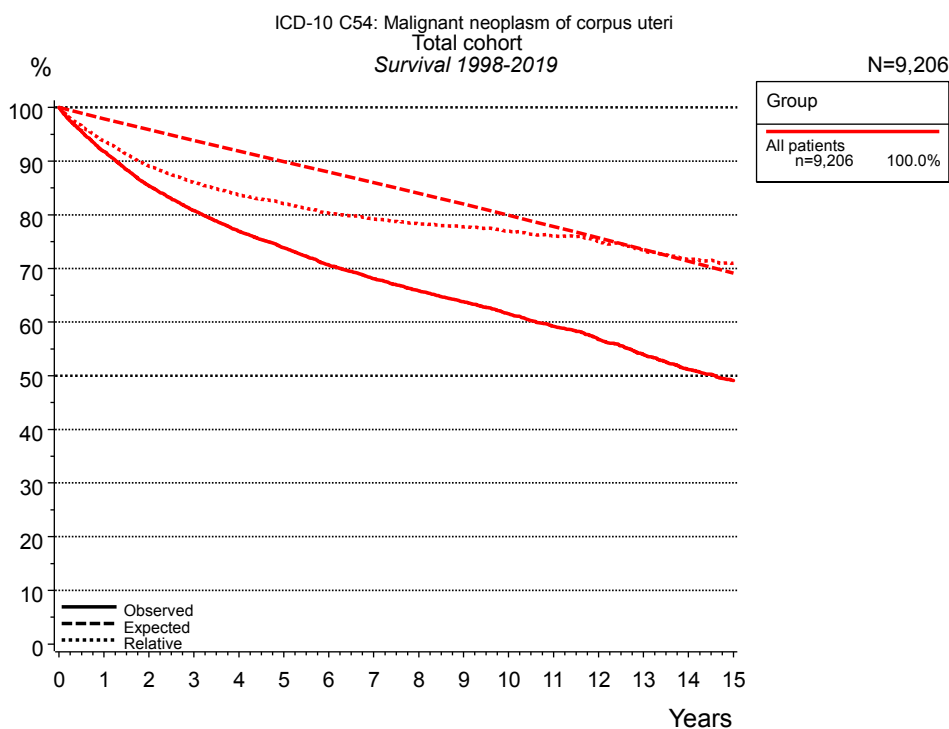


Figure 2a. Observed, expected and relative survival of the total cohort with corpus cancer. Included in the evaluation are 9,206 cases diagnosed between 1998 and 2019.

Years	Group	
	obs. %	rel. %
0	100.0	100.0
1	91.8	93.8
2	85.4	89.1
3	80.8	86.0
4	76.9	83.7
5	73.8	82.1
6	70.6	80.3
7	68.1	79.2
8	65.8	78.4
9	63.8	77.8
10	61.5	76.9
11	59.2	76.0
12	56.8	75.0
13	54.0	73.4
14	51.1	71.6
15	49.1	71.0
Median	14.6	

Table 2b. Observed (obs.) and relative (rel.) survival of the total cohort with corpus cancer for period 1998-2019 (N=9,206).

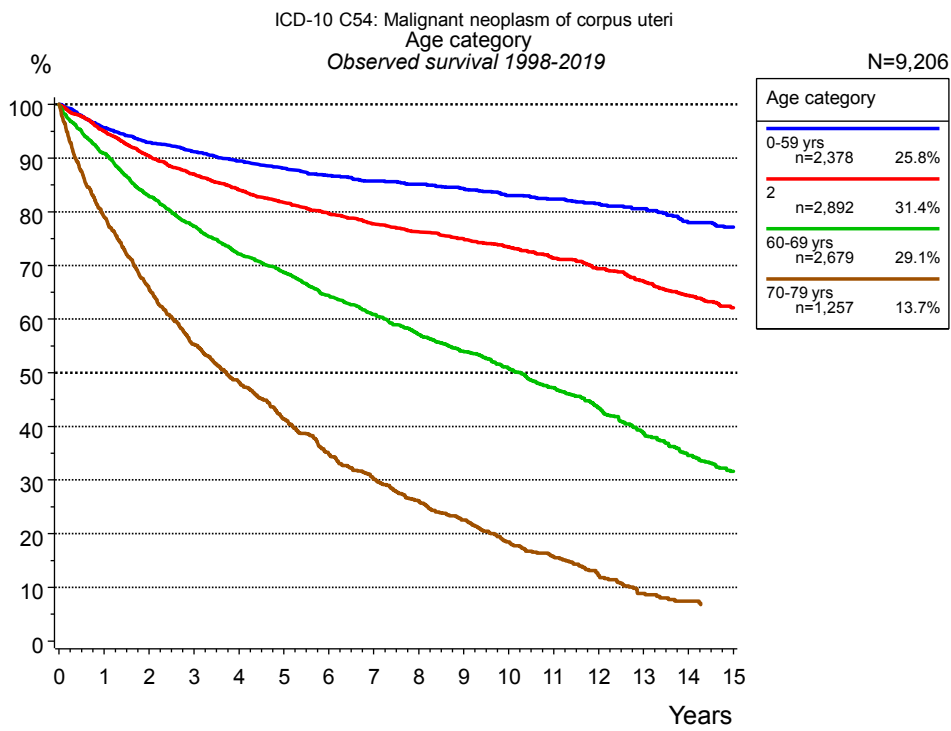


Figure 3a. Observed survival of patients with corpus cancer by age category. Included in the evaluation are 9,206 cases diagnosed between 1998 and 2019.

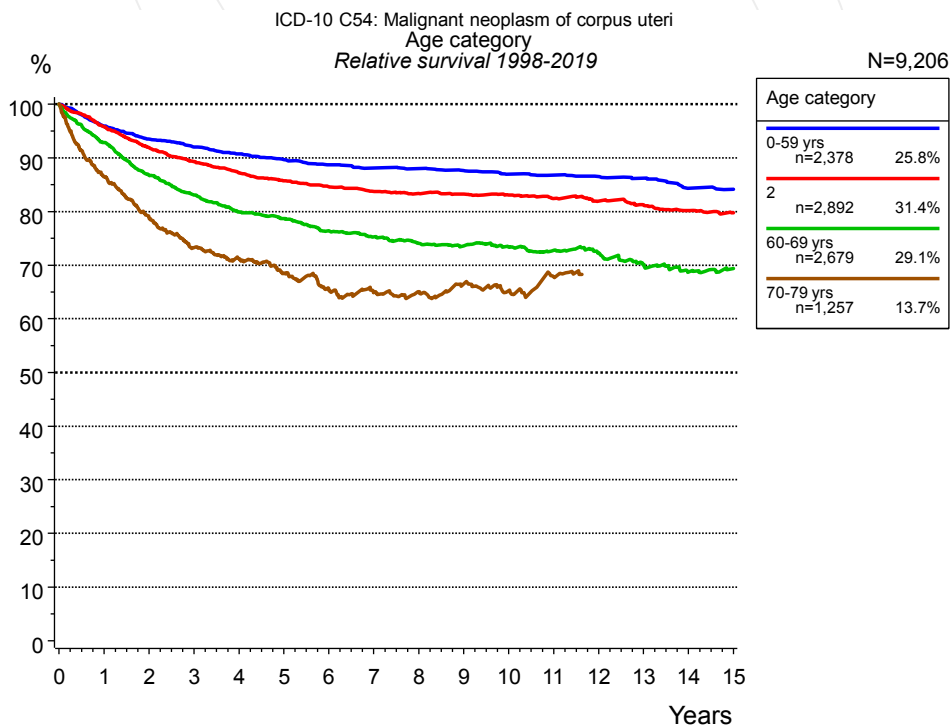


Figure 3b. Relative survival of patients with corpus cancer by age category. Included in the evaluation are 9,206 cases diagnosed between 1998 and 2019.

Years	Age category							
	0-59 yrs n=2,378		2 n=2,892		60-69 yrs n=2,679		70-79 yrs n=1,257	
	obs. %	rel. %	obs. %	rel. %	obs. %	rel. %	obs. %	rel. %
0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1	95.6	95.9	95.0	95.8	90.9	92.9	79.1	86.5
2	92.9	93.5	90.4	91.9	82.9	86.8	65.8	78.9
3	91.2	92.0	87.0	89.3	77.2	83.1	55.4	73.3
4	89.5	90.7	84.1	87.2	72.1	79.9	48.2	71.1
5	88.1	89.7	81.7	85.7	68.7	78.6	41.4	68.5
6	86.7	88.7	79.6	84.6	64.3	76.4	34.8	65.4
7	85.7	88.1	77.7	83.7	60.8	75.3	30.2	64.9
8	85.1	88.0	76.2	83.3	57.2	74.1	26.1	65.1
9	84.3	87.6	74.9	83.2	54.0	73.6	22.6	66.5
10	83.0	86.9	73.4	83.1	50.8	73.4	18.5	65.2
11	82.3	86.8	71.3	82.4	47.2	72.8	15.7	67.8
12	81.5	86.5	69.3	81.9	43.4	72.2	12.3	66.0
13	80.6	86.2	67.1	81.2	38.8	70.1	8.9	59.6
14	78.0	84.3	64.4	80.2	34.6	68.7	7.4	65.1
15	77.1	84.1	62.1	79.8	31.6	69.4		
Median					10.3		3.7	

Table 3c. Observed (obs.) and relative (rel.) survival of patients with corpus cancer by age category for period 1998-2019 (N=9,206).

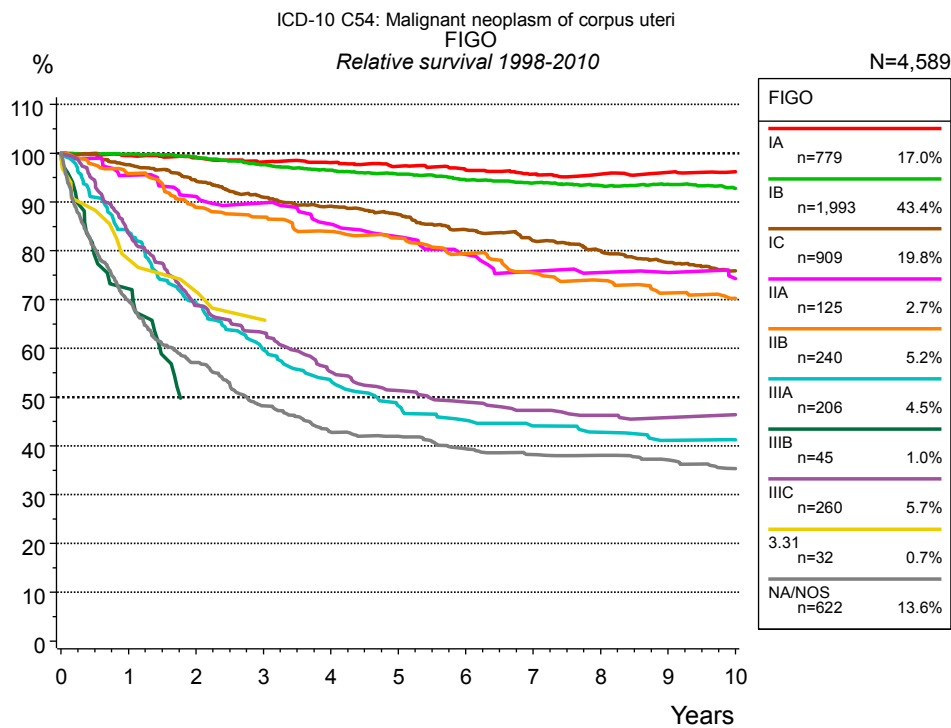


Figure 4a. Relative survival of patients with corpus cancer by FIGO. For 4,998 of 5,211 cases diagnosed between 1998 and 2010 valid data could be obtained for this item. For a total of 4,589 cases an evaluable classification was established. The grey line represents the subgroup of 622 patients with missing values regarding FIGO (11.9 % of 5,211 patients, the percent values of all other categories are related to n=4,589).

Due to substantial changes in stage classification schemes long-term survival statistics over decades could not be created.

Years	FIGO													
	IA n=779		IB n=1,993		IC n=909		IIA n=125		IIB n=240		IIIA n=206		IIIB n=45	
	obs. %	rel. %	obs. %	rel. %	obs. %	rel. %	obs. %	rel. %	obs. %	rel. %	obs. %	rel. %	obs. %	rel. %
0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1	98.1	99.5	98.1	99.8	94.8	97.6	93.5	95.5	93.6	95.8	80.9	83.9	70.8	72.2
2	96.1	99.1	95.8	99.2	88.9	94.3	87.7	91.1	85.0	88.9	65.1	69.3		
3	93.7	98.2	92.5	97.6	83.3	91.0	84.4	89.8	81.6	86.9	54.6	59.7		
4	92.0	98.1	89.7	96.5	79.1	89.2	78.4	85.4	77.1	84.0	48.0	53.4		
5	89.6	97.3	87.2	95.7	75.2	87.4	74.1	82.9	74.0	82.6	42.4	48.2		
6	87.2	96.5	84.3	94.5	70.4	84.4	68.9	79.3	69.5	79.4	39.3	45.2		
7	84.8	95.7	82.0	93.9	66.3	82.1	64.6	75.8	64.5	75.5	37.2	44.1		
8	83.1	95.7	79.7	93.4	62.6	80.0	62.9	75.6	61.8	73.9	35.6	42.8		
9	81.7	96.1	78.1	93.6	58.7	77.6	62.0	75.5	58.1	71.4	33.4	41.1		
10	80.2	96.2	75.4	92.8	55.5	75.9	59.2	74.3	55.7	70.2	32.8	41.2		
Median					11.4		12.7		12.7		3.6		1.7	

<i>cont'd</i>	FIGO					
	IIIC n=260		3.31 n=32		NA/NOS n=622	
Years	obs. %	rel. %	obs. %	rel. %	obs. %	rel. %
0	100.0	100.0	100.0	100.0	100.0	100.0
1	82.6	83.6	78.1	78.2	67.4	69.7
2	66.8	68.8	71.9	71.7	53.6	57.1
3	60.6	63.2	65.6	65.8	44.1	48.2
4	52.0	55.2			38.3	42.8
5	47.7	51.3			36.8	42.0
6	45.0	49.0			33.8	39.4
7	42.5	47.3			32.1	38.2
8	40.9	46.3			31.3	38.0
9	39.6	45.8			30.0	37.1
10	39.6	46.4			28.0	35.3
Median	4.3				2.4	

Table 4b. Observed (obs.) and relative (rel.) survival of patients with corpus cancer by FIGO for period 1998-2010 (N=4,589).

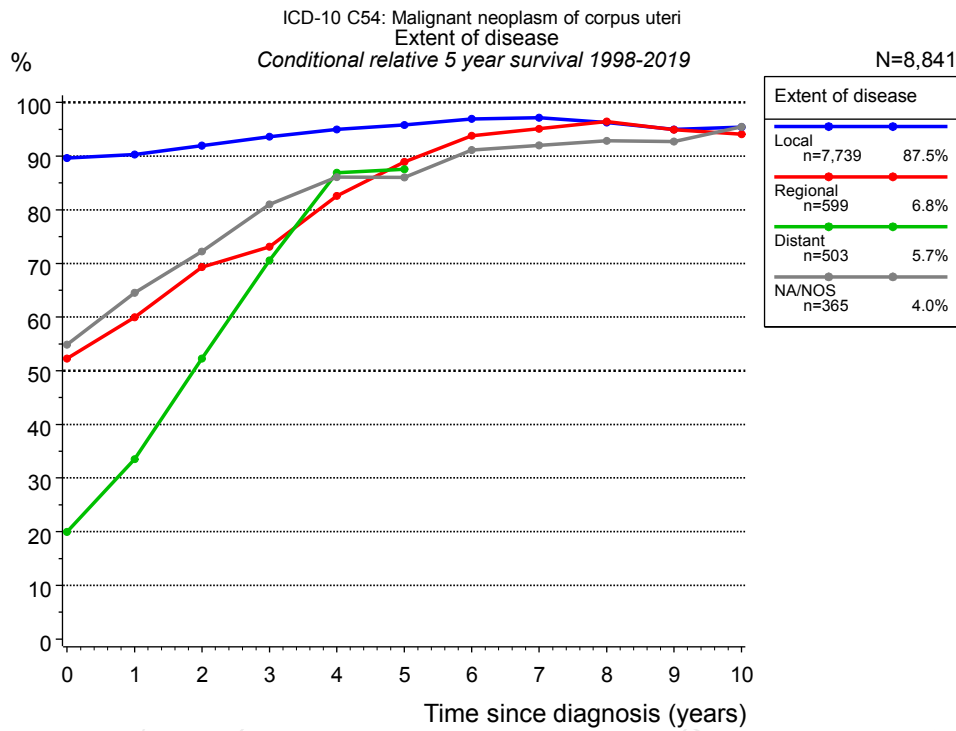


Figure 4c. Conditional relative 5-year survival of patients with corpus cancer by extent of disease. For 8,872 of 9,206 cases diagnosed between 1998 and 2019 valid data could be obtained for this item. For a total of 8,841 cases an evaluable classification was established. The grey line represents the subgroup of 365 patients with missing values regarding extent of disease (4.0 % of 9,206 patients, the percent values of all other categories are related to n=8,841).

Years	Extent of disease							
	Local		Regional		Distant		NA/NOS	
	n	Cond. surv. % 5 yrs	n	Cond. surv. % 5 yrs	n	Cond. surv. % 5 yrs	n	Cond. surv. % 5 yrs
0	7,739	89.6	599	52.3	503	19.9	365	54.9
1	6,889	90.3	457	59.9	261	33.5	260	64.5
2	6,139	92.0	349	69.3	149	52.3	206	72.2
3	5,495	93.6	286	73.1	96	70.6	169	81.0
4	4,958	95.0	226	82.6	71	86.9	142	86.1
5	4,420	95.8	185	88.9	60	87.6	134	86.0
6	3,923	97.0	163	93.8			116	91.1
7	3,478	97.2	144	95.1			108	92.0
8	3,063	96.3	120	96.4			96	92.9
9	2,681	95.0	100	94.9			81	92.7
10	2,307	95.4	83	94.1			71	95.5

Table 4d. Conditional relative 5-year survival of patients with corpus cancer by extent of disease for period 1998-2019 (N=8,841).

Conditional relative survival rates refer to the relative survival probability, in this case for 5 years after cancer diagnosis, compared to the age- and sex-matched population (=100 %) under the condition of being alive for a certain time period (x-axis in Figure 4a). The results illustrate to what extent the cancer induced mortality of particular subgroups declines in the subsequent years after detection of the malignancy. For instance, according to the presented survival statistics, patients in the subgroup extent of disease="Local", who are alive at least 3 years after cancer diagnosis, the conditional relative 5-year survival rate is 93.6% (n=5,495).

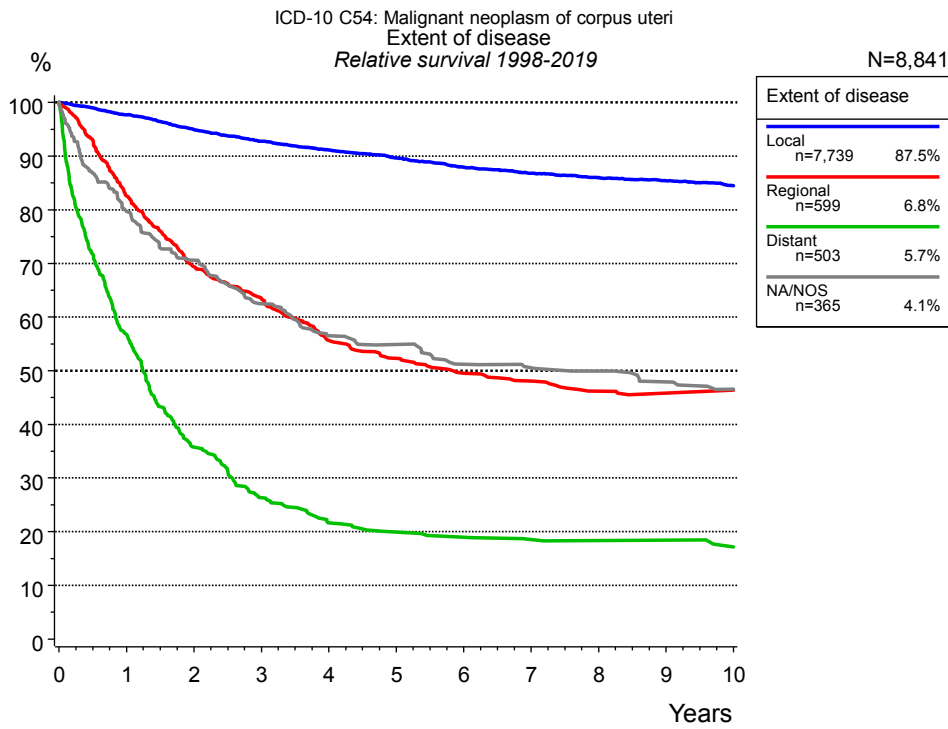


Figure 4c. Relative survival of patients with corpus cancer by extent of disease. For 8,872 of 9,206 cases diagnosed between 1998 and 2019 valid data could be obtained for this item. For a total of 8,841 cases an evaluable classification was established. The grey line represents the subgroup of 365 patients with missing values regarding extent of disease (4.0 % of 9,206 patients, the percent values of all other categories are related to n=8,841).

Years	Extent of disease							
	Local n=7,739		Regional n=599		Distant n=503		NA/NOS n=365	
	obs. %	rel. %	obs. %	rel. %	obs. %	rel. %	obs. %	rel. %
0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1	95.7	97.7	81.3	82.6	55.5	56.7	76.7	79.7
2	91.1	95.0	67.3	69.4	34.4	35.8	65.7	70.6
3	87.1	92.8	60.4	63.4	24.8	26.3	56.6	62.5
4	83.8	91.1	52.3	55.6	19.9	21.7	50.1	56.5
5	80.6	89.6	48.4	52.3	18.2	19.9	47.9	54.9
6	77.3	87.9	45.2	49.5	16.9	19.0	43.9	51.2
7	74.6	86.8	43.1	48.1	16.1	18.5	42.7	50.6
8	72.2	86.0	40.6	46.2	15.7	18.4	41.5	49.9
9	69.9	85.4	39.5	45.8	15.7	18.4	39.2	47.9
10	67.4	84.5	39.5	46.4	14.4	17.2	37.2	46.6
Median	17.0		4.5		1.2		4.2	

Table 4d. Observed (obs.) and relative (rel.) survival of patients with corpus cancer by extent of disease for period 1998-2019 (N=8,841).

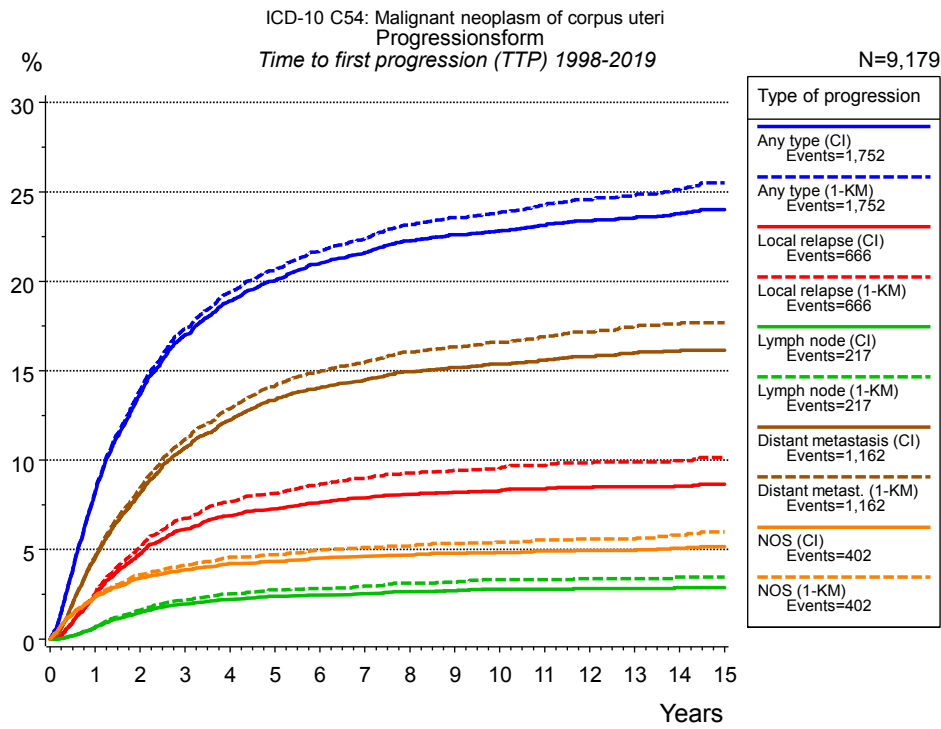


Figure 5a. Time to first progression of 9,179 patients with corpus cancer diagnosed between 1998 and 2019 (in solid cancers M0 only) estimated by cumulative incidence function (CI, solid line) accounting for death as competing risk and by inverse Kaplan-Meier estimate (1-KM, dashed line). The frequency of events may be underestimated due to underreporting.

		Type of progression						Distant metastasis (CI)
		Any type (CI)	Any type (1-KM)	Local relapse (CI)	Local relapse (1-KM)	Lymph node (CI)	Lymph node (1-KM)	
N		8,686	8,686	9,179	9,179	9,179	9,179	8,686
Events		1,747	1,747	664	664	217	217	1,157
compet.		1,334		2,656		2,961		1,730
Years		%	%	%	%	%	%	%
0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
1		8.1	8.2	2.4	2.5	0.6	0.7	4.5
2		13.7	13.9	4.7	5.1	1.5	1.6	8.2
3		17.0	17.4	6.1	6.8	2.0	2.2	10.7
4		18.9	19.4	6.9	7.7	2.2	2.5	12.2
5		20.0	20.6	7.3	8.2	2.4	2.7	13.3
6		21.0	21.7	7.6	8.6	2.5	2.8	14.0
7		21.6	22.4	7.9	9.0	2.5	3.0	14.5
8		22.3	23.2	8.1	9.3	2.7	3.1	15.0
9		22.6	23.6	8.2	9.4	2.7	3.2	15.2
10		22.8	23.8	8.3	9.5	2.8	3.3	15.4
11		23.1	24.2	8.4	9.7	2.8	3.3	15.6
12		23.4	24.6	8.5	9.8	2.8	3.4	15.8
13		23.6	24.8	8.5	9.9	2.8	3.4	16.0
14		23.8	25.1	8.5	10.0	2.9	3.5	16.1
15		24.0	25.5	8.6	10.1	2.9	3.5	16.1

<i>cont'd</i>	Type of progression		
	Distant metast. (1- KM)	NOS (CI)	NOS (1-KM)
N	8,686	9,179	9,179
Events	1,157	402	402
compet.		2,765	
Years	%	%	%
0	0.0	0.0	0.0
1	4.6	2.3	2.4
2	8.5	3.4	3.6
3	11.2	3.9	4.2
4	12.9	4.2	4.6
5	14.1	4.4	4.7
6	14.9	4.5	5.0
7	15.5	4.6	5.1
8	16.1	4.7	5.2
9	16.3	4.8	5.3
10	16.6	4.8	5.4
11	16.9	4.9	5.5
12	17.2	4.9	5.6
13	17.5	4.9	5.6
14	17.6	5.1	5.8
15	17.7	5.2	6.0

Table 5b. Time to first progression of patients with corpus cancer for period 1998-2019 (N=9,179), also showing the total of progression events (Events) and of deaths as competing risk (compet.).

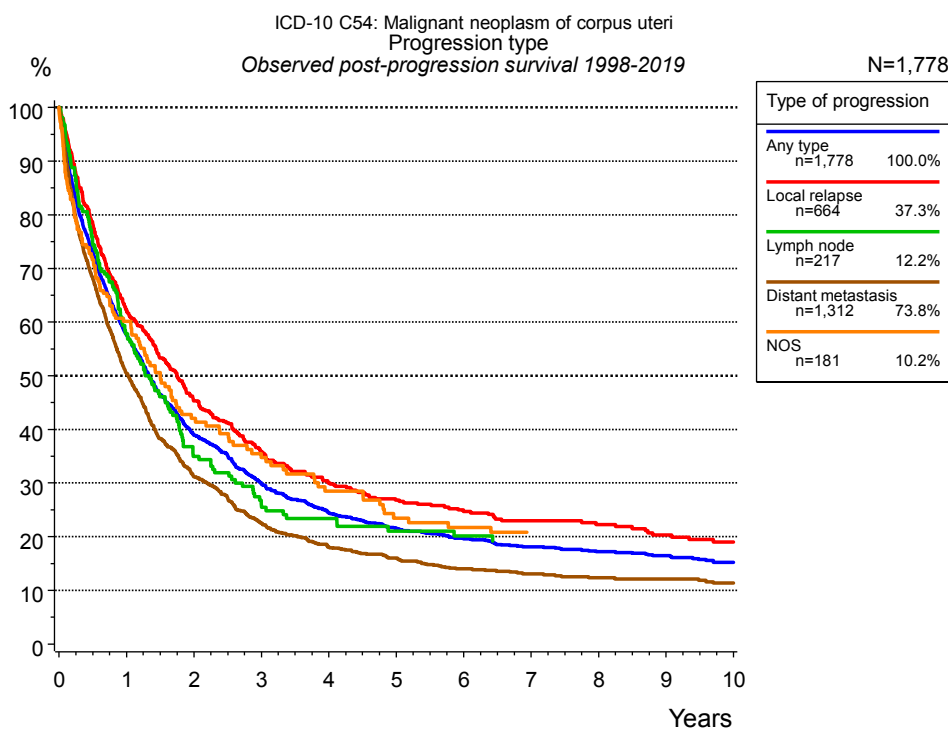


Figure 5c. Observed post-progression survival of 1,778 patients with corpus cancer diagnosed between 1998 and 2019. These 1,778 patients with documented progression events during their course of disease represent 19.4 % of the totally 9,179 evaluated cases (incl. M1, n=493, 5.4 %). Patients with cancer relapse documented via death certificates only were excluded (n=467, 5.1 %). Multiple progression types on different sites are included in the evaluation even when not occurring synchronously. The NOS (not otherwise specified) class is included under the condition, that it is the one and only progression type during the course of disease.

Medical record documentation often lacks the linguistic severity to distinguish between local relapse, regional lymph node metastasis and distant spread in solid cancers. Frequently, the statement “not specified” is the only information in registries regarding relapse of the disease. The category “Any type” denotes all cases who suffered from at least one relapse during the course of disease (incl. primary M1-status). Although, the real number of relapsed patients is likely to be much higher. The accumulated percentage of patients with local relapse or distant metastasis exceeds the 100 % value because patients are potentially considered in more than one subgroup.

Years	Type of progression				
	Any type n=1,778 %	Local relapse n=664 %	Lymph node n=217 %	Distant metastasis n=1,312 %	NOS n=181 %
0	100.0	100.0	100.0	100.0	100.0
1	57.6	62.2	57.8	50.4	60.1
2	38.9	45.3	35.0	31.1	42.1
3	29.9	35.8	26.1	22.5	34.7
4	24.5	30.0	23.4	18.1	28.5
5	21.6	26.8	21.0	16.0	23.5
6	19.6	24.7	20.1	14.0	21.7
7	18.1	23.0	20.1	13.1	20.8
8	17.2	22.3	20.1	12.3	20.8
9	16.4	20.3	20.1	12.1	20.8
10	15.2	19.0	20.1	11.3	20.8

Table 5d. Observed post-progression survival of patients with corpus cancer for period 1998-2019 (N=1,778).

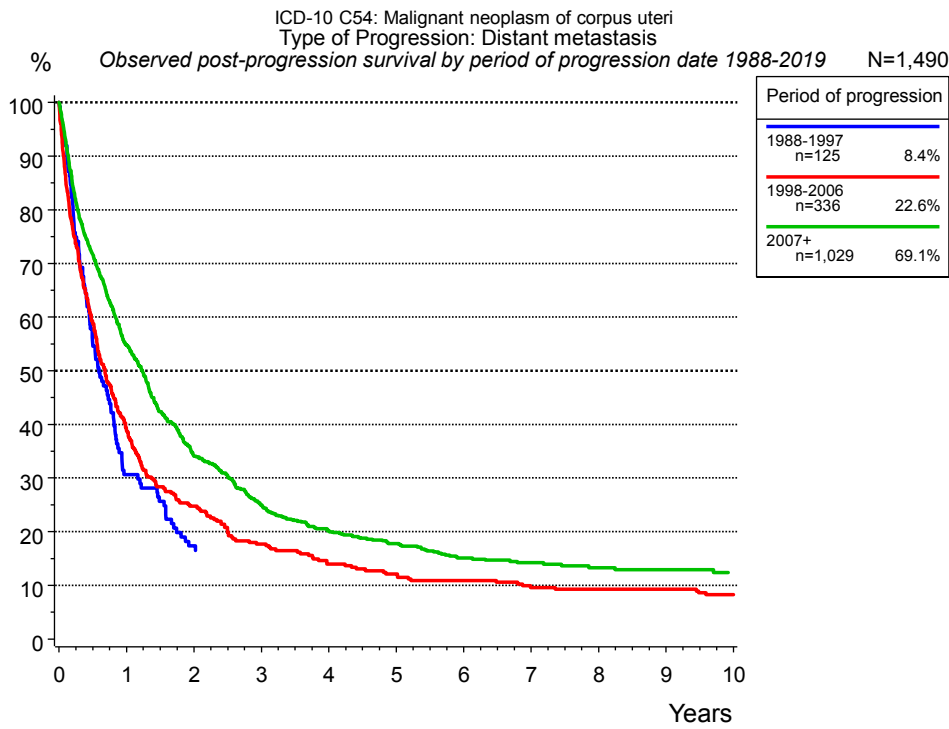


Figure 5e. Observed post-progression (distant metastasis) survival of 1,490 patients with corpus cancer diagnosed between 1988 and 2019 by period of progression.

Years	Period of progression		
	1988-1997 n=125 %	1998-2006 n=336 %	2007+ n=1,029 %
0	100.0	100.0	100.0
1	30.6	38.8	54.8
2	17.4	24.7	34.0
3		17.7	24.9
4		14.0	20.1
5		12.1	17.8
6		10.9	15.1
7		9.6	14.2
8		9.3	13.3
9		9.3	12.9
10		8.3	

Table 5f. Observed post-progression (distant metastasis) survival of patients with corpus cancer for period 1988-2019 by period of progression (N=1,490).

Shortcuts

MCR Munich Cancer Registry, Germany

NCI National Cancer Institute, USA

SEER Surveillance, Epidemiology, and End Results, USA

UICC Union for International Cancer Control, Geneva

DCO Death certificate only Death certificate provides the only notification to the registry.

NA Not available

NOS Not otherwise specified

OS Overall/Observed survival Overall/Observed survival (Kaplan-Meier estimate)
Date of entry: diagnosis
Event: death from any cause

RS Relative survival Survival compared to “general population”,
ratio of observed to expected survival (Ederer II method),
reflecting cancer specific survival

AS Assembled survival Assembled chart of
observed, expected, relative survival

CS Conditional survival Survival probability under the condition of surviving
a given period of time

TTP Time to progression Time to first progression / relapse
Date of entry: diagnosis
Event: (progression / relapse): first local-, lymph node recurrence,
distant metastasis or unspecified progression

1-KM 1 minus Kaplan-Meier estimator
 (“inverse” Kaplan-Meier estimator)

CI Cumulative incidence
Death as competing risk (according to Kalbfleisch und Prentice)

PPS Post-progression survival Survival since first progression / relapse (Kaplan-Meier estimate)
Date of entry (progression / relapse): first local-, lymph node
recurrence, distant metastasis or unspecified progression
Event: death from any cause

Recommended Citation

Munich Cancer Registry. Survival ICD-10 C54: Corpus cancer [Internet]. 2021 [updated 2021 Jan 27; cited 2021 Mar 1]. Available from: https://www.tumorregister-muenchen.de/en/facts/surv/sC54__E-ICD-10-C54-Corpus-cancer-survival.pdf

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