

Munich Cancer Registry



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

ICD-10 C54: Corpus cancer

Survival

Year of diagnosis	1988-1997	1998-2020
Patients	2,112	12,169
Diseases	2,112	12,169
Cases evaluated	1,897	9,874
Creation date	04/15/2022	
Database export	12/20/2021	
Population (females)	2.48 m	



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<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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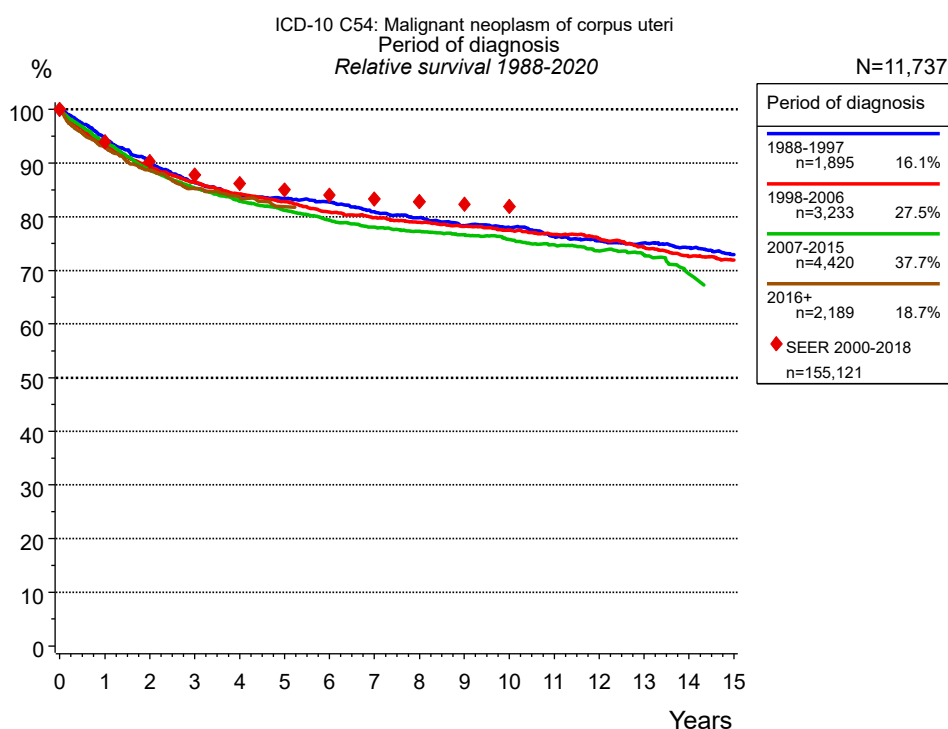


Figure 1a. Relative survival of patients with corpus cancer by period of diagnosis. Included in the evaluation are 11,737 cases diagnosed between 1988 and 2020.

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 2018, 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=1,895		1998-2006 n=3,233		2007-2015 n=4,420		2016+ n=2,189	
	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	92.3	94.8	91.2	93.4	92.0	94.0	91.2	93.0
2	85.5	90.1	85.2	89.2	85.1	88.7	85.4	88.7
3	79.8	86.4	80.7	86.4	80.3	85.4	80.6	85.2
4	75.5	83.9	76.9	84.2	76.3	82.9	77.6	83.6
5	73.0	83.3	74.0	82.8	73.2	81.2	74.8	81.9
6	70.6	82.7	70.6	80.9	70.0	79.3		
7	67.2	80.9	68.1	79.8	67.4	78.1		
8	64.5	79.8	65.8	79.0	65.2	77.3		
9	61.5	78.3	63.5	78.2	63.2	76.7		
10	59.6	78.1	61.3	77.5	60.8	75.7		
11	56.6	76.4	59.1	76.7	58.5	74.7		
12	54.3	75.5	56.9	75.9	56.1	73.6		
13	52.3	75.1	54.1	74.3	54.1	72.9		
14	50.1	74.3	51.3	72.6	49.8	69.3		
15	47.5	72.9	49.2	71.9				
Median	14.0		14.6		14.0			

Table 1b. Observed (obs.) and relative (rel.) survival of patients with corpus cancer by period of diagnosis for period 1988-2020 (N=11,737).

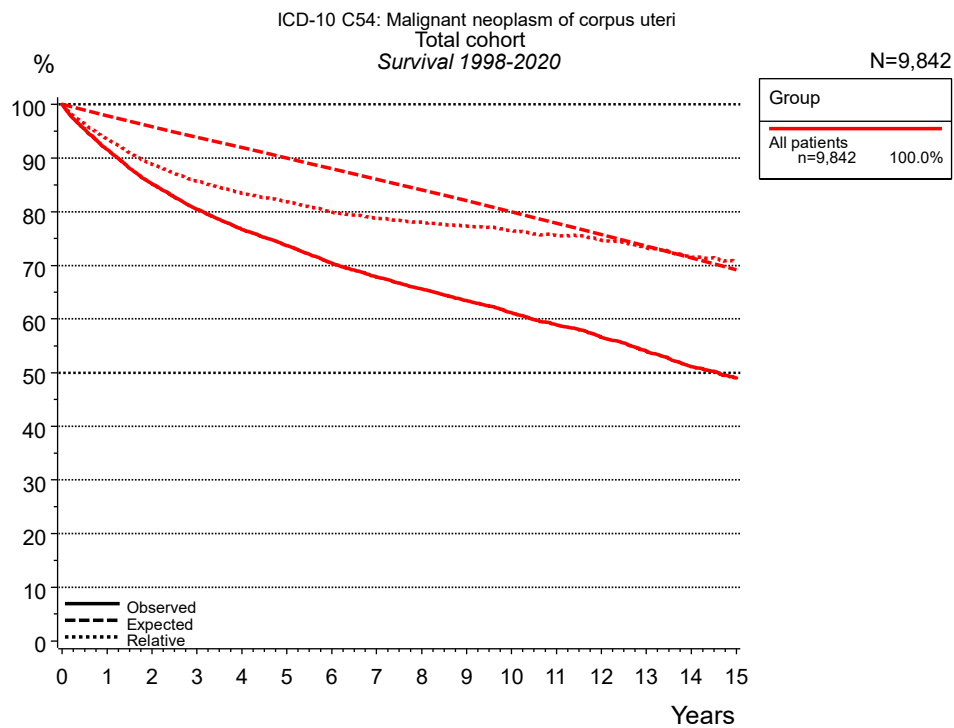


Figure 2a. Observed, expected and relative survival of the total cohort with corpus cancer. Included in the evaluation are 9,842 cases diagnosed between 1998 and 2020.

Group		
All patients n=9,842		
Years	obs. %	rel. %
0	100.0	100.0
1	91.6	93.6
2	85.2	88.9
3	80.4	85.7
4	76.7	83.4
5	73.7	81.8
6	70.4	80.0
7	67.8	78.8
8	65.6	78.0
9	63.4	77.3
10	61.2	76.5
11	58.9	75.6
12	56.6	74.7
13	54.0	73.4
14	51.1	71.5
15	49.0	70.8
Median	14.6	

Table 2b. Observed (obs.) and relative (rel.) survival of the total cohort with corpus cancer for period 1998-2020 (N=9,842).

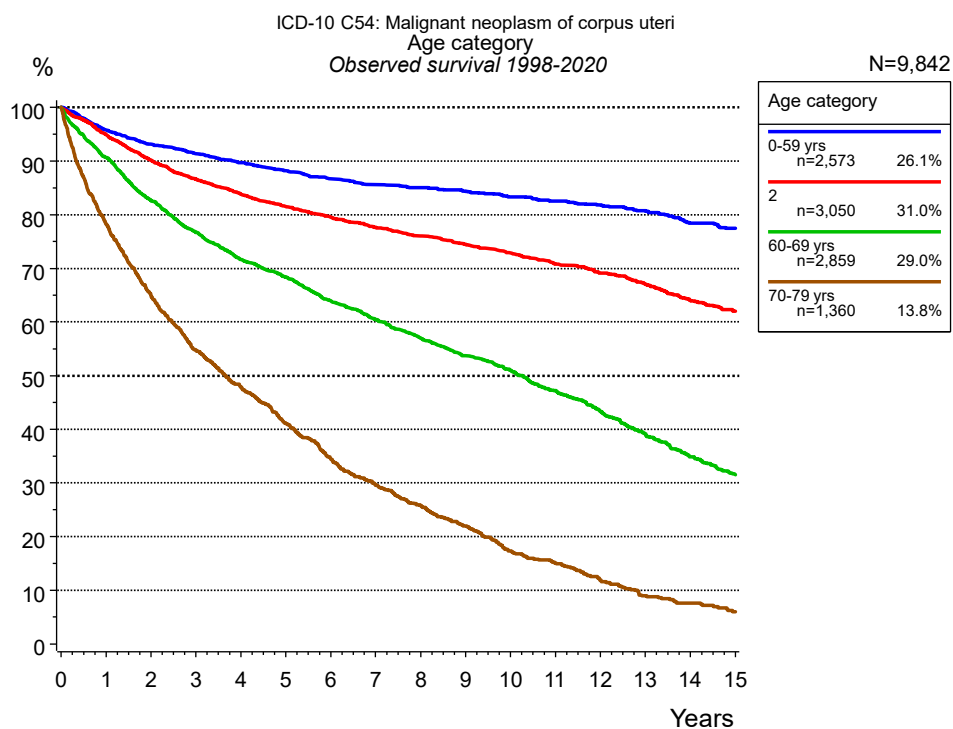


Figure 3a. Observed survival of patients with corpus cancer by age category. Included in the evaluation are 9,842 cases diagnosed between 1998 and 2020.

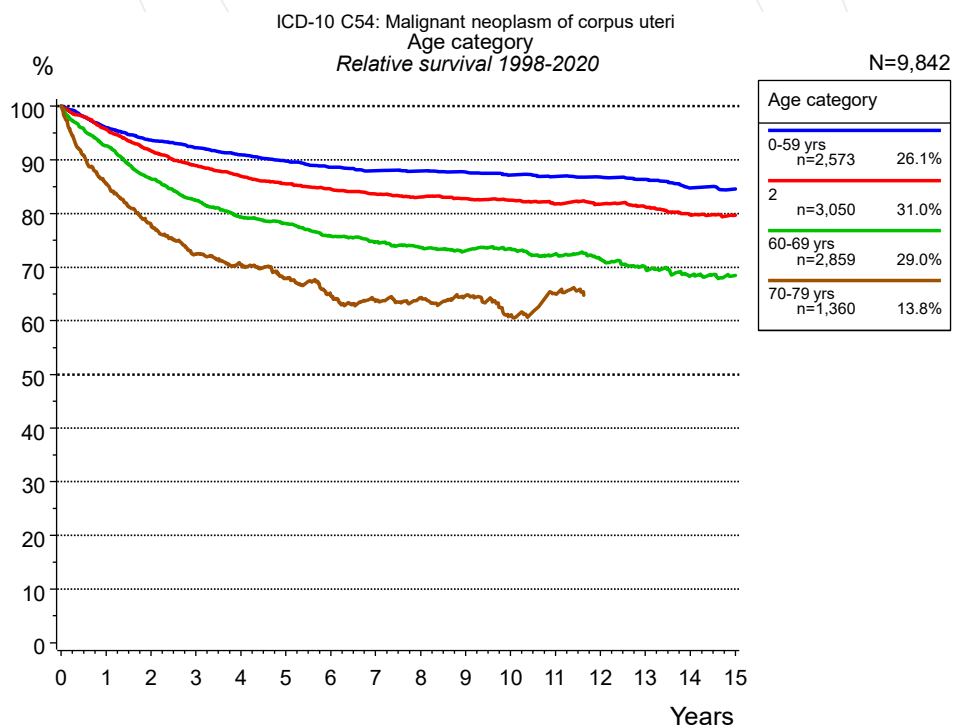


Figure 3b. Relative survival of patients with corpus cancer by age category. Included in the evaluation are 9,842 cases diagnosed between 1998 and 2020.

Years	Age category							
	0-59 yrs		2		60-69 yrs		70-79 yrs	
	n=2,573		n=3,050		n=2,859		n=1,360	
	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	95.8	96.1	94.9	95.7	90.7	92.6	78.3	85.6
2	93.1	93.7	90.2	91.7	82.7	86.5	65.0	77.9
3	91.4	92.2	86.6	88.9	76.7	82.4	54.8	72.4
4	89.7	90.9	83.8	87.0	71.7	79.3	47.9	70.5
5	88.2	89.8	81.5	85.5	68.3	78.1	41.1	67.9
6	86.7	88.6	79.5	84.5	63.9	75.8	34.5	64.7
7	85.6	88.0	77.6	83.6	60.4	74.7	29.6	63.7
8	85.1	87.9	76.0	83.1	57.0	73.7	25.7	64.3
9	84.4	87.7	74.5	82.7	53.7	73.0	22.0	64.7
10	83.3	87.2	72.8	82.5	51.0	73.4	17.3	61.0
11	82.5	86.9	70.8	81.8	47.2	72.4	15.0	65.0
12	81.8	86.8	69.1	81.7	43.2	71.4	11.9	64.2
13	80.8	86.4	67.1	81.3	39.1	70.0	8.9	61.1
14	78.4	84.8	64.0	79.8	34.8	68.4	7.6	67.6
15	77.5	84.5	62.0	79.7	31.5	68.5	5.9	71.4
Median			20.2		10.2		3.7	

Table 3c. Observed (obs.) and relative (rel.) survival of patients with corpus cancer by age category for period 1998-2020 (N=9,842).

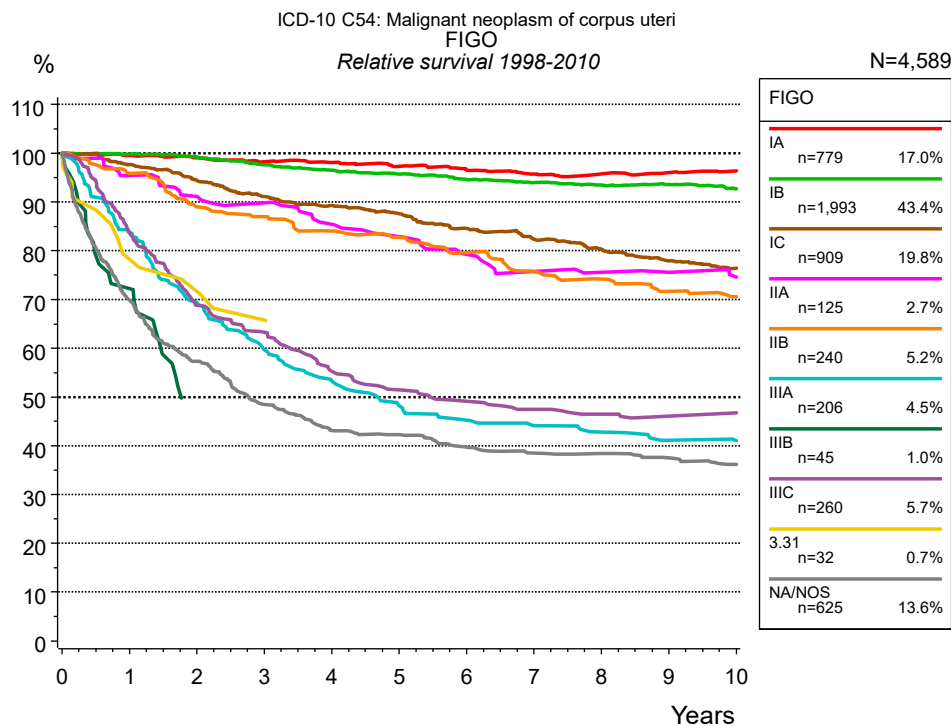


Figure 4a. Relative survival of patients with corpus cancer by FIGO. For 4,998 of 5,214 cases diagnosed between 1998 and 2010 valid data could be obtained for this item. For a total of 4,589 cases an evaluable classification was established. The grey line represents the subgroup of 625 patients with missing values regarding FIGO (12.0 % of 5,214 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.

		FIGO													
		IA n=779		IB n=1,993		IC n=909		IIA n=125		IIB n=240		IIIA n=206		IIIB n=45	
Years		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	94.9	97.7	93.5	95.5	93.7	95.9	80.9	83.9	70.8	72.2
2		96.1	99.1	95.8	99.3	88.9	94.4	87.7	91.1	85.1	89.0	65.1	69.3		
3		93.7	98.2	92.5	97.6	83.4	91.1	84.4	89.8	81.6	87.0	54.6	59.7		
4		92.0	98.1	89.7	96.5	79.2	89.3	78.4	85.4	77.3	84.1	48.0	53.4		
5		89.7	97.3	87.2	95.8	75.3	87.6	74.1	82.9	74.2	82.7	42.4	48.2		
6		87.2	96.5	84.4	94.5	70.6	84.5	68.9	79.3	69.7	79.6	39.3	45.2		
7		84.9	95.7	82.1	94.0	66.6	82.3	64.6	75.8	64.8	75.7	37.2	44.1		
8		83.2	95.8	79.8	93.5	62.9	80.3	62.9	75.6	62.0	74.2	35.6	42.8		
9		81.7	96.0	78.0	93.6	59.0	78.0	62.0	75.6	58.4	71.7	33.4	41.1		
10		80.3	96.4	75.3	92.7	55.9	76.4	59.4	74.6	56.1	70.6	32.9	41.1		
Median				19.7		11.7		13.0		12.5		3.6		1.7	

<i>cont'd</i>	FIGO					
	IIIC n=260		3.31 n=32		NA/NOS n=625	
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	67.6	69.9
2	66.8	68.8	71.9	71.7	53.9	57.3
3	60.6	63.2	65.6	65.8	44.4	48.5
4	52.1	55.3			38.6	43.1
5	47.9	51.4			37.1	42.3
6	45.1	49.1			34.1	39.8
7	42.7	47.5			32.4	38.6
8	41.1	46.4			31.6	38.4
9	39.8	46.0			30.4	37.6
10	39.8	46.7			28.7	36.2
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).

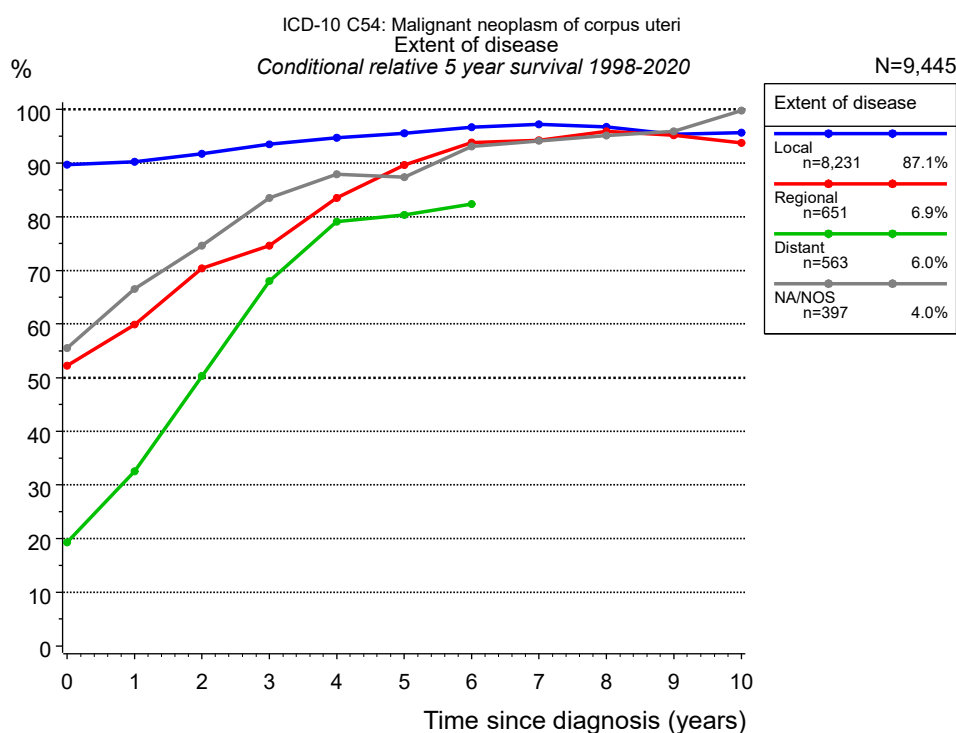


Figure 4c. Conditional relative 5-year survival of patients with corpus cancer by extent of disease. For 9,477 of 9,842 cases diagnosed between 1998 and 2020 valid data could be obtained for this item. For a total of 9,445 cases an evaluable classification was established. The grey line represents the subgroup of 397 patients with missing values regarding extent of disease (4.0 % of 9,842 patients, the percent values of all other categories are related to n=9,445).

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	8,231	89.7	651	52.2	563	19.3	397	55.5
1	7,582	90.2	510	59.9	297	32.5	287	66.5
2	6,923	91.7	396	70.4	172	50.3	236	74.6
3	6,256	93.5	335	74.6	115	68.0	194	83.5
4	5,635	94.8	272	83.5	89	79.1	163	88.0
5	5,080	95.6	229	89.7	70	80.4	150	87.4
6	4,571	96.7	195	93.8	57	82.4	128	93.1
7	4,100	97.2	169	94.3			123	94.2
8	3,667	96.7	146	95.9			115	95.2
9	3,252	95.4	132	95.2			105	95.9
10	2,861	95.7	119	93.7			93	99.8

Table 4d. Conditional relative 5-year survival of patients with corpus cancer by extent of disease for period 1998-2020 (N=9,445).

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 93.5% (n=6,256).

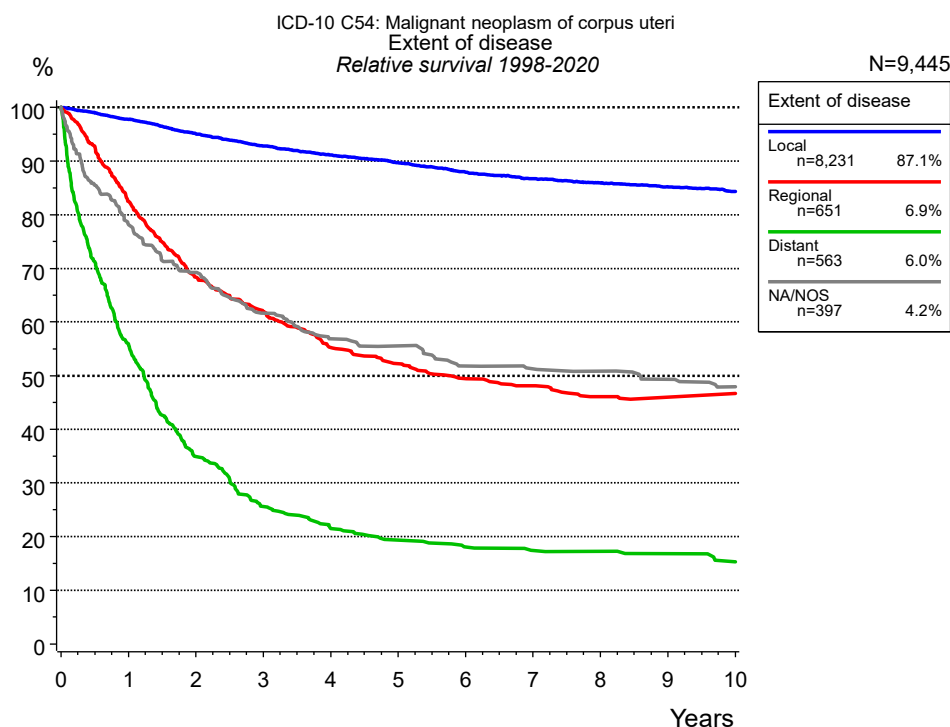


Figure 4c. Relative survival of patients with corpus cancer by extent of disease. For 9,477 of 9,842 cases diagnosed between 1998 and 2020 valid data could be obtained for this item. For a total of 9,445 cases an evaluable classification was established. The grey line represents the subgroup of 397 patients with missing values regarding extent of disease (4.0 % of 9,842 patients, the percent values of all other categories are related to n=9,445).

Years	Extent of disease							
	Local n=8,231		Regional n=651		Distant n=563		NA/NOS n=397	
	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	95.8	97.8	81.1	82.5	54.5	55.8	75.2	78.2
2	91.3	95.1	66.2	68.3	33.6	35.0	64.5	69.2
3	87.2	92.8	59.0	62.0	24.2	25.6	55.9	61.6
4	83.8	91.1	51.9	55.3	20.1	21.5	50.5	56.8
5	80.7	89.7	48.3	52.2	17.7	19.3	48.6	55.5
6	77.4	87.9	45.0	49.4	16.1	18.1	44.5	51.8
7	74.5	86.7	43.1	48.1	15.2	17.5	43.5	51.3
8	72.1	85.9	40.4	46.1	14.9	17.2	42.4	50.8
9	69.8	85.2	39.6	46.0	14.2	16.8	40.5	49.3
10	67.3	84.3	39.6	46.7	12.7	15.2	38.5	47.9
Median	16.7		4.5		1.2		4.3	

Table 4d. Observed (obs.) and relative (rel.) survival of patients with corpus cancer by extent of disease for period 1998-2020 (N=9,445).

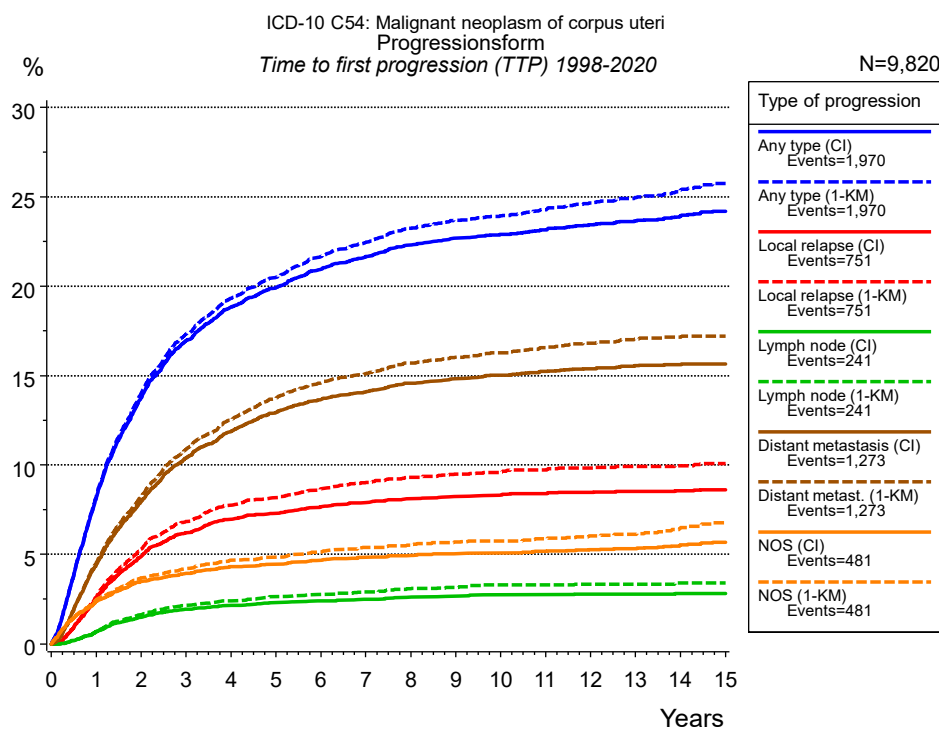


Figure 5a. Time to first progression of 9,820 patients with corpus cancer diagnosed between 1998 and 2020 (in solid cancers M0 only) estimated by cumulative incidence function (CI, solid line) accounting for death as competing risk and by inverse Kaplan-Meier estimate (1-KM, dashed line). The frequency 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	Events	9,267	9,267	9,820	9,820	9,820	9,820	9,267
compet.	Years	1,961	1,961	749	749	241	241	1,265
		1,569		3,087		3,445		2,081
		%	%	%	%	%	%	%
0		0.0	0.0	0.0	0.0	0.0	0.0	0.0
1		8.1	8.2	2.5	2.6	0.7	0.7	4.4
2		13.8	14.0	4.9	5.3	1.5	1.6	8.0
3		16.9	17.3	6.2	6.8	1.9	2.2	10.4
4		18.8	19.3	7.0	7.8	2.1	2.4	11.9
5		19.9	20.5	7.3	8.2	2.3	2.7	12.9
6		21.0	21.7	7.7	8.7	2.4	2.8	13.7
7		21.7	22.5	7.9	9.0	2.5	2.9	14.1
8		22.3	23.2	8.1	9.3	2.6	3.1	14.6
9		22.7	23.7	8.3	9.5	2.7	3.2	14.8
10		22.9	23.9	8.3	9.6	2.8	3.3	15.0
11		23.2	24.3	8.4	9.7	2.8	3.3	15.2
12		23.4	24.7	8.5	9.8	2.8	3.3	15.4
13		23.7	25.0	8.5	9.9	2.8	3.3	15.6
14		23.9	25.4	8.6	10.0	2.8	3.4	15.6
15		24.2	25.7	8.6	10.1	2.8	3.4	15.7

<i>cont'd</i>	Type of progression		
	Distant metast. (1-KM)	NOS (CI)	NOS (1-KM)
N	9,267	9,820	9,820
Events	1,265	478	478
compet.		3,202	
Years	%	%	%
0	0.0	0.0	0.0
1	4.5	2.4	2.4
2	8.3	3.5	3.7
3	10.9	3.9	4.2
4	12.5	4.3	4.7
5	13.7	4.5	4.8
6	14.6	4.7	5.1
7	15.1	4.8	5.4
8	15.7	4.9	5.5
9	16.0	5.1	5.7
10	16.3	5.1	5.7
11	16.6	5.2	5.9
12	16.8	5.3	6.0
13	17.1	5.3	6.1
14	17.1	5.5	6.5
15	17.2	5.7	6.8

Table 5b. Time to first progression of patients with corpus cancer for period 1998-2020 (N=9,820), also showing the total of progression events (Events) and of deaths as competing risk (compet.).

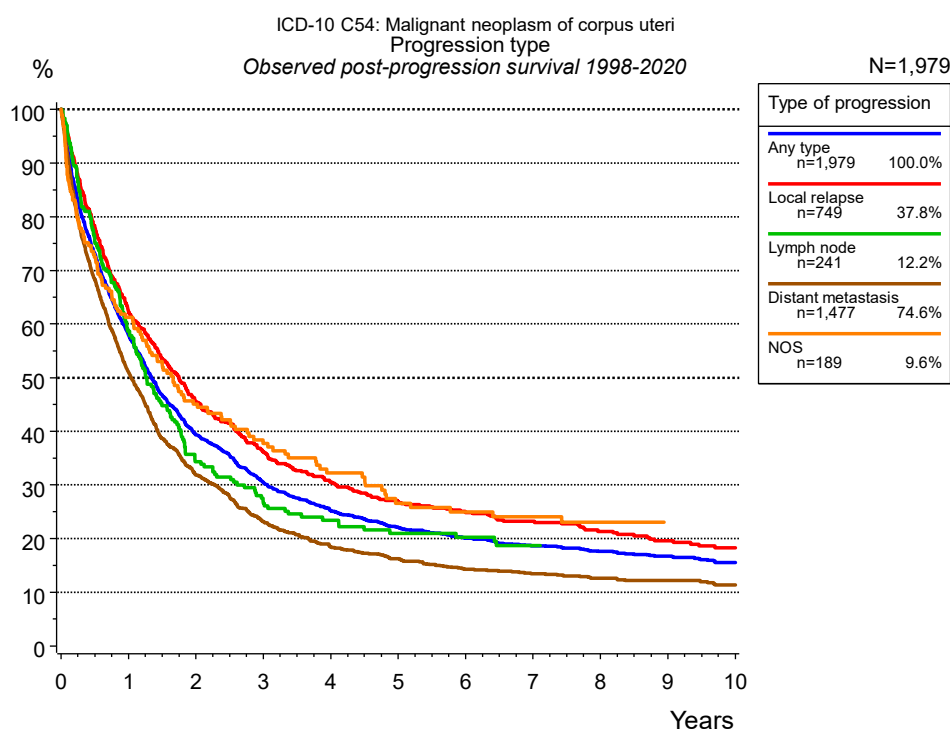


Figure 5c. Observed post-progression survival of 1,979 patients with corpus cancer diagnosed between 1998 and 2020. These 1,979 patients with documented progression events during their course of disease represent 20.2 % of the totally 9,820 evaluated cases (incl. M1, n=553, 5.6 %). Patients with cancer relapse documented via death certificates only were excluded (n=544, 5.5 %). 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=1,979 %	Local relapse n=749 %	Lymph node n=241 %	Distant metastasis n=1,477 %	NOS n=189 %
0	100.0	100.0	100.0	100.0	100.0
1	57.9	62.3	58.7	51.0	61.3
2	39.3	45.5	34.3	31.8	45.1
3	30.4	36.2	27.0	23.2	37.7
4	25.2	30.5	23.4	18.5	32.2
5	22.1	26.9	21.0	16.3	26.6
6	20.0	24.9	20.3	14.3	24.9
7	18.6	23.2	18.7	13.4	24.0
8	17.6	21.3		12.6	23.0
9	16.7	19.6		12.2	23.0
10	15.5	18.3		11.4	

Table 5d. Observed post-progression survival of patients with corpus cancer for period 1998-2020 (N=1,979).

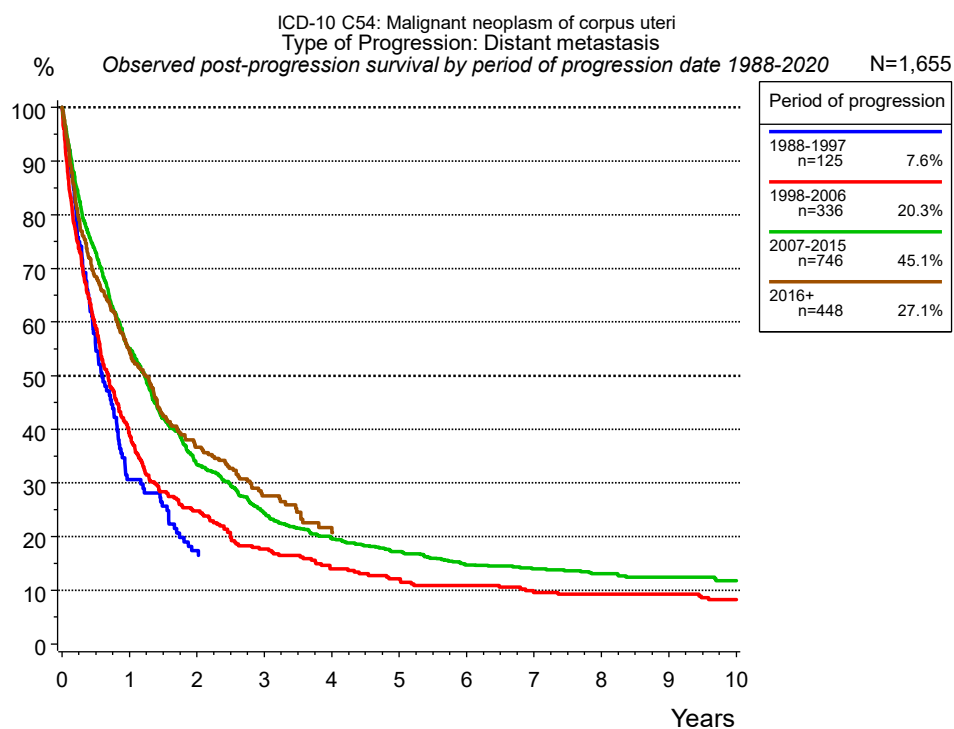


Figure 5e. Observed post-progression (distant metastasis) survival of 1,655 patients with corpus cancer diagnosed between 1988 and 2020 by period of progression.

Years	Period of progression			
	1988-1997 n=125 %	1998-2006 n=336 %	2007-2015 n=746 %	2016+ n=448 %
0	100.0	100.0	100.0	100.0
1	30.6	38.8	55.1	54.5
2	17.4	24.7	33.4	36.7
3		17.7	24.4	27.6
4		14.0	19.7	21.7
5		12.1	17.2	
6		10.9	14.8	
7		9.6	14.0	
8		9.3	13.1	
9		9.3	12.4	
10		8.3	11.8	

Table 5f. Observed post-progression (distant metastasis) survival of patients with corpus cancer for period 1988-2020 by period of progression (N=1,655).

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]. 2022 [updated 2022 Apr 15; cited 2022 Jun 1]. Available from: https://www.tumorregister-muenchen.de/en/facts/surv/sC54__E-ICD-10-C54-Corpus-cancer-survival.pdf

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