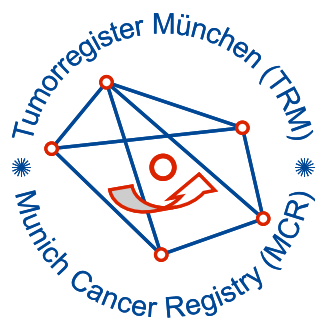


Munich Cancer Registry



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

ICD-10 C18: Colon cancer

Survival

Year of diagnosis	1988-1997	1998-2019
Patients	6,329	38,443
Diseases	6,405	39,284
Cases evaluated	5,546	28,705
Creation date	01/27/2021	
Database export	01/07/2021	
Population	4.92 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/sC18__E-ICD-10-C18-Colon-cancer-survival.pdf

Index of figures and tables

Fig./Tbl.		Page
1a	Relative survival by period of diagnosis (chart)	3
1b	Survival by period of diagnosis (table)	3
2a	Survival by sex (chart)	4
2b	Survival by sex (table)	4
3a	Observed survival by age category (chart)	5
3b	Relative survival by age category (chart)	5
3c	Survival by age category (table)	6
4a	Relative survival by UICC (chart)	7
4b	Survival by UICC (table)	7
4c	Conditional survival by UICC (chart)	8
4d	Conditional survival by UICC (table)	8
4g	Relative survival by TNM staging 1998+ (chart)	9
4h	Survival by TNM staging 1998+ (table)	9
4i	Relative survival by TNM staging 1998+ (chart)	11
4j	Survival by TNM staging 1998+ (table)	11
5a	Time to first progression (chart)	13
5b	Time to first progression (table)	13
5c	Observed post-progression survival (chart)	15
5d	Observed post-progression survival (table)	15
5e	Observed post-progression survival by period of progression (chart)	16
5f	Observed post-progression survival by period of progression (table)	16

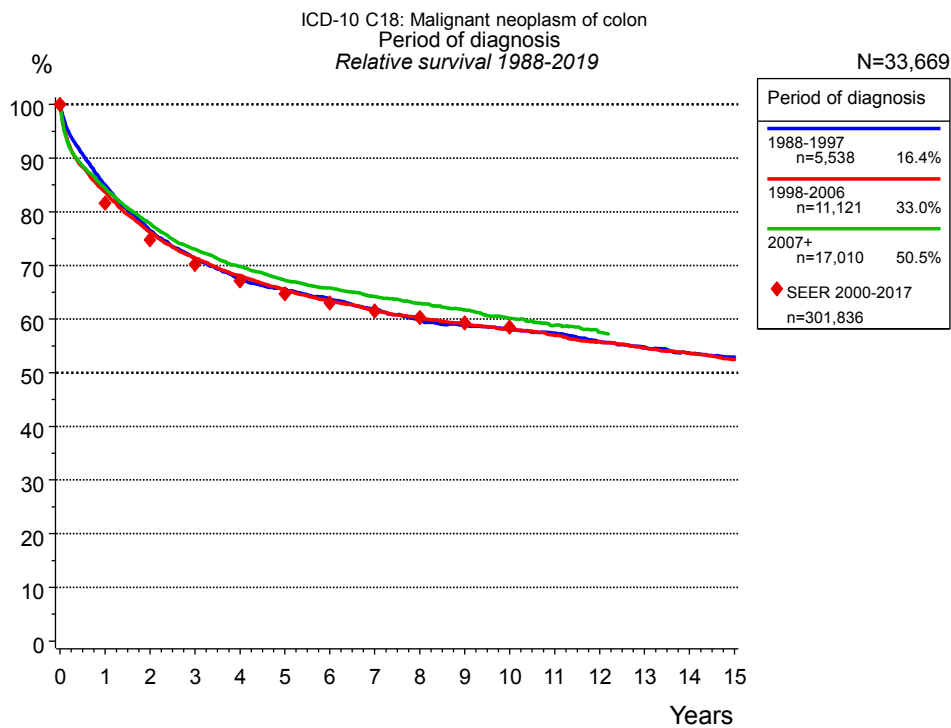


Figure 1a. Relative survival of patients with colon cancer by period of diagnosis. Included in the evaluation are 33,669 cases diagnosed between 1988 and 2019.

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 2017, 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=5,538		1998-2006 n=11,121		2007+ n=17,010	
	obs. %	rel. %	obs. %	rel. %	obs. %	rel. %
0	100.0	100.0	100.0	100.0	100.0	100.0
1	81.7	85.0	80.4	83.7	81.3	84.4
2	70.9	76.5	70.5	76.2	72.3	77.8
3	63.7	71.4	63.7	71.3	65.5	73.0
4	58.1	67.5	58.6	68.1	60.5	69.8
5	54.4	65.6	54.4	65.5	56.2	67.2
6	50.9	63.7	50.7	63.4	53.0	65.8
7	47.5	61.8	47.5	61.6	49.8	64.2
8	44.2	59.6	44.7	60.2	47.0	62.9
9	42.0	58.9	42.2	59.1	44.4	61.7
10	39.9	58.2	39.9	58.0	41.6	60.1
11	37.9	57.4	37.6	56.9	39.2	58.8
12	35.5	55.8	35.4	55.7	36.9	57.6
13	33.5	54.8	33.3	54.6		
14	31.6	53.7	31.4	53.6		
15	29.9	52.9	29.4	52.4		
Median	6.3		6.2		6.9	

Table 1b. Observed (obs.) and relative (rel.) survival of patients with colon cancer by period of diagnosis for period 1988-2019 (N=33,669).

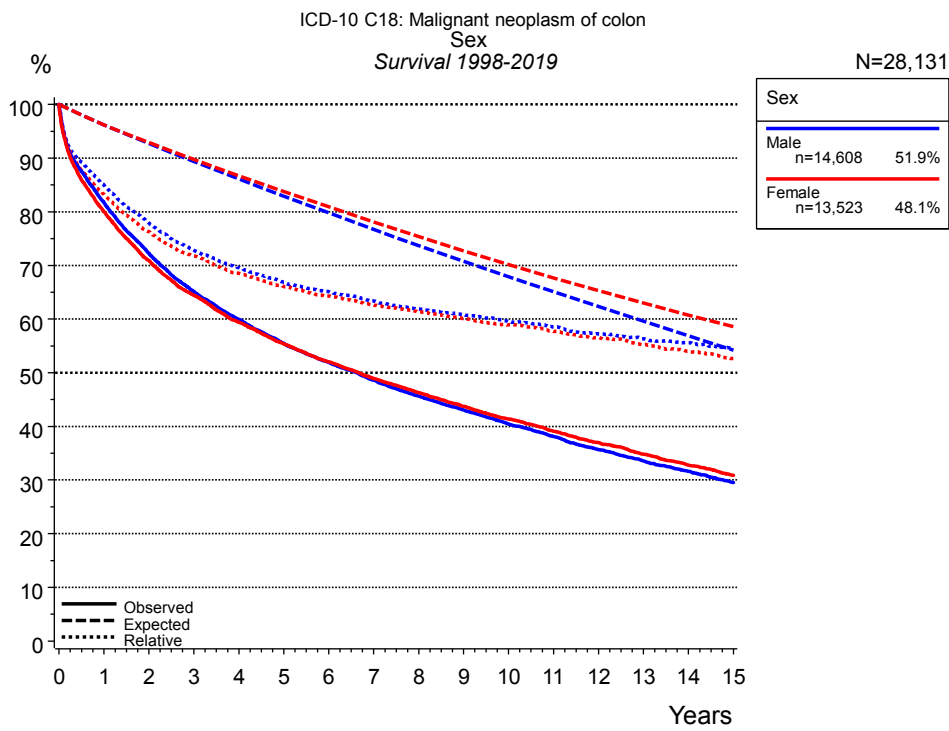


Figure 2a. Survival of patients with colon cancer by sex. Included in the evaluation are 28,131 cases diagnosed between 1998 and 2019.

Years	Sex			
	Male n=14,608		Female n=13,523	
	obs. %	rel. %	obs. %	rel. %
0	100.0	100.0	100.0	100.0
1	81.7	85.0	80.0	83.2
2	72.2	77.9	70.9	76.3
3	65.1	72.8	64.4	71.8
4	59.9	69.6	59.4	68.5
5	55.5	66.9	55.4	66.1
6	52.0	65.1	52.0	64.3
7	48.6	63.4	48.9	62.6
8	45.6	61.9	46.3	61.4
9	43.1	60.9	43.7	60.1
10	40.4	59.5	41.4	58.9
11	38.1	58.5	39.1	57.7
12	35.7	57.2	37.0	56.6
13	33.6	56.3	34.8	55.2
14	31.6	55.6	32.8	53.9
15	29.6	54.6	30.8	52.6
Median	6.6		6.7	

Table 2b. Observed (obs.) and relative (rel.) survival of patients with colon cancer by sex for period 1998-2019 (N=28,131).

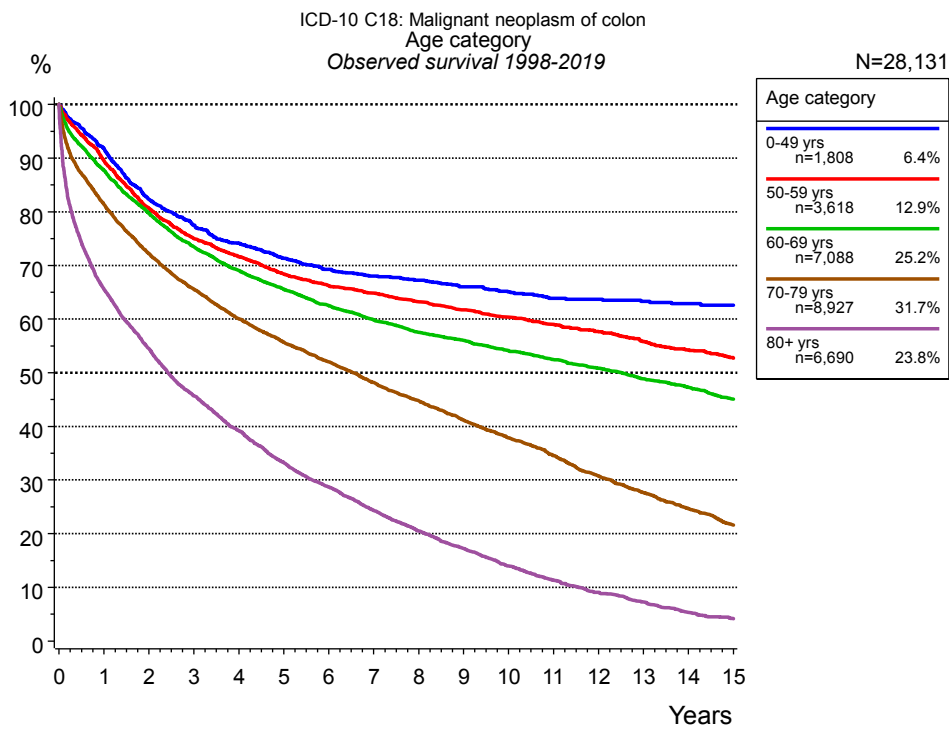


Figure 3a. Observed survival of patients with colon cancer by age category. Included in the evaluation are 28,131 cases diagnosed between 1998 and 2019.

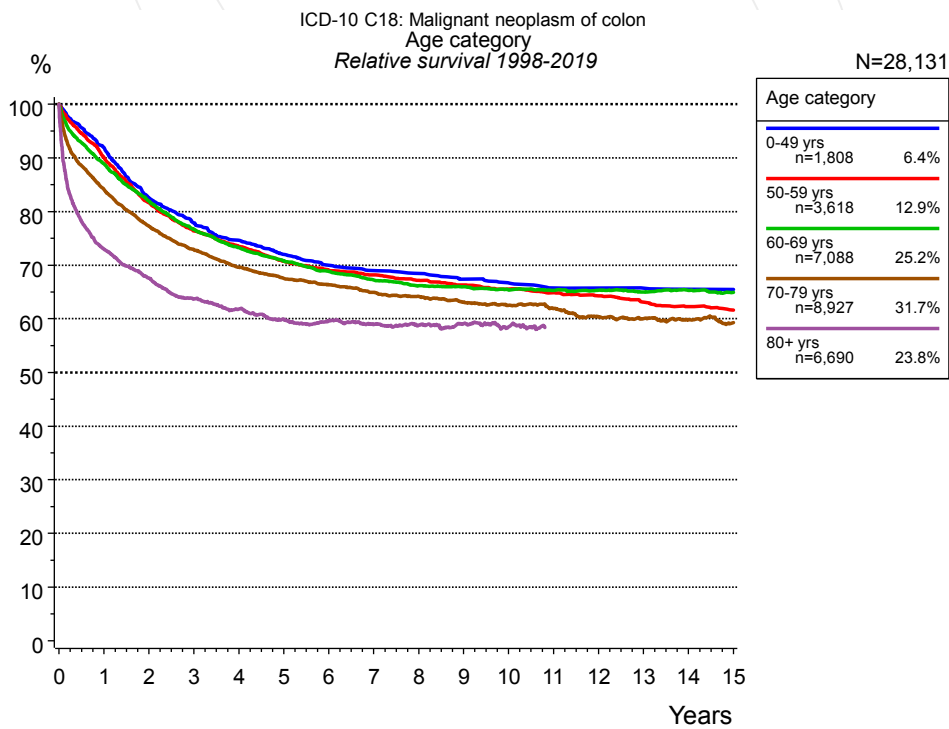


Figure 3b. Relative survival of patients with colon cancer by age category. Included in the evaluation are 28,131 cases diagnosed between 1998 and 2019.

Years	Age category									
	0-49 yrs n=1,808		50-59 yrs n=3,618		60-69 yrs n=7,088		70-79 yrs n=8,927		80+ yrs n=6,690	
	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
1	91.7	91.9	89.6	90.1	87.7	88.9	81.4	84.1	65.6	73.0
2	82.3	82.5	80.7	81.6	79.7	81.9	72.2	77.2	54.5	67.6
3	77.5	77.9	75.0	76.4	73.5	76.7	65.6	72.9	45.7	63.7
4	74.1	74.6	71.6	73.5	69.1	73.3	60.1	69.6	39.2	61.8
5	71.3	72.0	68.4	70.7	65.6	70.8	55.7	67.6	33.3	59.9
6	69.2	70.0	66.2	69.0	62.5	68.9	52.0	66.4	28.7	59.7
7	68.0	69.0	64.8	68.2	59.8	67.2	48.2	65.0	24.3	58.9
8	67.3	68.5	63.2	67.2	57.5	66.1	44.8	64.2	20.5	58.8
9	66.0	67.4	61.7	66.3	56.0	66.0	41.2	63.1	17.2	59.1
10	65.1	66.7	60.3	65.6	54.1	65.5	37.9	62.5	13.9	58.5
11	63.9	65.7	59.0	64.9	52.4	65.3	34.5	61.9	11.3	58.9
12	63.7	65.7	57.6	64.3	50.8	65.3	30.8	60.3	9.0	59.4
13	63.3	65.7	55.8	63.1	48.9	65.0	27.7	60.0	7.2	61.5
14	62.8	65.5	54.3	62.3	47.2	65.3	24.6	59.8	5.3	59.3
15	62.6	65.5	52.7	61.6	45.1	65.0	21.6	59.3	4.1	62.9
Median			18.0		12.5		6.5		2.4	

Table 3c. Observed (obs.) and relative (rel.) survival of patients with colon cancer by age category for period 1998-2019 (N=28,131).

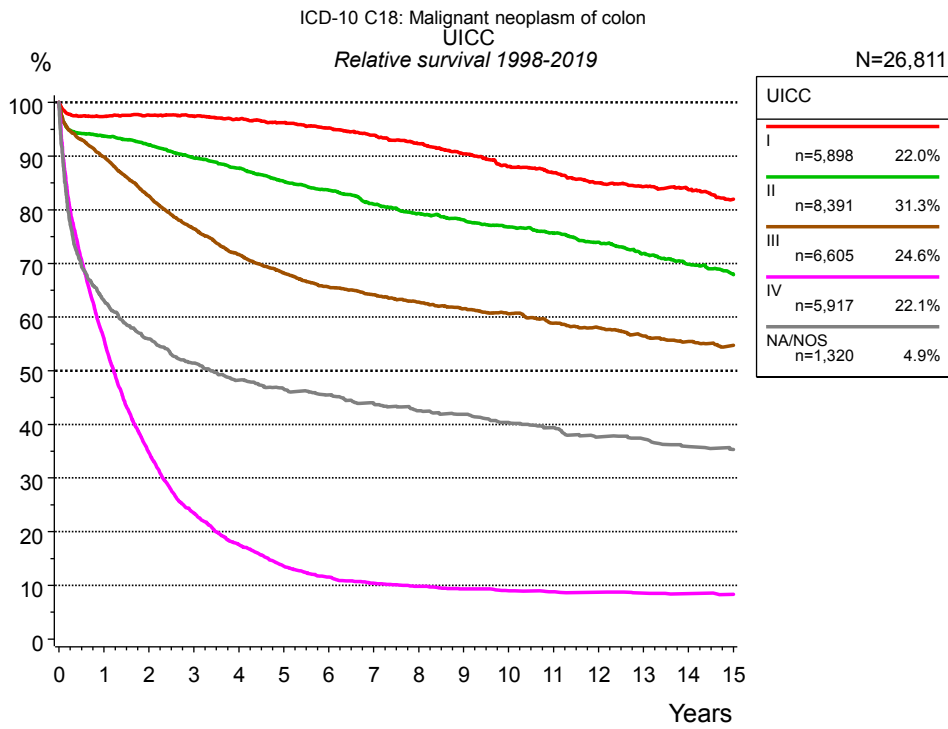


Figure 4a. Relative survival of patients with colon cancer by UICC. For 26,933 of 28,131 cases diagnosed between 1998 and 2019 valid data could be obtained for this item. For a total of 26,811 cases an evaluable classification was established. The grey line represents the subgroup of 1,320 patients with missing values regarding UICC (4.7 % of 28,131 patients, the percent values of all other categories are related to n=26,811).

Years	UICC									
	I n=5,898		II n=8,391		III n=6,605		IV n=5,917		NA/NOS n=1,320	
	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
1	94.2	97.4	89.8	93.7	86.4	89.9	54.0	55.9	59.5	63.1
2	91.4	97.6	84.7	92.1	76.7	82.6	32.7	34.8	50.5	55.9
3	88.2	97.5	79.2	89.7	68.6	76.4	21.5	23.4	44.7	51.4
4	84.7	96.9	74.4	87.7	62.1	71.7	15.7	17.6	40.5	48.2
5	81.2	96.2	69.5	85.3	57.1	68.2	11.9	13.6	38.0	46.6
6	77.6	95.3	65.4	83.7	53.0	65.6	9.8	11.5	35.8	45.5
7	73.8	93.9	60.8	81.0	50.1	64.1	8.6	10.4	33.6	43.9
8	69.8	92.3	57.1	79.3	47.3	62.8	7.9	9.8	31.6	42.5
9	65.8	90.4	53.9	78.2	44.7	61.5	7.4	9.3	30.2	41.9
10	61.7	88.1	50.8	76.8	42.5	60.6	6.9	9.0	28.4	40.4
11	58.5	86.9	47.9	75.6	39.8	58.8	6.6	8.8	26.9	39.4
12	55.0	85.0	44.9	73.9	37.9	58.0	6.3	8.7	24.9	37.7
13	52.3	84.3	41.7	71.9	35.6	56.4	6.0	8.5	24.0	37.3
14	49.9	83.8	38.8	69.8	33.6	55.5	5.7	8.5	22.4	35.9
15	46.8	82.0	36.1	67.9	31.9	54.7	5.4	8.3	21.4	35.3
Median	14.0		10.3		7.0		1.1		2.1	

Table 4b. Observed (obs.) and relative (rel.) survival of patients with colon cancer by UICC for period 1998-2019 (N=26,811).

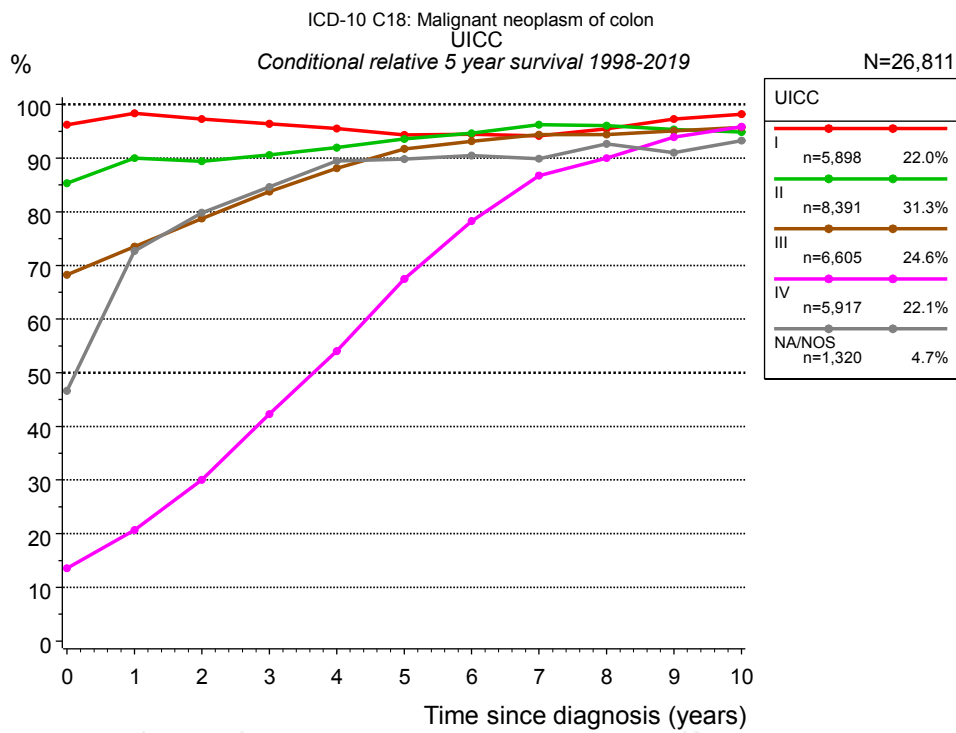


Figure 4c. Conditional relative 5-year survival of patients with colon cancer by UICC. For 26,933 of 28,131 cases diagnosed between 1998 and 2019 valid data could be obtained for this item. For a total of 26,811 cases an evaluable classification was established. The grey line represents the subgroup of 1,320 patients with missing values regarding UICC (4.7 % of 28,131 patients, the percent values of all other categories are related to n=26,811).

Years	UICC									
	I		II		III		IV		NA/NOS	
	n	Cond. surv. % 5 yrs	n	Cond. surv. % 5 yrs	n	Cond. surv. % 5 yrs	n	Cond. surv. % 5 yrs	n	Cond. surv. % 5 yrs
0	5,898	96.2	8,391	85.3	6,605	68.2	5,917	13.6	1,320	46.6
1	5,201	98.3	7,123	90.0	5,450	73.5	3,038	20.7	746	72.7
2	4,796	97.3	6,390	89.4	4,592	78.8	1,736	30.0	615	79.8
3	4,367	96.4	5,624	90.6	3,872	83.8	1,059	42.3	524	84.6
4	3,981	95.5	4,967	91.9	3,287	88.1	713	54.0	464	89.5
5	3,584	94.3	4,357	93.6	2,857	91.7	491	67.5	418	89.8
6	3,207	94.4	3,814	94.6	2,473	93.1	367	78.2	379	90.5
7	2,809	94.2	3,277	96.2	2,142	94.4	291	86.8	338	89.9
8	2,442	95.5	2,832	96.1	1,856	94.4	238	90.0	298	92.7
9	2,112	97.3	2,424	95.3	1,585	95.1	192	93.9	271	91.0
10	1,777	98.2	2,055	94.9	1,341	95.7	160	95.9	240	93.2

Table 4d. Conditional relative 5-year survival of patients with colon cancer by UICC for period 1998-2019 (N=26,811).

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 UICC="I", who are alive at least 3 years after cancer diagnosis, the conditional relative 5-year survival rate is 96.4% (n=4,367).

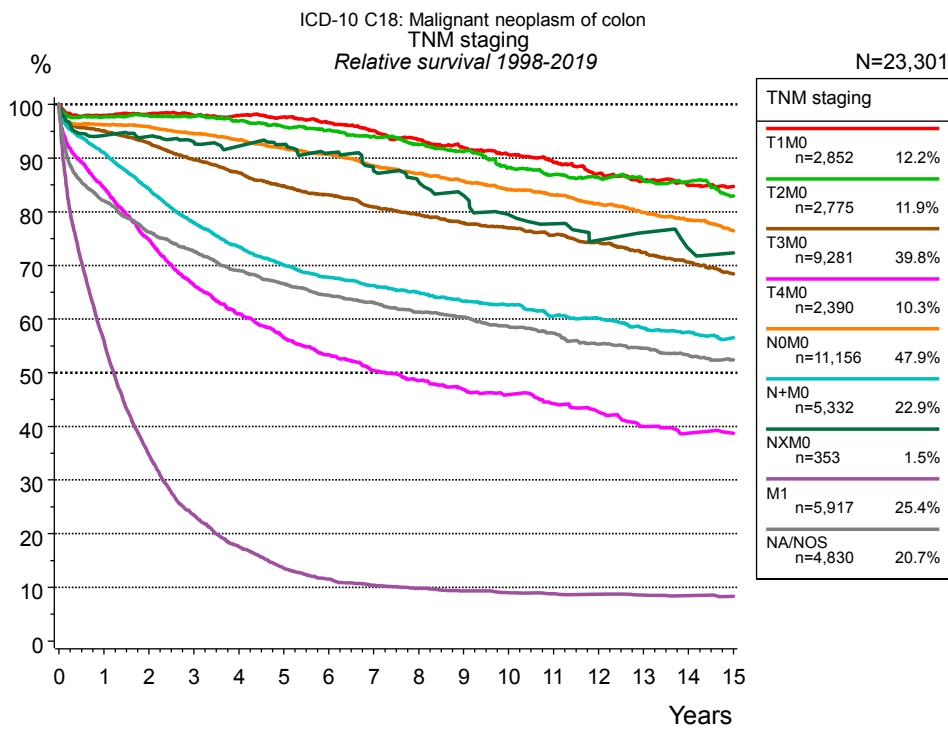


Figure 4g. Relative survival of patients with colon cancer by TNM staging. For 26,933 of 28,131 cases diagnosed between 1998 and 2019 valid data could be obtained for this item. For a total of 23,301 cases an evaluable classification was established. The accumulated percentage exceeds the 100 % value because patients are potentially considered in more than one subgroup. The grey line represents the subgroup of 4,830 patients with missing values regarding TNM staging (17.2 % of 28,131 patients, the percent values of all other categories are related to n=23,301).

Years	T1M0 n=2,852		T2M0 n=2,775		T3M0 n=9,281		T4M0 n=2,390		NOM0 n=11,156		N+M0 n=5,332		NXM0 n=353	
	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	95.2	98.0	94.3	97.7	91.3	95.0	80.9	84.5	92.6	96.2	87.7	91.1	91.7	94.2
2	92.8	98.3	91.3	97.9	85.9	92.9	69.0	74.9	89.0	95.8	78.5	84.3	89.3	94.1
3	89.9	98.0	88.0	97.8	79.9	89.7	59.0	66.4	84.6	94.6	70.2	77.9	86.1	93.0
4	87.2	97.9	84.1	96.9	74.8	87.3	52.4	61.0	80.4	93.4	63.9	73.5	82.9	92.2
5	84.3	97.6	80.1	95.8	70.0	84.8	46.8	56.5	76.2	91.8	59.0	70.1	81.1	92.5
6	80.8	96.6	76.6	95.2	66.0	83.2	42.7	53.3	72.4	90.7	55.1	67.8	77.2	91.0
7	77.0	95.1	72.9	94.1	61.6	80.8	38.9	50.4	68.0	88.5	52.0	66.2	72.0	87.6
8	73.2	93.5	69.0	92.5	58.3	79.5	36.1	48.6	64.3	87.1	49.3	64.9	68.5	85.6
9	69.5	92.0	65.4	91.2	54.8	77.9	33.7	46.9	60.8	85.7	46.4	63.3	64.3	83.0
10	66.1	90.6	60.9	88.2	52.0	77.0	31.9	45.9	57.4	84.2	44.3	62.6	58.4	79.5
11	62.7	89.2	57.7	86.9	49.0	75.6	29.6	44.3	54.4	83.1	41.3	60.6	55.2	77.8
12	59.0	87.1	55.1	86.4	46.2	74.3	27.6	42.7	51.3	81.5	39.6	60.1	50.5	74.7
13	56.0	85.8	52.7	85.8	43.2	72.4	25.0	40.0	48.1	79.9	37.1	58.3	49.2	76.1
14	53.2	84.9	50.4	85.6	40.3	70.6	23.3	38.8	45.3	78.4	35.2	57.6	45.1	73.2
15	51.0	84.7	46.9	82.9	37.4	68.4	22.5	38.8	42.3	76.4	33.3	56.5	43.7	72.4
Median	15.2		14.3		10.7		4.4		12.4		7.7		12.9	

<i>cont'd</i> Years	TNM staging			
	M1 n=5,917		NA/NOS n=4,830	
	obs. %	rel. %	obs. %	rel. %
0	100.0	100.0	100.0	100.0
1	54.0	55.9	78.1	82.0
2	32.7	34.8	69.6	76.2
3	21.5	23.4	63.6	72.6
4	15.7	17.6	58.2	69.1
5	11.9	13.6	54.0	66.6
6	9.8	11.5	50.2	64.4
7	8.6	10.4	47.3	63.1
8	7.9	9.8	44.2	61.3
9	7.4	9.3	41.9	60.4
10	6.9	9.0	39.1	58.6
11	6.6	8.8	36.8	57.4
12	6.3	8.7	34.1	55.3
13	6.0	8.5	32.3	54.6
14	5.7	8.5	30.3	53.3
15	5.4	8.3	28.6	52.4
Median	1.1		6.1	

Table 4h. Observed (obs.) and relative (rel.) survival of patients with colon cancer by TNM staging for period 1998-2019 (N=23,301).

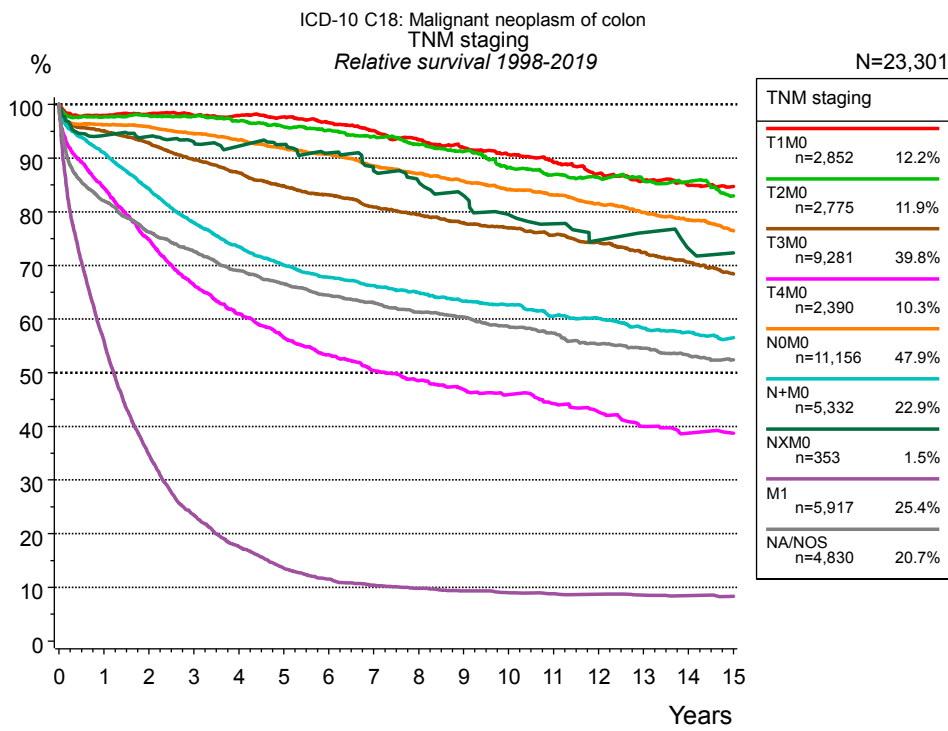


Figure 4i. Relative survival of patients with colon cancer by TNM staging. For 26,933 of 28,131 cases diagnosed between 1998 and 2019 valid data could be obtained for this item. For a total of 23,301 cases an evaluable classification was established. The accumulated percentage exceeds the 100 % value because patients are potentially considered in more than one subgroup. The grey line represents the subgroup of 4,830 patients with missing values regarding TNM staging (17.2 % of 28,131 patients, the percent values of all other categories are related to n=23,301).

Years	TNM staging													
	T1M0 n=2,852		T2M0 n=2,775		T3M0 n=9,281		T4M0 n=2,390		N0M0 n=11,156		N+M0 n=5,332		NXM0 n=353	
	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	95.2	98.0	94.3	97.7	91.3	95.0	80.9	84.5	92.6	96.2	87.7	91.1	91.7	94.2
2	92.8	98.3	91.3	97.9	85.9	92.9	69.0	74.9	89.0	95.8	78.5	84.3	89.3	94.1
3	89.9	98.0	88.0	97.8	79.9	89.7	59.0	66.4	84.6	94.6	70.2	77.9	86.1	93.0
4	87.2	97.9	84.1	96.9	74.8	87.3	52.4	61.0	80.4	93.4	63.9	73.5	82.9	92.2
5	84.3	97.6	80.1	95.8	70.0	84.8	46.8	56.5	76.2	91.8	59.0	70.1	81.1	92.5
6	80.8	96.6	76.6	95.2	66.0	83.2	42.7	53.3	72.4	90.7	55.1	67.8	77.2	91.0
7	77.0	95.1	72.9	94.1	61.6	80.8	38.9	50.4	68.0	88.5	52.0	66.2	72.0	87.6
8	73.2	93.5	69.0	92.5	58.3	79.5	36.1	48.6	64.3	87.1	49.3	64.9	68.5	85.6
9	69.5	92.0	65.4	91.2	54.8	77.9	33.7	46.9	60.8	85.7	46.4	63.3	64.3	83.0
10	66.1	90.6	60.9	88.2	52.0	77.0	31.9	45.9	57.4	84.2	44.3	62.6	58.4	79.5
11	62.7	89.2	57.7	86.9	49.0	75.6	29.6	44.3	54.4	83.1	41.3	60.6	55.2	77.8
12	59.0	87.1	55.1	86.4	46.2	74.3	27.6	42.7	51.3	81.5	39.6	60.1	50.5	74.7
13	56.0	85.8	52.7	85.8	43.2	72.4	25.0	40.0	48.1	79.9	37.1	58.3	49.2	76.1
14	53.2	84.9	50.4	85.6	40.3	70.6	23.3	38.8	45.3	78.4	35.2	57.6	45.1	73.2
15	51.0	84.7	46.9	82.9	37.4	68.4	22.5	38.8	42.3	76.4	33.3	56.5	43.7	72.4
Median	15.2		14.3		10.7		4.4		12.4		7.7		12.9	

<i>cont'd</i>	TNM staging			
	M1 n=5,917		NA/NOS n=4,830	
	obs. %	rel. %	obs. %	rel. %
Years				
0	100.0	100.0	100.0	100.0
1	54.0	55.9	78.1	82.0
2	32.7	34.8	69.6	76.2
3	21.5	23.4	63.6	72.6
4	15.7	17.6	58.2	69.1
5	11.9	13.6	54.0	66.6
6	9.8	11.5	50.2	64.4
7	8.6	10.4	47.3	63.1
8	7.9	9.8	44.2	61.3
9	7.4	9.3	41.9	60.4
10	6.9	9.0	39.1	58.6
11	6.6	8.8	36.8	57.4
12	6.3	8.7	34.1	55.3
13	6.0	8.5	32.3	54.6
14	5.7	8.5	30.3	53.3
15	5.4	8.3	28.6	52.4
Median	1.1		6.1	

Table 4j. Observed (obs.) and relative (rel.) survival of patients with colon cancer by TNM staging for period 1998-2019 (N=23,301).

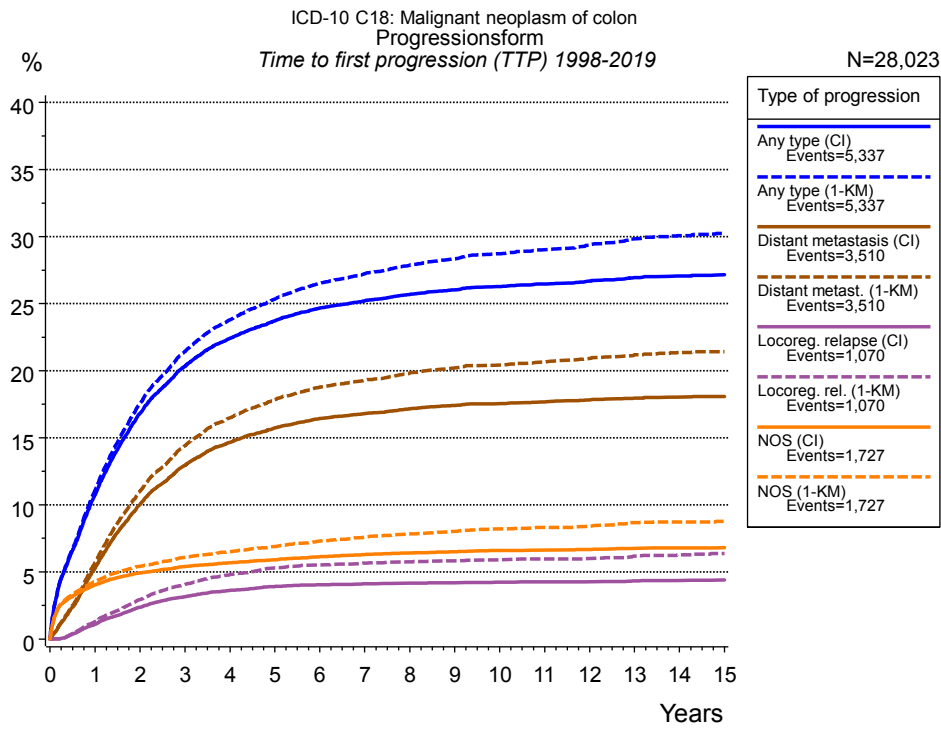


Figure 5a. Time to first progression of 28,023 patients with colon cancer diagnosed between 1998 and 2019 (in solid cancers M0 only) estimated by cumulative incidence function (CI, solid line) accounting for death as competing risk and by inverse Kaplan-Meier estimate (1-KM, dashed line). The frequency of events may be underestimated due to underreporting.

	Type of progression							
	Any type (CI)	Any type (1-KM)	Distant metastasis (CI)	Distant metast. (1-KM)	Locoreg. relapse (CI)	Locoreg. rel. (1-KM)	NOS (CI)	NOS (1-KM)
N	22,206	22,206	22,208	22,208	28,023	28,023	28,021	28,021
Events	5,318	5,318	3,499	3,499	1,068	1,068	1,721	1,721
compet.	5,560		7,111		14,221		13,515	
Years	%	%	%	%	%	%	%	%
0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1	10.7	11.1	5.3	5.7	1.1	1.3	4.0	4.0
2	16.8	17.5	10.0	11.0	2.4	2.9	4.9	4.9
3	20.3	21.4	12.9	14.4	3.2	4.1	5.4	5.4
4	22.4	23.8	14.7	16.5	3.6	4.8	5.7	5.7
5	23.7	25.3	15.7	17.9	3.9	5.3	5.9	5.9
6	24.7	26.5	16.4	18.8	4.0	5.5	6.1	6.1
7	25.2	27.2	16.8	19.3	4.1	5.7	6.3	6.3
8	25.7	27.9	17.2	19.8	4.2	5.7	6.4	6.4
9	26.0	28.3	17.4	20.2	4.2	5.8	6.5	6.5
10	26.3	28.7	17.5	20.4	4.2	5.9	6.6	6.6
11	26.5	29.0	17.7	20.6	4.3	6.0	6.6	6.6
12	26.7	29.4	17.8	20.9	4.3	6.0	6.7	6.7
13	27.0	29.9	18.0	21.2	4.3	6.2	6.8	6.8
14	27.1	30.1	18.1	21.4	4.4	6.3	6.8	6.8
15	27.2	30.2	18.1	21.4	4.4	6.4	6.8	6.8

Type of progression	
<i>cont'd</i>	NOS (1-KM)
N	28,021
Events	1,721
compet.	
Years	%
0	0.0
1	4.3
2	5.4
3	6.1
4	6.5
5	6.9
6	7.3
7	7.6
8	7.8
9	8.0
10	8.2
11	8.3
12	8.4
13	8.7
14	8.7
15	8.8

Table 5b. Time to first progression of patients with colon cancer for period 1998-2019 (N=28,023), also showing the total of progression events (Events) and of deaths as competing risk (compet.).

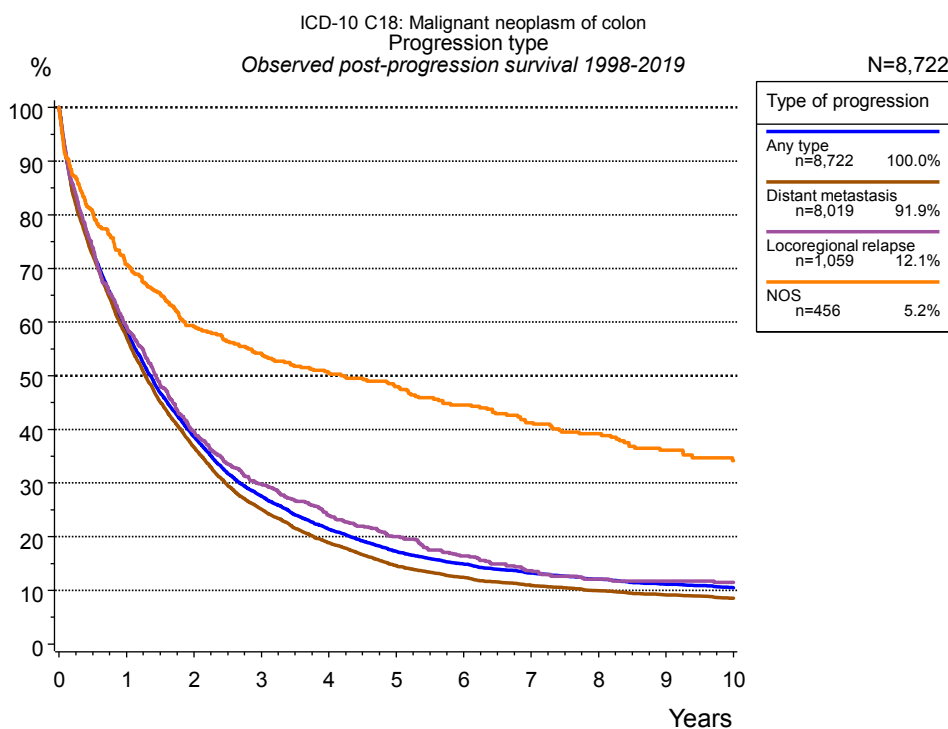


Figure 5c. Observed post-progression survival of 8,722 patients with colon cancer diagnosed between 1998 and 2019. These 8,722 patients with documented progression events during their course of disease represent 31.1 % of the totally 28,023 evaluated cases (incl. M1, n=5,817, 20.8 %). Patients with cancer relapse documented via death certificates only were excluded (n=2,432, 8.7 %). 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=8,722 %	Distant metastasis n=8,019 %	Locoregional relapse n=1,059 %	NOS n=456 %
0	100.0	100.0	100.0	100.0
1	58.6	57.3	59.1	70.8
2	38.6	36.7	39.6	59.1
3	27.6	25.1	29.9	54.2
4	21.4	18.8	23.9	50.5
5	17.2	14.6	20.0	48.0
6	14.9	12.4	16.4	44.6
7	13.2	10.9	13.7	41.2
8	12.0	9.9	12.1	39.2
9	11.1	9.1	11.7	36.1
10	10.5	8.5	11.5	34.2

Table 5d. Observed post-progression survival of patients with colon cancer for period 1998-2019 (N=8,722).

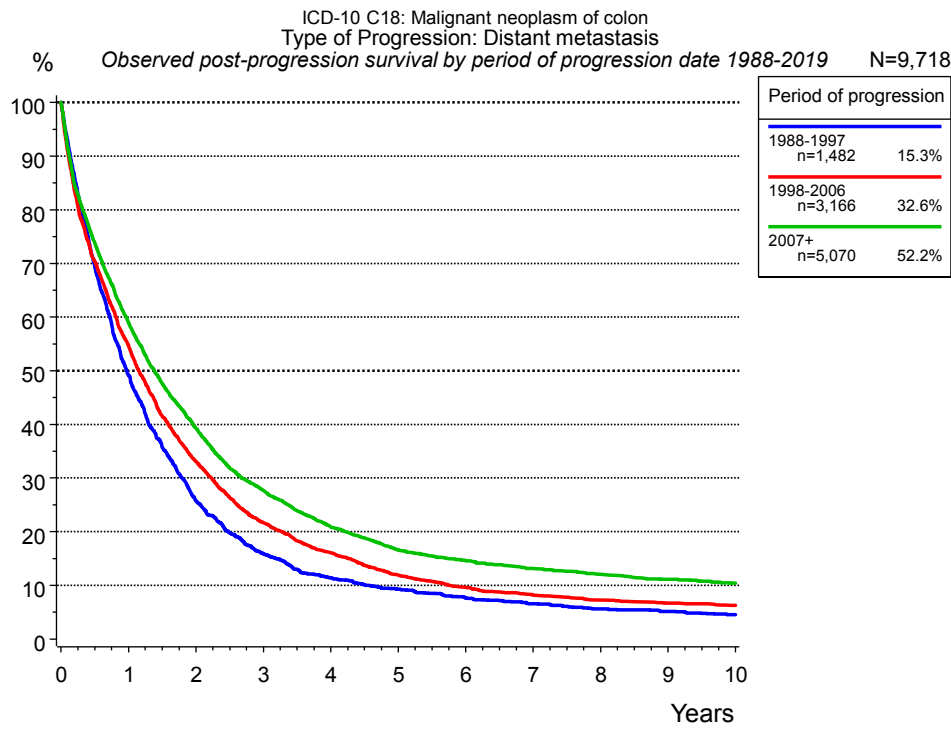


Figure 5e. Observed post-progression (distant metastasis) survival of 9,718 patients with colon cancer diagnosed between 1988 and 2019 by period of progression.

Years	Period of progression		
	1988-1997 n=1,482 %	1998-2006 n=3,166 %	2007+ n=5,070 %
0	100.0	100.0	100.0
1	49.2	54.8	59.0
2	25.8	33.1	39.3
3	15.9	21.7	27.7
4	11.4	16.1	20.9
5	9.3	11.9	16.6
6	7.6	9.6	14.6
7	6.5	8.2	13.1
8	5.6	7.2	12.0
9	5.2	6.7	11.1
10	4.6	6.2	10.4

Table 5f. Observed post-progression (distant metastasis) survival of patients with colon cancer for period 1988-2019 by period of progression (N=9,718).

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 C18: Colon cancer [Internet]. 2021 [updated 2021 Jan 27; cited 2021 Mar 1]. Available from: https://www.tumorregister-muenchen.de/en/facts/surv/sC18__E-ICD-10-C18-Colon-cancer-survival.pdf

Copyright

The content of the public web site provided by the Munich Cancer Registry is available worldwide and free of charge. All documents are free to download, utilize, copy, print-out and distribute, providing that the MCR is referenced.

Disclaimer

The Munich Cancer Registry reserves the right to not be responsible for the topicality, correctness, completeness or quality of the information provided. Liability claims regarding damage caused by the use of any information provided, including any kind of information which is incomplete or incorrect, will therefore be rejected.