

Munich Cancer Registry



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Munich Cancer Registry at Munich Cancer Center
Marchioninstr. 15
Munich, 81377
Germany

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

Cancer statistics: Survival

C50: Breast cancer (women)

Year of diagnosis	1978-1987	1988-1997	1998-2011
Patients	5,297	11,758	41,944
Diseases	5,482	12,235	43,683
Creation date	04/01/2013		
Export date	01/03/2013		
Population (females)	2.3 m		



http://www.tumorregister-muenchen.de/en/facts/surv/surv_C50f_E.pdf

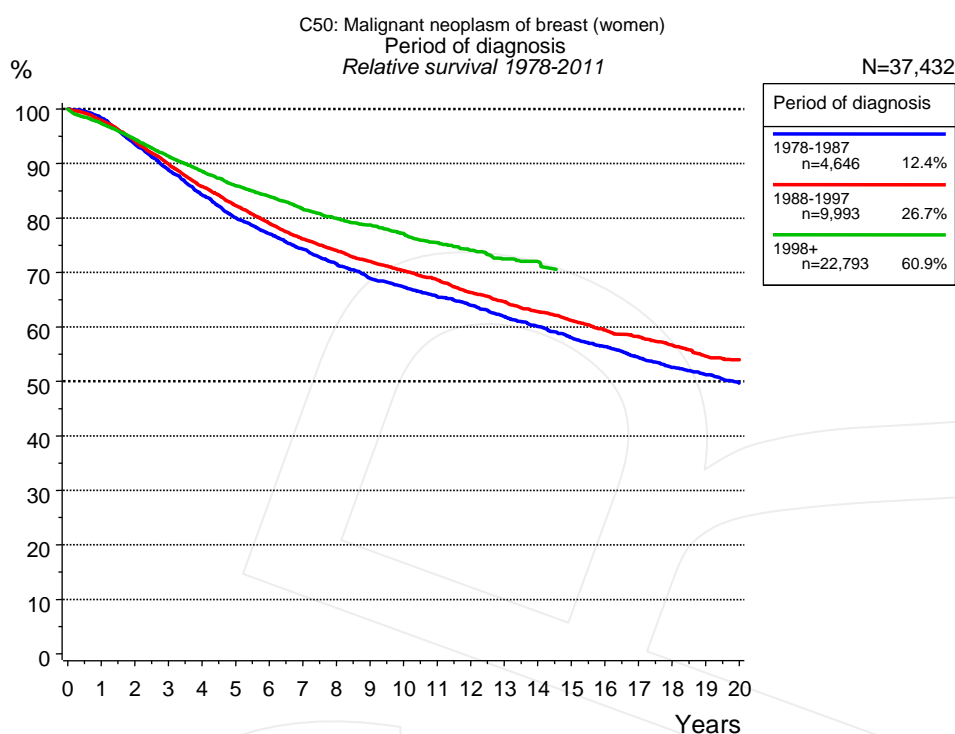


Figure 1a. Relative survival of patients with breast cancer (women) by period of diagnosis. Included in the evaluation are 37,432 cases diagnosed between 1978 and 2011.

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					
	1978-1987 n=4,646		1988-1997 n=9,993		1998+ n=22,793	
	obs. %	rel. %	obs. %	rel. %	obs. %	rel. %
0	100.0	100.0	100.0	100.0	100.0	100.0
1	97.1	98.3	96.2	97.9	95.6	97.3
2	91.1	93.5	91.0	94.1	91.2	94.4
3	85.4	88.7	85.5	89.9	86.8	91.3
4	79.9	84.2	80.1	85.7	82.8	88.6
5	74.9	80.0	75.6	82.2	79.1	85.9
6	71.1	77.0	71.4	79.0	76.0	83.9
7	67.5	74.3	67.6	76.1	72.7	81.6
8	64.0	71.6	64.6	74.0	70.0	79.9
9	60.7	68.9	61.8	72.0	67.8	78.7
10	58.4	67.4	59.3	70.3	65.2	77.1
11	55.8	65.5	56.9	68.6	62.6	75.4
12	53.5	64.0	54.0	66.3	60.3	74.1
13	50.9	61.9	51.6	64.6	57.9	72.5
14	48.5	60.1	49.3	62.8	56.5	72.0
15	46.0	58.0	47.1	61.2		
16	43.9	56.4	44.8	59.4		
17	41.6	54.4	42.9	58.1		
18	39.4	52.5	41.0	56.7		
19	37.7	51.2	38.7	54.5		
20	35.8	49.6	37.5	54.0		

Table 1b. Observed (obs.) and relative (rel.) survival of patients with breast cancer (women) by period of diagnosis for period 1978-2011 (N=37,432).

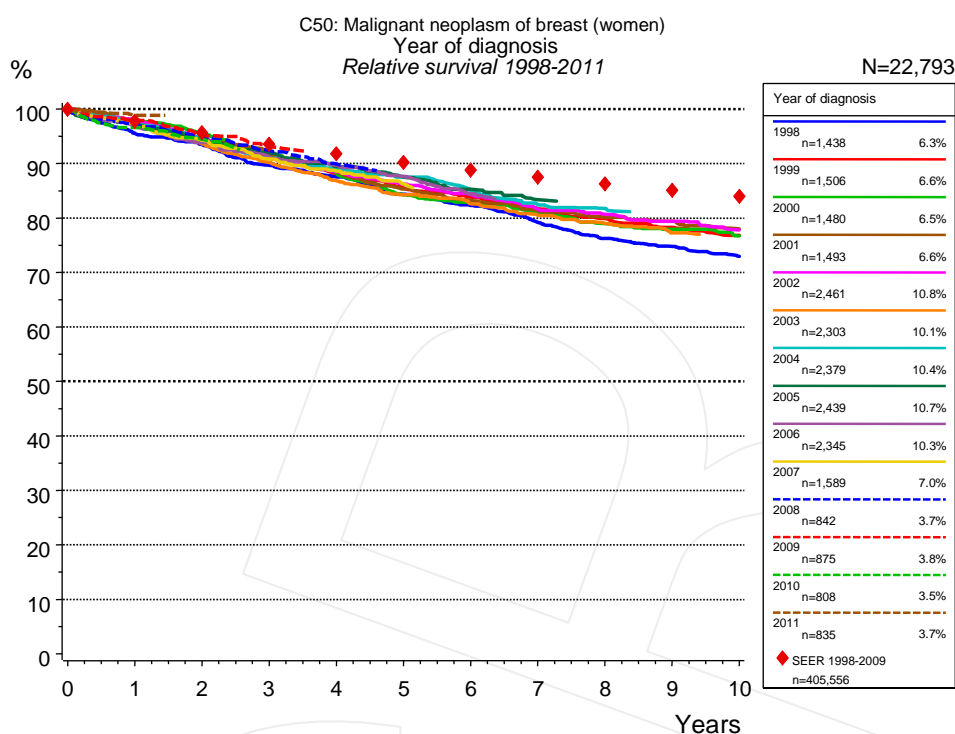


Figure 1c. Relative survival of patients with breast cancer (women) by year of diagnosis. Included in the evaluation are 22,793 cases diagnosed between 1998 and 2011.

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 1998 to 2009, and are represented by red diamonds in order to facilitate comparisons between MCR and SEER.

		Year of diagnosis													
		1998 n=1,438		1999 n=1,506		2000 n=1,480		2001 n=1,493		2002 n=2,461		2003 n=2,303		2004 n=2,379	
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		93.7	95.5	95.5	97.2	96.0	97.8	96.1	97.7	96.2	98.0	95.5	97.2	95.8	97.4
2		90.2	93.4	91.0	94.2	92.1	95.5	91.4	94.4	91.1	94.4	90.4	93.6	91.3	94.4
3		85.1	89.7	86.8	91.5	87.1	91.9	87.6	91.9	86.5	91.1	85.6	90.2	86.6	91.0
4		81.6	87.5	82.2	88.1	82.2	88.2	83.1	88.5	82.6	88.5	81.0	86.8	83.5	89.0
5		77.4	84.3	78.5	85.5	77.1	84.2	79.0	85.3	79.1	86.2	77.4	84.3	80.7	87.5
6		74.3	82.3	75.6	83.8	74.6	82.8	76.0	83.3	76.1	84.3	74.6	82.6	77.0	85.0
7		70.2	79.1	72.6	81.7	71.7	80.9	73.2	81.4	72.4	81.6	71.5	80.5	73.5	82.4
8		66.6	76.2	69.9	79.9	68.8	78.9	70.9	80.1	70.2	80.7	68.9	79.0	71.8	81.7
9		64.3	74.8	67.5	78.3	66.8	77.9	69.3	79.4	68.0	79.4	66.2	77.3		
10		61.7	72.9	65.1	76.8	64.5	76.7	66.8	78.0	65.0	77.8				

		Year of diagnosis													
cont'd		2005 n=2,439		2006 n=2,345		2007 n=1,589		2008 n=842		2009 n=875		2010 n=808		2011 n=835	
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		95.5	97.2	95.3	96.9	95.5	97.3	95.8	97.3	96.3	97.9	95.2	96.6	97.3	98.8
2		91.1	94.3	90.9	93.8	91.2	94.3	92.0	94.9	92.5	95.4	91.7	94.4		
3		87.4	91.9	87.0	91.2	86.6	90.8	88.2	92.4	89.0	93.3				
4		83.7	89.4	84.2	89.7	83.3	88.6	84.6	89.9						
5		80.6	87.5	80.9	87.6	80.1	86.2								
6		77.3	85.3	76.6	84.4										
7		74.2	83.3												

Table 1d. Observed (obs.) and relative (rel.) survival of patients with breast cancer (women) by year of diagnosis for period 1998-2011 (N=22,793).

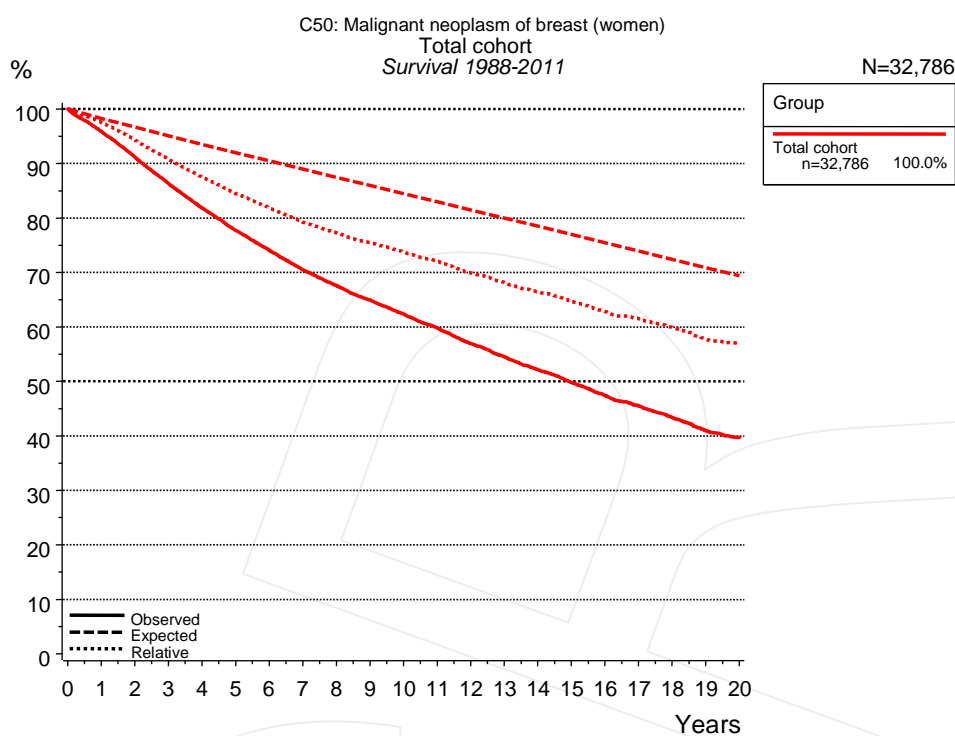


Figure 2a. Observed, expected and relative survival of the total cohort with breast cancer (women). Included in the evaluation are 32,786 cases diagnosed between 1988 and 2011.

Group		
Total cohort n=32,786		
Years	obs. %	rel. %
0	100.0	100.0
1	95.8	97.5
2	91.1	94.3
3	86.3	90.8
4	81.8	87.5
5	77.7	84.5
6	74.0	81.8
7	70.5	79.2
8	67.6	77.3
9	64.9	75.5
10	62.4	73.8
11	59.8	72.1
12	57.0	69.9
13	54.5	68.2
14	52.1	66.4
15	49.8	64.7
16	47.4	62.8
17	45.4	61.5
18	43.4	59.9
19	40.9	57.7
20	39.7	57.1

Table 2b. Observed (obs.) and relative (rel.) survival of the total cohort with breast cancer (women) for period 1988-2011 (N=32,786).

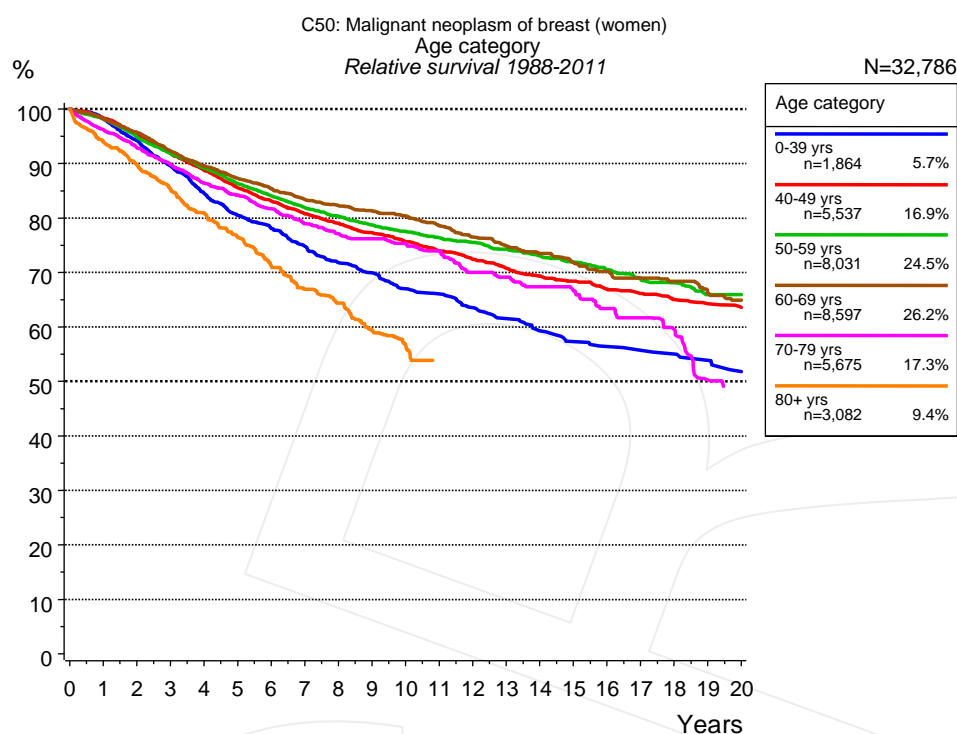


Figure 3a. Relative survival of patients with breast cancer (women) by age category. Included in the evaluation are 32,786 cases diagnosed between 1988 and 2011.

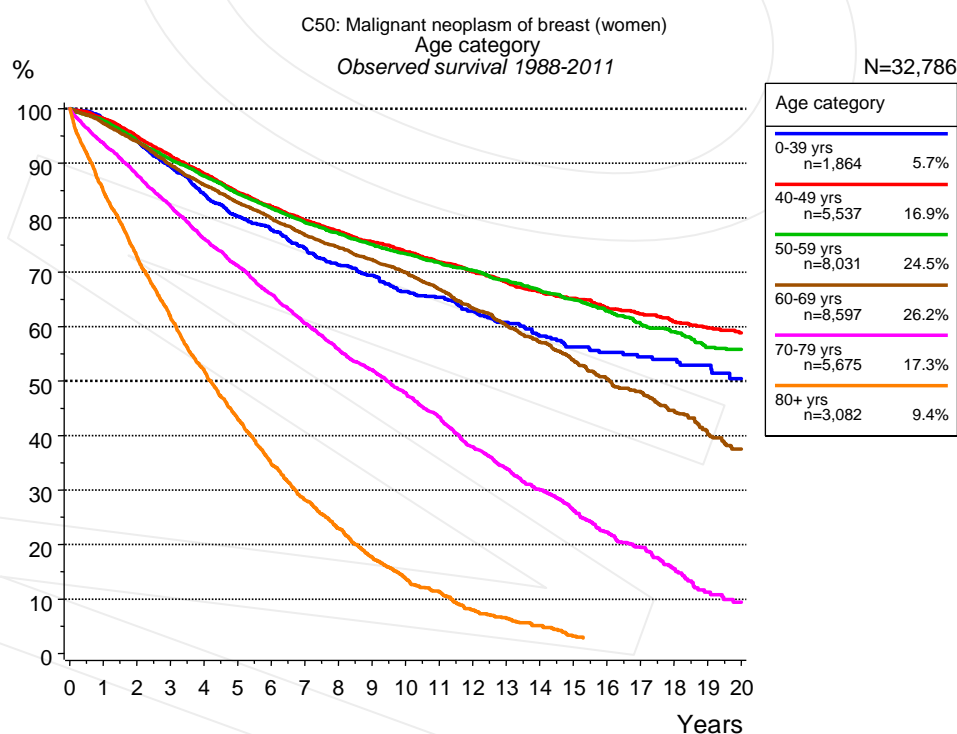


Figure 3b. Observed survival of patients with breast cancer (women) by age category. Included in the evaluation are 32,786 cases diagnosed between 1988 and 2011.

Years	Age category											
	0-39 yrs n=1,864		40-49 yrs n=5,537		50-59 yrs n=8,031		60-69 yrs n=8,597		70-79 yrs n=5,675		80+ yrs n=3,082	
	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
1	98.2	98.2	98.2	98.3	97.8	98.2	97.2	98.1	93.7	96.2	84.9	94.0
2	94.1	94.2	95.0	95.3	94.1	94.8	94.0	95.7	87.8	92.9	72.8	89.7
3	89.4	89.5	91.4	91.9	90.7	91.8	89.7	92.3	82.1	89.8	61.8	85.2
4	84.3	84.5	88.1	88.7	87.6	89.1	86.0	89.5	76.1	86.4	51.9	80.9
5	80.2	80.5	84.7	85.5	84.4	86.3	82.8	87.2	71.2	84.1	43.0	76.5
6	77.7	78.0	82.0	83.1	81.7	84.1	79.9	85.4	65.9	81.7	34.7	71.1
7	74.4	74.8	79.5	80.8	79.2	81.9	76.8	83.4	60.5	78.9	28.1	66.9
8	71.3	71.8	77.6	79.1	77.1	80.3	74.5	82.3	55.8	77.1	22.9	64.3
9	69.4	69.9	75.6	77.3	75.1	78.7	72.3	81.3	52.1	76.1	17.7	59.4
10	66.4	67.0	73.7	75.7	73.4	77.5	69.9	80.3	47.8	75.3	13.8	56.7
11	65.4	66.0	71.8	74.0	71.7	76.4	66.8	78.6	43.4	73.9		
12	62.8	63.5	70.0	72.4	70.3	75.5	63.4	76.5	37.9	70.0		
13	60.8	61.5	68.1	70.8	68.5	74.3	60.2	74.8	33.9	69.1		
14	58.3	59.3	66.4	69.3	66.6	73.0	57.1	73.5	30.1	67.3		
15	56.3	57.3	65.2	68.4	64.9	71.9	53.9	71.8	26.2	66.6		
16	55.3	56.4	63.5	66.9	62.9	70.5	50.4	70.2	22.3	63.4		
17	54.4	55.7	62.3	66.2	60.4	68.7	47.9	68.9	19.4	61.7		
18	54.0	55.0	60.9	65.0	59.1	68.1	44.4	68.4	15.6	59.5		
19	52.9	53.9	59.7	64.3	56.2	65.9	40.2	66.2	11.2	50.2		
20	50.5	51.8	58.8	63.6	55.8	65.9	37.5	64.9				

Table 3c. Observed (obs.) and relative (rel.) survival of patients with breast cancer (women) by age category for period 1988-2011 (N=32,786).

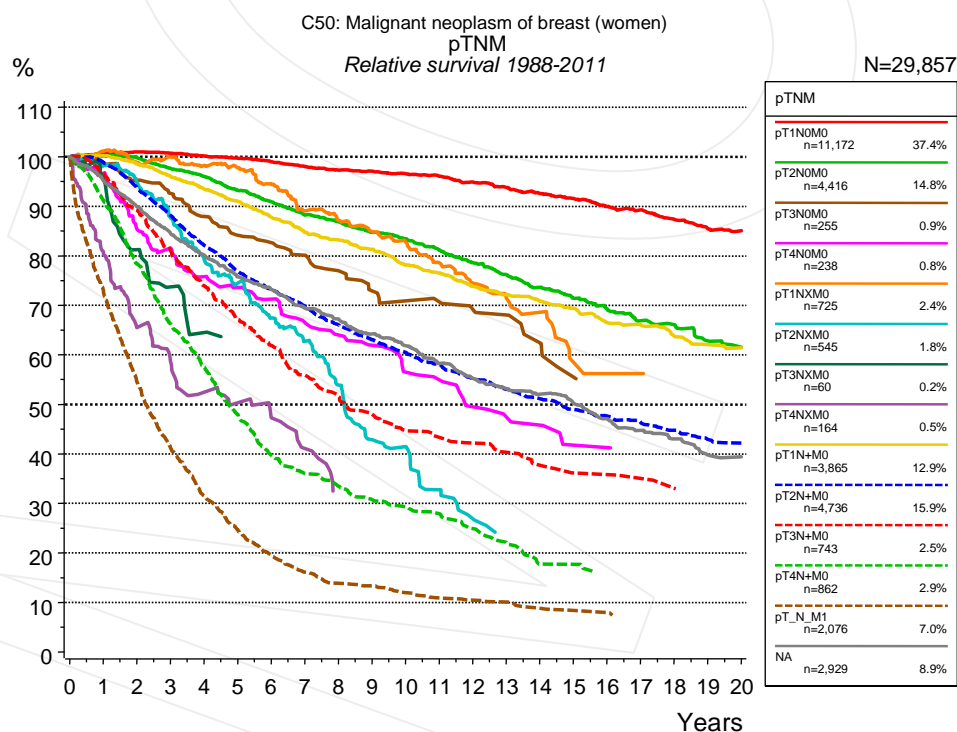


Figure 4a. Relative survival of patients with breast cancer (women) by pTNM. For 31,684 of 32,786 cases diagnosed between 1988 and 2011 valid data could be obtained for this item. For a total of 29,857 cases an evaluable classification was established. The grey line represents the subgroup of 2,929 patients with missing values regarding pTNM (8.9% of 32,786 patients, the percent values of all other categories are related to n=29,857).

Years	pTNM													
	pT1N0M0 n=11,172		pT2N0M0 n=4,416		pT3N0M0 n=255		pT4N0M0 n=238		pT1NXM0 n=725		pT2NXM0 n=545		pT3NXM0 n=60	
	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	99.5	100.5	98.5	100.1	96.0	98.4	92.4	96.7	96.4	101.1	90.8	98.2	86.3	95.7
2	98.8	100.9	96.6	99.8	90.9	95.3	77.7	85.3	89.6	98.8	81.0	94.9	67.1	81.2
3	97.4	100.7	92.9	97.6	86.2	92.6	71.2	81.6	86.4	100.0	68.9	87.7	54.3	73.7
4	95.6	100.1	89.8	96.0	80.0	87.9	63.2	75.8	80.9	98.3	57.5	79.2	43.6	64.5
5	93.9	99.7	85.6	93.2	74.8	84.1	58.8	73.6	76.7	97.8	50.0	74.5		
6	92.0	99.0	82.0	90.9	72.2	82.7	55.1	71.3	70.5	94.4	41.7	67.4		
7	89.9	98.0	78.1	88.2	68.8	80.1	49.7	66.5	63.8	89.1	35.8	62.7		
8	87.9	97.3	75.5	86.8	64.2	77.0	46.1	64.0	59.7	87.2	28.5	53.9		
9	86.4	97.1	72.3	84.7	60.1	72.9	43.1	61.9	56.1	84.9	21.3	42.8		
10	84.6	96.6	69.8	83.4	57.4	70.9	38.1	56.5	52.4	82.8	19.3	41.4		
11	82.7	96.1	66.6	81.2	56.4	70.6	36.3	54.9	47.5	78.6	14.4	32.7		
12	80.3	94.8	63.2	78.6	54.0	69.2	31.4	49.5	43.1	74.5	11.3	26.9		
13	78.0	93.8	60.1	76.2	52.8	68.1	29.1	47.4	39.6	71.3	9.5	23.5		
14	75.6	92.6	57.0	73.6	48.1	62.4	27.9	45.8	37.2	68.6				
15	73.3	91.6	54.2	71.4	42.5	55.5	23.9	41.7	30.5	58.4				
16	70.7	89.9	51.4	69.2	40.3	53.1	23.9	41.2	28.4	56.2				
17	68.8	89.3	48.5	66.9			22.5	39.8	28.4	56.2				
18	66.0	87.4	47.2	66.0										
19	63.3	85.5	43.7	62.8										
20	61.9	85.1	41.6	61.5										

cont'd Years	pTNM													
	pT4NXM0 n=164		pT1N+M0 n=3,865		pT2N+M0 n=4,736		pT3N+M0 n=743		pT4N+M0 n=862		pT_N_M1 n=2,076		NA n=2,929	
	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	72.9	80.2	99.1	100.1	97.5	98.8	95.2	96.6	88.0	91.2	71.2	72.8	93.1	95.1
2	54.3	65.5	96.5	98.5	91.2	93.8	86.7	89.3	73.1	78.4	52.3	54.6	86.3	90.0
3	44.4	58.6	93.0	96.0	84.5	88.2	77.6	81.0	59.8	66.2	38.7	41.2	79.7	84.5
4	36.6	52.5	89.5	93.4	77.5	82.1	69.7	73.9	50.2	57.5	29.0	31.5	74.3	80.1
5	32.4	50.3	86.1	91.0	71.4	76.8	62.6	67.2	40.5	48.0	22.4	24.7	69.0	75.7
6	27.6	47.3	82.0	87.8	66.9	73.2	56.9	61.9	32.6	39.7	17.3	19.6	65.5	73.2
7	22.5	41.1	78.1	84.7	62.8	69.7	50.8	55.9	28.7	36.0	14.0	16.1	61.2	69.4
8	16.3	32.4	75.7	83.2	58.5	66.1	46.1	51.6	26.0	33.5	11.9	13.9	58.2	67.2
9			73.1	81.3	55.0	63.1	42.4	48.0	23.3	30.8	11.2	13.3	54.5	64.2
10			69.1	78.1	51.9	60.5	39.0	44.7	21.6	29.3	9.8	12.0	51.6	61.8
11			66.8	76.5	49.0	58.0	37.0	43.3	20.1	27.9	8.8	10.9	47.6	58.3
12			63.5	73.8	45.9	55.3	35.7	42.2	17.5	24.9	8.2	10.5	44.2	55.2
13			61.1	72.1	43.2	53.0	33.7	40.3	15.0	22.1	7.8	10.1	41.7	53.2
14			59.0	70.8	41.0	51.1	31.3	37.7	11.7	17.7	6.6	8.8	40.0	52.0
15			57.0	69.4	38.6	49.0	29.2	36.2	11.7	17.7	6.0	8.4	37.8	50.2
16			53.6	66.5	36.8	47.6	29.2	35.8	10.2	16.2	5.7	8.0	34.7	47.1
17			52.2	66.1	35.1	46.3	28.3	35.0	10.2	16.0			32.3	44.7
18			49.6	63.7	33.4	44.8	27.1	33.1					30.3	43.0
19			47.3	62.1	31.4	42.9	25.5	31.4					27.3	39.8
20			45.9	61.4	30.6	42.2							26.7	39.4

Table 4b. Observed (obs.) and relative (rel.) survival of patients with breast cancer (women) by pTNM for period 1988-2011 (N=29,857).

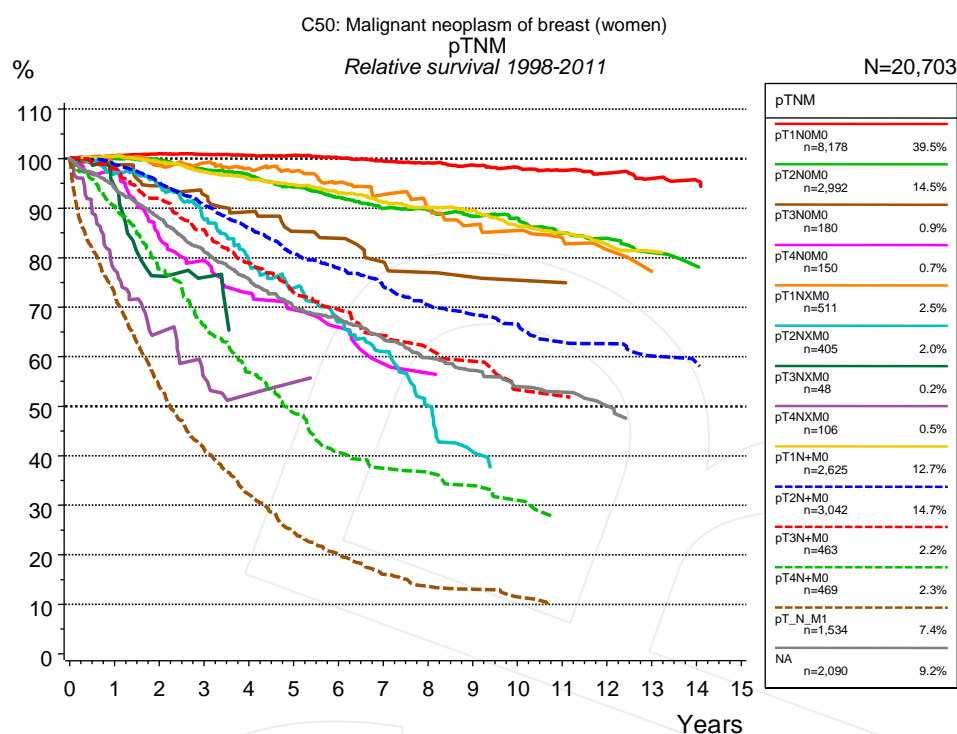


Figure 4c. Relative survival of patients with breast cancer (women) by pTNM. For 22,273 of 22,793 cases diagnosed between 1998 and 2011 valid data could be obtained for this item. For a total of 20,703 cases an evaluable classification was established. The grey line represents the subgroup of 2,090 patients with missing values regarding pTNM (9.2% of 22,793 patients, the percent values of all other categories are related to n=20,703).

Years	pTNM															
	pT1N0M0 n=8,178		pT2N0M0 n=2,992		pT3N0M0 n=180		pT4N0M0 n=150		pT1NXM0 n=511		pT2NXM0 n=405		pT3NXM0 n=48			
	obs. %	rel. %	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	100.0	100.0
1	99.5	100.5	98.3	100.0	96.0	98.6	93.3	97.8	95.9	100.4	89.3	96.9	85.0	94.4		
2	98.8	100.9	96.4	99.7	89.8	94.5	75.9	83.9	89.8	98.7	80.2	94.6	62.8	76.3		
3	97.6	100.8	92.9	97.7	85.6	92.7	68.9	79.5	85.9	99.1	68.0	87.7	55.4	76.1		
4	96.2	100.6	90.4	96.7	80.7	89.2	60.0	72.9	81.3	98.0	56.5	79.0	44.0	64.8		
5	95.0	100.6	86.4	94.2	74.6	85.3	54.6	69.5	77.0	97.5	48.8	73.8				
6	93.4	100.1	83.0	92.2	72.2	83.9	50.4	65.9	72.2	95.2	40.6	67.0				
7	91.5	99.5	79.4	89.9	66.9	79.1	43.9	58.6	67.6	92.7	34.1	61.0				
8	89.9	99.1	77.6	89.6	63.9	77.0	42.1	56.7	62.8	90.0	26.0	50.1				
9	88.1	98.7	75.0	88.4	62.0	76.1	40.1	54.8	58.4	86.6	19.9	40.7				
10	86.3	98.3	73.2	88.0	59.6	75.5			55.8	85.5	17.2	37.0				
11	84.2	97.6	69.1	84.9	59.6	75.0			52.4	83.9						
12	82.3	97.0	66.7	83.9					48.8	81.5						
13	80.0	96.0	63.3	81.0												
14	78.2	95.6	61.2	78.3												

cont'd	pTNM													
	pT4NXM0 n=106		pT1N+M0 n=2,625		pT2N+M0 n=3,042		pT3N+M0 n=463		pT4N+M0 n=469		pT_N_M1 n=1,534		NA n=2,090	
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	69.9	77.5	99.5	100.5	97.3	98.8	96.5	98.0	86.9	90.4	71.0	72.6	91.9	94.0
2	53.1	64.9	97.2	99.2	92.6	95.3	88.9	91.9	71.8	77.6	51.7	53.9	84.4	87.9
3	41.1	55.8	94.4	97.3	86.9	90.8	81.3	85.6	59.3	66.3	38.9	41.3	76.8	81.1
4	35.4	52.4	91.9	95.9	80.8	85.8	73.9	78.9	49.2	56.8	29.8	32.2	70.5	75.6
5	33.7	54.8	89.8	94.8	74.9	80.8	67.4	72.9	40.7	48.6	22.4	24.6	64.2	69.9
6			87.0	93.0	71.0	77.9	63.4	69.5	32.9	40.6	17.9	20.1	61.3	67.7
7			84.1	91.2	66.6	74.2	57.9	64.3	29.6	37.5	14.1	16.0	57.1	63.7
8			82.0	90.1	62.2	70.4	55.1	61.6	27.7	36.6	11.9	13.6	52.9	59.8
9			80.5	89.5	59.5	68.6	52.5	59.1	25.5	33.9	11.1	13.0	50.0	57.2
10			76.2	86.3	56.9	66.6	46.2	53.3	22.8	31.0	9.5	11.5	46.5	54.0
11			74.3	85.1	52.9	63.0	46.2	52.0	19.0	26.3	8.0	9.5	45.1	52.9
12			71.1	82.6	51.6	62.7	44.0	49.7					42.1	50.0
13			68.7	81.2	48.6	60.1	44.0	47.1						
14					47.3	58.8								

Table 4d. Observed (obs.) and relative (rel.) survival of patients with breast cancer (women) by pTNM for period 1998-2011 (N=20,703).

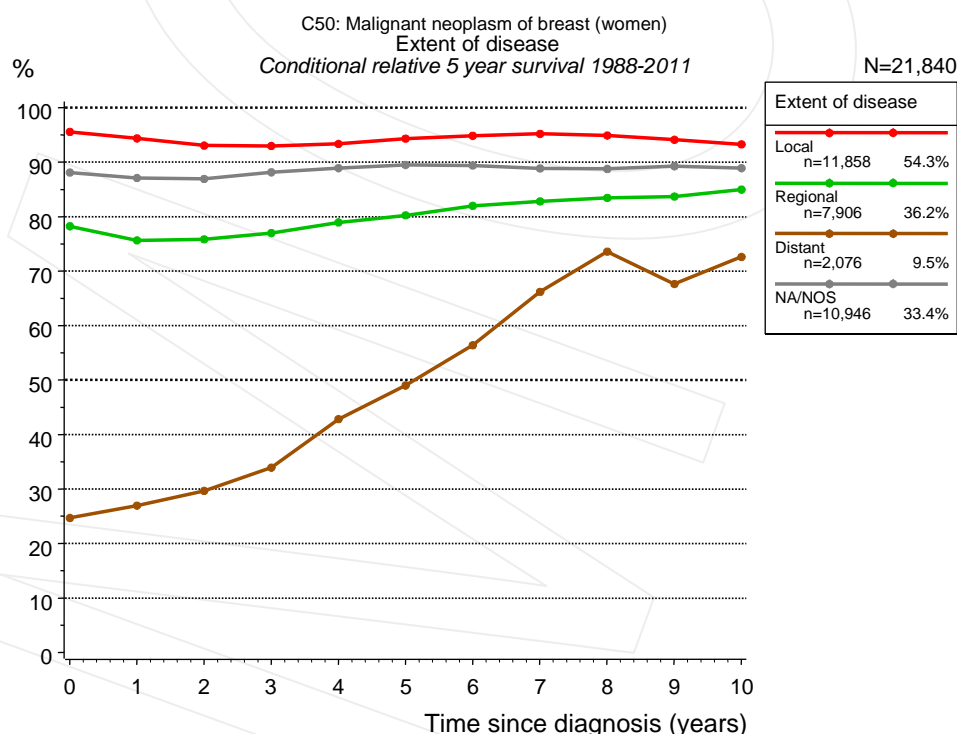


Figure 4e. Conditional relative 5-year survival of patients with breast cancer (women) by extent of disease. For 31,684 of 32,786 cases diagnosed between 1988 and 2011 valid data could be obtained for this item. For a total of 21,840 cases an evaluable classification was established. The grey line represents the subgroup of 10,946 patients with missing values regarding extent of disease (33.4% of 32,786 patients, the percent values of all other categories are related to n=21,840).

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	11,858	95.6	7,906	78.2	2,076	24.7	10,946	88.1
1	11,111	94.4	7,296	75.7	1,386	27.0	10,164	87.1
2	9,883	93.1	6,284	75.8	931	29.7	9,118	86.9
3	8,727	93.0	5,370	77.0	622	33.9	7,958	88.1
4	7,653	93.3	4,515	78.9	425	42.8	6,845	88.9
5	6,637	94.3	3,795	80.2	285	49.0	5,857	89.5
6	5,726	94.8	3,147	82.0	192	56.4	5,006	89.4
7	5,066	95.2	2,725	82.8	147	66.2	4,307	88.9
8	4,501	94.9	2,343	83.5	108	73.6	3,689	88.8
9	3,951	94.1	2,001	83.7	95	67.6	3,156	89.3
10	3,468	93.3	1,672	85.0	69	72.6	2,725	88.9

Table 4f. Conditional relative 5-year survival of patients with breast cancer (women) by extent of disease for period 1988-2011 (N=21,840).

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 4c). 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 93.0% (n=8,727).

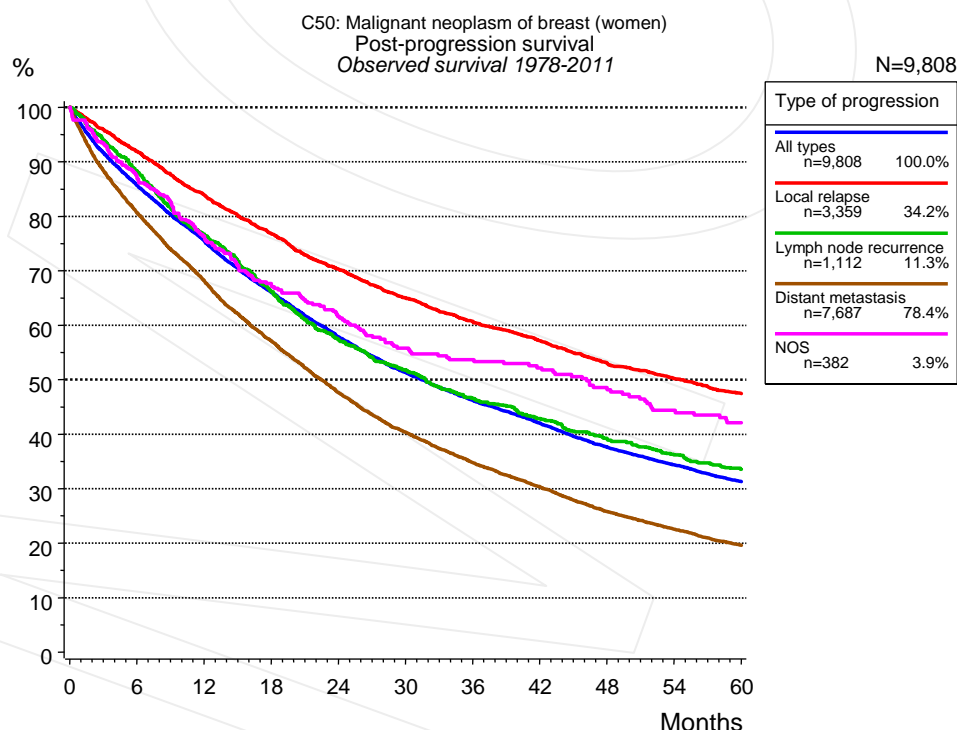


Figure 5a. Observed post-progression survival of 9,808 patients with breast cancer (women) diagnosed between 1978 and 2011 (incl. M1). These 9,808 patients with documented progression events during their course of disease represent 26.2% of the totally 37,432 evaluated cases. Patients with cancer relapse documented via death certificates only were excluded (n=1,114, 3.0%). 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 "All types" 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.

Months	Type of progression				
	All types n=9,808 %	Local relapse n=3,359 %	Lymph node recurrence n=1,112 %	Distant metastasis n=7,687 %	NOS n=382 %
0	100.0	100.0	100.0	100.0	100.0
12	75.5	83.9	76.8	68.2	76.3
24	57.8	70.3	57.5	47.6	61.6
36	46.2	60.7	46.6	34.8	53.7
48	37.7	53.1	39.3	25.8	48.5
60	31.3	47.4	33.6	19.6	42.1

Table 5b. Observed post-progression survival of patients with breast cancer (women) for period 1978-2011 (N=9,808).

Shortcuts

AS	Assembled survival chart (observed, expected, relative)
CS	Conditional survival
DCO	Death certificate only. The death certificate provides the only notification to the registry.
MCR	Munich Cancer Registry, Germany (Tumorregister München)
NA	Not available
NCI	National Cancer Institute, USA
NOS	Not otherwise specified
OS	Observed/overall survival (Kaplan-Meier estimate)
PPS	Post-progression survival
RS	Relative Survival. Ratio of observed and expected survival (derived from the normal population)
SEER	Surveillance, Epidemiology, and End Results, USA
TTP	Time to progression Date of entry: Date of diagnosis Event (Progression): First local recurrence, lymph node relapse or distant metastasis, unspecified recurrence First all-cause recurrence is illustrated by survival curves (Kaplan-Meier estimate). First local recurrence, lymph node relapse or distant metastasis are depicted cumulatively, where applicable ("reverse" Kaplan-Meier estimate).
UICC	Union for International Cancer Control, Geneva

Recommended Citation

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