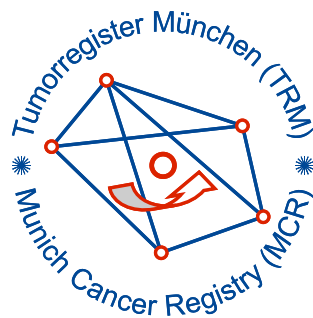


Munich Cancer Registry



- ▶ Baseline statistics
- ▶ Selection Matrix
- ▶ Homepage

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

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

Cancer statistics: Survival

C51: Vulva cancer

Year of diagnosis	1978-1987	1988-1997	1998-2011
Patients	208	269	1,094
Diseases	209	269	1,097
Creation date	04/01/2013		
Export date	01/03/2013		
Population (females)	2.3 m		



http://www.tumorregister-muenchen.de/en/facts/surv/surv_C51__E.pdf

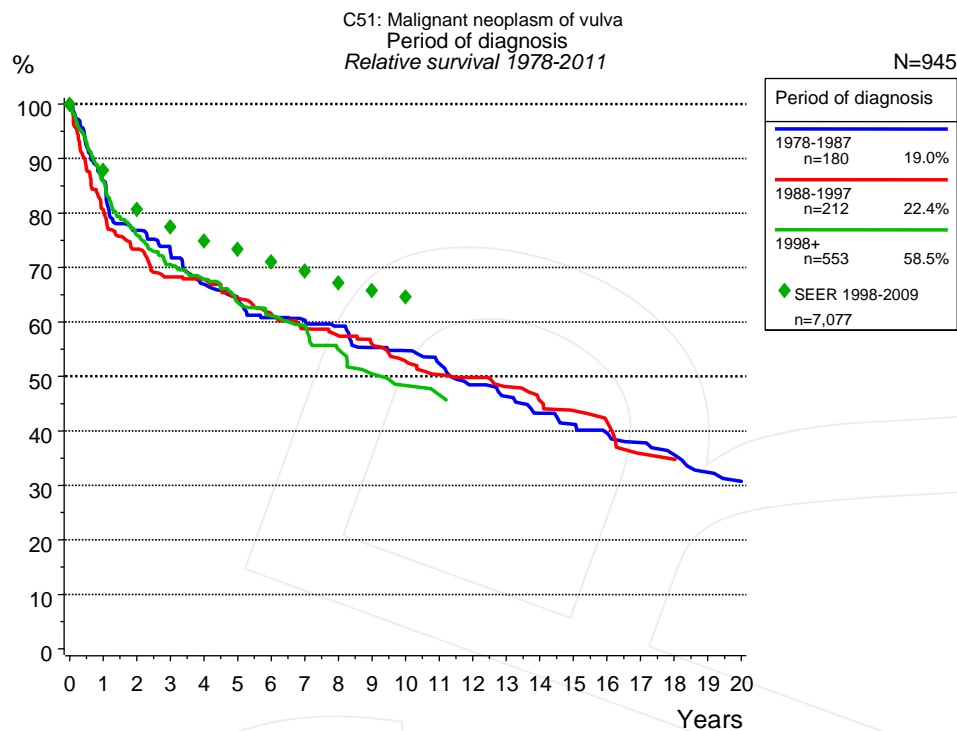


Figure 1a. Relative survival of patients with vulva cancer by period of diagnosis. Included in the evaluation are 945 cases diagnosed between 1978 and 2011.

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 green 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					
	1978-1987		1988-1997		1998+	
	n=180		n=212		n=553	
	obs. %	rel. %	obs. %	rel. %	obs. %	rel. %
0	100.0	100.0	100.0	100.0	100.0	100.0
1	82.2	85.9	77.4	80.5	81.9	85.7
2	70.6	76.8	68.4	73.3	70.0	76.0
3	63.9	72.8	61.7	68.2	62.7	70.5
4	56.7	66.9	59.3	67.7	58.5	67.8
5	52.2	64.2	54.5	64.4	53.6	63.6
6	47.8	60.8	50.7	61.4	50.1	61.1
7	45.6	60.3	47.3	58.8	47.3	59.3
8	42.8	59.2	45.3	57.4	42.2	55.0
9	38.3	55.3	42.8	56.0	37.6	50.4
10	36.7	54.7	39.3	52.8	35.6	48.3
11	33.9	52.4	36.8	50.3	33.9	46.6
12	30.0	48.4	35.8	49.8	32.1	44.2
13	27.8	46.3	33.5	48.1	32.1	42.4
14	25.0	43.3	31.1	45.5		
15	23.3	41.2	29.1	43.7		
16	21.7	39.6	27.5	41.6		
17	19.9	37.9	22.8	35.8		
18	18.2	35.6	22.8	34.8		
19	16.0	32.4	21.6	32.6		
20	14.8	30.7	21.6	30.4		

Table 1b. Observed (obs.) and relative (rel.) survival of patients with vulva cancer by period of diagnosis for period 1978-2011 (N=945).

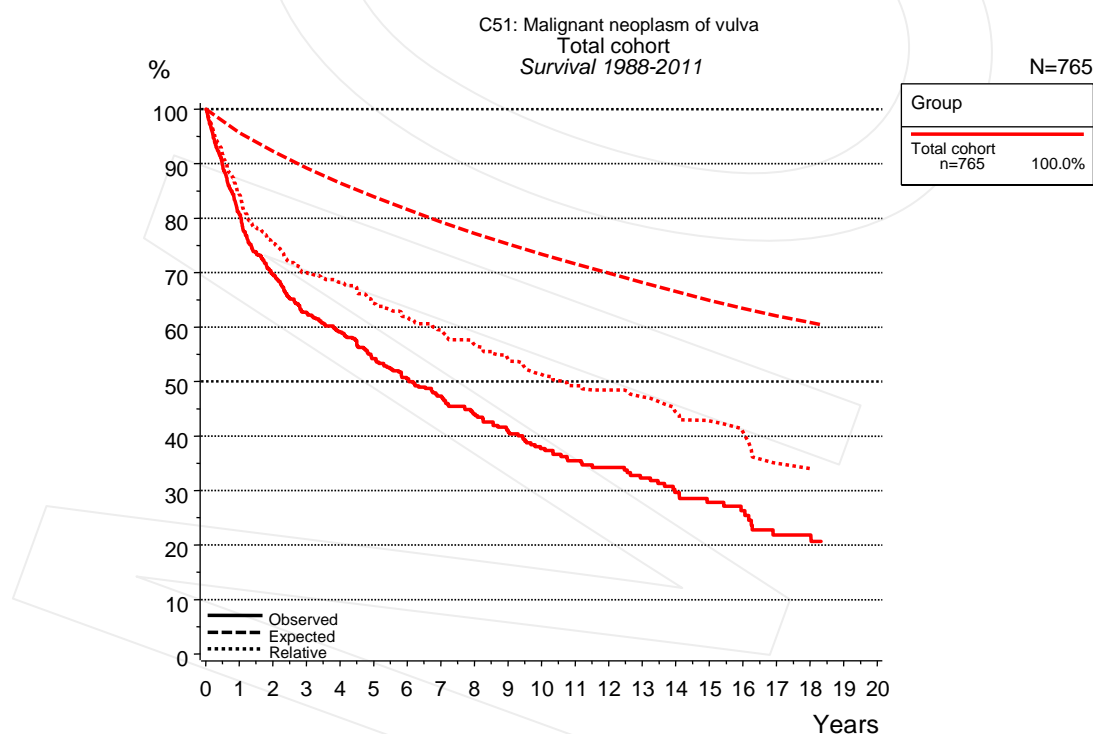


Figure 2a. Observed, expected and relative survival of the total cohort with vulva cancer. Included in the evaluation are 765 cases diagnosed between 1988 and 2011.

Years	Group	
	Total cohort n=765	
	obs. %	rel. %
0	100.0	100.0
1	80.6	84.3
2	69.6	75.4
3	62.6	70.0
4	59.1	68.2
5	54.2	64.3
6	50.5	61.8
7	47.4	59.4
8	44.0	56.8
9	40.7	54.1
10	37.7	51.3
11	35.5	49.2
12	34.3	48.4
13	32.3	47.2
14	29.7	44.4
15	27.9	42.7
16	26.3	40.7
17	21.8	35.0
18	21.8	34.0
19	20.7	31.9
20	20.7	29.7

Table 2b. Observed (obs.) and relative (rel.) survival of the total cohort with vulva cancer for period 1988-2011 (N=765).

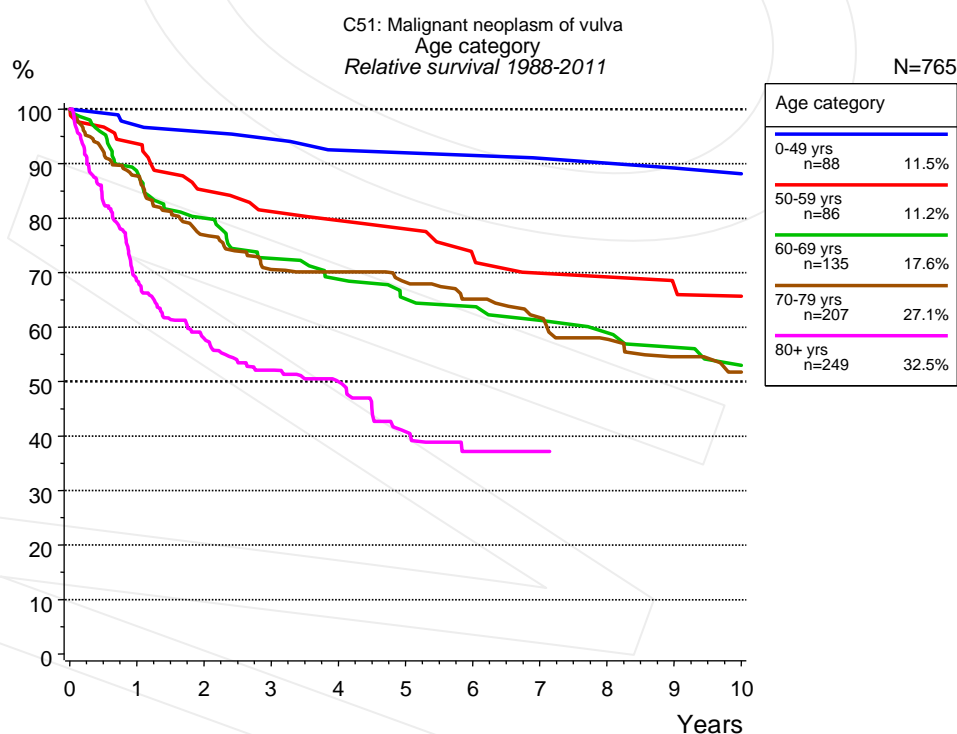


Figure 3a. Relative survival of patients with vulva cancer by age category. Included in the evaluation are 765 cases diagnosed between 1988 and 2011.

Years	Age category									
	0-49 yrs n=88		50-59 yrs n=86		60-69 yrs n=135		70-79 yrs n=207		80+ yrs n=249	
	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	97.7	97.0	94.2	93.7	87.8	88.6	85.7	87.7	61.4	68.5
2	96.5	95.8	84.6	85.1	78.9	80.0	72.9	76.9	46.3	57.9
3	95.1	94.5	80.5	81.2	70.7	72.6	64.4	70.6	38.0	52.1
4	92.0	92.5	79.0	79.6	66.5	68.8	63.2	70.1	31.5	50.0
5	92.0	92.0	77.4	78.0	62.0	65.2	58.0	68.2	22.4	40.8
6	92.0	91.5	71.7	73.2	60.8	63.8	52.9	65.1	17.6	37.2
7	90.0	91.0	67.6	69.9	57.8	61.2	48.0	61.7	15.7	37.2
8	90.0	90.1	67.6	69.2	54.4	59.0	42.7	57.8		
9	87.6	89.2	65.1	67.5	51.0	56.3	37.0	54.6		
10	87.6	88.1	62.6	65.7	47.4	52.9	32.9	51.8		

Table 3b. Observed (obs.) and relative (rel.) survival of patients with vulva cancer by age category for period 1988-2011 (N=765).

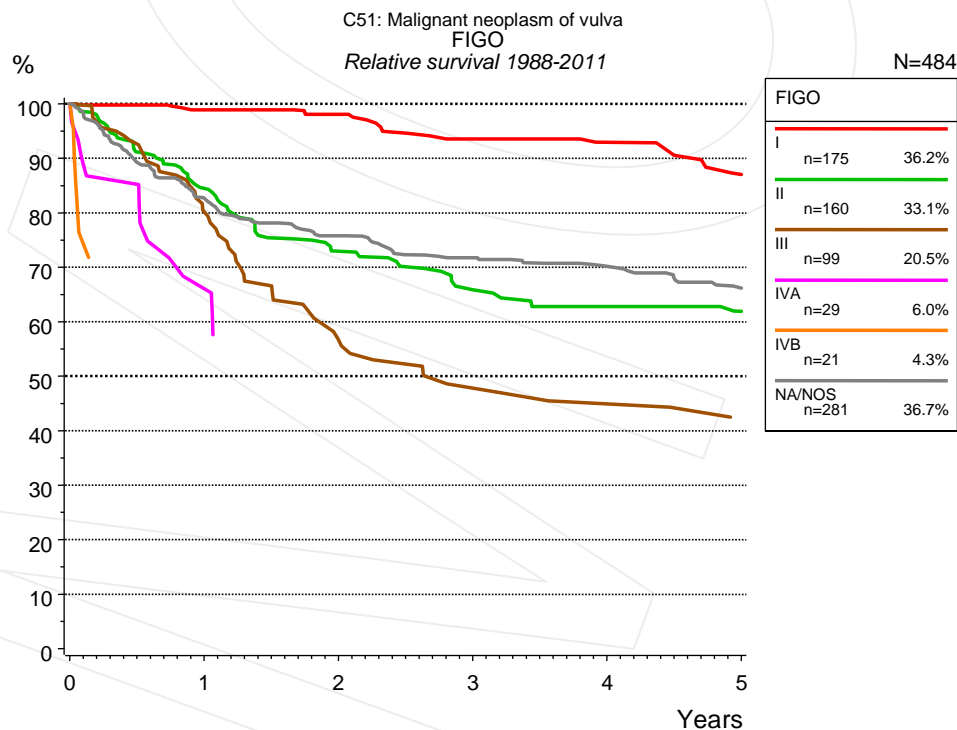


Figure 4a. Relative survival of patients with vulva cancer by FIGO. For 695 of 765 cases diagnosed between 1988 and 2011 valid data could be obtained for this item. For a total of 484 cases an evaluable classification was established. The grey line represents the subgroup of 281 patients with missing values regarding FIGO (36.7% of 765 patients, the percent values of all other categories are related to n=484).

FIGO												
	I n=175		II n=160		III n=99		IVA n=29		IVB n=21		NA/NOS n=281	
Years	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	95.9	98.9	79.8	84.5	77.3	80.2	65.2	66.0			79.3	82.7
2	92.6	98.0	65.5	72.9	52.8	56.7					70.6	75.8
3	85.5	93.5	56.2	65.9	44.1	47.8					64.9	71.7
4	82.3	92.9	52.6	62.8	40.5	44.9					61.3	70.2
5	75.2	87.0	48.9	61.9	36.7	42.4					56.4	66.2

Table 4b. Observed (obs.) and relative (rel.) survival of patients with vulva cancer by FIGO for period 1988-2011 (N=484).

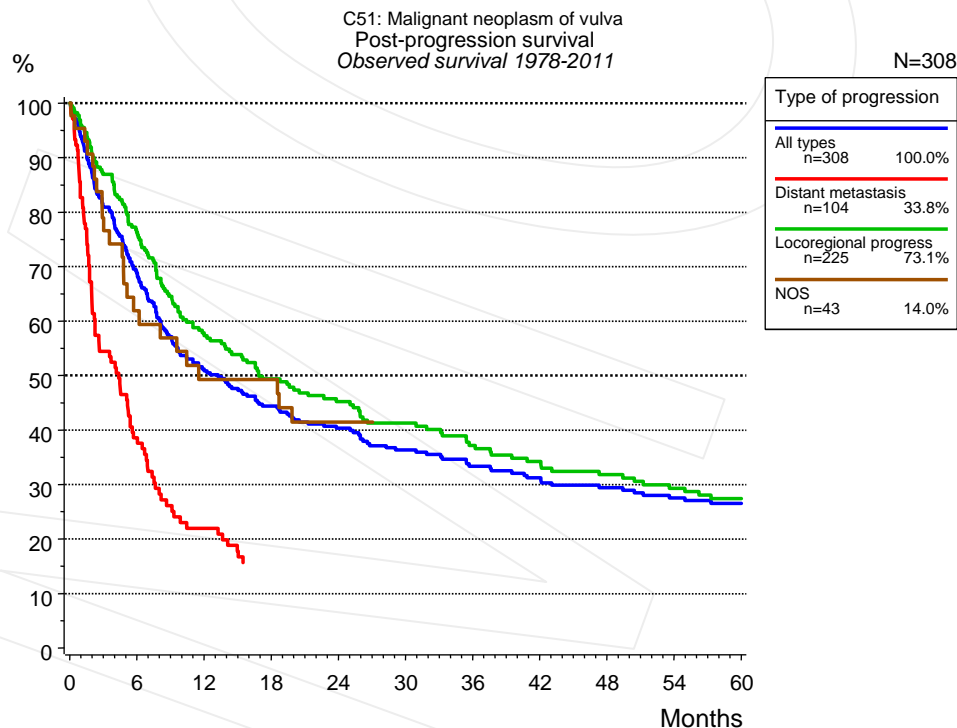


Figure 5a. Observed post-progression survival of 308 patients with vulva cancer diagnosed between 1978 and 2011 (incl. M1). These 308 patients with documented progression events during their course of disease represent 32.6% of the totally 945 evaluated cases. Patients with cancer relapse documented via death certificates only were excluded (n=78, 8.3%). 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			NOS n=43 %
	All types n=308 %	Distant metastasis n=104 %	Locoregional progress n=225 %	
0	100.0	100.0	100.0	100.0
12	50.9	22.0	57.3	49.3
24	40.3		45.2	41.5
36	33.4		37.2	
48	29.4		31.8	
60	26.6		27.4	

Table 5b. Observed post-progression survival of patients with vulva cancer for period 1978-2011 (N=308).

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

Munich Cancer Registry. Survival C51: Vulva cancer [Internet]. 2013 [updated 2013 Apr 1; cited 2013 May 1]. Available from: http://www.tumorregister-muenchen.de/en/facts/surv/surv_C51__E.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.

Index of figures and tables

Fig./Tbl.		Page
1a	Relative survival by period of diagnosis (chart)	2
1b	Survival by period of diagnosis (table)	3
2a	Survival of total cohort (chart)	3
2b	Survival of total cohort (table)	4
3a	Relative survival by age category (chart)	4
3b	Survival by age category (table)	5
4a	Relative survival by FIGO (chart)	5
4b	Survival by FIGO (table)	6
5a	Observed post-progression survival (chart)	6
5b	Observed post-progression survival (table)	7