# **Munich Cancer Registry**



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# ICD-10 D39.1: Borderline ovarian tumor

### Survival

Year of diagnosis	1988-1997	1998-2020
Patients	128	1,761
Diseases	128	1,762
Cases evaluated	114	1,539
Creation date	04/15/2022	
Database export	12/20/2021	
Population (females)	2.48 m	



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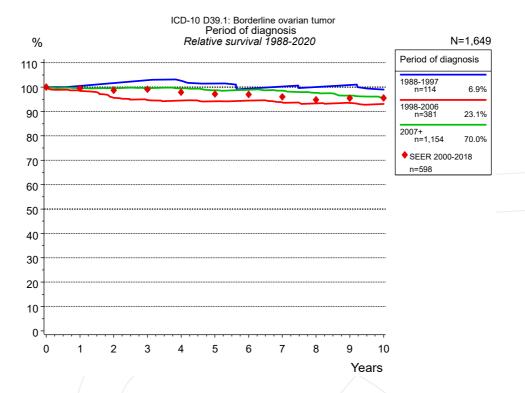
https://www.tumorregister-muenchen.de/en

https://www.tumorregister-muenchen.de/en/facts/surv/sD391\_E-ICD-10-D39.1-Borderline-ovarian-tumor-survival.pdf

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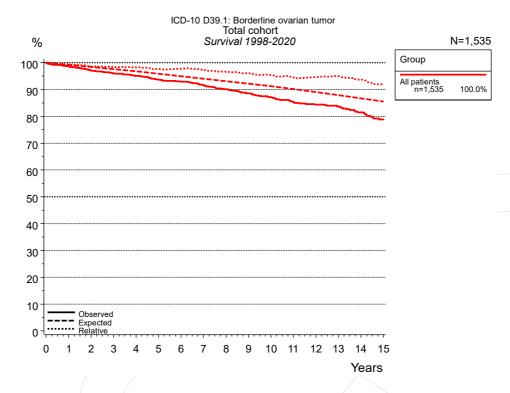
**Figure 1a.** Relative survival of patients with borderline ovarian tumor by period of diagnosis. Included in the evaluation are 1,649 cases diagnosed between 1988 and 2020.

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.

Period of diagnosis							
	1988-	1997	97 1998-20		200	)7+	
	n=1	14	n=3	81	n=1,	154	
Years	obs. %	rel. %	obs. %	rel. %	obs. %	rel. %	
0	100.0	100.0	100.0	100.0	100.0	100.0	
1	99.1	100.5	97.8	98.6	98.8	99.5	
2	99.1	101.6	93.9	95.6	98.3	99.6	
3	99.1	102.8	92.2	94.6	97.3	99.6	
4	97.3	102.6	91.3	94.5	96.4	99.5	
5	94.6	101.5	90.1	94.2	94.9	98.7	
6	91.0	99.4	89.6	94.4	94.1	98.9	
7	91.0	100.2	87.8	93.7	92.9	98.5	
8	89.1	100.0	86.6	93.3	91.3	97.7	
9	89.1	100.8	85.7	93.5	89.4	96.5	
10	85.5	99.0	84.4	93.1	87.9	95.7	
Median	23.2						

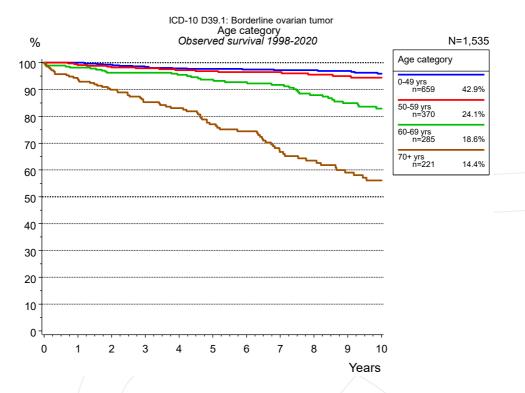
**Table 1b.** Observed (obs.) and relative (rel.) survival of patients with borderline ovarian tumor by period of diagnosis for period 1988-2020 (N=1,649).



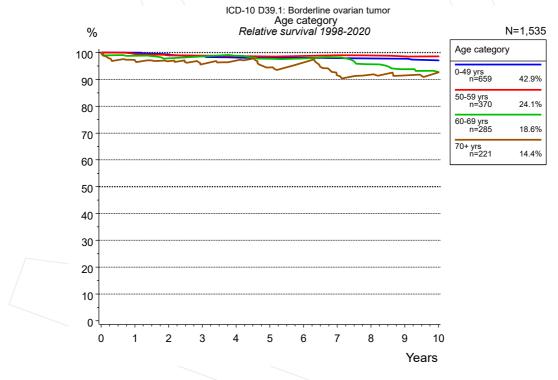
**Figure 2a.** Observed, expected and relative survival of the total cohort with borderline ovarian tumor. Included in the evaluation are 1,535 cases diagnosed between 1998 and 2020.

Group				
	All patients			
	n=1,535			
Years	obs. %	rel. %		
0	100.0	100.0		
1	98.6	99.3		
2	97.1	98.7		
3	96.0	98.3		
4	95.1	98.3		
5	93.7	97.7		
6	93.0	97.8		
7	91.6	97.3		
8	90.1	96.7		
9	88.6	96.0		
10	87.2	95.5		
11	85.5	94.6		
12	84.4	94.7		
13	83.7	95.0		
14	81.5	93.7		
15	78.8	91.9		
Median				

**Table 2b.** Observed (obs.) and relative (rel.) survival of the total cohort with borderline ovarian tumor for period 1998-2020 (N=1,535).



**Figure 3a.** Observed survival of patients with borderline ovarian tumor by age category. Included in the evaluation are 1,535 cases diagnosed between 1998 and 2020.

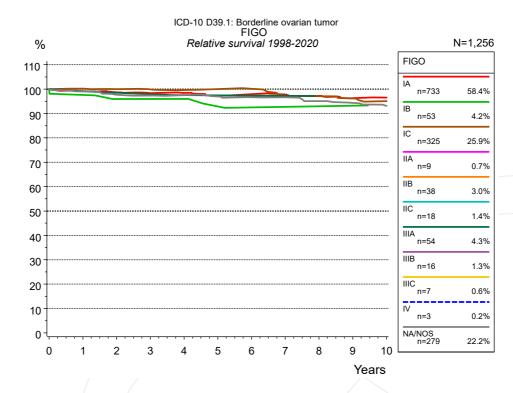


**Figure 3b.** Relative survival of patients with borderline ovarian tumor by age category. Included in the evaluation are 1,535 cases diagnosed between 1998 and 2020.

Age category										
	0-49	yrs (	50-59	9 yrs	60-69	9 yrs	70+ yrs			
	n=6	659	n=3	370	n=2	285	n=221			
Years	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	100.0	99.9	99.1	99.5	98.2	98.8	93.8	97.1		
2	99.3	99.3	98.3	98.9	96.3	97.8	89.9	96.8		
3	98.5	98.7	97.9	98.9	96.3	98.6	85.3	95.7		
4	97.9	98.2	97.3	98.7	95.4	98.8	83.0	97.0		
5	97.7	98.1	96.9	98.5	93.7	97.7	77.0	94.4		
6	97.5	98.0	96.5	98.7	92.7	97.8	74.4	96.3		
7	97.2	97.9	96.5	99.0	91.7	98.2	66.7	91.5		
8	97.2	97.9	95.5	98.9	87.9	95.7	63.5	91.8		
9	96.9	97.7	95.0	98.6	84.9	93.8	59.0	91.5		
10	96.0	97.1	94.4	98.6	82.9	92.7	56.1	92.6		
Median						/	12.5			

**Table 3c.** Observed (obs.) and relative (rel.) survival of patients with borderline ovarian tumor by age category for period 1998-2020 (N=1,535).





**Figure 4a.** Relative survival of patients with borderline ovarian tumor by FIGO. For 1,285 of 1,535 cases diagnosed between 1998 and 2020 valid data could be obtained for this item. For a total of 1,256 cases an evaluable classification was established. The grey line represents the subgroup of 279 patients with missing values regarding FIGO (18.2 % of 1,535 patients, the percent values of all other categories are related to n=1,256). Subgroups with sample size <20 are omitted from the chart.

FIGO													
	I.A	4	11	3	10	IC		IIB		IIIA		NA/NOS	
	n=7	733	n=	53	n=3	325	n=	38	n=	54	n=2	279	
Years	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	98.3	99.1	98.1	97.6	99.7	100.2	100.0	99.7	100.0	99.2	98.5	99.1	
2	97.2	98.7	94.0	96.0	98.7	100.0	100.0	99.4	98.0	98.5	96.2	97.7	
3	95.9	98.3	94.0	96.0	97.7	99.9	100.0	99.1	98.0	97.9	95.4	97.4	
4	95.3	98.4	94.0	96.0	96.5	99.6	100.0	98.7	95.7	97.6	94.5	97.5	
5	93.4	97.3	89.4	92.8	96.1	100.0	100.0	98.4	95.7	97.5	93.2	97.0	
6	93.1	97.9	87.0	92.4	95.6	100.1			95.7	97.4	91.9	96.7	
7	92.0	97.8	87.0	92.7	91.9	97.3			95.7	97.3	90.9	96.7	
8	90.5	97.2	87.0	92.9	90.7	97.1					88.8	95.1	
9	88.6	96.3	87.0	93.1	89.5	96.2					87.2	94.4	
10	87.9	96.5	83.5	92.9	87.5	95.1					85.4	93.1	
Median													

**Table 4b.** Observed (obs.) and relative (rel.) survival of patients with borderline ovarian tumor by FIGO for period 1998-2020 (N=1,256).

#### **Shortcuts**

MCR	Munich Cancer Registry, Germany							
NCI SEER UICC	National Cancer Institute, USA Surveillance, Epidemiology, and End Results, USA Union for International Cancer Control, Geneva							
DCO NA NOS	Death certificate only Not available Not otherwise specified	Death certificate provides the only notification to the registry.						
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**

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