

# Munich Cancer Registry



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

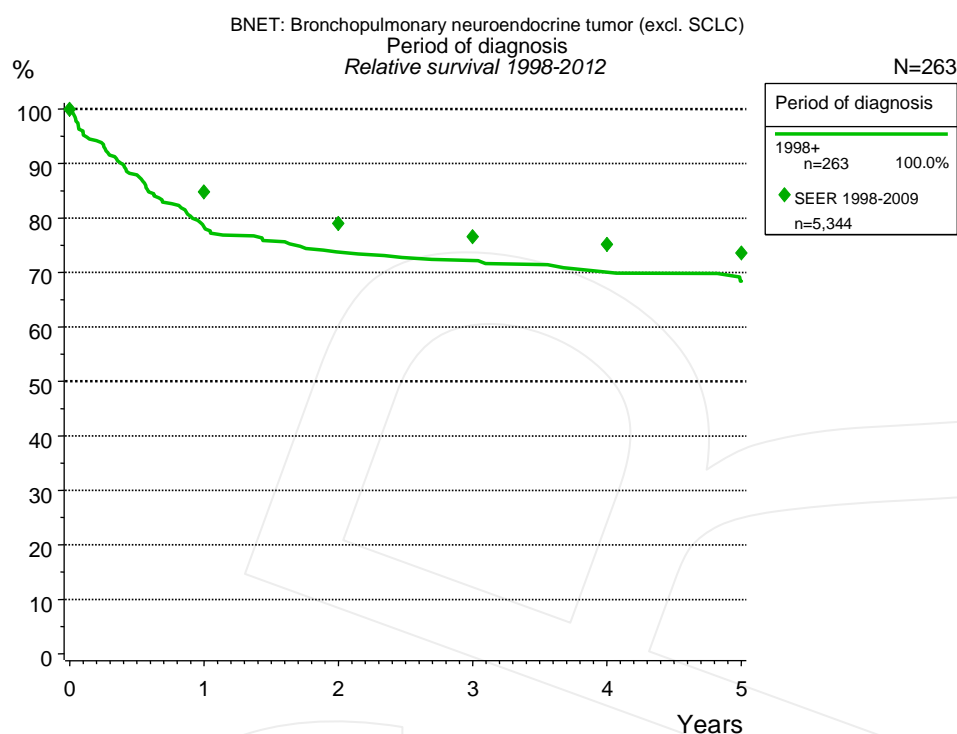
## Cancer statistics: Survival

### BNET: Pulm. neuroend. tumor

Year of diagnosis	1988-2012
Patients	631
Diseases	632
Cases evaluated	330
Creation date	03/25/2014
Export date	02/12/2014
Population	4.5 m



[http://www.tumorregister-muenchen.de/en/facts/surv/surv\\_hBNETE.pdf](http://www.tumorregister-muenchen.de/en/facts/surv/surv_hBNETE.pdf)

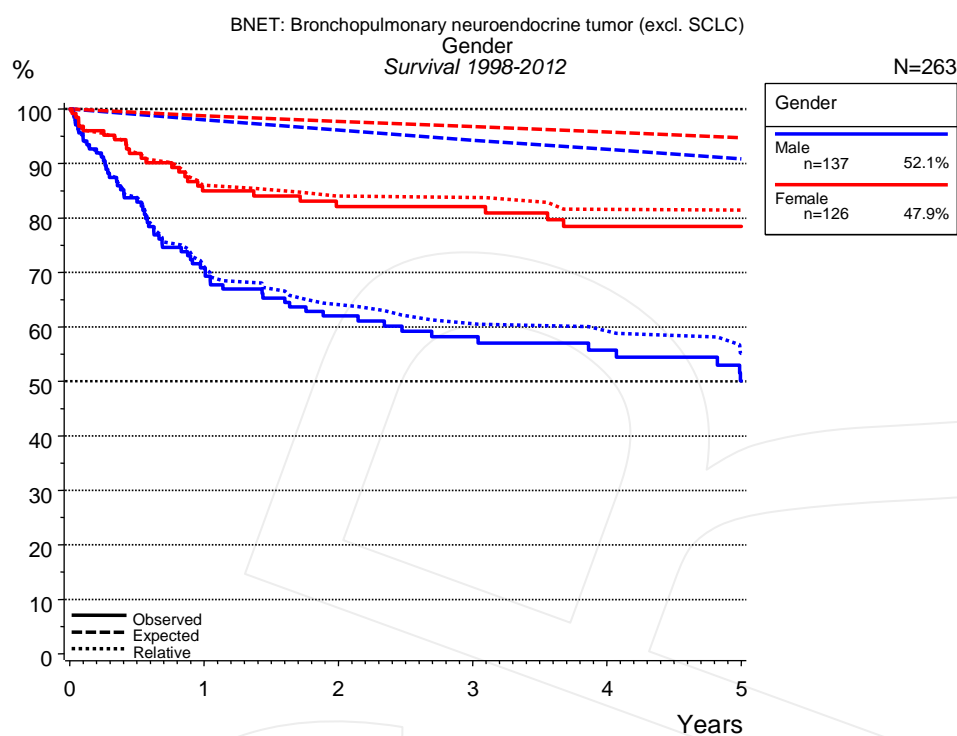


**Figure 1a.** Relative survival of patients with pulm. neuroend. tumor by period of diagnosis. Included in the evaluation are 263 cases diagnosed between 1998 and 2012.

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 1988, 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		
1998+ n=263		
Years	obs. %	rel. %
0	100.0	100.0
1	77.5	78.3
2	71.5	73.7
3	69.5	72.2
4	66.5	70.1
5	63.6	68.4

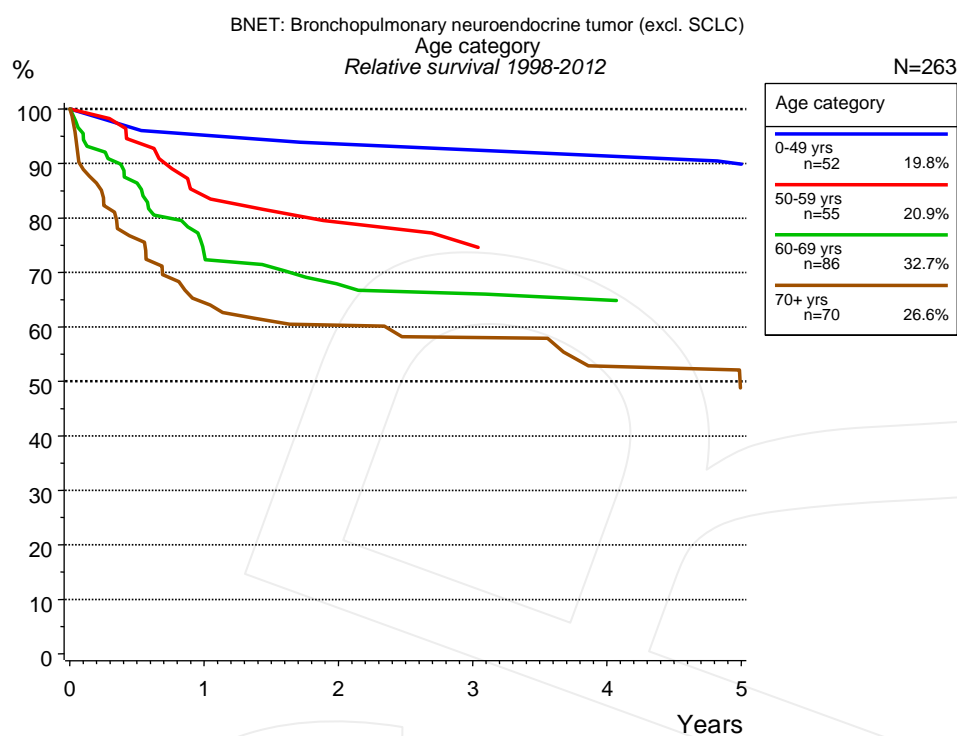
**Table 1b.** Observed (obs.) and relative (rel.) survival of patients with pulm. neuroend. tumor by period of diagnosis for period 1998-2012 (N=263).



**Figure 2a.** Survival of patients with pulm. neuroend. tumor by gender. Included in the evaluation are 263 cases diagnosed between 1998 and 2012.

Years	Gender			
	Male n=137		Female n=126	
	obs. %	rel. %	obs. %	rel. %
0	100.0	100.0	100.0	100.0
1	70.8	71.0	85.0	86.0
2	62.0	64.1	82.1	84.0
3	58.2	60.6	82.1	83.8
4	55.7	59.2	78.4	81.6
5	50.1	55.1	78.4	81.5

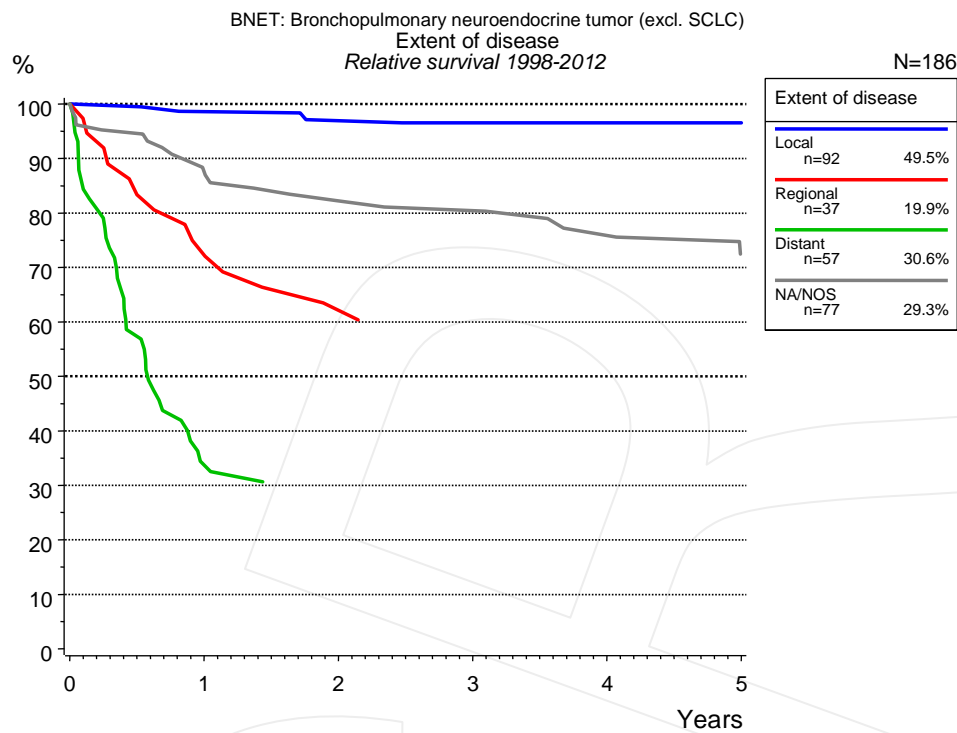
**Table 2b.** Observed (obs.) and relative (rel.) survival of patients with pulm. neuroend. tumor by gender for period 1998-2012 (N=263).



**Figure 3a.** Relative survival of patients with pulm. neuroend. tumor by age category. Included in the evaluation are 263 cases diagnosed between 1998 and 2012.

Years	Age category							
	0-49 yrs n=52		50-59 yrs n=55		60-69 yrs n=86		70+ yrs n=70	
	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	95.9	95.2	84.9	84.1	73.8	73.3	62.9	64.5
2	93.6	93.6	78.7	79.2	66.2	67.8	56.4	60.3
3	93.6	92.4	76.1	74.9	64.8	66.1	52.5	58.1
4	93.6	91.3	73.4	73.5	63.3	64.9	45.2	52.7
5	89.7	89.8	73.4	72.3	61.2	58.7	39.9	48.8

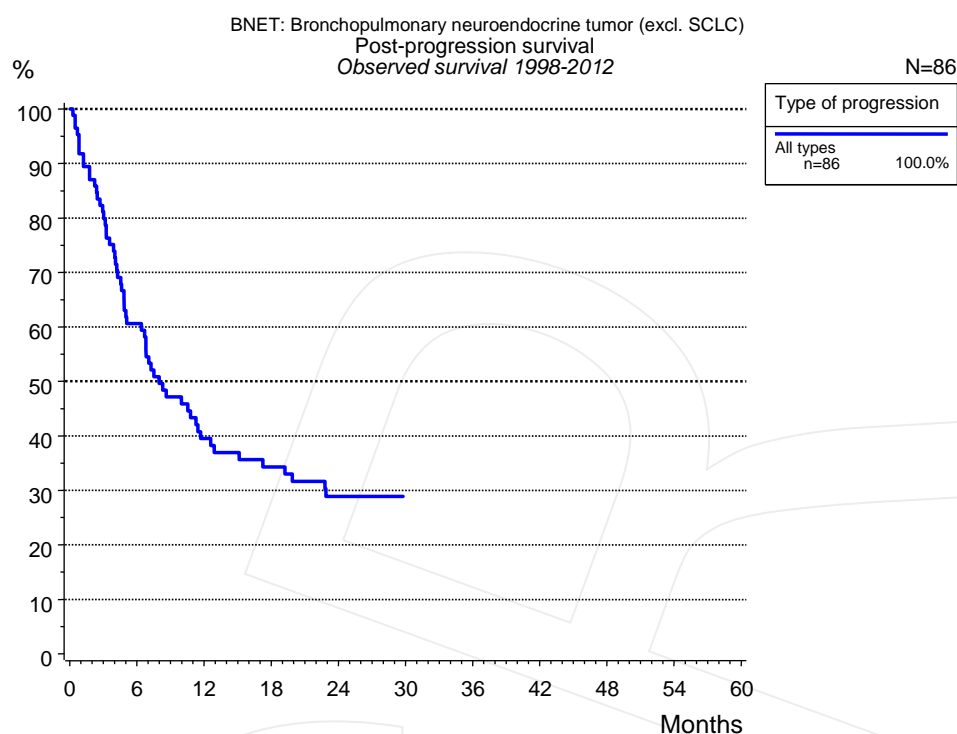
**Table 3b.** Observed (obs.) and relative (rel.) survival of patients with pulm. neuroend. tumor by age category for period 1998-2012 (N=263).



**Figure 4a.** Relative survival of patients with pulm. neuroend. tumor by extent of disease. For 216 of 263 cases diagnosed between 1998 and 2012 valid data could be obtained for this item. For a total of 186 cases an evaluable classification was established. The grey line represents the subgroup of 77 patients with missing values regarding extent of disease (29.3% of 263 patients, the percent values of all other categories are related to n=186).

Years	Extent of disease							
	Local n=92		Regional n=37		Distant n=57		NA/NOS n=77	
	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	97.7	98.6	73.8	72.3	33.8	33.7	86.6	87.5
2	95.2	97.0	61.6	62.1			79.1	82.2
3	93.9	96.6					77.4	80.4
4	93.9	96.6					72.0	75.9
5	93.9	96.6					65.9	72.5

**Table 4b.** Observed (obs.) and relative (rel.) survival of patients with pulm. neuroend. tumor by extent of disease for period 1998-2012 (N=186).



**Figure 5a.** Observed post-progression survival of 86 patients with pulm. neuroend. tumor diagnosed between 1998 and 2012 (incl. M1). These 86 patients with documented progression events during their course of disease represent 32.7% of the totally 263 evaluated cases. Patients with cancer relapse documented via death certificates only were excluded (n=14, 5.3%).

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.

Type of progression	
All types n=86	
Months	%
0	100.0
12	39.5
24	28.9

**Table 5b.** Observed post-progression survival of patients with pulm. neuroend. tumor for period 1998-2012 (N=86).

## 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 BNET: Pulm. neuroend. tumor [Internet]. 2014 [updated 2014 Mar 25; cited 2014 May 1]. Available from: [http://www.tumorregister-muenchen.de/en/facts/surv/surv\\_hBNETE.pdf](http://www.tumorregister-muenchen.de/en/facts/surv/surv_hBNETE.pdf)

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