

# Munich Cancer Registry



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

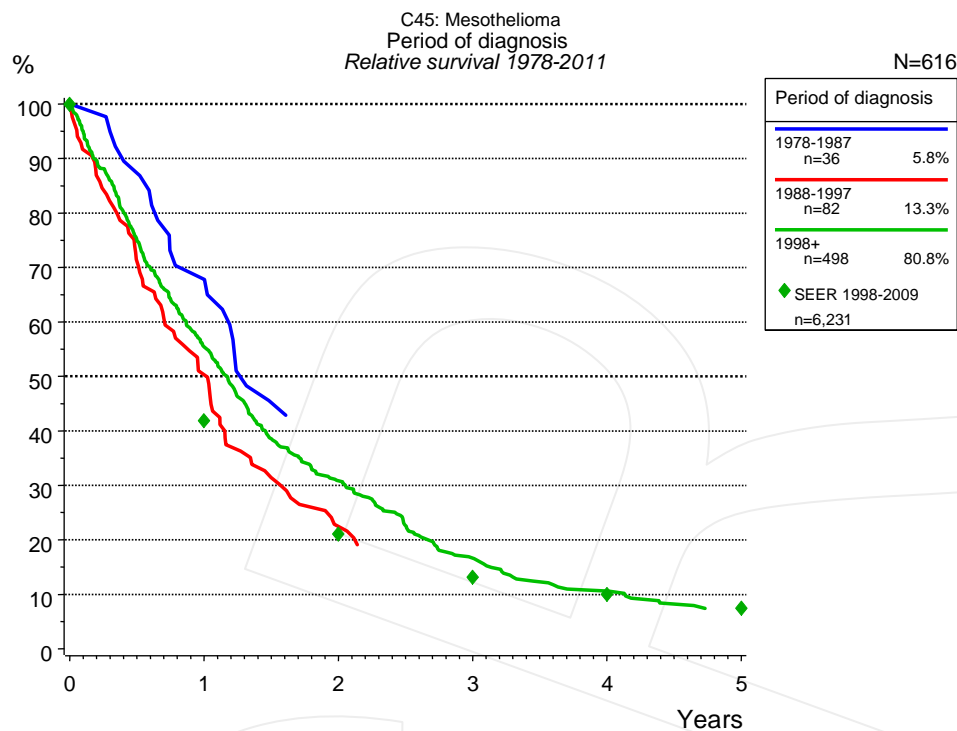
## Cancer statistics: Survival

### C45: Mesothelioma

| Year of diagnosis | 1978-1987  | 1988-1997 | 1998-2011 |
|-------------------|------------|-----------|-----------|
| Patients          | 39         | 97        | 977       |
| Diseases          | 39         | 97        | 979       |
| Creation date     | 04/01/2013 |           |           |
| Export date       | 01/03/2013 |           |           |
| Population        | 4.5 m      |           |           |



[http://www.tumorregister-muenchen.de/en/facts/surv/surv\\_C45\\_\\_E.pdf](http://www.tumorregister-muenchen.de/en/facts/surv/surv_C45__E.pdf)



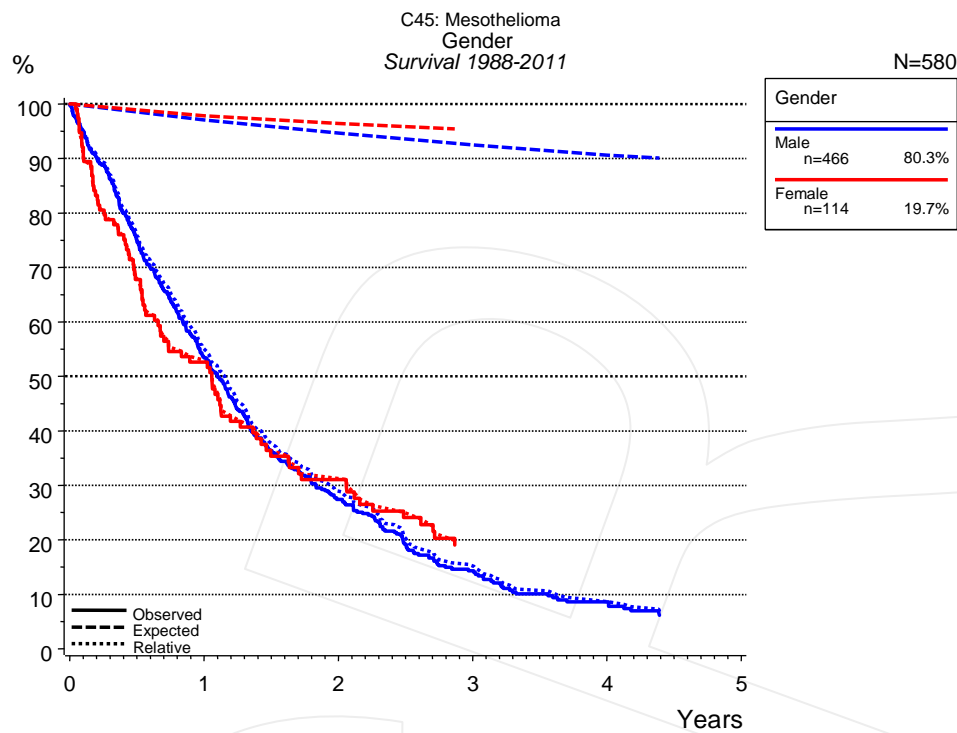
**Figure 1a.** Relative survival of patients with mesothelioma by period of diagnosis. Included in the evaluation are 616 cases diagnosed between 1978 and 2011.

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<br>n=36   |        | 1988-1997<br>n=82 |        | 1998+<br>n=498 |        |
|       | obs. %              | rel. % | obs. %            | rel. % | obs. %         | rel. % |
| 0     | 100.0               | 100.0  | 100.0             | 100.0  | 100.0          | 100.0  |
| 1     | 69.4                | 67.8   | 50.0              | 50.2   | 53.8           | 55.4   |
| 2     |                     |        | 22.0              | 22.4   | 29.3           | 30.8   |
| 3     |                     |        |                   |        | 15.7           | 16.6   |
| 4     |                     |        |                   |        | 10.1           | 10.6   |
| 5     |                     |        |                   |        | 6.7            | 7.0    |

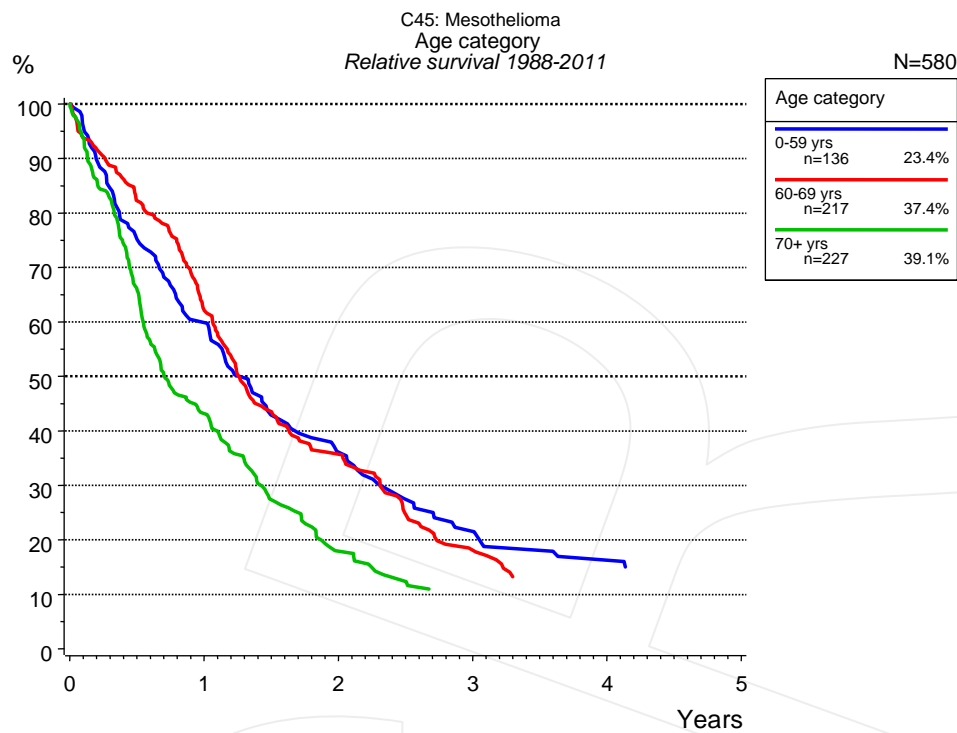
**Table 1b.** Observed (obs.) and relative (rel.) survival of patients with mesothelioma by period of diagnosis for period 1978-2011 (N=616).



**Figure 2a.** Survival of patients with mesothelioma by gender. Included in the evaluation are 580 cases diagnosed between 1988 and 2011.

| Years | Gender        |        |                 |        |
|-------|---------------|--------|-----------------|--------|
|       | Male<br>n=466 |        | Female<br>n=114 |        |
|       | obs. %        | rel. % | obs. %          | rel. % |
| 0     | 100.0         | 100.0  | 100.0           | 100.0  |
| 1     | 53.4          | 55.0   | 52.6            | 53.0   |
| 2     | 27.4          | 28.9   | 31.1            | 31.2   |
| 3     | 14.3          | 15.2   | 19.0            | 19.1   |
| 4     | 8.6           | 8.6    |                 |        |

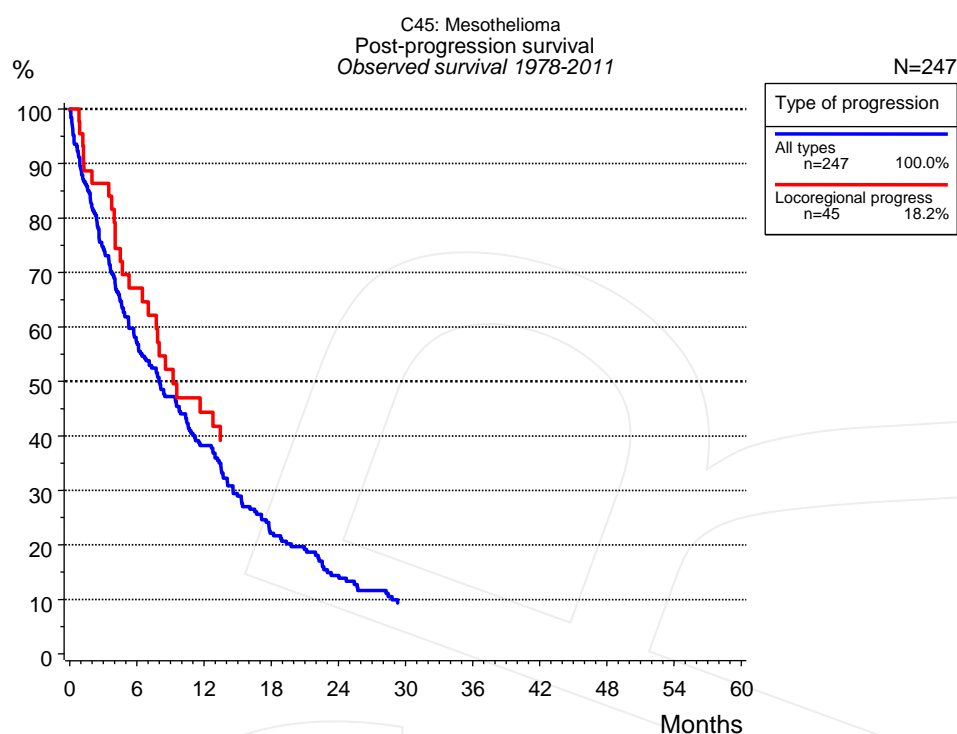
**Table 2b.** Observed (obs.) and relative (rel.) survival of patients with mesothelioma by gender for period 1988-2011 (N=580).



**Figure 3a.** Relative survival of patients with mesothelioma by age category. Included in the evaluation are 580 cases diagnosed between 1988 and 2011.

| Years | Age category      |        |                    |        |                  |        |
|-------|-------------------|--------|--------------------|--------|------------------|--------|
|       | 0-59 yrs<br>n=136 |        | 60-69 yrs<br>n=217 |        | 70+ yrs<br>n=227 |        |
|       | obs. %            | rel. % | obs. %             | rel. % | obs. %           | rel. % |
| 0     | 100.0             | 100.0  | 100.0              | 100.0  | 100.0            | 100.0  |
| 1     | 60.1              | 59.9   | 61.1               | 62.1   | 41.2             | 43.1   |
| 2     | 35.8              | 36.1   | 34.9               | 35.7   | 16.3             | 17.9   |
| 3     | 21.9              | 21.5   | 17.6               | 18.1   |                  |        |
| 4     | 16.6              | 16.3   |                    |        |                  |        |

**Table 3b.** Observed (obs.) and relative (rel.) survival of patients with mesothelioma by age category for period 1988-2011 (N=580).



**Figure 5a.** Observed post-progression survival of 247 patients with mesothelioma diagnosed between 1978 and 2011 (incl. M1). These 247 patients with documented progression events during their course of disease represent 40.1% of the totally 616 evaluated cases. Patients with cancer relapse documented via death certificates only were excluded (n=223, 36.2%). Multiple progression types on different sites are included in the evaluation even when not occurring synchronously.

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<br>n=247 | Locoregional progress<br>n=45 |
| Months              | %                  | %                             |
| 0                   | 100.0              | 100.0                         |
| 12                  | 38.2               | 44.4                          |
| 24                  | 14.4               |                               |

**Table 5b.** Observed post-progression survival of patients with mesothelioma for period 1978-2011 (N=247).

**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<br>Date of entry: Date of diagnosis<br>Event (Progression): First local recurrence, lymph node relapse or distant metastasis, unspecified recurrence<br>First all-cause recurrence is illustrated by survival curves (Kaplan-Meier estimate).<br>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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