

Munich Cancer Registry



- ▶ Incidence and Mortality
- ▶ Selection Matrix
- ▶ Homepage
- ▶ *Deutsch*

ICD-10 D05: Breast cancer i.s. (women)

Survival

| | | |
|----------------------|------------|-----------|
| Year of diagnosis | 1988-1997 | 1998-2020 |
| Patients | 675 | 7,303 |
| Diseases | 686 | 7,430 |
| Cases evaluated | 539 | 5,764 |
| Creation date | 04/15/2022 | |
| Database export | 12/20/2021 | |
| Population (females) | 2.48 m | |



Munich Cancer Registry
Cancer Registry Bavaria - Upper Bavaria Regional Center
at Klinikum Grosshadern/IBE
Marchioninstr. 15
Munich, 81377
Germany

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

https://www.tumorregister-muenchen.de/en/facts/surv/sD05f_E-ICD-10-D05-Breast-cancer-i.s.-women-survival.pdf

Index of figures and tables

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

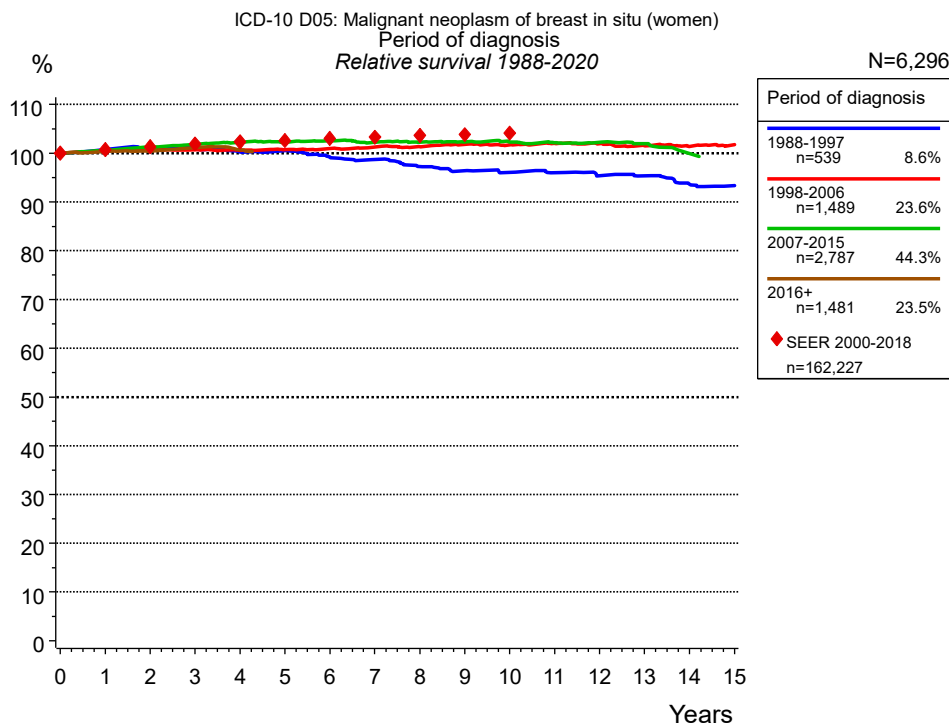


Figure 1a. Relative survival of patients with breast cancer i.s. (women) by period of diagnosis. Included in the evaluation are 6,296 cases diagnosed between 1988 and 2020.

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.

| Years | Period of diagnosis | | | | | | | |
|--------|---------------------|--------|----------------------|--------|----------------------|--------|------------------|--------|
| | 1988-1997 n=539 | | 1998-2006 n=1,489 | | 2007-2015 n=2,787 | | 2016+ n=1,481 | |
| | 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 | 99.6 | 100.7 | 99.7 | 100.5 | 99.6 | 100.5 | 99.6 | 100.3 |
| 2 | 98.7 | 101.0 | 98.9 | 100.7 | 99.3 | 101.2 | 98.7 | 100.4 |
| 3 | 97.4 | 100.9 | 98.1 | 100.7 | 98.9 | 101.8 | 98.6 | 101.1 |
| 4 | 95.7 | 100.2 | 96.9 | 100.6 | 98.3 | 102.2 | 97.3 | 100.7 |
| 5 | 94.9 | 100.5 | 96.1 | 100.7 | 97.2 | 102.3 | | |
| 6 | 92.4 | 99.2 | 95.3 | 101.0 | 96.3 | 102.5 | | |
| 7 | 90.9 | 98.7 | 94.5 | 101.2 | 94.9 | 102.2 | | |
| 8 | 88.6 | 97.3 | 93.4 | 101.3 | 93.7 | 102.2 | | |
| 9 | 86.8 | 96.4 | 92.6 | 101.8 | 92.6 | 102.3 | | |
| 10 | 85.4 | 96.1 | 91.3 | 101.7 | 91.2 | 102.3 | | |
| 11 | 84.3 | 96.0 | 90.2 | 102.0 | 89.7 | 102.1 | | |
| 12 | 82.7 | 95.3 | 88.8 | 101.9 | 88.5 | 102.2 | | |
| 13 | 81.7 | 95.3 | 87.0 | 101.5 | 86.7 | 101.9 | | |
| 14 | 79.0 | 93.6 | 85.3 | 101.4 | 84.3 | 99.9 | | |
| 15 | 77.8 | 93.4 | 84.1 | 101.7 | | | | |
| Median | | | | | | | | |

Table 1b. Observed (obs.) and relative (rel.) survival of patients with breast cancer i.s. (women) by period of diagnosis for period 1988-2020 (N=6,296).

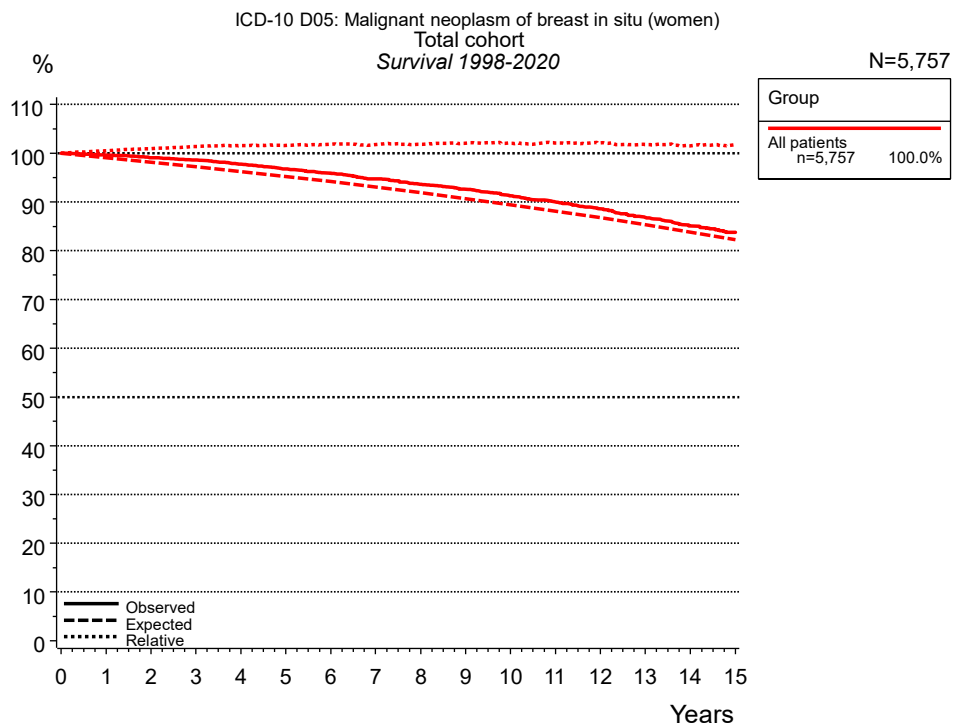


Figure 2a. Observed, expected and relative survival of the total cohort with breast cancer i.s. (women). Included in the evaluation are 5,757 cases diagnosed between 1998 and 2020.

| Years | Group | |
|--------|--------|--------|
| | obs. % | rel. % |
| 0 | 100.0 | 100.0 |
| 1 | 99.6 | 100.5 |
| 2 | 99.1 | 100.9 |
| 3 | 98.6 | 101.4 |
| 4 | 97.8 | 101.5 |
| 5 | 96.8 | 101.6 |
| 6 | 95.9 | 101.8 |
| 7 | 94.7 | 101.7 |
| 8 | 93.6 | 101.8 |
| 9 | 92.6 | 102.0 |
| 10 | 91.2 | 102.0 |
| 11 | 90.0 | 102.1 |
| 12 | 88.6 | 102.1 |
| 13 | 86.8 | 101.8 |
| 14 | 85.0 | 101.5 |
| 15 | 83.7 | 101.8 |
| Median | | |

Table 2b. Observed (obs.) and relative (rel.) survival of the total cohort with breast cancer i.s. (women) for period 1998-2020 (N=5,757).

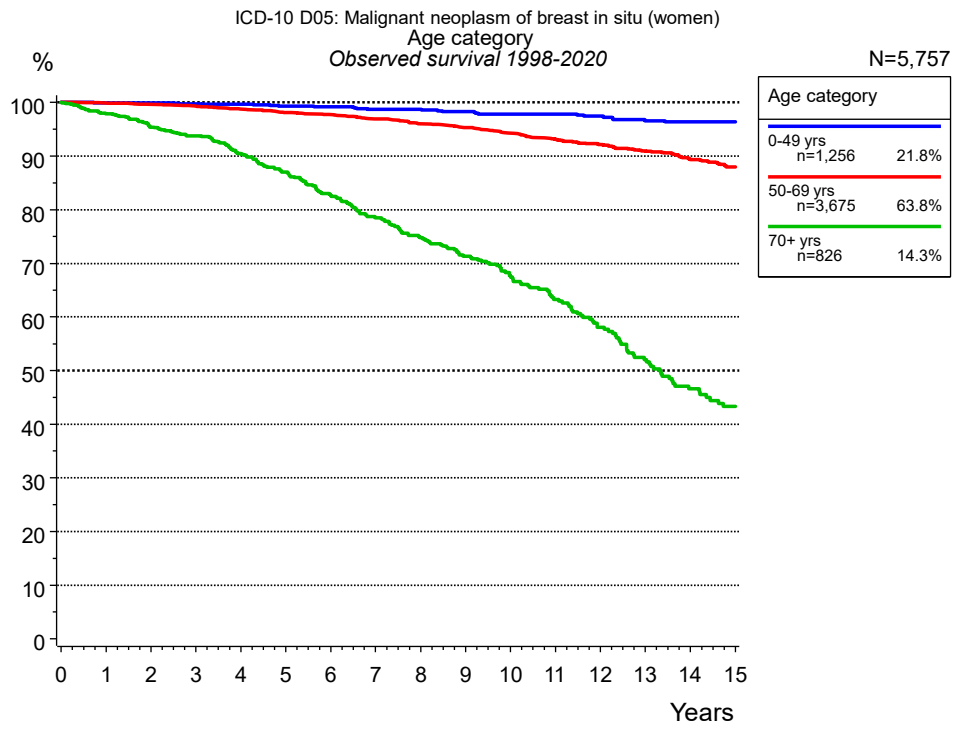


Figure 3a. Observed survival of patients with breast cancer i.s. (women) by age category. Included in the evaluation are 5,757 cases diagnosed between 1998 and 2020.

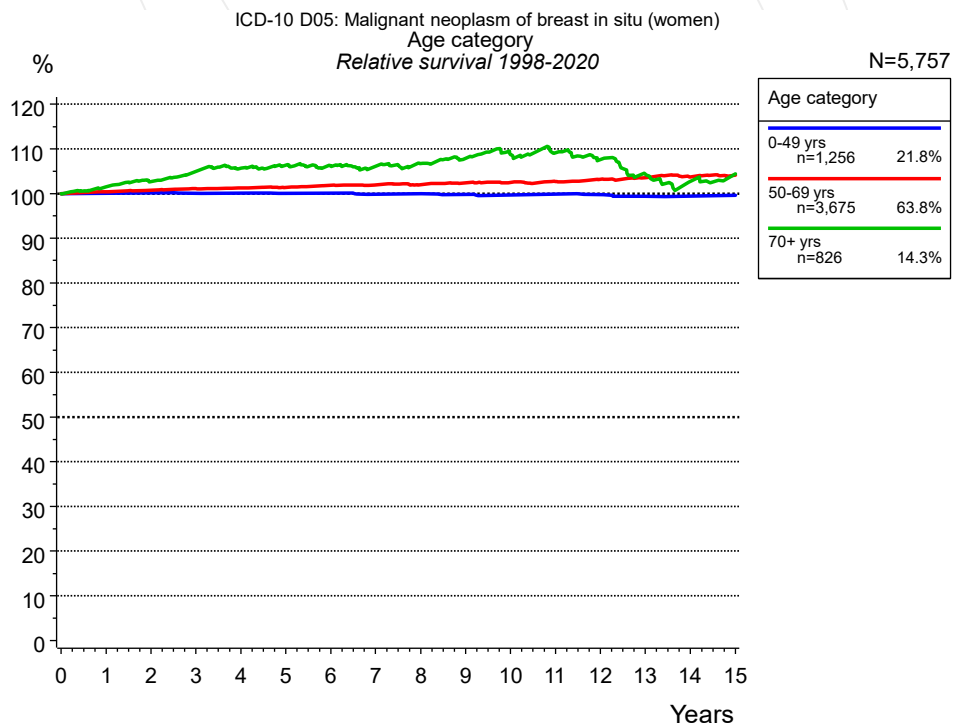


Figure 3b. Relative survival of patients with breast cancer i.s. (women) by age category. Included in the evaluation are 5,757 cases diagnosed between 1998 and 2020.

| Years | Age category | | | | | |
|--------|---------------------|--------|----------------------|--------|------------------|--------|
| | 0-49 yrs n=1,256 | | 50-69 yrs n=3,675 | | 70+ yrs n=826 | |
| | obs. % | rel. % | obs. % | rel. % | obs. % | rel. % |
| 0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| 1 | 99.9 | 100.0 | 99.9 | 100.4 | 97.9 | 101.5 |
| 2 | 99.9 | 100.1 | 99.6 | 100.8 | 95.4 | 102.7 |
| 3 | 99.7 | 100.1 | 99.3 | 101.1 | 93.8 | 105.0 |
| 4 | 99.6 | 100.1 | 98.7 | 101.2 | 90.5 | 105.7 |
| 5 | 99.3 | 100.0 | 98.1 | 101.4 | 87.0 | 106.4 |
| 6 | 99.2 | 100.1 | 97.7 | 101.8 | 82.7 | 106.2 |
| 7 | 98.7 | 99.8 | 96.9 | 101.9 | 78.5 | 106.2 |
| 8 | 98.7 | 99.9 | 96.0 | 102.0 | 74.8 | 106.8 |
| 9 | 98.3 | 99.8 | 95.3 | 102.4 | 71.3 | 107.9 |
| 10 | 97.8 | 99.7 | 94.2 | 102.5 | 67.4 | 108.7 |
| 11 | 97.8 | 99.9 | 93.1 | 102.7 | 63.3 | 109.1 |
| 12 | 97.5 | 99.8 | 92.2 | 103.2 | 58.1 | 107.6 |
| 13 | 96.6 | 99.4 | 91.0 | 103.6 | 52.0 | 104.4 |
| 14 | 96.3 | 99.4 | 89.4 | 103.8 | 46.6 | 102.7 |
| 15 | 96.3 | 99.6 | 88.0 | 104.2 | 43.3 | 104.4 |
| Median | | | | | 13.3 | |

Table 3c. Observed (obs.) and relative (rel.) survival of patients with breast cancer i.s. (women) by age category for period 1998-2020 (N=5,757).

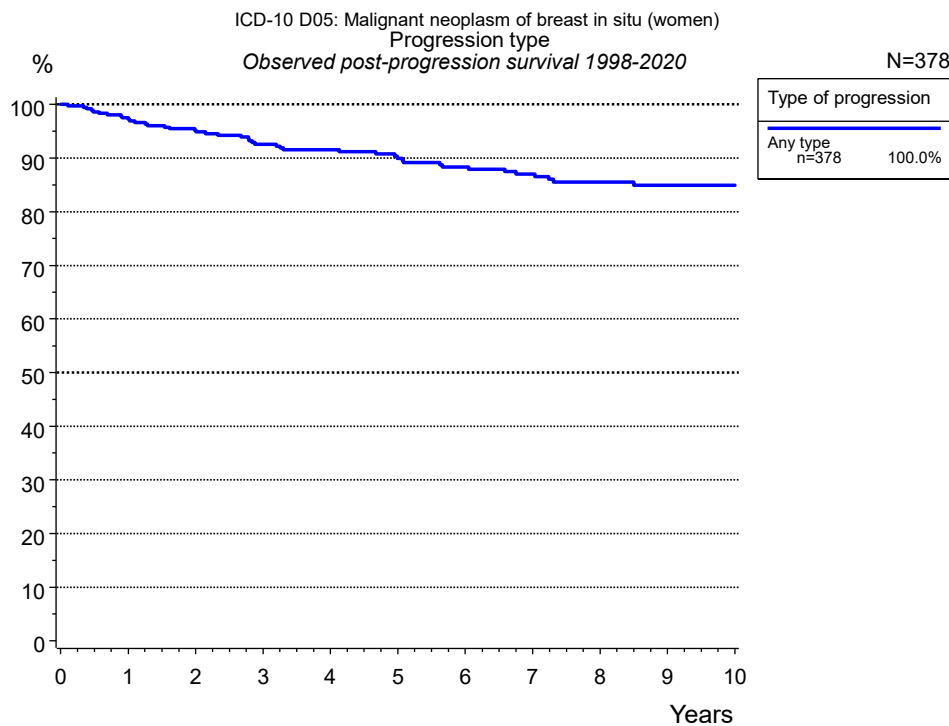


Figure 5c. Observed post-progression survival of 378 patients with breast cancer i.s. (women) diagnosed between 1998 and 2020. These 378 patients with documented progression events during their course of disease represent 6.6 % of the totally 5,736 evaluated cases. Patients with cancer relapse documented via death certificates only were excluded (n=32, 0.6 %).

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 “Any type” 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 | |
|---------------------|-------|
| Any type | |
| n=378 | |
| Years | % |
| 0 | 100.0 |
| 1 | 97.5 |
| 2 | 95.2 |
| 3 | 92.6 |
| 4 | 91.5 |
| 5 | 90.0 |
| 6 | 88.3 |
| 7 | 87.0 |
| 8 | 85.5 |
| 9 | 84.9 |
| 10 | 84.9 |

Table 5d. Observed post-progression survival of patients with breast cancer i.s. (women) for period 1998-2020 (N=378).

Shortcuts

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

Munich Cancer Registry. Survival ICD-10 D05: Breast cancer i.s. (women) [Internet]. 2022 [updated 2022 Apr 15; cited 2022 Jun 1]. Available from: https://www.tumorregister-muenchen.de/en/facts/surv/sD05f_E-ICD-10-D05-Breast-cancer-i.s.-women-survival.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.