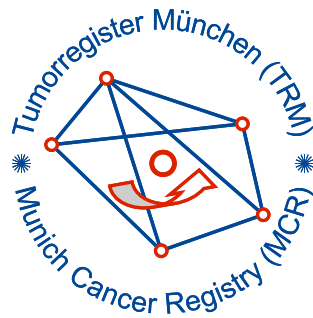


# Munich Cancer Registry



- ▶ Baseline statistics
- ▶ Selection Matrix
- ▶ Homepage

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

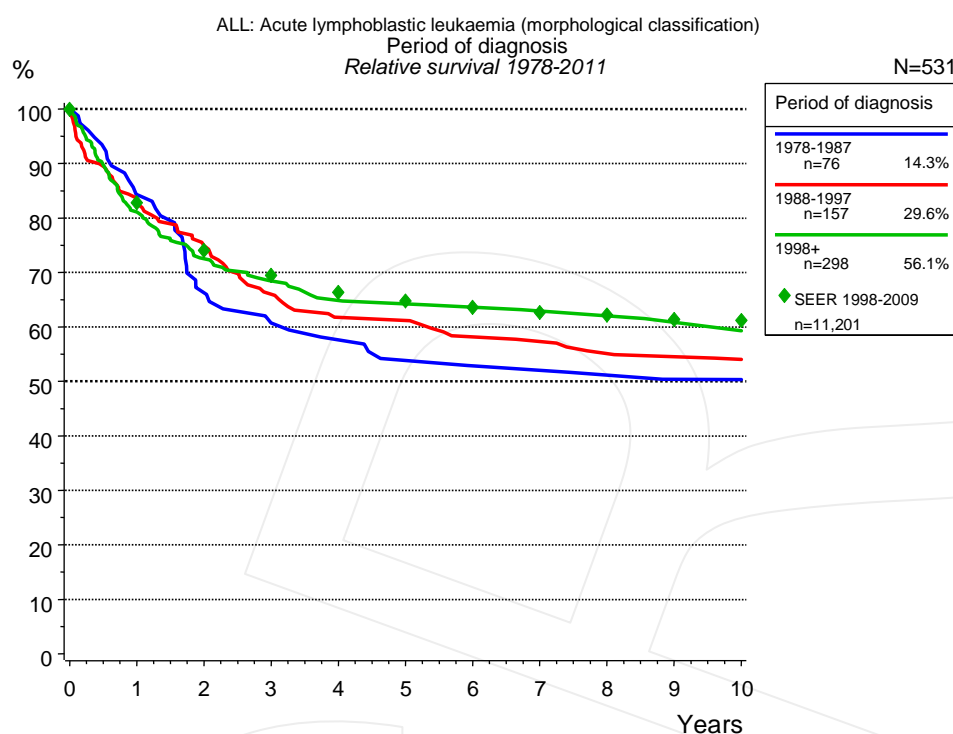
## Cancer statistics: Survival

### ALL: Acute lymphobl. leukaemia (morph.)

Year of diagnosis	1978-1987	1988-1997	1998-2011
Patients	83	179	588
Diseases	83	179	588
Creation date	04/01/2013		
Export date	01/03/2013		
Population	4.5 m		



[http://www.tumorregister-muenchen.de/en/facts/surv/surv\\_hALL\\_E.pdf](http://www.tumorregister-muenchen.de/en/facts/surv/surv_hALL_E.pdf)

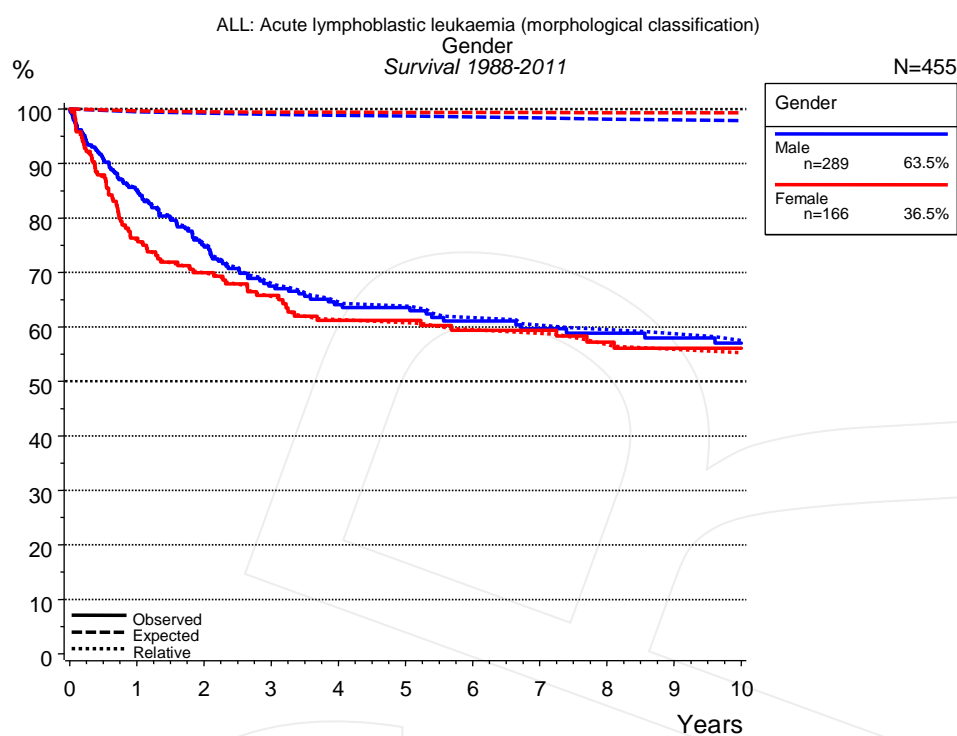


**Figure 1a.** Relative survival of patients with acute lymphobl. leukaemia (morph.) by period of diagnosis. Included in the evaluation are 531 cases diagnosed between 1978 and 2011.

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 n=76		1988-1997 n=157		1998+ n=298	
	obs. %	rel. %	obs. %	rel. %	obs. %	rel. %
0	100.0	100.0	100.0	100.0	100.0	100.0
1	84.2	84.2	83.4	83.3	80.7	81.1
2	67.1	66.2	75.0	74.9	72.2	72.5
3	60.5	60.7	65.9	66.0	68.0	68.5
4	57.9	57.6	61.2	61.7	64.7	64.8
5	53.9	53.8	61.2	61.1	64.1	64.2
6	52.6	52.9	57.8	58.2	63.3	63.6
7	52.6	52.0	57.1	57.3	62.3	62.9
8	51.3	51.1	55.0	55.1	62.3	62.0
9	50.0	50.4	54.3	54.5	60.5	60.9
10	50.0	50.3	53.6	54.0	60.5	59.3

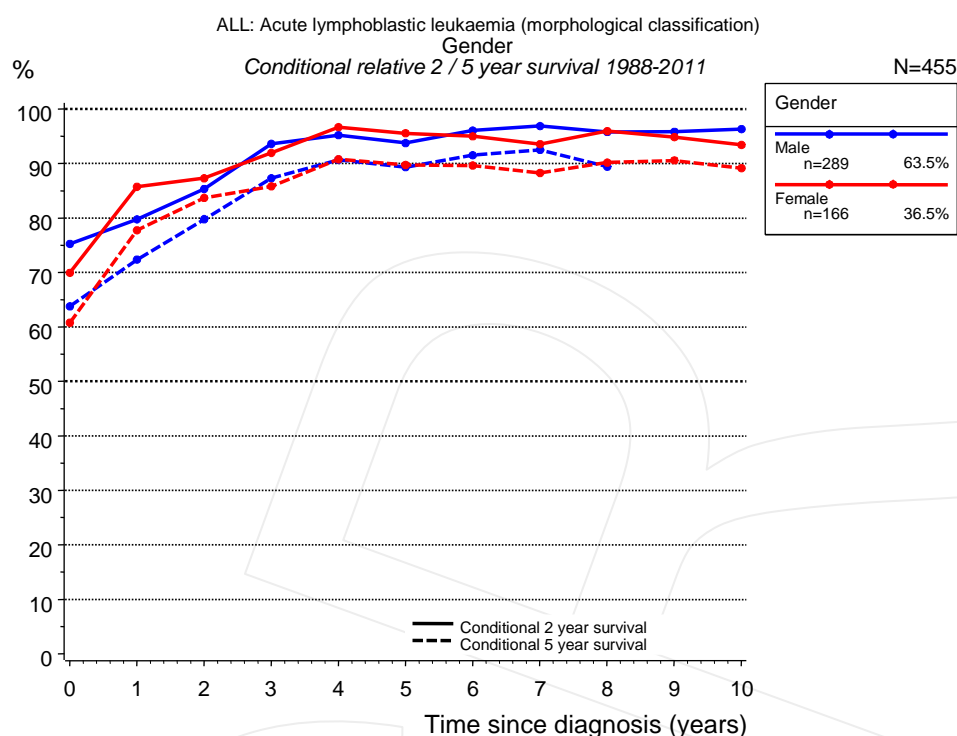
**Table 1b.** Observed (obs.) and relative (rel.) survival of patients with acute lymphobl. leukaemia (morph.) by period of diagnosis for period 1978-2011 (N=531).



**Figure 2a.** Survival of patients with acute lymphobl. leukaemia (morph.) by gender. Included in the evaluation are 455 cases diagnosed between 1988 and 2011.

Years	Gender			
	Male n=289		Female n=166	
	obs. %	rel. %	obs. %	rel. %
0	100.0	100.0	100.0	100.0
1	84.9	85.3	76.3	76.0
2	75.1	75.2	69.9	69.9
3	67.5	68.0	65.7	65.6
4	64.1	64.5	61.2	61.4
5	63.5	63.8	61.2	60.8
6	61.1	61.7	59.3	59.5
7	59.7	60.3	59.3	58.8
8	58.9	59.5	57.2	56.7
9	58.0	58.7	56.1	55.9
10	57.0	57.5	56.1	55.3

**Table 2b.** Observed (obs.) and relative (rel.) survival of patients with acute lymphobl. leukaemia (morph.) by gender for period 1988-2011 (N=455).

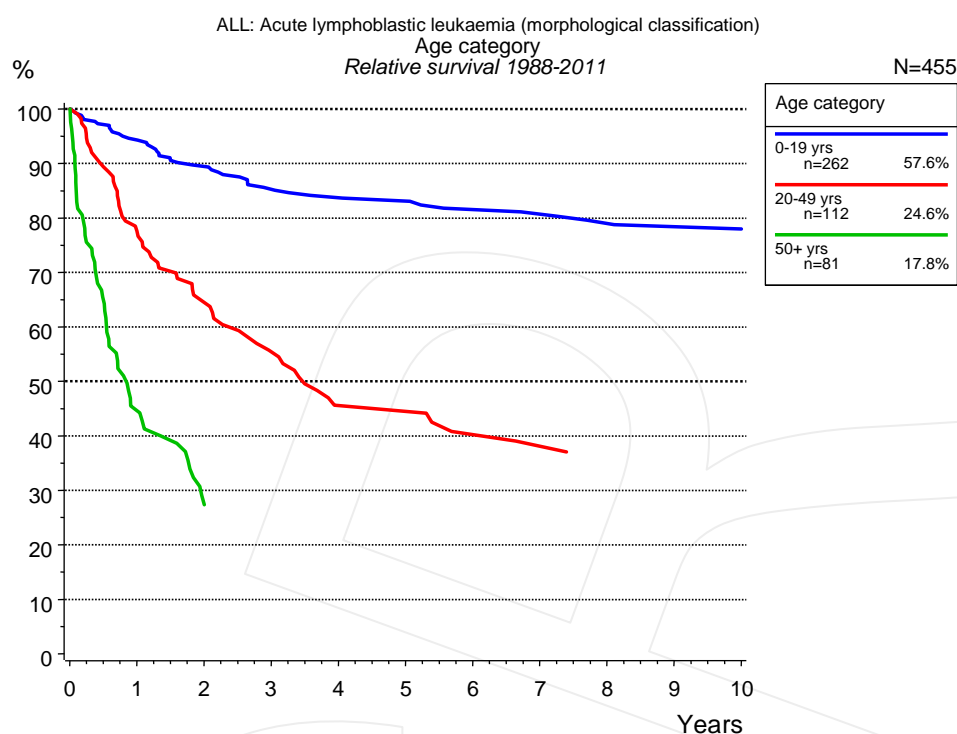


**Figure 2c.** Conditional relative 2 / 5-year survival of patients with acute lymphobl. leukaemia (morph.) by gender. For 455 of 455 cases diagnosed between 1988 and 2011 valid data could be obtained for this item.

Years	Gender					
	Male			Female		
	n	Cond. surv. % 2 yrs	5 yrs	n	Cond. surv. % 2 yrs	5 yrs
0	289	75.2	63.8	166	69.9	60.8
1	231	79.7	72.4	124	85.7	77.8
2	174	85.3	79.8	106	87.3	83.7
3	143	93.6	87.3	88	91.9	85.8
4	123	95.2	90.7	76	96.7	90.8
5	107	93.8	89.3	69	95.6	89.7
6	92	96.0	91.5	61	95.0	89.6
7	79	96.9	92.5	56	93.5	88.3
8	69	95.8	89.4	51	95.9	90.2
9	61	95.8		46	94.8	90.6
10	56	96.3		43	93.4	89.1

**Table 2d.** Conditional relative 2 / 5-year survival of patients with acute lymphobl. leukaemia (morph.) by gender for period 1988-2011 (N=455).

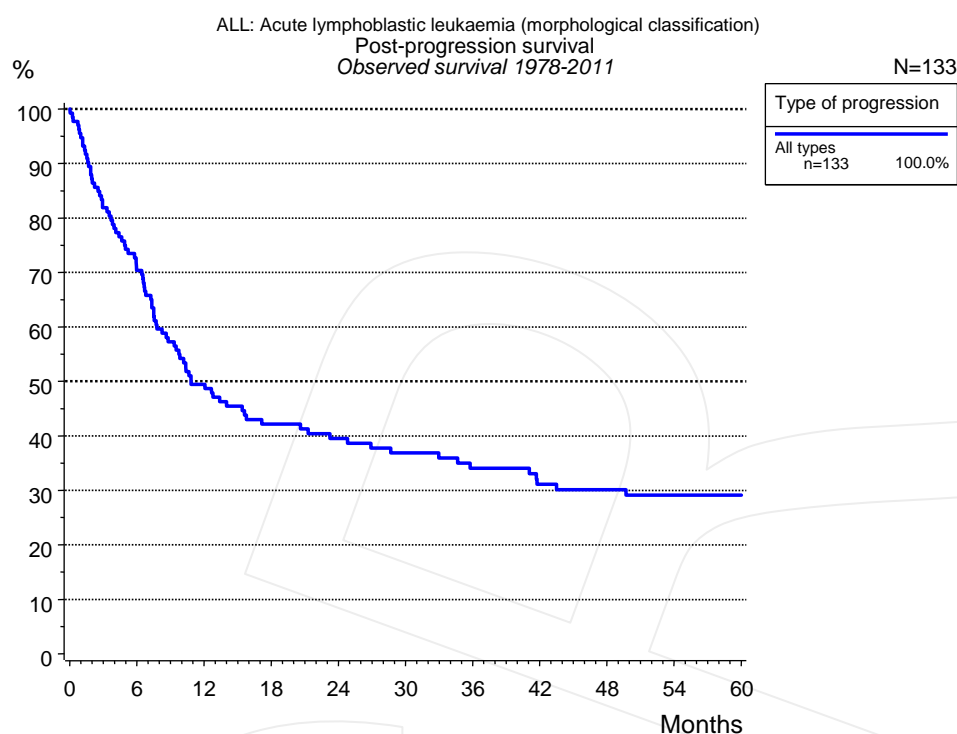
Conditional relative survival rates refer to the relative survival probability, in this case for 2 and 5 years after cancer diagnosis, compared to the age- and sex-matched population (=100%) under the condition of being alive for a certain time period (x-axis in Figure 2a). The results illustrate to what extent the cancer induced mortality of particular subgroups declines in the subsequent years after detection of the malignancy. For instance, according to the presented survival statistics, patients in the subgroup gender="Male", who are alive at least 3 years after cancer diagnosis, the conditional relative 2-year survival rate is 93.6% (n=143).



**Figure 3a.** Relative survival of patients with acute lymphobl. leukaemia (morph.) by age category. Included in the evaluation are 455 cases diagnosed between 1988 and 2011.

Years	Age category					
	0-19 yrs n=262		20-49 yrs n=112		50+ yrs n=81	
	obs. %	rel. %	obs. %	rel. %	obs. %	rel. %
0	100.0	100.0	100.0	100.0	100.0	100.0
1	94.6	94.3	77.5	77.5	44.6	44.6
2	89.7	89.4	65.7	64.5	27.8	27.4
3	85.5	85.3	55.5	55.4		
4	84.1	83.7	45.3	45.5		
5	83.5	83.0	45.3	44.5		
6	81.7	81.5	40.5	40.2		
7	81.0	80.7	38.6	38.1		
8	79.4	79.0	36.6	35.7		
9	78.6	78.4				
10	78.6	78.0				

**Table 3b.** Observed (obs.) and relative (rel.) survival of patients with acute lymphobl. leukaemia (morph.) by age category for period 1988-2011 (N=455).



**Figure 5a.** Observed post-progression survival of 133 patients with acute lymphobl. leukaemia (morph.) diagnosed between 1978 and 2011 (incl. M1). These 133 patients with documented progression events during their course of disease represent 25.0% of the totally 531 evaluated cases. Patients with cancer relapse documented via death certificates only were excluded (n=63, 11.9%).

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=133	
Months	%
0	100.0
12	49.5
24	39.5
36	34.0
48	30.1
60	29.1

**Table 5b.** Observed post-progression survival of patients with acute lymphobl. leukaemia (morph.) for period 1978-2011 (N=133).

**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**

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