Munich Cancer Registry

- Survival
- Selection Matrix
- Homepage
- *Deutsch*

Munich Cancer Registry at Munich Cancer Center
Marchioninistr. 15
Munich, 81377
Germany

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

Cancer statistics: Baseline statistics

C92: Myeloid leukaemia

Year of diagnosis	1998-2013
Patients	3,342
Diseases	3,355
Creation date	05/19/2015
Export date	12/30/2014
Population	4.64 m

http://www.tumorregister-muenchen.de/en/facts/base/base_C92__E.pdf

Global Statements about the statistics on the Internet −
Baseline Statistics (grey button), **Survival** (red button)

In these analyses, the clinics and physicians of Upper Bavaria and the city and county of Landshut[#], with a total of 4.64 million inhabitants, account for the frequency of cancer diseases[##] and the achieved long term results. Additionally, the long term survival evaluated by the Munich Cancer Registry (MCR) is compared with the results of the population-based registry in the USA (SEER), which is useful for checking the consistency of the data on an international level.

In comparing several tables, inconsistent figures may be detected. This is based on the fact that different patient cohorts are included in the base calculation, for example when proportions of multiple tumors or DCO-cases[###] are concerned. In other cases the individual tumor diagnosis is the basis for calculation, for example with incidence.

The foot notes describe the currentness of the data. The baseline statistics and survival data are updated annually. This yearly analysis comprises the Annual Report of the MCR. The time-delayed acquisition of data and the occasionally high DCO-rates indicate optimizing reserves, among others, because of current financial and legal conditions that hinder the analyses.

Clinics and physicians have access to essentially more detailed data, with which they can check, compare and in the best case optimize their own data and results.

We would be pleased to receive corrections, critique and useful suggestions. Just send an e-mail to tumor@ibe.med.uni-muenchen.de.

Munich Cancer Registry, May 2015

[#] Base data has been collected since 1998. An increase in new diseases is apparent, which is an effect of two extensions in the MCR catchment area (from a base population of 2.51 million to 3.96 in 2002, and to 4.52 million in 2007). Death certificates from 2014 are incorporated into these analyses.

[##] Due to the high frequency and good prognosis of non-malignant skin cancer (C44), no systematic ascertainment is performed for this diagnosis. C44 is not designated as a primary, but rather as a secondary tumor.

[###] DCO (death certificate only) identifies a cancer case that first becomes available to the MCR through the death certificate. A high proportion of DCO cases (≥5%) in particular cancer types indicate insufficient participation of specific cancer specializations.

Some remarks regarding this cancer type

The results for leukemias should be interpreted with caution. As with other primarily non-surgically or non-radiologically treated cancer diseases, the MCR hardly manages to obtain even the simplest information on this cancer. The proportion of DCO cases indicates a situation that is far away from a satisfying cooperation. In the group of institutions that potentially participate in reporting are a few hospitals that refuse any contribution to MCR.

ICD-10 codes (ICD-10 2015) used for specifying cancer site

Code	Description
C92.-	Myeloid leukaemia
C92.0	Acute myeloblastic leukaemia [AML]
C92.1	Chronic myeloid leukaemia [CML], BCR/ABL-positive
C92.2	Atypical chronic myeloid leukaemia, BCR/ABL-negative
C92.3	Myeloid sarcoma
C92.4	Acute promyelocytic leukaemia [PML]
C92.5	Acute myelomonocytic leukaemia
C92.6	Acute myeloid leukaemia with 11q23-abnormality
C92.7	Other myeloid leukaemia
C92.8	Acute myeloid leukaemia wiht multilineage dysplasia
C92.9	Myeloid leukaemia, unspecified

INCIDENCE

Table 1

Patient cohorts by year of diagnosis including DCO cases and multiple primaries, and with proportion of deaths and active follow-up

Year of diagnosis	Cases n	DCO cases n	Prop. DCO %	Prop. mult. primaries %	Prop. deaths %	Prop. actively followed %	
1998	91	26	28.6	11.0	87.9	100.0	
1999	112	33	29.5	15.2	80.4	99.1	
2000	129	39	30.2	12.4	73.6	99.2	
2001	135	58	43.0	21.5	83.0	98.5	
2002	180	62	34.4	18.3	77.2	96.7	#
2003	237	85	35.9	20.3	79.3	98.3	
2004	227	86	37.9	25.1	76.7	98.7	
2005	218	74	33.9	28.4	78.0	97.2	
2006	246	95	38.6	32.9	85.0	96.3	
2007	239	72	30.1	29.3	74.5	93.3	# ##
2008	249	77	30.9	32.5	73.1	83.5	
2009	253	56	22.1	32.0	72.7	83.0	
2010	315	65	20.6	35.2	71.1	81.0	
2011	241	50	20.7	35.3	70.1	83.4	
2012	295	70	23.7	37.6	65.4	83.4	
2013	188	78	41.5	42.6	69.1	99.5	###
1998-2013	3355	1026	30.6	29.0	75.0	91.6	

The increases of incident cases in 2002 and 2007 reflect the expansion to additional registry areas.

Since 2007 the percentage of actively followed patients sharply declined compared to the previous years. This is a consequence of ambiguous data protection rules that currently forbid cancer registries in Bavaria to obtain the essential life status informations from competent registration offices.

Please be aware that data of recent annual patient cohorts may not yet be fully processed. Therefore, the presented figures and tables are potentially related to different time periods as pointed out in the respective headlines or legends.

Table 1a

Patient cohorts by year of diagnosis and gender
including DCO cases

Year of diagnosis	All n	Males n	Females n	Prop. males %
1998	91	43	48	47.3
1999	112	62	50	55.4
2000	129	66	63	51.2
2001	135	69	66	51.1
2002	180	91	89	50.6
2003	237	119	118	50.2
2004	227	111	116	48.9
2005	218	106	112	48.6
2006	246	142	104	57.7
2007	239	134	105	56.1
2008	249	132	117	53.0
2009	253	127	126	50.2
2010	315	160	155	50.8
2011	241	127	114	52.7
2012	295	148	147	50.2
2013	188	116	72	61.7
1998-2013	3355	1753	1602	52.3

Table 2

Incidence measures by year of diagnosis and gender including DCO cases
(with respect to registry area expansion from 2.51 to 3.96 m as of 2002,
and from 3.96 to 4.64 m as of 2007, respectively)

Year of diagnosis	Males n	Females n	Males Inc. raw	Fem. Inc. raw	Males Inc. WS	Fem. Inc. WS	Males Inc. ES	Fem. Inc. ES	Males Inc. BRD-S	Fem. Inc. BRD-S
1998	43	48	3.9	4.1	2.7	2.5	3.7	3.1	4.7	3.5
1999	62	50	5.5	4.2	3.5	2.3	4.9	3.1	5.9	3.8
2000	66	63	5.8	5.2	4.5	3.1	5.5	4.0	6.4	4.6
2001	69	66	6.0	5.4	3.7	2.6	5.1	3.8	6.5	4.7
2002	91	89	4.9	4.5	3.3	2.3	4.3	3.2	5.4	3.8
2003	119	118	6.3	6.0	3.6	3.1	5.4	4.2	7.0	5.1
2004	111	116	5.9	5.9	3.5	3.3	4.9	4.3	6.1	5.1
2005	106	112	5.6	5.6	3.3	3.1	4.5	3.9	5.8	4.8
2006	142	104	7.4	5.2	4.2	2.3	5.9	3.2	7.7	4.2
2007	134	105	6.0	4.5	3.8	2.3	4.9	3.1	6.1	3.8
2008	132	117	5.9	5.0	3.7	2.3	4.7	3.3	5.9	4.2
2009	127	126	5.7	5.4	3.3	2.7	4.4	3.7	5.5	4.4
2010	160	155	7.1	6.6	3.9	3.1	5.5	4.3	7.0	5.3
2011	127	114	5.6	4.8	3.3	2.6	4.4	3.3	5.2	3.9
2012	148	147	6.5	6.2	3.4	3.4	4.8	4.4	6.2	5.1
2013	116	72	5.1	3.1	2.5	1.2	3.6	1.8	5.0	2.4
1998-2013	1753	1602	5.9	5.2	3.5	2.6	4.8	3.5	6.0	4.3

The computation of the incidence measures includes all primaries, irrespective of first or subsequent malignancy.

Table 3

Age distribution parameters by year of diagnosis (All)
(incl. DCO)

Year of diagnosis	Cases n	Mean	Std. dev.	Min.	Max.	10%	25%	Median 50%	75%	90%
1998	91	62.0	21.8	0.9	94.1	32.4	48.5	68.2	78.4	86.3
1999	112	64.2	17.6	1.5	92.0	39.5	54.9	69.2	76.0	85.0
2000	129	59.1	20.9	0.4	97.6	32.2	46.4	63.1	73.8	81.5
2001	135	64.2	16.2	9.8	96.4	38.2	56.5	66.2	76.5	81.6
2002	180	63.3	18.3	2.0	96.1	37.6	52.9	67.5	77.4	83.1
2003	237	65.2	17.6	1.0	98.9	40.6	53.6	67.6	79.6	84.2
2004	227	65.0	18.1	0.4	93.3	40.4	56.6	67.3	78.2	84.6
2005	218	64.1	19.1	0.6	92.9	38.6	55.6	69.3	78.3	83.5
2006	246	67.9	17.5	1.0	95.1	40.9	62.5	72.3	79.5	84.8
2007	239	63.8	19.1	3.0	94.5	37.4	51.6	68.5	77.1	83.7
2008	249	66.0	19.1	0.6	98.1	39.0	57.9	71.0	78.8	84.2
2009	253	65.0	18.3	4.2	100	38.7	53.1	69.4	77.6	86.3
2010	315	67.6	17.2	1.3	94.2	47.1	59.3	70.9	79.0	86.4
2011	241	64.5	19.1	0.3	98.4	41.3	54.3	69.7	77.2	84.1
2012	295	65.8	18.5	0.0	98.7	41.6	56.7	70.6	79.3	84.5
2013	188	70.9	16.2	0.5	92.7	50.7	66.7	74.8	81.6	86.1
1998-2013	3355	65.3	18.4	0.0	100	39.6	55.9	69.7	78.5	84.5

Table 3a

Age distribution parameters by year of diagnosis (MALES)
(incl. DCO)

Year of diagnosis	Cases n	Mean	Std. dev.	Min.	Max.	10%	25%	Median 50%	75%	90%
1998	43	62.9	22.2	0.9	94.1	32.4	48.7	70.1	77.8	86.5
1999	62	62.7	17.7	1.5	91.5	38.9	54.9	66.4	74.7	81.5
2000	66	56.5	22.4	0.4	97.6	22.7	43.0	61.8	72.4	79.7
2001	69	60.7	16.9	9.8	96.4	37.7	51.2	63.0	75.1	80.1
2002	91	60.1	19.6	2.0	94.9	32.3	47.5	63.9	75.0	80.5
2003	119	65.3	16.9	10.1	93.6	39.3	55.0	67.7	78.2	85.1
2004	111	65.4	17.2	0.4	90.1	41.8	60.0	67.3	78.2	84.6
2005	106	62.9	18.9	2.7	91.3	36.4	52.1	69.4	77.1	81.1
2006	142	66.2	17.0	1.0	93.6	41.5	60.0	70.7	76.5	82.2
2007	134	61.4	19.7	3.0	94.5	32.6	48.2	67.6	75.1	82.2
2008	132	63.4	20.9	0.6	98.1	35.0	53.1	69.2	77.3	83.0
2009	127	63.6	18.3	4.2	92.2	37.6	52.4	69.4	75.9	82.7
2010	160	66.9	16.7	2.9	93.4	48.2	60.3	70.5	77.4	83.4
2011	127	64.4	18.1	6.4	98.4	41.9	54.5	67.9	76.0	83.5
2012	148	66.7	17.2	9.9	94.0	41.8	57.6	70.6	80.0	84.7
2013	116	70.3	16.5	0.5	92.7	50.3	68.6	73.9	78.7	84.4
1998-2013	1753	64.3	18.5	0.4	98.4	38.2	55.0	69.1	77.0	83.0

Table 3b

Age distribution parameters by year of diagnosis (FEMALES)
(incl. DCO)

Year of diagnosis	Cases n	Mean	Std. dev.	Min.	Max.	10%	25%	Median 50%	75%	90%
1998	48	61.2	21.6	1.3	87.5	27.9	44.8	63.8	80.1	86.3
1999	50	66.0	17.6	12.6	92.0	43.0	55.6	70.8	77.1	86.4
2000	63	61.8	19.1	16.5	94.3	35.6	47.6	63.8	76.1	86.2
2001	66	67.8	14.7	26.8	89.5	52.7	59.5	71.2	79.3	84.0
2002	89	66.7	16.4	13.5	96.1	42.8	55.9	69.3	80.1	85.6
2003	118	65.0	18.4	1.0	98.9	41.4	53.4	66.5	80.8	84.2
2004	116	64.7	18.9	0.7	93.3	39.1	56.1	68.0	78.3	84.2
2005	112	65.3	19.4	0.6	92.9	41.6	57.8	69.3	80.1	84.6
2006	104	70.1	18.1	1.8	95.1	40.9	66.4	75.0	81.4	86.6
2007	105	66.8	17.9	3.5	94.3	43.6	57.0	69.8	79.7	86.0
2008	117	68.8	16.5	15.7	94.9	45.9	61.6	72.3	81.0	86.5
2009	126	66.4	18.4	17.8	100	39.1	54.5	69.8	79.8	87.0
2010	155	68.4	17.8	1.3	94.2	46.5	58.4	71.5	82.4	87.8
2011	114	64.6	20.3	0.3	90.0	41.3	52.3	71.0	79.5	85.2
2012	147	65.0	19.8	0.0	98.7	40.2	55.9	71.1	78.4	84.0
2013	72	71.9	15.9	25.3	92.4	51.6	62.6	76.9	82.6	87.9
1998-2013	1602	66.4	18.4	0.0	100	41.1	56.5	70.7	80.2	85.9

Table 4

Age distribution by 5-year age group and gender for period 1998-2013 (incl. DCO)

Age at diagnosis Years	Cases n	%	Cum.%	Males n	%	Cum.%	Females n	%	Cum.%
0-4	35	1.0	1.0	19	1.1	1.1	16	1.0	1.0
5-9	17	0.5	1.5	11	0.6	1.7	6	0.4	1.4
10-14	19	0.6	2.1	11	0.6	2.3	8	0.5	1.9
15-19	29	0.9	3.0	19	1.1	3.4	10	0.6	2.5
20-24	32	1.0	3.9	19	1.1	4.5	13	0.8	3.3
25-29	46	1.4	5.3	25	1.4	5.9	21	1.3	4.6
30-34	64	1.9	7.2	40	2.3	8.2	24	1.5	6.1
35-39	101	3.0	10.2	52	3.0	11.2	49	3.1	9.2
40-44	145	4.3	14.5	80	4.6	15.7	65	4.1	13.2
45-49	139	4.1	18.7	65	3.7	19.5	74	4.6	17.9
50-54	183	5.5	24.1	98	5.6	25.0	85	5.3	23.2
55-59	220	6.6	30.7	99	5.6	30.7	121	7.6	30.7
60-64	276	8.2	38.9	161	9.2	39.9	115	7.2	37.9
65-69	399	11.9	50.8	230	13.1	53.0	169	10.5	48.4
70-74	470	14.0	64.8	264	15.1	68.1	206	12.9	61.3
75-79	477	14.2	79.0	266	15.2	83.2	211	13.2	74.5
80-84	393	11.7	90.8	176	10.0	93.3	217	13.5	88.0
85+	310	9.2	100.0	118	6.7	100.0	192	12.0	100.0
All ages	3355	100.0		1753	100.0		1602	100.0	

Included in the statistics are 35.3% multiple primaries in males and 35.3% in females.

Table 5

Age-specific incidence, DCO rate and proportion of all cancers
for period 1998-2013

Age at diagnosis Years	Males n	Females n	Males Age-spec. incid.	Females Age-spec. incid.	Males DCO rate n=516 %	Females DCO rate n=508 %	Males Prop.all cancers n=158258 %	Females Prop.all cancers n=153136 %
0- 4	19	16	1.3	1.1			5.9	6.6
5- 9	11	6	0.7	0.4			6.3	4.8
10-14	11	8	0.7	0.6			6.6	4.7
15-19	19	10	1.2	0.7			5.4	3.4
20-24	19	13	1.1	0.7	10.5	7.7	3.1	2.5
25-29	25	21	1.2	1.0			2.6	1.9
30-34	40	24	1.8	1.1	7.5	4.2	2.7	1.2
35-39	52	49	2.1	2.1	13.5	8.2	2.3	1.3
40-44	80	65	3.1	2.6	10.0	9.2	2.5	1.0
45-49	65	74	2.8	3.2	9.2	14.9	1.2	0.8
50-54	98	85	4.9	4.1	17.3	17.6	1.1	0.8
55-59	99	121	5.4	6.3	21.2	20.7	0.7	0.9
60-64	161	115	9.1	6.1	22.4	22.6	0.7	0.7
65-69	230	169	14.6	9.8	29.1	30.8	0.8	0.9
70-74	263	206	20.5	13.6	33.8	29.6	1.0	1.1
75-79	264	211	31.9	17.8	33.3	39.8	1.3	1.2
80-84	175	217	35.0	23.3	55.4	51.6	1.3	1.4
85+	118	192	34.6	21.5	63.6	57.3	1.2	1.1
All ages	1749	1602			29.5	31.7	1.1	1.0
Incidence								
Raw			5.9	5.2				
WS			3.5	2.6				
ES			4.8	3.5				
BRD-S			6.0	4.3				

The age-specific incidence characterizes the disease risk in a particular age group. The age distribution depends on the patient population frequency in each age group and reflects the tangible clinical picture of everyday patients care (see following chart).

Table 6a

Standardized incidence ratio (SIR, with 95% confidence limits), excess absolute risk (EAR) and DCO rate of second primaries for period 1998-2013
MALES

Diagnosis		Observed n	Expected n	SIR	LCL 95%	UCL 95%		EAR	DCO %
C18	Colon	5	2.4	2.1	0.7	4.9		11.3	
C25	Pancreas	2	0.9	2.3	0.3	8.4		5.0	
C33-C34	Lung	7	3.0	2.3	0.9	4.8		17.5	14.3
C43	Malign. melanoma	5	1.1	4.6	1.5	10.8	#	17.1	
C61	Prostate	17	7.5	2.3	1.3	3.6	#	41.4	5.9
C67	Bladder	2	1.0	2.0	0.2	7.1		4.3	
C81	Hodgkin lymphoma	2	0.1	27.4	3.3	98.8	#	8.4	
C82-C85	NHL	10	1.0	9.9	4.8	18.3	#	39.3	10.0
C90	Mult. myeloma	4	0.3	12.7	3.5	32.5	#	16.1	
C91-C96	Leukaemia	9	0.4	22.3	10.2	42.3	#	37.5	66.7
Other primaries		12	6.3	1.9	1.0	3.3		24.8	
Not observed		0	1.7	0.0	0.0	2.1		-7.6	
All mult. primaries		75	25.7	2.9	2.3	3.7	#	215.2	12.0

Patients	983
Median age at second malignancy (years)	69.2
Person-years	2291
Mean observation time (years)	2.3
Median observation time (years)	0.9

The occurrence of second malignancy is statistically significant.

Observed second primaries with count 1 are pooled in category "Other primaries".

Table 6b

Standardized incidence ratio (SIR, with 95% confidence limits), excess absolute risk (EAR) and DCO rate of second primaries for period 1998-2013
FEMALES

Diagnosis		Observed n	Expected n	SIR	LCL 95%	UCL 95%		EAR	DCO %
C15	Oesophagus	2	0.1	20.3	2.5	73.4	#	9.2	
C18	Colon	3	1.6	1.9	0.4	5.6		6.9	
C25	Pancreas	2	0.7	2.9	0.4	10.6		6.4	50.0
C33-C34	Lung	4	1.2	3.3	0.9	8.4		13.4	
C50	Breast	11	5.6	2.0	1.0	3.5		26.2	
C53	Cervix uteri	3	0.3	10.3	2.1	30.2	#	13.1	66.7
C54	Corpus uteri	5	1.0	5.1	1.7	12.0	#	19.4	
C82-C85	NHL	2	0.6	3.1	0.4	11.4		6.6	50.0
C91-C96	Leukaemia	3	0.3	11.4	2.4	33.3	#	13.2	33.3
Other primaries		6	2.0	3.0	1.1	6.6	#	19.4	
Not observed		0	4.1	0.0	0.0	0.9	#	-19.8	
All mult. primaries		41	17.4	2.4	1.7	3.2	#	113.8	12.2

Patients	887
Median age at second malignancy (years)	68.6
Person-years	2075
Mean observation time (years)	2.3
Median observation time (years)	0.9

The occurrence of second malignancy is statistically significant.

Observed second primaries with count 1 are pooled in category "Other primaries".

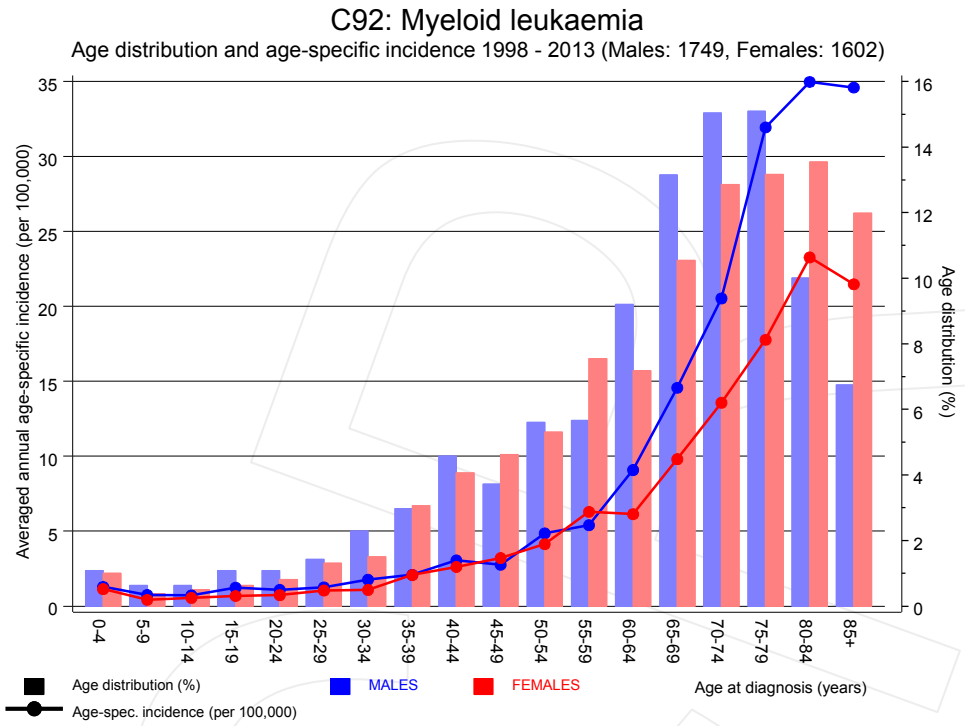


Figure 7. Age distribution and age-specific incidence

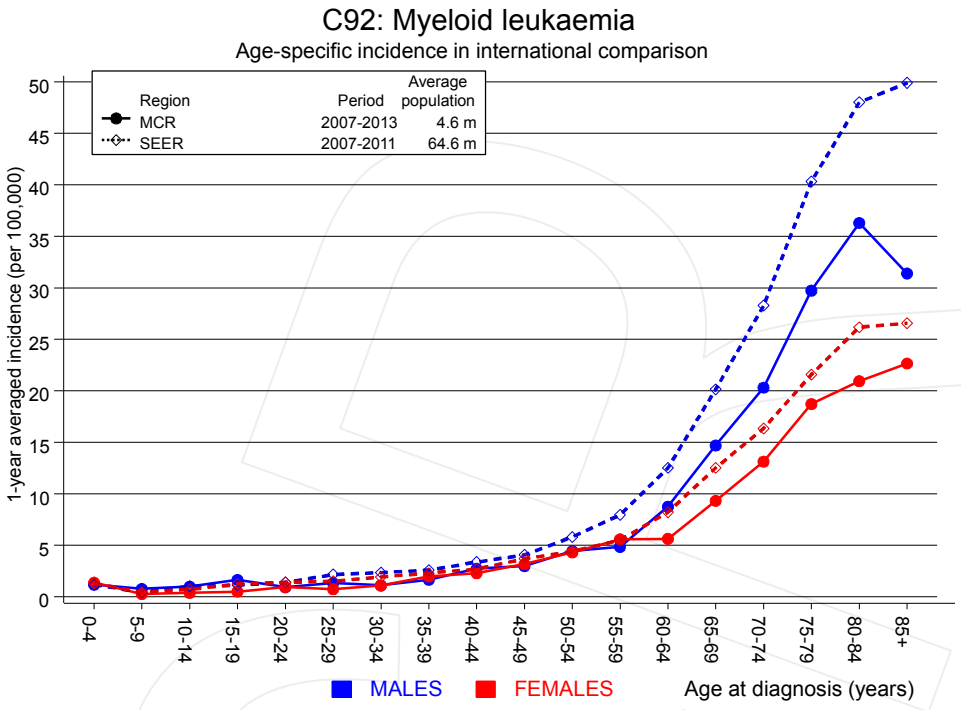


Figure 7a. Age-specific incidence in MCR registry areas compared to SEER (Surveillance, Epidemiology, and End Results, USA).

Reference:

Surveillance, Epidemiology, and End Results (SEER) Program SEER*Stat Database: Incidence - SEER 18 Regs Research Data, released April 2014, based on the November 2013 submission. http://www.seer.cancer.gov.

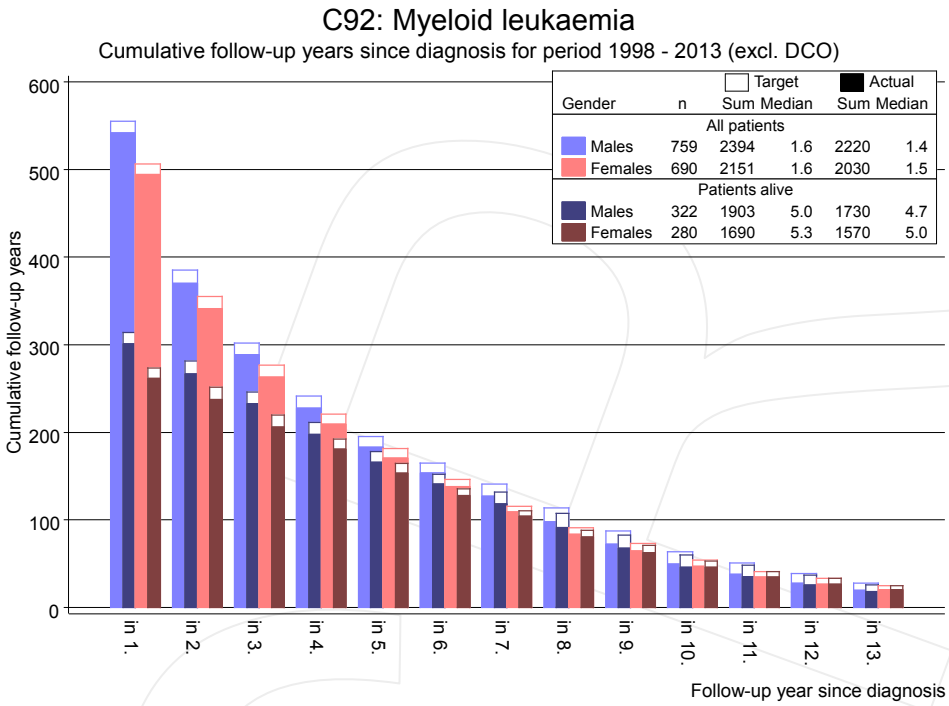
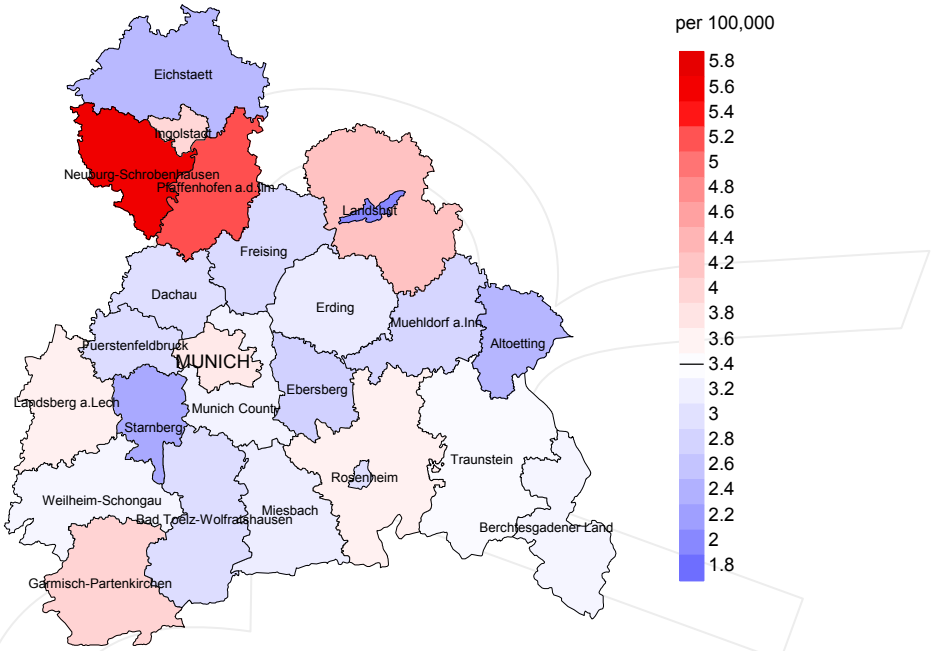


Figure 8. Cumulative follow-up years depending on time since diagnosis

The increase of the lost to follow-up rate can be interpreted as a consequence of a declining number of survivors over time.

Average incidence (world standard population) 2007 - 2013: Males



Average incidence (world standard population) 2007 - 2013: Females

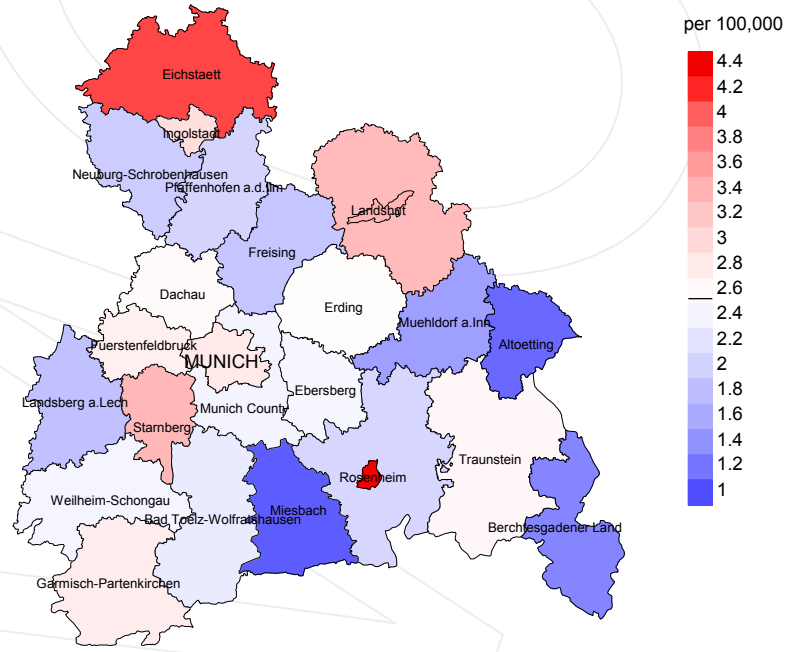
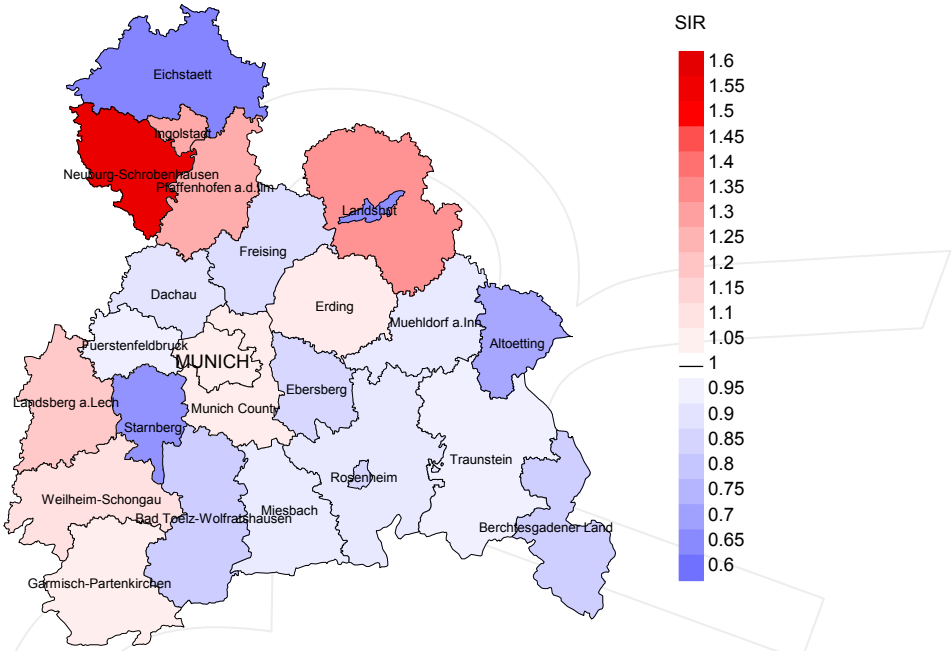


Figure 9a. Map of cancer incidence (world standard population, incl. DCO cases) by county averaged for period 2007 to 2013. According to their individual incidence rates, the counties are displayed in different red and blue color temperatures where the fine white color indicates the population mean (males 3.4/100,000 WS N=941, females 2.5/100,000 WS N=836).

The results should be interpreted with caution! E.g., in county Ebersberg with a population of 64,928 female residents (averaged) in the period from 2007 to 2013 a total of 19 women were identified with newly diagnosed myeloid leukaemia. Therefore, the mean incidence rate for this cancer type in this area can be calculated at 2.4/100,000 (world standard population). Though, the value of this parameter may vary with an underlying probability of 99% between 0.9 and 6.0/100,000.

Standardized incidence ratio (SIR) 2007 - 2013: Males



Standardized incidence ratio (SIR) 2007 - 2013: Females

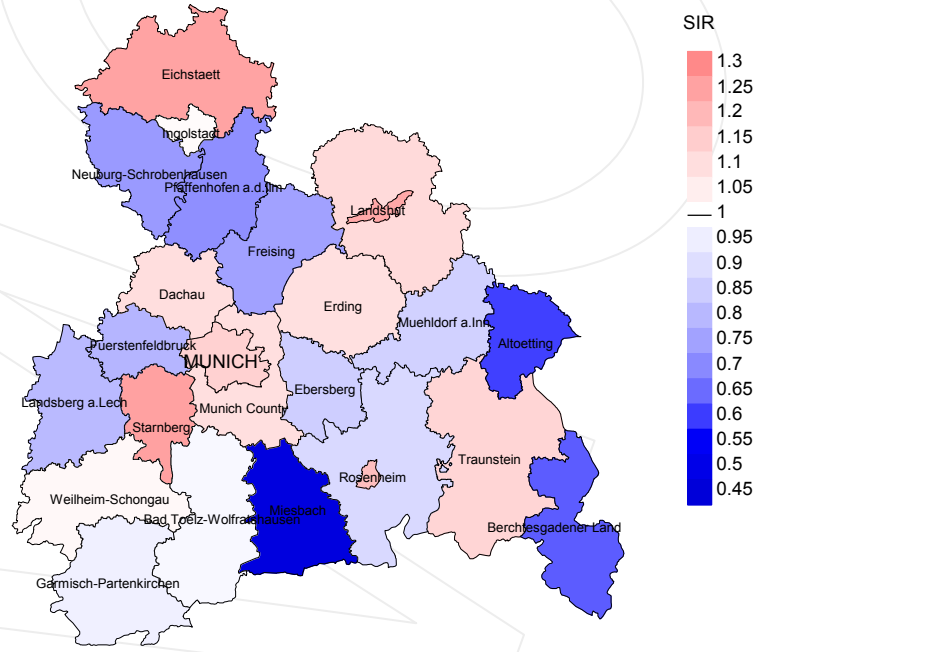


Figure 9b. Map of standardized incidence ratio (SIR, incl. DCO cases) by county averaged for period 2007 to 2013. According to their individual SIR values, the counties are displayed in different red and blue color temperatures where the fine white color indicates the population overall of 1.0 (males N=941, females N=836).

The results should be interpreted with caution! E.g., in county Ebersberg with a population of 64,642 female residents (averaged) in the period from 2007 to 2013 a total of 19 women were identified with newly diagnosed myeloid leukaemia. Therefore, the mean standardized incidence ratio (SIR) for this cancer type in this area can be calculated at 0.85. Though, the value of this parameter may vary with an underlying probability of 99% between 0.43 and 1.50, and is therefore not statistically striking.

MORTALITY

Table 10a

Patient cohorts of incident cancers by year of diagnosis, follow-up status, proportion of DCO, deaths among the annual cohorts, and proportion of available death certificates (with respect to registry area expansion from 2.51 to 3.96 m as of 2002, and from 3.96 to 4.64 m as of 2007, respectively)

Year of diagnosis	Incident cases n	Prop. actively followed %	Prop. DCO %	Deaths n	Prop. deaths %	Prop. deaths with death certific. %
1998	91	100.0	28.6	80	87.9	97.5
1999	112	99.1	29.5	90	80.4	96.7
2000	129	99.2	30.2	95	73.6	96.8
2001	135	98.5	43.0	112	83.0	99.1
2002	180	96.7	34.4	139	77.2	97.8
2003	237	98.3	35.9	188	79.3	99.5
2004	227	98.7	37.9	174	76.7	98.9
2005	218	97.2	33.9	170	78.0	98.8
2006	246	96.3	38.6	209	85.0	98.6
2007	239	93.3	30.1	178	74.5	98.3
2008	249	83.5	30.9	182	73.1	98.9
2009	253	83.0	22.1	184	72.7	99.5
2010	315	81.0	20.6	224	71.1	98.2
2011	241	83.4	20.7	169	70.1	97.6
2012	295	83.4	23.7	193	65.4	96.4
2013	188	99.5	41.5	130	69.1	95.4
1998-2013	3355	91.6	30.6	2517	75.0	98.1

Table 10b

Annual cohorts of incident cancers and deaths, proportion of death certificates and cases deceased the same year of cancer diagnosis
(incl. DCO)
(with respect to registry area expansion from 2.51 to 3.96 m as of 2002, and from 3.96 to 4.64 m as of 2007, respectively)

Year of diagnosis/ death	Incident cases n	Deaths n	Prop. deaths with death certific. %	Deaths in same year n	Prop. deaths in same year %
1998	91	92	98.9	46	50.5
1999	112	86	97.7	42	37.5
2000	129	94	96.8	53	41.1
2001	135	117	97.4	63	46.7
2002	180	122	98.4	79	43.9
2003	237	145	98.6	109	46.0
2004	227	140	98.6	100	44.1
2005	218	180	99.4	107	49.1
2006	246	169	98.8	140	56.9
2007	239	170	98.8	109	45.6
2008	249	167	97.6	117	47.0
2009	253	163	97.5	111	43.9
2010	315	201	98.0	139	44.1
2011	241	200	98.0	106	44.0
2012	295	204	99.0	129	43.7
2013	188	193	99.0	115	61.2
1998-2013	3355	2443	98.4	1565	46.6

Table 10c

Annual cohorts of deaths, proportion of cancer-related and non-cancer-related deaths, and cancer recorded on death certificates (incl. DCO)
(with respect to registry area expansion from 2.51 to 3.96 m as of 2002, and from 3.96 to 4.64 m as of 2007, respectively)

Year of death	Deaths n	Prop. cancer-related %	Prop. non-cancer-related %	Prop. cancer recorded on death certificate %
1998	92	73.9	26.1	95.6
1999	86	80.2	19.8	97.6
2000	94	88.3	11.7	100.0
2001	117	83.8	16.2	97.4
2002	122	91.0	9.0	99.2
2003	145	91.0	9.0	99.3
2004	140	92.1	7.9	97.8
2005	180	93.9	6.1	99.4
2006	169	94.7	5.3	98.8
2007	170	92.9	7.1	98.8
2008	167	86.8	13.2	95.1
2009	163	90.8	9.2	96.9
2010	201	93.0	7.0	98.0
2011	200	89.0	11.0	95.9
2012	204	90.7	9.3	98.5
2013	193	82.4	17.6	96.9
1998-2013	2443	89.2	10.8	97.8

Table 11a

Medians of age at death according to the grouping in Table 10
MALES

Year of death	Deaths n	Age at death (all causes) Years	Age at death (cancer-related) Years	Age at death (non-cancer-related) Years	Age at death (according to death certificate) Years
1998	48	65.0	65.7	62.7	66.1
1999	48	71.7	70.4	77.6	71.7
2000	57	69.0	67.7	72.7	69.3
2001	50	70.1	71.2	64.0	70.4
2002	57	67.9	67.8	69.4	69.1
2003	80	70.5	69.7	76.5	70.1
2004	71	73.5	73.6	64.7	73.5
2005	93	72.3	72.2	74.7	72.3
2006	99	72.2	72.2	71.9	72.2
2007	84	70.9	71.1	53.1	70.9
2008	88	72.1	72.9	67.2	72.5
2009	84	73.1	74.2	68.8	74.2
2010	104	73.6	73.1	80.3	73.3
2011	100	73.7	73.7	76.0	74.2
2012	109	73.8	73.2	81.4	73.4
2013	113	76.2	76.0	76.3	76.2
1998-2013	1285	72.3	72.3	72.1	72.3

Deaths of patients are considered to be cancer-related, in case that fact was recorded on the death certificate, or patients had suffered from metastasis or recurrence.

Table 11b

Medians of age at death according to the grouping in Table 10
FEMALES

Year of death	Deaths n	Age at death (all causes) Years	Age at death (cancer-related) Years	Age at death (non-cancer-related) Years	Age at death (according to death certificate) Years
1998	44	62.0	61.1	72.3	61.9
1999	38	74.5	75.2	65.6	74.5
2000	37	76.1	74.9	87.3	76.1
2001	67	72.0	71.3	78.2	72.5
2002	65	73.6	73.2	82.7	73.7
2003	65	75.4	74.9	81.1	75.4
2004	69	74.6	74.5	74.6	74.6
2005	87	71.0	71.4	57.7	71.8
2006	70	76.1	76.1	71.9	76.1
2007	86	70.9	70.9	68.5	71.4
2008	79	75.1	72.8	85.0	73.9
2009	79	75.3	75.5	68.6	75.3
2010	97	77.7	78.2	69.5	78.2
2011	100	73.8	72.9	78.8	73.8
2012	95	73.6	73.9	72.1	73.9
2013	80	77.1	75.8	82.5	77.0
1998-2013	1158	74.4	74.0	79.8	74.5

By 2010, life expectancy for a newborn male in Germany is 77.5 years compared with 82.6 years for his female counterpart.

Deaths of patients are considered to be cancer-related, in case that fact was recorded on the death certificate, or patients had suffered from metastasis or recurrence.

Table 12a

Mortality measures (cancer-related death) and mortality-incidence-index
by year of death
MALES

Year of death	Deaths n	Mort. raw	MI-Index raw	Mort. WS	MI-Index WS	Mort. ES	MI-Index ES	Mort. BRD-S	MI-Index BRD-S
1998	35	3.2	0.81	2.3	0.88	3.0	0.82	3.8	0.80
1999	38	3.4	0.61	2.0	0.58	3.0	0.61	3.7	0.63
2000	51	4.5	0.77	2.8	0.63	4.0	0.73	5.2	0.82
2001	45	3.9	0.65	2.2	0.60	3.4	0.65	4.7	0.73
2002	52	2.8	0.57	1.7	0.52	2.4	0.56	3.1	0.57
2003	75	4.0	0.63	2.2	0.62	3.4	0.62	4.4	0.63
2004	65	3.5	0.59	1.8	0.52	2.8	0.58	4.0	0.66
2005	87	4.6	0.82	2.3	0.70	3.6	0.79	4.9	0.84
2006	92	4.8	0.65	2.4	0.58	3.7	0.62	5.0	0.66
2007	81	3.7	0.60	1.9	0.51	2.8	0.57	3.8	0.62
2008	76	3.4	0.58	1.7	0.46	2.5	0.54	3.4	0.58
2009	75	3.4	0.59	1.6	0.48	2.4	0.54	3.4	0.61
2010	94	4.2	0.59	2.0	0.52	3.1	0.56	4.0	0.58
2011	89	3.9	0.70	1.8	0.56	2.8	0.63	3.8	0.72
2012	97	4.2	0.66	1.9	0.57	3.0	0.62	4.0	0.65
2013	92	4.0	0.80	1.7	0.69	2.7	0.77	3.9	0.80
1998-2013	1144	3.8	0.65	2.0	0.57	3.0	0.63	4.0	0.67

Table 12b

Mortality measures (cancer-related death) and mortality-incidence-index
by year of death
FEMALES

Year of death	Deaths n	Mort. raw	MI-Index raw	Mort. WS	MI-Index WS	Mort. ES	MI-Index ES	Mort. BRD-S	MI-Index BRD-S
1998	33	2.8	0.69	2.0	0.80	2.3	0.75	2.5	0.72
1999	31	2.6	0.62	1.1	0.49	1.7	0.54	2.2	0.60
2000	32	2.7	0.51	1.1	0.37	1.7	0.42	2.2	0.49
2001	53	4.4	0.80	2.2	0.83	3.0	0.80	3.9	0.81
2002	59	3.0	0.66	1.3	0.58	1.9	0.61	2.5	0.67
2003	57	2.9	0.48	1.2	0.39	1.8	0.43	2.4	0.47
2004	64	3.2	0.55	1.4	0.41	2.0	0.48	2.7	0.53
2005	82	4.1	0.73	1.9	0.63	2.7	0.68	3.3	0.69
2006	68	3.4	0.65	1.3	0.59	2.0	0.64	2.8	0.67
2007	77	3.3	0.73	1.5	0.66	2.1	0.69	2.7	0.72
2008	69	3.0	0.59	1.2	0.53	1.8	0.56	2.4	0.57
2009	73	3.1	0.58	1.3	0.46	1.9	0.52	2.5	0.56
2010	93	4.0	0.60	1.4	0.44	2.1	0.49	2.9	0.56
2011	89	3.8	0.78	1.5	0.55	2.2	0.67	2.9	0.75
2012	88	3.7	0.60	1.6	0.47	2.3	0.52	3.0	0.58
2013	67	2.8	0.93	1.1	0.91	1.6	0.92	2.2	0.90
1998-2013	1035	3.3	0.65	1.4	0.54	2.1	0.59	2.7	0.63

Table 13

Age distribution of age at death (cancer-related) for period 1998-2013
(**incl. multiple primaries**)

Age at death Years	Cases n	%	Cum.%	Males n	%	Cum.%	Females n	%	Cum.%
0-4	4	0.2	0.2	1	0.1	0.1	3	0.3	0.3
5-9	3	0.1	0.3	2	0.2	0.3	1	0.1	0.4
10-14	6	0.3	0.6	3	0.3	0.5	3	0.3	0.7
15-19	9	0.4	1.0	5	0.4	1.0	4	0.4	1.1
20-24	9	0.4	1.4	6	0.5	1.5	3	0.3	1.3
25-29	18	0.8	2.2	13	1.1	2.6	5	0.5	1.8
30-34	21	1.0	3.2	13	1.1	3.7	8	0.8	2.6
35-39	40	1.8	5.0	22	1.9	5.6	18	1.7	4.3
40-44	58	2.6	7.7	30	2.6	8.2	28	2.7	7.0
45-49	65	3.0	10.6	32	2.8	11.0	33	3.2	10.2
50-54	77	3.5	14.2	44	3.8	14.8	33	3.2	13.4
55-59	136	6.2	20.4	65	5.6	20.5	71	6.8	20.2
60-64	176	8.0	28.4	95	8.2	28.7	81	7.8	28.0
65-69	265	12.1	40.5	155	13.5	42.2	110	10.6	38.6
70-74	351	16.0	56.5	199	17.3	59.5	152	14.6	53.3
75-79	415	18.9	75.5	233	20.2	79.7	182	17.5	70.8
80-84	308	14.1	89.5	137	11.9	91.6	171	16.5	87.3
85+	229	10.5	100.0	97	8.4	100.0	132	12.7	100.0
All ages	2190	100.0		1152	100.0		1038	100.0	

Included in the statistics are 35.3% multiple primaries in males and 35.3% in females.

Table 14

Age-specific mortality (cancer-related) and proportion of all cancers
for period 1998-2013
(**incl. multiple primaries**)

Age at death Years	Males n	Females n	Males Age-spec. mortal.	MI-index	Females Age-spec. mortal.	MI-index	Males Prop.all cancers %	Females Prop.all cancers %
0- 4	1	3	0.1	0.05	0.2	0.19	3.0	11.5
5- 9	2	1	0.1	0.18	0.1	0.17	5.3	2.5
10-14	3	3	0.2	0.27	0.2	0.38	8.6	9.7
15-19	5	4	0.3	0.26	0.3	0.40	11.1	10.8
20-24	6	3	0.3	0.32	0.2	0.23	6.7	5.9
25-29	13	5	0.6	0.52	0.2	0.24	12.0	4.3
30-34	13	8	0.6	0.33	0.4	0.33	7.0	3.5
35-39	22	18	0.9	0.42	0.8	0.37	5.5	3.5
40-44	30	28	1.1	0.38	1.1	0.43	3.5	2.5
45-49	32	33	1.4	0.49	1.4	0.45	1.8	1.6
50-54	44	33	2.2	0.45	1.6	0.39	1.3	1.1
55-59	65	71	3.5	0.66	3.7	0.59	1.1	1.5
60-64	95	81	5.4	0.59	4.3	0.70	1.1	1.2
65-69	155	110	9.8	0.67	6.4	0.65	1.3	1.3
70-74	199	152	15.5	0.75	10.0	0.74	1.5	1.5
75-79	233	182	28.2	0.88	15.3	0.86	1.8	1.7
80-84	137	171	27.4	0.78	18.3	0.79	1.3	1.5
85+	97	132	28.4	0.82	14.8	0.69	1.1	1.0
All ages	1152	1038					1.4	1.4
Mortality								
Raw			3.9	0.66	3.3	0.65		
WS			2.0	0.57	1.4	0.55		
ES			3.0	0.63	2.1	0.59		
BRD-S			4.1	0.67	2.7	0.63		
PYLL-70								
per 100,000			25.7		21.7			
ES			23.8		20.1			
AYLL-70			14.2		14.3			

The rates underestimate the prognosis if other synchronous cancers are prognostic unfavorable.

Table 15a

Multiple primaries in deaths in period 1998-2013
MALES

Diagnosis		Total n	Total %↓	Pre n	Pre ←%	Syn-chron ±30d n	Syn-chron ±30d ←%	Post n	Post ←%
C16	Stomach	6	1.3	5	83.3			1	16.7
C18	Colon	30	6.5	21	70.0	4	13.3	5	16.7
C19-C20	Rectum	12	2.6	9	75.0	2	16.7	1	8.3
C25	Pancreas	6	1.3	1	16.7			5	83.3
C33-C34	Lung	21	4.6	9	42.9	5	23.8	7	33.3
C43	Malign. melanoma	14	3.0	12	85.7	1	7.1	1	7.1
C44	Skin others	21	4.6	7	33.3	2	9.5	12	57.1
C61	Prostate	75	16.3	68	90.7	4	5.3	3	4.0
C64	Kidney	14	3.0	14	100.0				
C67	Bladder	28	6.1	25	89.3	1	3.6	2	7.1
C70-C72	CNS cancer	7	1.5	3	42.9	2	28.6	2	28.6
C81	Hodgkin lymphoma	6	1.3	5	83.3			1	16.7
C82-C85	NHL	34	7.4	22	64.7	4	11.8	8	23.5
C90	Mult. myeloma	7	1.5	6	85.7	1	14.3		
C91-C96	Leukaemia	147	32.0			43	29.3	104	70.7
Other primaries		32	7.0	22	68.8	3	9.4	7	21.9
All mult. primaries		460	100.0	229	49.8	72	15.7	159	34.6

Multiple primaries with number of cases 1 to 4 are pooled in category "Other primaries".

ICD-10 C44 (Other malignant neoplasms of skin) is not systematically recorded by MCR and therefore not considered for evaluation as a particular primary but at least as a multiple malignancy.

Table 15b

Multiple primaries in deaths in period 1998-2013
FEMALES

Diagnosis		Total n	Total %↓	Pre n	Pre ←%	Syn-chron ±30d n	Syn-chron ±30d ←%	Post n	Post ←%
C18	Colon	12	2.9	10	83.3	1	8.3	1	8.3
C19-C20	Rectum	10	2.4	6	60.0	2	20.0	2	20.0
C33-C34	Lung	10	2.4	6	60.0	2	20.0	2	20.0
C43	Malign. melanoma	8	1.9	8	100.0				
C44	Skin others	12	2.9	8	66.7			4	33.3
C50	Breast	114	27.7	103	90.4	5	4.4	6	5.3
C53	Cervix uteri	10	2.4	7	70.0	2	20.0	1	10.0
C54	Corpus uteri	24	5.8	18	75.0	2	8.3	4	16.7
C56	Ovary	7	1.7	6	85.7			1	14.3
C67	Bladder	11	2.7	9	81.8	1	9.1	1	9.1
C70-C72	CNS cancer	5	1.2	4	80.0			1	20.0
C73	Thyroid	11	2.7	11	100.0				
C81	Hodgkin lymphoma	5	1.2	4	80.0	1	20.0		
C82-C85	NHL	18	4.4	17	94.4			1	5.6
C90	Mult. myeloma	9	2.2	6	66.7	3	33.3		
C91-C96	Leukaemia	113	27.4			34	30.1	79	69.9
Other primaries		33	8.0	16	48.5	2	6.1	15	45.5
All mult. primaries		412	100.0	239	58.0	55	13.3	118	28.6

Multiple primaries with number of cases 1 to 4 are pooled in category "Other primaries".

ICD-10 C44 (Other malignant neoplasms of skin) is not systematically recorded by MCR and therefore not considered for evaluation as a particular primary but at least as a multiple malignancy.

Table 16

Age-specific mortality (cancer-related) and proportion of all cancers
for period 1998-2013
(**Singular primaries only** *)

Age at death Years	Males n	Females n	Males Age-spec. mortal.	MI-index	Females Age-spec. mortal.	MI-index	Males Prop.all cancers %	Females Prop.all cancers %
0- 4	1	3	0.1	0.06	0.2	0.19	3.6	12.5
5- 9	2	1	0.1	0.20	0.1	0.17	5.6	2.7
10-14	3	3	0.2	0.30	0.2	0.38	8.6	10.3
15-19	5	4	0.3	0.29	0.3	0.40	11.9	12.1
20-24	5	2	0.3	0.29	0.1	0.15	6.0	4.3
25-29	11	5	0.5	0.46	0.2	0.25	11.1	4.6
30-34	13	8	0.6	0.34	0.4	0.38	7.2	4.0
35-39	20	16	0.8	0.43	0.7	0.35	5.3	3.4
40-44	26	23	1.0	0.36	0.9	0.40	3.3	2.3
45-49	28	26	1.2	0.49	1.1	0.44	1.7	1.5
50-54	37	24	1.8	0.44	1.2	0.39	1.3	0.9
55-59	56	51	3.1	0.66	2.7	0.54	1.1	1.3
60-64	69	60	3.9	0.57	3.2	0.72	0.9	1.1
65-69	104	82	6.6	0.65	4.8	0.66	1.1	1.2
70-74	133	88	10.4	0.76	5.8	0.63	1.2	1.1
75-79	147	127	17.8	0.82	10.7	0.88	1.5	1.5
80-84	92	125	18.4	0.79	13.4	0.81	1.1	1.4
85+	62	93	18.2	0.79	10.4	0.66	0.9	0.8
All ages	814	741					1.3	1.3
Mortality								
Raw			2.7	0.62	2.4	0.62		
WS			1.5	0.54	1.1	0.51		
ES			2.2	0.59	1.5	0.56		
BRD-S			2.9	0.64	2.0	0.60		
PYLL-70								
per 100,000			22.2		17.7			
ES			20.7		16.7			
AYLL-70			15.6		15.3			

* See corresponding tables with multiple primaries.

Table 17

Age-specific mortality (cancer-related) and proportion of all cancers
for period 1998-2013
(**Single primaries only** *)

Age at death Years	Males n	Females n	Males Age-spec. mortal.	MI-index	Females Age-spec. mortal.	MI-index	Males Prop.all cancers %	Females Prop.all cancers %
0- 4	1	3	0.1	0.06	0.2	0.19	3.7	12.5
5- 9	2	1	0.1	0.20	0.1	0.17	5.7	2.8
10-14	3	3	0.2	0.30	0.2	0.38	8.6	11.1
15-19	5	4	0.3	0.29	0.3	0.40	11.9	14.3
20-24	5	2	0.3	0.31	0.1	0.17	6.3	4.5
25-29	11	5	0.5	0.46	0.2	0.26	12.0	4.9
30-34	13	8	0.6	0.35	0.4	0.40	7.4	4.4
35-39	18	13	0.7	0.39	0.5	0.30	5.0	3.1
40-44	25	22	1.0	0.35	0.9	0.40	3.3	2.4
45-49	26	25	1.1	0.46	1.1	0.46	1.7	1.6
50-54	34	23	1.7	0.44	1.1	0.43	1.3	1.0
55-59	54	48	2.9	0.70	2.5	0.55	1.2	1.3
60-64	65	57	3.7	0.60	3.0	0.75	1.0	1.2
65-69	95	76	6.0	0.64	4.4	0.63	1.1	1.3
70-74	126	86	9.8	0.76	5.7	0.64	1.4	1.3
75-79	139	118	16.8	0.82	9.9	0.84	1.7	1.6
80-84	87	121	17.4	0.77	13.0	0.81	1.4	1.6
85+	60	88	17.6	0.79	9.8	0.64	1.1	0.9
All ages	769	703					1.4	1.4
Mortality								
Raw			2.6	0.62	2.3	0.62		
WS			1.4	0.53	1.0	0.51		
ES			2.0	0.59	1.4	0.56		
BRD-S			2.7	0.63	1.9	0.60		
PYLL-70								
per 100,000			21.2		16.8			
ES			19.8		15.9			
AYLL-70			15.9		15.4			

* See corresponding tables with multiple primaries.

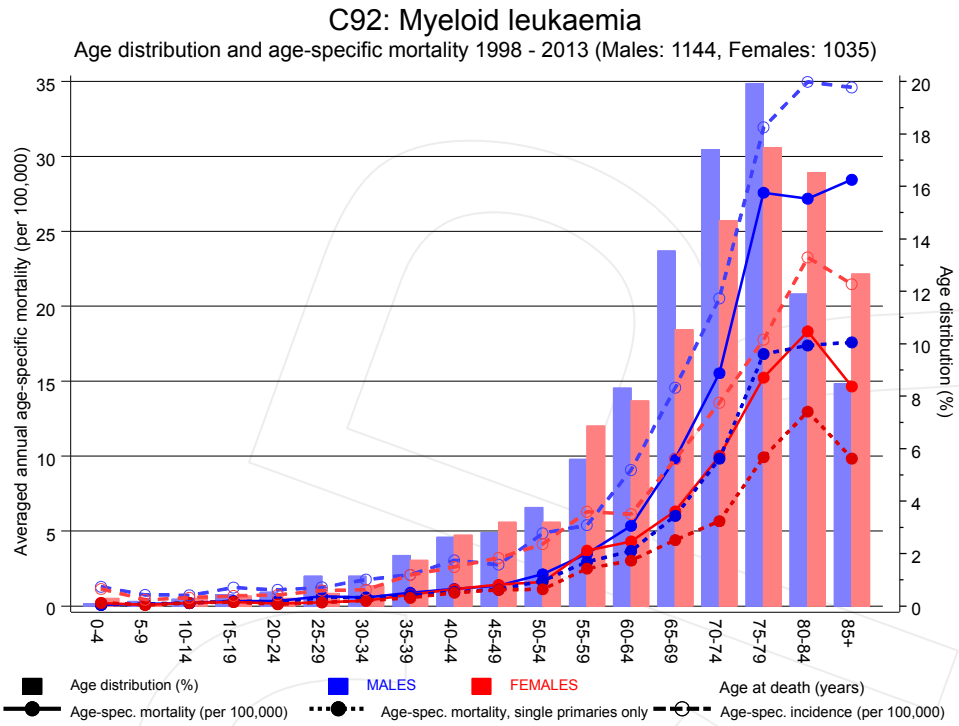
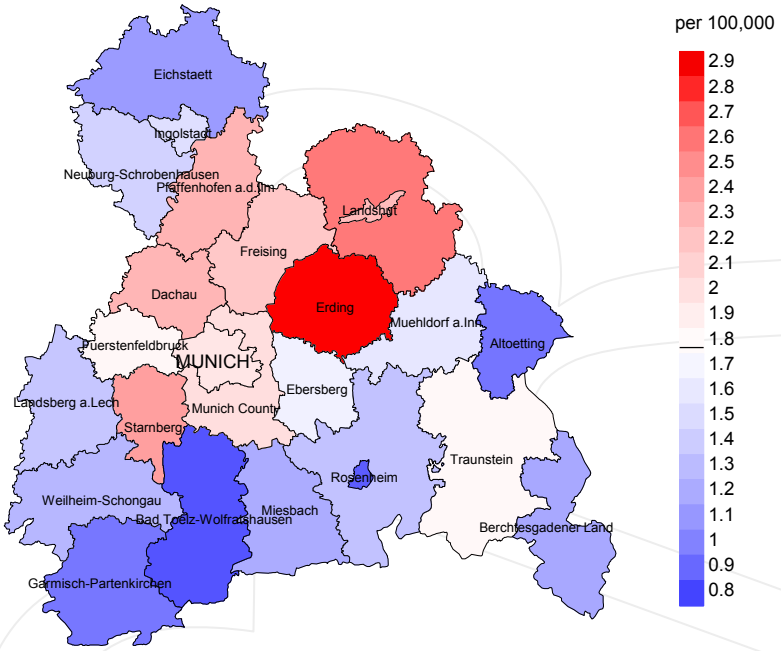


Figure 18. Distribution of age at death (bars) and age-specific mortality (all patients: solid line, patients with single primaries: dotted line). The age-specific incidence is additionally plotted for comparison (dashed line).

The difference between age at diagnosis (Table 3) and age at myeloid leukaemia-related death (see Table 10) should be considered.

Average mortality (world standard population) 2007 - 2013: Males



Average mortality (world standard population) 2007 - 2013: Females

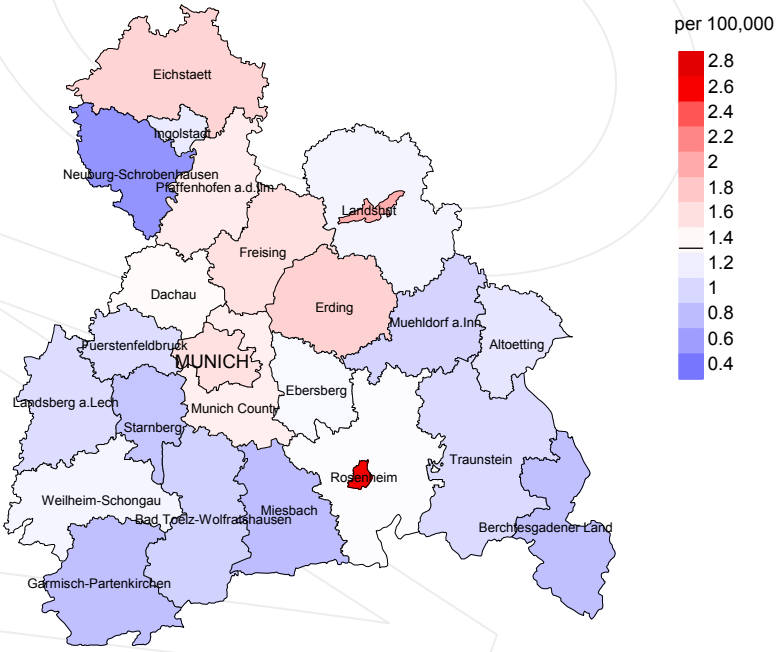


Figure 19a. Map of cancer mortality (world standard population) by county averaged for period 2007 to 2013. According to their individual mortality rates, the counties are displayed in different red and blue color temperatures where the fine white color indicates the population mean (males 1.8/100,000 WS N=586, females 1.3/100,000 WS N=542).

The results should be interpreted with caution! E.g., in county Ebersberg with a population of 64,928 female residents (averaged) in the period from 2007 to 2013 a total of 13 women died from myeloid leukaemia. Therefore, the mean mortality rate for this cancer type in this area can be calculated at 1.3/100,000 (world standard population). Though, the value of this parameter may vary with an underlying probability of 99% between 0.5 and 2.8/100,000.

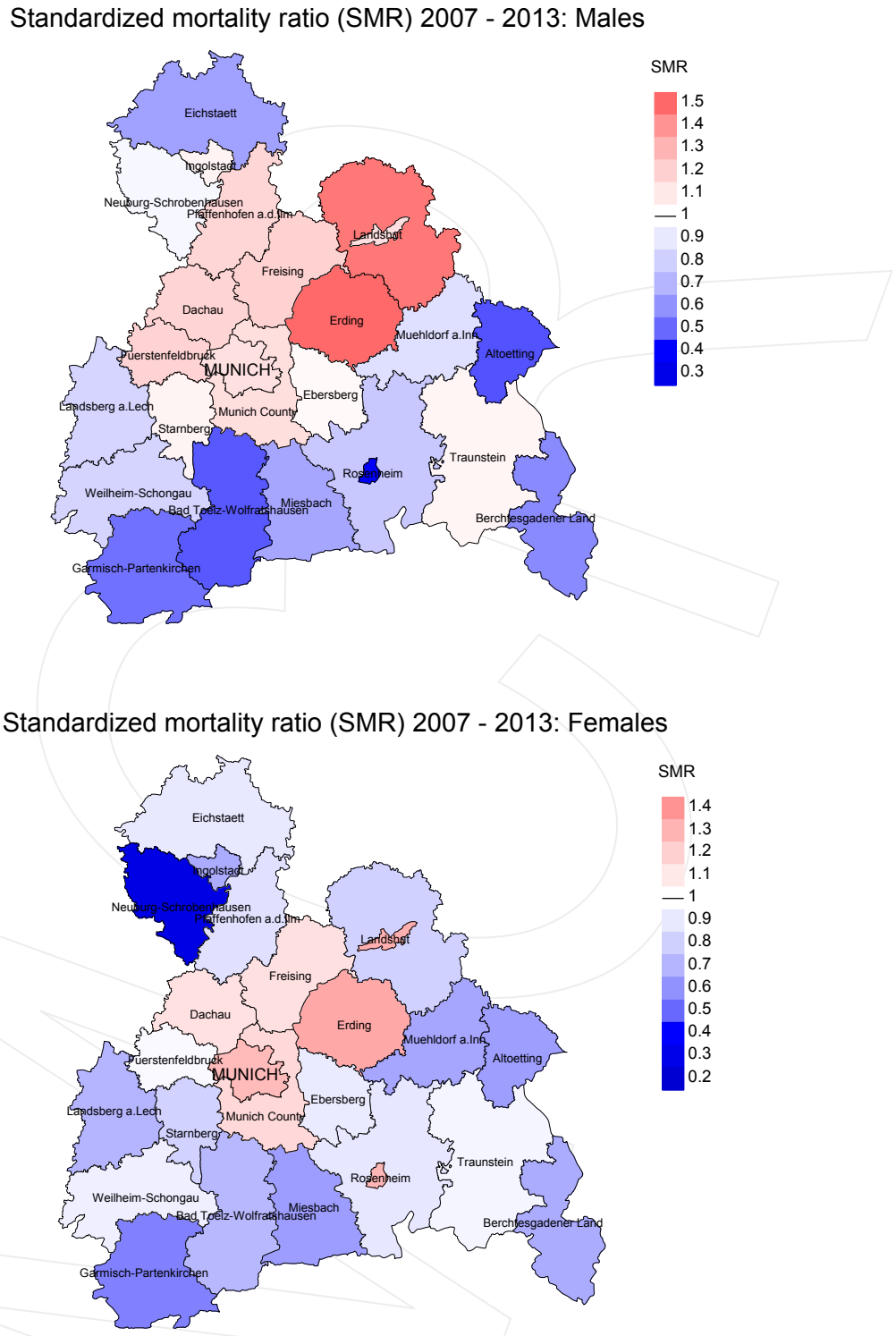


Figure 19b. Map of standardized mortality ratio (SMR, incl. DCO cases) by county averaged for period 2007 to 2013. According to their individual SMR values, the counties are displayed in different red and blue color temperatures where the fine white color indicates the population overall of 1.0 (males N=586, females N=542).

The results should be interpreted with caution! E.g., in county Ebersberg with a population of 64,642 female residents (averaged) in the period from 2007 to 2013 a total of 13 women died from myeloid leukaemia. Therefore, the mean standardized mortality ratio (SMR) for this cancer type in this area can be calculated at 0.91. Though, the value of this parameter may vary with an underlying probability of 99% between 0.39 and 1.79, and is therefore not statistically striking.

Statistical Notes

In all tables and figures the respective reference values should be carefully considered. The incidence rates include diagnoses (with multiple primary), and death certificate only (DCO) cases. For mortality statistics patients, diagnoses and progressive course of disease are presented. In the calculations, all courses of disease are considered whereby progressions occurred and/or death certificate identified progressive cancers were ascertained. Additionally there are three groups of disease course to consider:

1. **All multiple primaries included**

   The mortality statistic describes the tumor-specific death, independent of any malignancy. The patient perspective, induced secondary malignancies, and the problem of multiple malignancies from the same primary tumor all have reasons for their inclusion.

2. **First singular primary** (no information about other prior or synchronous malignancy)

   The mortality statistic describes the cancer-related death for patients who have no therapeutic restrictions due to a previous or synchronous cancer. These statistics are comparable to studies that have exclusion criteria based on a second malignancy.

3. **Single primary** (no information about other prior, syn- or metachronous malignancy)

   The mortality statistic describes the tumor-specific death that occurs without any impact through secondary primaries, earlier, synchronous, later or induced. Precisely the difference between disease group 1 and 2 highlight the magnitude of the problem of secondary malignancies.

For this reason differences appear concerning official mono-causal mortality statistics. To judge the maximum deviation, 2 further tables are presented. In the first table the distribution of secondary malignancies before, at or after the described cancer are shown, that could be an alternative cause of death. In the second table, the age-specific mortality rates for all courses of disease, without designation of secondary malignancies are shown.

A previously minimally acknowledged statistic is the **age at death**, which allows for a good assessment of the quality of classification of the apparent tumor-specific death. For assumed tumor-independent deaths, the age of death should be estimated from the age of diagnosis and the normal life expectancy, whereas tumor-dependent deaths can be estimated from the age of diagnosis plus the average tumor-specific life expectancy. The comparison of different tumors demonstrates this association, if the causes of cancer and the competing cause of death are independent of each other (e.g. breast and colon versus head/neck and lung).

The index from mortality and incidence (Mortality-Incidence ratio, **MI-index**) is a statistic that allows for the evaluation of the quality of data. For diseases with poor prognoses, comparable values are obtained from all age groups, because to a large extent, the numerator and denominator contain the same cases. For tumors with a good prognosis, increasing and decreasing incidence and age-specific differences in prognosis can more strongly alter the MI- index. Additionally, attention should be paid to the confidence intervals where fewer cases are reported.

The complexity of problems identified here emphasizes the importance of relative survival data for the appropriate analysis of long term results.

As a measurement of the burden of disease, the number of potential life years loss due to premature deaths in a cohort can be calculated (**PYLL**, potential years of life lost, standardized per 100,000 persons or per European standard) as well as the average loss of life years per individual (**AYLL**, average years of life lost). Depending upon the analytic aim (health economy, prevention, health care research) different methods exist for the generation of these measurements. In the results presented here, the age for a premature death is considered to be before 70 years, according to the guidelines of the OECD and the WHO (as seen in the abbreviation PYLL-70 or AYLL-70).

Shortcuts

FRG	Federal Republic of Germany
GEKID	Association of Population-based Cancer Registries in Germany (Gesellschaft der epidemiologischen Krebsregister in Deutschland e.V.)
MCR	Munich Cancer Registry (Tumorregister München)
SEER	Surveillance, Epidemiology, and End Results (USA)
AYLL-70	Average years of life lost prior to age 70 given a person dies before that age
BRD-S	German standard population
DCO	Death certificate only
EAR	Excess absolute risk = excess cancer cases (O - E) per 10,000 person-years
ES	European standard population (old)
LCL	Lower confidence limit
MI-index	Ratio between mortality and incidence
PYLL-70	Potential years of life lost prior to age 70 given a person dies before that age
SIR	Standardized incidence ratio
SMR	Standardized mortality ratio
UCL	Upper confidence limit
WS	World standard population

Recommended Citation

Munich Cancer Registry. Baseline statistics C92: Myeloid leukaemia [Internet]. 2015 [updated 2015 May 19; cited 2015 Jul 1]. Available from: http://www.tumorregister-muenchen.de/en/facts/base/base_C92__E.pdf

Copyright

Disclaimer

Index of figures and tables