Munich Cancer Registry

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ICD-10 C81: Hodgkin lymphoma

Incidence and Mortality

Year of diagnosis	1998-2014
Patients	1,661
Diseases	1,661
Creation date	04/13/2016
Export date	12/23/2015
Population	4.64 m

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

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

http://www.tumorregister-muenchen.de/en/facts/base/bC81__E-ICD-10-C81-Hodgkin-lymphoma-incidence-and-mortality.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.

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, April 2016

[#] 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).

[##] 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.

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

Code	Description
C81.-	Hodgkin lymphoma
C81.0	Nodular lymphocyte predominant Hodgkin lymphoma
C81.1	Nodular sclerosis (classical) Hodgkin lymphoma
C81.2	Mixed cellularity (classical) Hodgkin lymphoma
C81.3	Lymphocyte depleted (classical) Hodgkin lymphoma
C81.4	Lymphocyte-rich (classical) Hodgkin lymphoma
C81.7	Other (classical) Hodgkin lymphoma
C81.9	Hodgkin lymphoma, unspecified

INCIDENCE

Table 1

All patients by year of diagnosis,
proportions of DCO, multiple primaries, deaths, and active follow-up
(incl. DCO)

Year of diagnosis	Cases n	DCO cases n	Prop. DCO %	Prop. mult. primaries %	Prop. deaths %	Prop. actively followed %
1998	85	4	4.7	16.5	24.7	92.9
1999	66	6	9.1	19.7	36.4	90.9
2000	61	5	8.2	19.7	27.9	95.1
2001	59	3	5.1	13.6	27.1	84.7
2002	100	6	6.0	17.0	29.0	89.0 #
2003	113	4	3.5	10.6	19.5	88.5
2004	110	3	2.7	19.1	17.3	90.9
2005	115	3	2.6	16.5	17.4	84.3
2006	87	2	2.3	23.0	27.6	88.5
2007	110	2	1.8	14.5	20.9	59.1 #
2008	118	1	0.8	14.4	19.5	50.0
2009	100	3	3.0	15.0	15.0	55.0
2010	121	2	1.7	7.4	14.9	50.4
2011	112	3	2.7	11.6	16.1	53.6
2012	148	5	3.4	16.9	18.2	70.3
2013	114	6	5.3	15.8	14.9	99.1
2014	42	5	11.9	11.9	19.0	92.9 ##
1998-2014	1661	63	3.8	15.3	20.5	76.2

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

Please be aware that data of recent annual patient cohorts may not yet be fully processed. The years under evaluation can be found in the respective headings.

Table 1a

All patients
by year of diagnosis and gender
(incl. DCO)

Year of diagnosis	All n	Males n	Females n	Prop. males %
1998	85	50	35	58.8
1999	66	33	33	50.0
2000	61	31	30	50.8
2001	59	27	32	45.8
2002	100	58	42	58.0
2003	113	62	51	54.9
2004	110	61	49	55.5
2005	115	62	53	53.9
2006	87	51	36	58.6
2007	110	65	45	59.1
2008	118	63	55	53.4
2009	100	61	39	61.0
2010	121	72	49	59.5
2011	112	67	45	59.8
2012	148	93	55	62.8
2013	114	71	43	62.3
2014	42	27	15	64.3
1998-2014	1661	954	707	57.4

Table 2

Incidence measures by year of diagnosis 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	50	35	4.5	3.0	4.0	3.1	4.3	3.1	4.6	3.2
1999	33	33	2.9	2.8	2.5	2.7	2.7	2.7	2.9	3.1
2000	31	30	2.7	2.5	2.1	2.7	2.4	2.6	2.5	2.9
2001	27	32	2.3	2.6	2.0	2.4	2.2	2.6	2.2	2.8
2002	58	42	3.1	2.1	2.5	2.1	2.8	2.1	3.0	2.3
2003	62	51	3.3	2.6	2.8	2.8	3.1	2.7	3.3	3.0
2004	61	49	3.2	2.5	3.1	2.3	3.1	2.4	3.3	2.7
2005	62	53	3.3	2.7	3.0	2.4	3.1	2.5	3.5	2.8
2006	51	36	2.7	1.8	2.2	1.9	2.5	1.8	2.7	1.9
2007	65	45	2.9	1.9	2.7	1.7	2.8	1.8	3.0	2.0
2008	63	55	2.8	2.4	2.6	2.1	2.7	2.2	3.0	2.4
2009	61	39	2.7	1.7	2.2	1.7	2.5	1.7	2.7	1.8
2010	72	49	3.2	2.1	2.8	2.0	3.0	2.0	3.2	2.3
2011	67	45	2.9	1.9	2.5	1.7	2.8	1.8	3.1	2.0
2012	93	55	4.1	2.3	3.3	2.2	3.6	2.2	4.1	2.5
2013	71	43	3.1	1.8	2.7	1.6	2.9	1.7	3.1	1.9
2014	27	15	1.2	0.6	0.9	0.7	1.1	0.6	1.2	0.7
1998-2014	954	707	3.0	2.1	2.6	2.0	2.8	2.1	3.0	2.3

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 patients)
(incl. DCO)

Year of diagnosis	Cases n	Mean	Std. dev.	Min.	Max.	10%	25%	Median 50%	75%	90%
1998	85	39.5	19.4	6.1	94.0	18.2	24.7	34.9	56.0	64.0
1999	66	44.3	21.3	9.1	84.3	17.3	28.8	39.1	61.5	77.0
2000	61	41.4	19.6	6.6	85.3	20.1	27.3	35.7	57.7	69.1
2001	59	43.9	19.3	9.4	86.0	19.6	28.5	41.2	58.5	72.3
2002	100	43.1	19.2	7.5	82.6	20.7	28.0	38.8	61.0	70.8
2003	113	39.9	18.6	6.1	85.1	19.1	25.2	36.1	54.3	69.1
2004	110	39.8	17.8	11.2	85.7	20.6	26.2	36.1	52.1	66.0
2005	115	43.8	21.2	12.6	86.4	17.5	23.8	39.4	62.7	76.1
2006	87	43.1	21.2	9.2	89.9	16.9	26.5	39.1	59.1	77.7
2007	110	43.8	19.7	5.2	84.2	21.0	27.5	41.8	59.8	72.8
2008	118	43.8	21.8	5.5	87.7	17.1	24.0	39.4	61.6	76.6
2009	100	44.9	21.1	7.9	92.1	19.6	28.2	41.1	65.0	73.7
2010	121	45.4	21.8	3.2	85.5	20.2	25.6	42.2	65.7	75.3
2011	112	46.4	21.3	6.9	96.6	21.9	26.7	45.7	61.2	79.8
2012	148	47.2	22.6	11.0	93.4	19.4	26.3	42.7	68.2	78.7
2013	114	45.2	20.9	8.1	90.8	20.2	28.8	40.9	59.3	76.5
2014	42	46.1	24.0	16.4	99.5	21.7	27.0	41.1	66.0	82.8
1998-2014	1661	43.7	20.7	3.2	99.5	19.2	26.6	39.5	60.6	74.4

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	50	41.3	19.5	6.1	94.0	19.2	25.5	35.9	56.0	63.7
1999	33	42.7	18.4	12.5	77.8	22.2	30.9	38.7	55.6	69.7
2000	31	48.4	18.6	6.6	85.3	31.8	35.7	52.0	62.1	69.2
2001	27	42.2	17.9	9.4	72.9	17.5	29.9	39.8	56.9	67.7
2002	58	44.4	17.7	11.2	76.7	24.2	31.6	39.5	62.5	70.3
2003	62	42.9	19.0	6.1	85.1	20.4	30.5	38.9	57.6	69.1
2004	61	36.7	15.2	14.3	81.7	18.5	26.6	35.5	42.5	62.7
2005	62	43.9	21.9	12.6	84.7	17.3	23.3	39.9	65.5	72.7
2006	51	46.0	19.2	9.2	81.0	19.1	33.5	45.0	61.8	73.4
2007	65	42.8	20.0	5.2	80.4	19.3	26.3	40.0	60.2	71.3
2008	63	42.0	20.5	5.5	82.2	17.8	23.3	38.8	58.5	73.7
2009	61	46.6	20.1	7.9	80.0	23.3	30.4	44.8	68.6	73.3
2010	72	45.7	21.4	3.2	85.5	20.3	27.8	42.6	65.6	74.0
2011	67	45.8	20.3	6.9	96.6	21.9	26.8	47.2	59.8	75.7
2012	93	49.1	21.5	11.0	83.4	19.7	32.2	44.7	68.5	77.5
2013	71	44.3	19.5	8.1	89.9	21.1	28.8	41.3	59.3	70.4
2014	27	51.5	24.8	18.8	99.5	21.7	27.2	49.5	78.5	86.1
1998-2014	954	44.4	20.0	3.2	99.5	19.8	28.7	40.7	61.1	73.1

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	35	37.0	19.2	12.4	87.5	17.2	23.9	30.7	56.7	64.0
1999	33	45.8	24.1	9.1	84.3	17.3	28.1	41.4	67.3	80.8
2000	30	34.2	18.3	11.4	79.5	17.2	21.7	29.7	35.1	66.0
2001	32	45.4	20.6	11.4	86.0	20.8	27.6	43.3	59.9	74.0
2002	42	41.3	21.2	7.5	82.6	20.0	23.0	36.7	60.6	77.5
2003	51	36.4	17.6	11.9	77.4	18.4	22.6	31.7	41.8	64.2
2004	49	43.7	20.0	11.2	85.7	21.4	25.4	39.3	61.1	70.1
2005	53	43.8	20.6	15.3	86.4	18.1	27.7	39.4	60.1	77.7
2006	36	39.0	23.5	11.2	89.9	13.8	23.1	30.0	57.0	78.3
2007	45	45.3	19.3	7.3	84.2	24.9	28.7	43.7	58.1	74.7
2008	55	45.9	23.3	11.8	87.7	17.1	25.0	41.2	69.7	78.1
2009	39	42.2	22.5	13.7	92.1	17.8	24.2	35.0	59.3	76.9
2010	49	44.8	22.6	9.8	84.8	19.2	24.3	41.7	66.2	76.0
2011	45	47.3	22.9	16.7	90.5	20.4	26.6	45.4	63.0	80.8
2012	55	44.0	24.2	13.0	93.4	19.4	24.3	34.6	67.3	80.7
2013	43	46.7	23.1	12.4	90.8	19.8	28.0	39.3	69.2	78.8
2014	15	36.4	19.7	16.4	82.3	17.3	24.6	29.0	41.7	77.9
1998-2014	707	42.8	21.6	7.3	93.4	18.5	24.8	36.0	60.4	76.9

Table 4

Age distribution by 5-year age group and gender for period 2007-2014
(incl. DCO)

Age at diagnosis Years	Cases n	%	Cum.%	Males n	%	Cum.%	Females n	%	Cum.%
0-4	2	0.2	0.2	2	0.4	0.4			0.0
5-9	10	1.2	1.4	8	1.5	1.9	2	0.6	0.6
10-14	17	2.0	3.4	10	1.9	3.9	7	2.0	2.6
15-19	59	6.8	10.2	29	5.6	9.4	30	8.7	11.3
20-24	86	9.9	20.1	44	8.5	17.9	42	12.1	23.4
25-29	103	11.9	32.0	55	10.6	28.5	48	13.9	37.3
30-34	68	7.9	39.9	40	7.7	36.2	28	8.1	45.4
35-39	61	7.1	46.9	46	8.9	45.1	15	4.3	49.7
40-44	70	8.1	55.0	46	8.9	53.9	24	6.9	56.6
45-49	47	5.4	60.5	29	5.6	59.5	18	5.2	61.8
50-54	46	5.3	65.8	30	5.8	65.3	16	4.6	66.5
55-59	53	6.1	71.9	34	6.6	71.9	19	5.5	72.0
60-64	31	3.6	75.5	18	3.5	75.3	13	3.8	75.7
65-69	51	5.9	81.4	36	6.9	82.3	15	4.3	80.1
70-74	59	6.8	88.2	41	7.9	90.2	18	5.2	85.3
75-79	50	5.8	94.0	27	5.2	95.4	23	6.6	91.9
80-84	32	3.7	97.7	16	3.1	98.5	16	4.6	96.5
85+	20	2.3	100.0	8	1.5	100.0	12	3.5	100.0
All ages	865	100.0		519	100.0		346	100.0	

Included in the statistics are 18.9% multiple primaries in males and 13.9% in females.

Table 5

Age-specific incidence, DCO rate and proportion of all cancers
for period 2007-2014

Age at diagnosis Years	Males n	Females n	Males Age-spec. incid.	Females Age-spec. incid.	Males DCO rate n=11 %	Females DCO rate n=16 %	Males Prop.all cancers n=91183 %	Females Prop.all cancers n=89596 %
0- 4	2		0.2	0.0			1.1	
5- 9	8	2	0.9	0.2			8.3	2.6
10-14	10	7	1.1	0.8			10.0	7.9
15-19	29	30	3.0	3.3			13.4	18.2
20-24	44	42	4.0	3.9			11.8	13.5
25-29	55	48	4.6	3.9			9.8	7.3
30-34	40	28	3.2	2.2			5.2	2.4
35-39	46	15	3.5	1.2		6.7	4.0	0.8
40-44	46	24	2.8	1.6		4.2	2.5	0.6
45-49	29	18	1.8	1.2		5.6	0.9	0.3
50-54	30	16	2.3	1.2			0.6	0.2
55-59	34	19	3.2	1.7	2.9		0.5	0.3
60-64	18	13	1.8	1.2		7.7	0.2	0.1
65-69	36	15	3.7	1.4	5.6	6.7	0.2	0.1
70-74	41	18	4.5	1.7	2.4		0.2	0.2
75-79	27	23	4.9	3.2	7.4	8.7	0.2	0.2
80-84	16	16	4.6	2.9	18.8	12.5	0.2	0.2
85+	8	12	3.5	2.1	25.0	58.3	0.1	0.1
All ages	519	346			2.1	4.6	0.6	0.4
Incidence								
Raw			2.9	1.8				
WS			2.5	1.7				
ES			2.7	1.8				
BRD-S			2.9	2.0				

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).

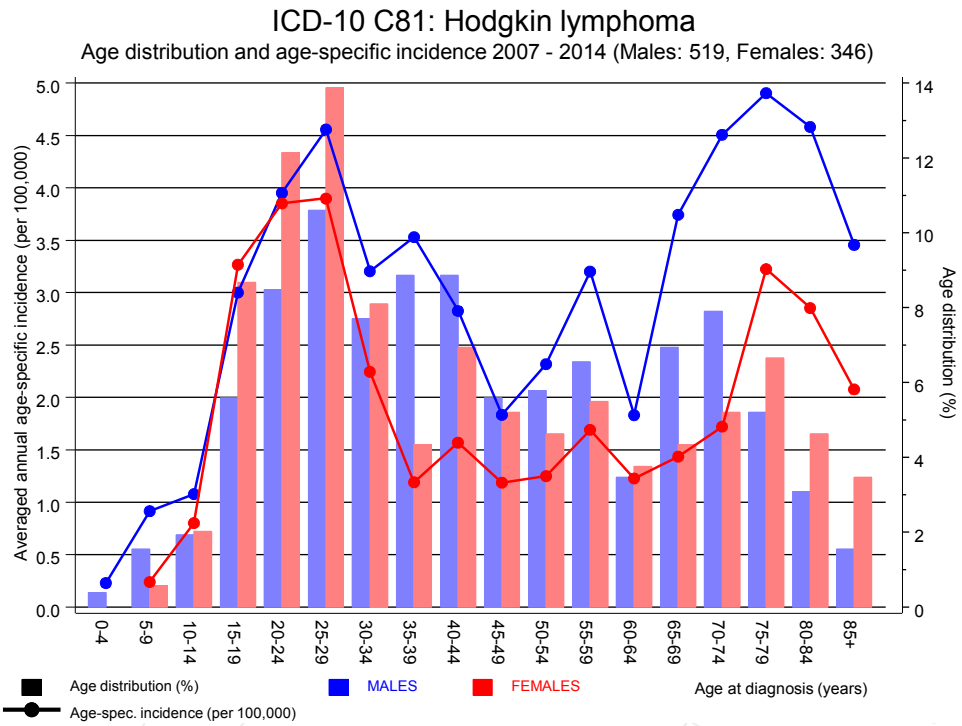


Figure 6. Age distribution and age-specific incidence

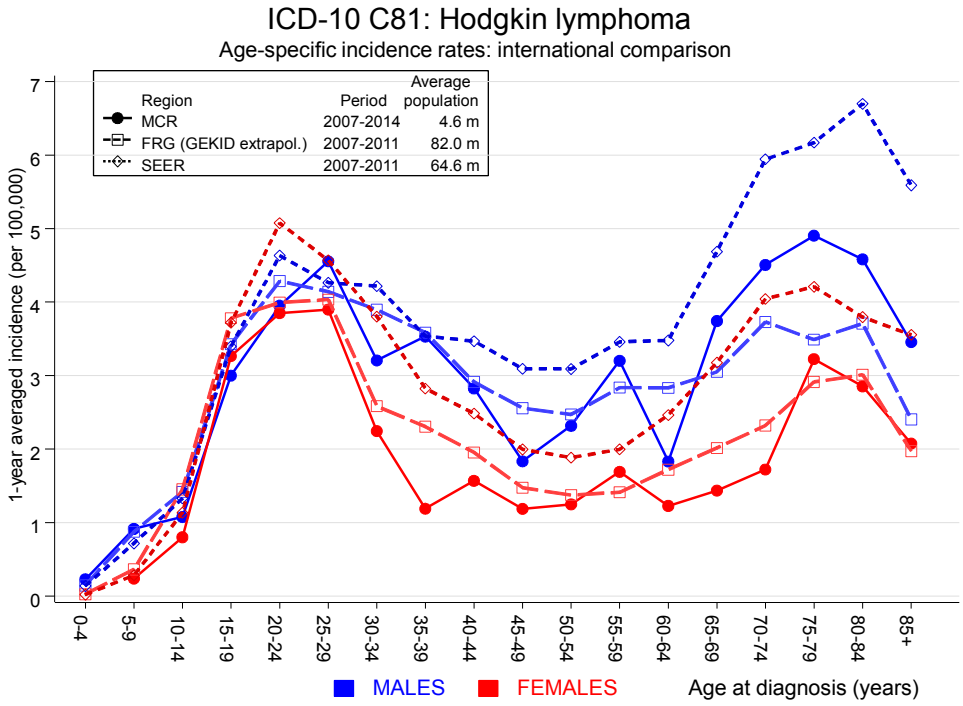


Figure 6a. Age-specific incidence in MCR registry areas compared to Germany (FRG, GEKID extrapolation) and SEER (Surveillance, Epidemiology, and End Results, USA).

Reference:

Extrapolated age-specific patient population of Germany, data status middle of 2010. Association of Population-based Cancer Registries in Germany (GEKID e.V.). Berlin, 2014. http://www.gekid.de. Last access: 02/11/2015

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.

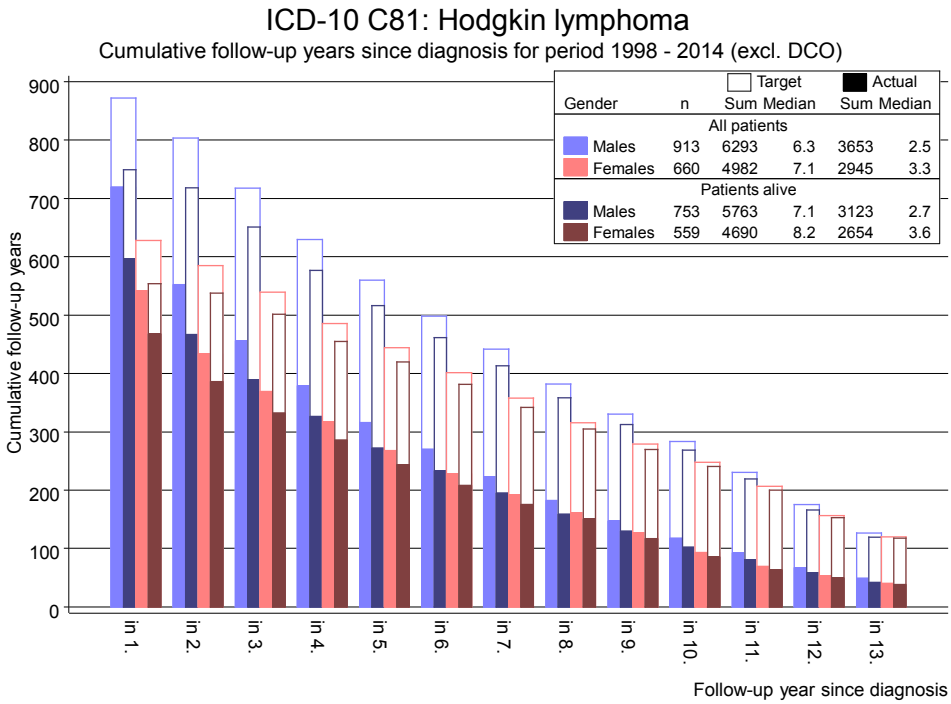


Figure 7. Cumulative follow-up years depending on time since diagnosis

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

Table 8a

Standardized incidence ratio (SIR, with 95% confidence limits), excess absolute risk (EAR) and DCO rate of second primaries for period 1998-2014
MALES

Diagnosis		Observed n	Expected n	SIR	LCL 95%	UCL 95%		EAR	DCO %
C16	Stomach	2	0.7	2.8	0.3	10.2		3.5	50.0
C17	Small intestine	2	0.1	18.5	2.2	66.9	#	5.2	
C18	Colon	2	1.7	1.2	0.1	4.3		0.9	
C19-C20	Rectum	2	1.1	1.9	0.2	6.7		2.5	
C23-C24	Bile	2	0.2	12.0	1.5	43.4	#	5.0	
C25	Pancreas	3	0.6	4.7	1.0	13.7		6.5	33.3
C33-C34	Lung	14	2.2	6.4	3.5	10.7	#	32.4	14.3
C43	Malign. melanoma	2	1.1	1.9	0.2	6.8		2.6	
C60	Penis	2	0.0	45.2	5.5	163.3	#	5.4	
C61	Prostate	11	5.0	2.2	1.1	3.9	#	16.4	
C64	Kidney	2	0.7	2.7	0.3	9.7		3.5	
C73	Thyroid	2	0.2	8.3	1.0	30.2	#	4.8	
C82-C85	NHL	17	0.8	21.0	12.2	33.6	#	44.4	
C91-C96	Leukaemia	5	0.3	15.1	4.9	35.3	#	12.8	
Other primaries		2	1.0	2.0	0.2	7.1		2.7	
Not observed		0	3.8	0.0	0.0	1.0	#	-10.3	
All mult. primaries		70	19.6	3.6	2.8	4.5	#	138.3	5.7

Patients	918
Median age at second malignancy (years)	62.7
Person-years	3643
Mean observation time (years)	4.0
Median observation time (years)	2.5

The occurrence of second malignancy is statistically significant.

Observed second primaries with count 1 are pooled in category “Other primaries”

Table 8b

Standardized incidence ratio (SIR, with 95% confidence limits), excess absolute risk (EAR) and DCO rate of second primaries for period 1998–2014
FEMALES

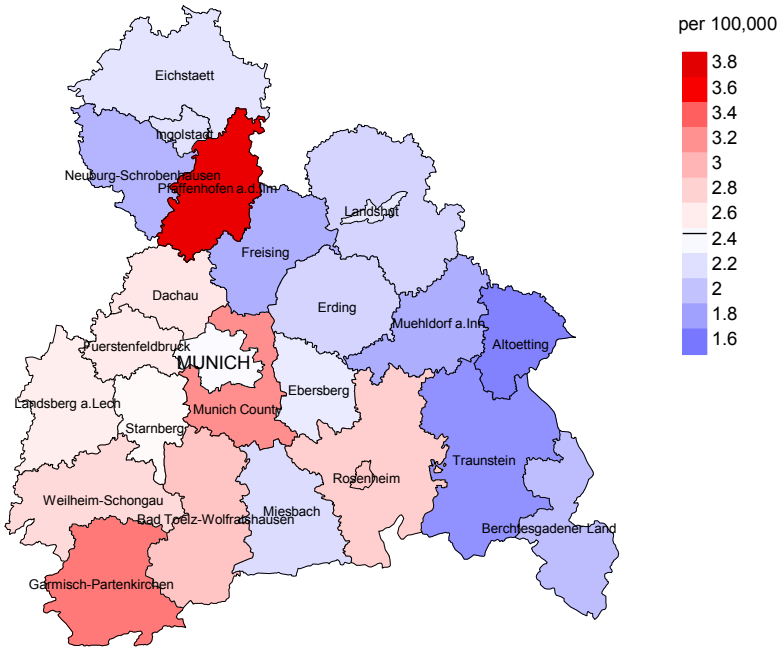
Diagnosis		Observed n	Expected n	SIR	LCL 95%	UCL 95%		EAR	DCO %
C18	Colon	3	0.9	3.4	0.7	10.0		7.2	
C33–C34	Lung	3	0.8	3.9	0.8	11.3		7.6	
C50	Breast	8	4.0	2.0	0.9	3.9		13.4	
C73	Thyroid	2	0.4	4.7	0.6	17.0		5.3	
C82–C85	NHL	15	0.4	37.1	20.8	61.3	#	49.6	
C91–C96	Leukaemia	3	0.2	16.7	3.4	48.8	#	9.6	
Other primaries		9	2.3	4.0	1.8	7.6	#	22.9	
Not observed		0	2.9	0.0	0.0	1.3		-9.7	
All mult. primaries		43	11.8	3.6	2.6	4.9	#	105.9	

Patients	665
Median age at second malignancy (years)	61.8
Person-years	2945
Mean observation time (years)	4.4
Median observation time (years)	3.2

The occurrence of second malignancy is statistically significant.

Observed second primaries with count 1 are pooled in category “Other primaries”

Average incidence (world standard population) 2007 - 2014: Males



Average incidence (world standard population) 2007 - 2014: Females

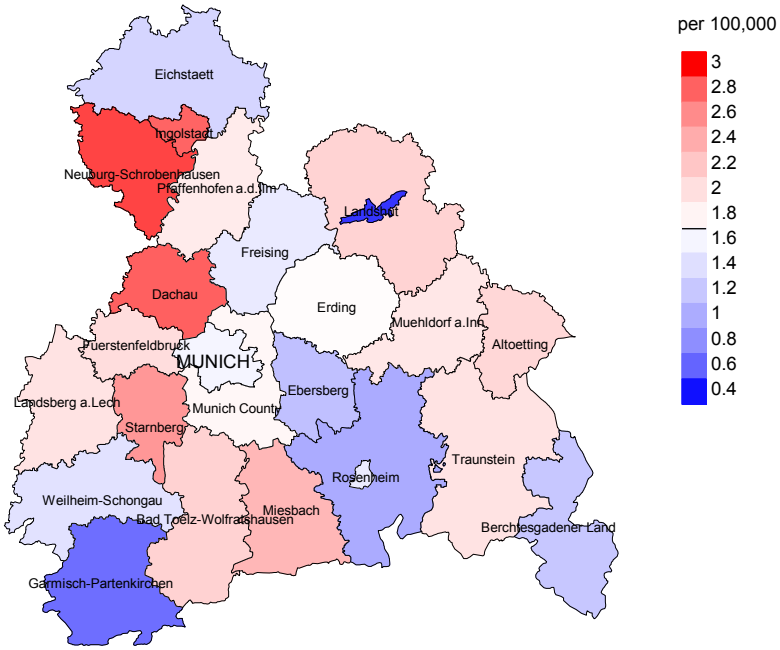
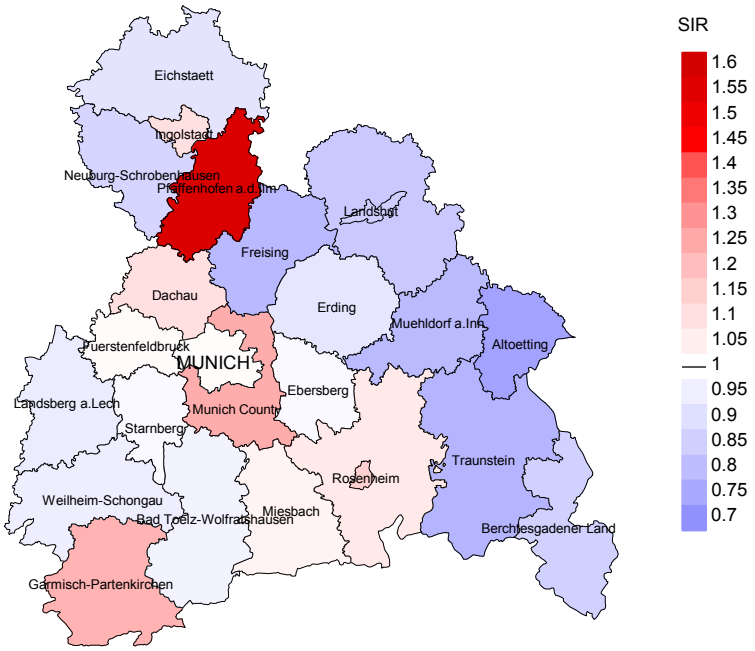


Figure 9a. Map of cancer incidence (world standard population, incl. DCO cases) by county averaged for period 2007 to 2014. According to their individual incidence rates, the counties are displayed in different red and blue color temperatures where the fine white color indicates the population mean (males 2.5/100,000 WS N=519, females 1.7/100,000 WS N=346).

The results should be interpreted with caution! E.g., in county Ebersberg with a population of 65,347 female residents (averaged) in the period from 2007 to 2014 a total of 6 women were identified with newly diagnosed hodgkin lymphoma. Therefore, the mean incidence rate for this cancer type in this area can be calculated at 1.1/100,000 (world standard population). Though, the value of this parameter may vary with an underlying probability of 99% between 0.2 and 3.6/100,000.

Standardized incidence ratio (SIR) 2007 - 2014: Males



Standardized incidence ratio (SIR) 2007 - 2014: Females

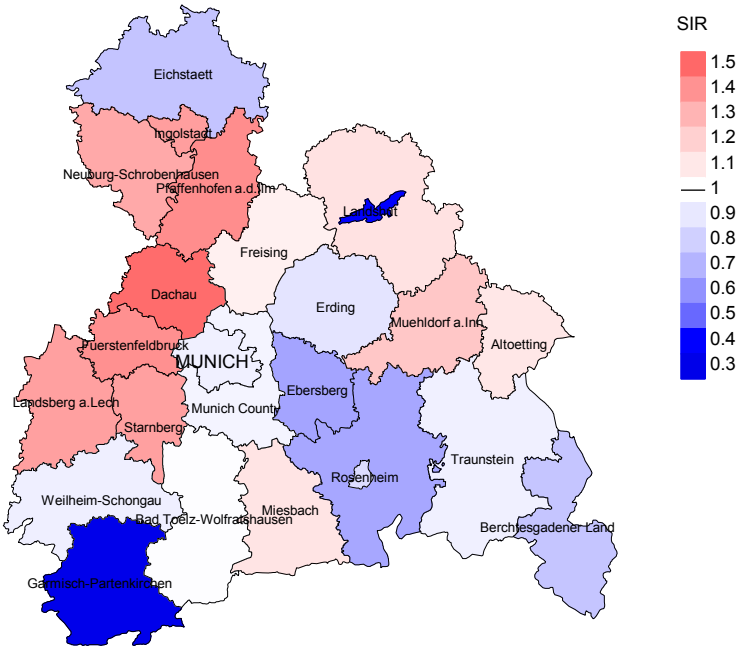


Figure 9b. Map of standardized incidence ratio (SIR, incl. DCO cases) by county averaged for period 2007 to 2014. According to their individual SIR values, the counties are displayed in different red and blue color temperatures where the fine white color indicates the population overall of 1.0 (males N=519, females N=346).

The results should be interpreted with caution! E.g., in county Ebersberg with a population of 64,924 female residents (averaged) in the period from 2007 to 2014 a total of 6 women were identified with newly diagnosed hodgkin lymphoma. Therefore, the mean standardized incidence ratio (SIR) for this cancer type in this area can be calculated at 0.65. Though, the value of this parameter may vary with an underlying probability of 99% between 0.17 and 1.70, 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	85	92.9	4.7	21	24.7	100.0
1999	66	90.9	9.1	24	36.4	100.0
2000	61	95.1	8.2	17	27.9	94.1
2001	59	84.7	5.1	16	27.1	93.8
2002	100	89.0	6.0	29	29.0	96.6
2003	113	88.5	3.5	22	19.5	95.5
2004	110	90.9	2.7	19	17.3	100.0
2005	115	84.3	2.6	20	17.4	100.0
2006	87	88.5	2.3	24	27.6	100.0
2007	110	59.1	1.8	23	20.9	95.7
2008	118	50.0	0.8	23	19.5	91.3
2009	100	55.0	3.0	15	15.0	100.0
2010	121	50.4	1.7	18	14.9	100.0
2011	112	53.6	2.7	18	16.1	100.0
2012	148	70.3	3.4	27	18.2	100.0
2013	114	99.1	5.3	17	14.9	100.0
2014	42	92.9	11.9	8	19.0	100.0
1998-2014	1661	76.2	3.8	341	20.5	97.9

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	85	23	82.6	4	4.7
1999	66	28	92.9	8	12.1
2000	61	22	100.0	8	13.1
2001	59	18	94.4	4	6.8
2002	100	36	100.0	8	8.0
2003	113	34	97.1	5	4.4
2004	110	33	97.0	5	4.5
2005	115	36	94.4	8	7.0
2006	87	28	100.0	5	5.7
2007	110	38	97.4	7	6.4
2008	118	46	97.8	7	5.9
2009	100	37	100.0	6	6.0
2010	121	47	95.7	7	5.8
2011	112	50	98.0	9	8.0
2012	148	53	100.0	15	10.1
2013	114	58	100.0	13	11.4
2014	42	50	98.0	8	19.0
1998-2014	1661	637	97.3	127	7.6

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	23	56.5	43.5	89.5
1999	28	67.9	32.1	88.5
2000	22	54.5	45.5	90.9
2001	18	55.6	44.4	70.6
2002	36	69.4	30.6	86.1
2003	34	55.9	44.1	87.9
2004	33	72.7	27.3	81.3
2005	36	80.6	19.4	91.2
2006	28	64.3	35.7	82.1
2007	38	60.5	39.5	78.4
2008	46	67.4	32.6	82.2
2009	37	81.1	18.9	94.6
2010	47	70.2	29.8	93.3
2011	50	72.0	28.0	81.6
2012	53	66.0	34.0	84.9
2013	58	75.9	24.1	87.9
2014	50	68.0	32.0	89.8
1998-2014	637	68.3	31.7	86.3

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	11	43.0	38.7	43.8	44.9
1999	13	56.8	56.4	61.5	60.0
2000	13	64.8	59.2	67.2	66.1
2001	10	58.0	71.3	55.6	59.3
2002	20	63.0	65.0	55.4	65.8
2003	23	64.3	64.3	64.7	64.3
2004	16	70.8	59.2	78.2	72.5
2005	18	69.3	67.9	71.9	69.3
2006	17	72.3	68.7	74.3	72.3
2007	21	67.8	66.2	71.1	64.7
2008	23	61.1	61.1	59.7	61.6
2009	20	66.9	68.7	65.0	66.9
2010	30	67.8	71.9	63.6	71.9
2011	34	72.0	72.0	68.6	72.0
2012	29	68.9	72.5	58.5	65.8
2013	34	61.9	66.6	58.7	64.4
2014	28	68.4	65.9	77.5	66.0
1998-2014	360	65.8	66.2	63.9	66.7

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	12	52.3	46.3	67.3	63.5
1999	15	53.2	41.4	69.8	50.7
2000	9	50.2	47.8	50.3	50.3
2001	8	79.1	77.2	83.9	79.1
2002	16	63.4	59.5	80.9	63.4
2003	11	52.6	44.6	55.5	54.0
2004	17	71.7	71.7	74.6	71.5
2005	18	73.3	71.5	76.5	71.6
2006	11	81.0	81.0	79.9	79.7
2007	17	76.8	76.8	73.8	73.3
2008	23	66.8	65.6	67.6	66.8
2009	17	70.5	70.5	71.6	70.5
2010	17	72.1	71.0	75.1	71.5
2011	16	67.9	67.9	60.2	67.9
2012	24	69.2	69.2	70.6	68.5
2013	24	68.1	65.4	73.0	65.4
2014	22	73.6	71.8	75.6	72.6
1998-2014	277	69.8	69.5	72.6	69.6

By 2010, life expectancy at birth was 77.5 years for boys and 82.6 years for girls.

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	6	0.5	0.12	0.5	0.12	0.5	0.12	0.6	0.12
1999	10	0.9	0.30	0.6	0.26	0.8	0.30	0.9	0.31
2000	5	0.4	0.16	0.3	0.17	0.4	0.17	0.5	0.20
2001	4	0.3	0.15	0.2	0.09	0.3	0.14	0.5	0.21
2002	13	0.7	0.22	0.4	0.16	0.6	0.22	0.7	0.24
2003	13	0.7	0.21	0.4	0.15	0.6	0.18	0.7	0.22
2004	11	0.6	0.18	0.3	0.11	0.5	0.15	0.6	0.18
2005	13	0.7	0.21	0.4	0.13	0.5	0.17	0.7	0.19
2006	11	0.6	0.22	0.3	0.16	0.5	0.19	0.6	0.22
2007	12	0.5	0.18	0.3	0.12	0.4	0.15	0.5	0.17
2008	15	0.7	0.24	0.4	0.16	0.6	0.20	0.6	0.20
2009	15	0.7	0.25	0.4	0.16	0.5	0.21	0.6	0.24
2010	20	0.9	0.28	0.5	0.17	0.7	0.22	0.9	0.27
2011	24	1.1	0.36	0.5	0.20	0.7	0.27	1.0	0.33
2012	17	0.7	0.18	0.4	0.11	0.5	0.15	0.7	0.17
2013	27	1.2	0.38	0.7	0.25	0.9	0.32	1.1	0.37
2014	22	1.0	0.81	0.6	0.63	0.8	0.75	1.0	0.78
1998-2014	238	0.7	0.25	0.4	0.17	0.6	0.22	0.8	0.25

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	7	0.6	0.20	0.6	0.18	0.6	0.19	0.7	0.21
1999	9	0.8	0.27	0.6	0.22	0.7	0.26	0.8	0.25
2000	7	0.6	0.23	0.5	0.18	0.6	0.21	0.6	0.21
2001	6	0.5	0.19	0.2	0.07	0.3	0.11	0.4	0.16
2002	12	0.6	0.29	0.4	0.18	0.5	0.23	0.6	0.26
2003	6	0.3	0.12	0.2	0.08	0.3	0.10	0.3	0.11
2004	13	0.7	0.27	0.3	0.14	0.5	0.19	0.6	0.21
2005	16	0.8	0.30	0.4	0.16	0.5	0.21	0.7	0.25
2006	7	0.3	0.19	0.1	0.08	0.2	0.11	0.3	0.15
2007	11	0.5	0.24	0.2	0.12	0.3	0.15	0.4	0.19
2008	16	0.7	0.29	0.4	0.20	0.5	0.24	0.6	0.26
2009	15	0.6	0.38	0.3	0.20	0.4	0.26	0.5	0.29
2010	13	0.6	0.27	0.2	0.13	0.3	0.17	0.4	0.19
2011	12	0.5	0.27	0.3	0.16	0.3	0.20	0.4	0.21
2012	18	0.8	0.33	0.3	0.15	0.5	0.22	0.6	0.25
2013	17	0.7	0.40	0.3	0.22	0.5	0.28	0.6	0.30
2014	12	0.5	0.80	0.2	0.30	0.3	0.48	0.4	0.55
1998-2014	197	0.6	0.28	0.3	0.16	0.4	0.20	0.5	0.23

Table 13

Age distribution of age at death (cancer-related) for period 2007-2014
(**incl. multiple primaries**)

Age at death Years	Cases n	%	Cum.%	Males n	%	Cum.%	Females n	%	Cum.%
15-19	2	0.8	0.8	1	0.7	0.7	1	0.9	0.9
20-24	2	0.8	1.5	1	0.7	1.3	1	0.9	1.8
25-29	5	1.9	3.4	2	1.3	2.6	3	2.6	4.4
30-34	5	1.9	5.3	3	2.0	4.6	2	1.8	6.1
35-39	4	1.5	6.8	2	1.3	5.9	2	1.8	7.9
40-44	14	5.3	12.0	10	6.6	12.5	4	3.5	11.4
45-49	24	9.0	21.1	15	9.9	22.4	9	7.9	19.3
50-54	17	6.4	27.4	13	8.6	30.9	4	3.5	22.8
55-59	13	4.9	32.3	9	5.9	36.8	4	3.5	26.3
60-64	21	7.9	40.2	12	7.9	44.7	9	7.9	34.2
65-69	36	13.5	53.8	17	11.2	55.9	19	16.7	50.9
70-74	34	12.8	66.5	19	12.5	68.4	15	13.2	64.0
75-79	38	14.3	80.8	23	15.1	83.6	15	13.2	77.2
80-84	27	10.2	91.0	13	8.6	92.1	14	12.3	89.5
85+	24	9.0	100.0	12	7.9	100.0	12	10.5	100.0
All ages	266	100.0		152	100.0		114	100.0	

Included in the statistics are 18.9% multiple primaries in males and 13.9% in females.

Table 14

Age-specific mortality (cancer-related) and proportion of all cancers
for period 2007-2014
(**incl. multiple primaries**)

Age at death Years	Males n	Females n	Males Age-spec. mortal.	Males MI-index	Females Age-spec. mortal.	Females MI-index	Males Prop.all cancers %	Females Prop.all cancers %
0- 4			0.0		0.0			
5- 9			0.0		0.0			
10-14			0.0		0.0			
15-19	1	1	0.1	0.03	0.1	0.03	2.8	4.5
20-24	1	1	0.1	0.02	0.1	0.02	2.1	3.6
25-29	2	3	0.2	0.04	0.2	0.06	3.2	4.7
30-34	3	2	0.2	0.08	0.2	0.07	3.4	1.8
35-39	2	2	0.2	0.04	0.2	0.13	1.1	0.8
40-44	10	4	0.6	0.22	0.3	0.17	2.2	0.6
45-49	15	9	0.9	0.52	0.6	0.50	1.5	0.7
50-54	13	4	1.0	0.43	0.3	0.25	0.7	0.2
55-59	9	4	0.8	0.26	0.4	0.21	0.3	0.2
60-64	12	9	1.2	0.67	0.8	0.69	0.3	0.3
65-69	17	19	1.8	0.47	1.8	1.27	0.2	0.4
70-74	19	15	2.1	0.46	1.4	0.83	0.2	0.2
75-79	23	15	4.2	0.85	2.1	0.65	0.3	0.2
80-84	13	14	3.7	0.81	2.5	0.88	0.2	0.2
85+	12	12	5.2	1.50	2.1	1.00	0.2	0.1
All ages	152	114					0.3	0.3
Mortality								
Raw			0.8	0.29	0.6	0.33		
WS			0.5	0.19	0.3	0.18		
ES			0.7	0.24	0.4	0.23		
BRD-S			0.8	0.28	0.5	0.26		
PYLL-70								
per 100,000			9.0		5.8			
ES			7.9		5.2			
AYLL-70			17.0		15.8			

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

Table 15a

Multiple primaries in deaths in period 1998-2014
MALES

Diagnosis	Total n	Total %↓	Pre n	Pre ←%	Syn-chron ±30d n	Syn-chron ±30d ←%	Post n	Post ←%
C03-C06 Oral cavity	2	1.1	1	50.0			1	50.0
C09-C10 Oropharynx	2	1.1					2	100.0
C11 Nasopharynx	2	1.1	2	100.0				
C12-C13 Hypopharynx	2	1.1					2	100.0
C15 Oesophagus	7	3.7					7	100.0
C16 Stomach	8	4.2	1	12.5	1	12.5	6	75.0
C18 Colon	7	3.7	1	14.3			6	85.7
C19-C20 Rectum	7	3.7	3	42.9			4	57.1
C23-C24 Bile	2	1.1					2	100.0
C25 Pancreas	4	2.1					4	100.0
C33-C34 Lung	39	20.5			1	2.6	38	97.4
C43 Malign. melanoma	3	1.6	1	33.3			2	66.7
C44 Skin others	18	9.5	8	44.4	1	5.6	9	50.0
C61 Prostate	16	8.4	7	43.8	1	6.3	8	50.0
C64 Kidney	3	1.6					3	100.0
C67 Bladder	4	2.1	3	75.0			1	25.0
C70-C72 CNS cancer	2	1.1					2	100.0
C76-C79 CUP	5	2.6					5	100.0
C82-C85 NHL	36	18.9	14	38.9	4	11.1	18	50.0
C90 Mult. myeloma	5	2.6	3	60.0			2	40.0
C91-C96 Leukaemia	6	3.2	1	16.7	1	16.7	4	66.7
Other primaries	10	5.3	1	10.0	1	10.0	8	80.0
All mult. primaries	190	100.0	46	24.2	10	5.3	134	70.5

Multiple primaries with number of cases 1 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 1998–2014
FEMALES

Diagnosis		Total n	Total %↓	Pre n	Pre ←%	Syn-chron ±30d n	Syn-chron ±30d ←%	Post n	Post ←%
C16	Stomach	3	2.3					3	100.0
C18	Colon	9	7.0			1	11.1	8	88.9
C19–C20	Rectum	3	2.3	1	33.3			2	66.7
C22	Liver	2	1.6					2	100.0
C25	Pancreas	5	3.9					5	100.0
C33–C34	Lung	13	10.1			1	7.7	12	92.3
C43	Malign. melanoma	4	3.1					4	100.0
C44	Skin others	9	7.0	1	11.1	1	11.1	7	77.8
C50	Breast	31	24.0	11	35.5			20	64.5
C51	Vulva	2	1.6					2	100.0
C54	Corpus uteri	3	2.3	2	66.7			1	33.3
C56	Ovary	3	2.3			1	33.3	2	66.7
C70–C72	CNS cancer	2	1.6	1	50.0			1	50.0
C73	Thyroid	2	1.6					2	100.0
C76–C79	CUP	4	3.1					4	100.0
C82–C85	NHL	16	12.4	3	18.8			13	81.3
C91–C96	Leukaemia	8	6.2			1	12.5	7	87.5
Other primaries		10	7.8					10	100.0
All mult. primaries		129	100.0	19	14.7	5	3.9	105	81.4

Multiple primaries with number of cases 1 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 2007-2014
(**First primaries only** *)

Age at death Years	Males n	Females n	Males Age-spec. mortal.	Males MI-index	Females Age-spec. mortal.	Females MI-index	Males Prop.all cancers %	Females Prop.all cancers %
0- 4			0.0		0.0			
5- 9			0.0		0.0			
10-14			0.0		0.0			
15-19	1	1	0.1	0.03	0.1	0.03	3.0	5.0
20-24	1	1	0.1	0.02	0.1	0.02	2.3	3.8
25-29	2	2	0.2	0.04	0.2	0.04	3.6	3.4
30-34	3	2	0.2	0.08	0.2	0.07	3.5	2.1
35-39	2	2	0.2	0.04	0.2	0.15	1.2	0.9
40-44	10	4	0.6	0.23	0.3	0.18	2.4	0.7
45-49	13	9	0.8	0.48	0.6	0.56	1.4	0.9
50-54	13	4	1.0	0.48	0.3	0.31	0.8	0.3
55-59	9	4	0.8	0.28	0.4	0.24	0.3	0.2
60-64	9	9	0.9	0.60	0.8	0.82	0.2	0.3
65-69	11	18	1.1	0.48	1.7	1.29	0.2	0.4
70-74	15	13	1.6	0.45	1.2	0.87	0.2	0.3
75-79	14	11	2.5	0.82	1.5	0.58	0.2	0.2
80-84	9	13	2.6	1.00	2.3	0.93	0.2	0.3
85+	8	8	3.5	1.60	1.4	0.89	0.2	0.1
All ages	120	101					0.3	0.3
Mortality								
Raw			0.7	0.26	0.5	0.32		
WS			0.4	0.17	0.3	0.17		
ES			0.5	0.22	0.4	0.22		
BRD-S			0.6	0.24	0.5	0.25		
PYLL-70								
per 100,000			8.5		5.5			
ES			7.5		4.9			
AYLL-70			18.4		15.5			

* See corresponding tables with multiple primaries.

Table 17

Age-specific mortality (cancer-related) and proportion of all cancers
for period 2007-2014
(**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			0.0		0.0			
5- 9			0.0		0.0			
10-14			0.0		0.0			
15-19	1		0.1	0.03	0.0		3.0	
20-24	1		0.1	0.02	0.0		2.6	
25-29		1	0.0		0.1	0.02		1.8
30-34	3		0.2	0.08	0.0		3.5	
35-39	1	1	0.1	0.02	0.1	0.08	0.6	0.5
40-44	3	1	0.2	0.08	0.1	0.05	0.8	0.2
45-49	4	1	0.3	0.15	0.1	0.07	0.5	0.1
50-54			0.0		0.0			
55-59	4		0.4	0.14	0.0		0.2	
60-64	1	4	0.1	0.07	0.4	0.40	0.0	0.2
65-69	7	6	0.7	0.30	0.6	0.43	0.1	0.2
70-74	11	7	1.2	0.35	0.7	0.58	0.2	0.2
75-79	7	7	1.3	0.50	1.0	0.37	0.1	0.2
80-84	5	9	1.4	0.63	1.6	0.75	0.1	0.2
85+	4	7	1.7	0.80	1.2	0.78	0.1	0.1
All ages	52	44					0.2	0.2
Mortality								
Raw			0.3	0.12	0.2	0.14		
WS			0.2	0.07	0.1	0.06		
ES			0.2	0.09	0.1	0.08		
BRD-S			0.3	0.11	0.2	0.10		
PYLL-70								
per 100,000			3.1		1.1			
ES			2.8		0.9			
AYLL-70			19.7		12.1			

* See corresponding tables with multiple primaries.

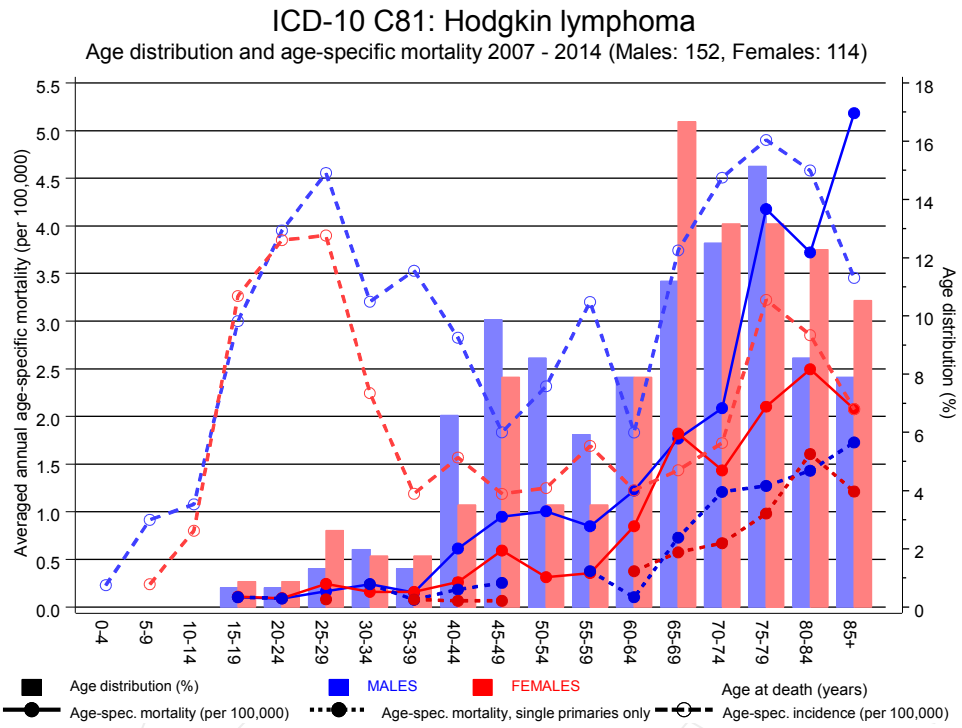
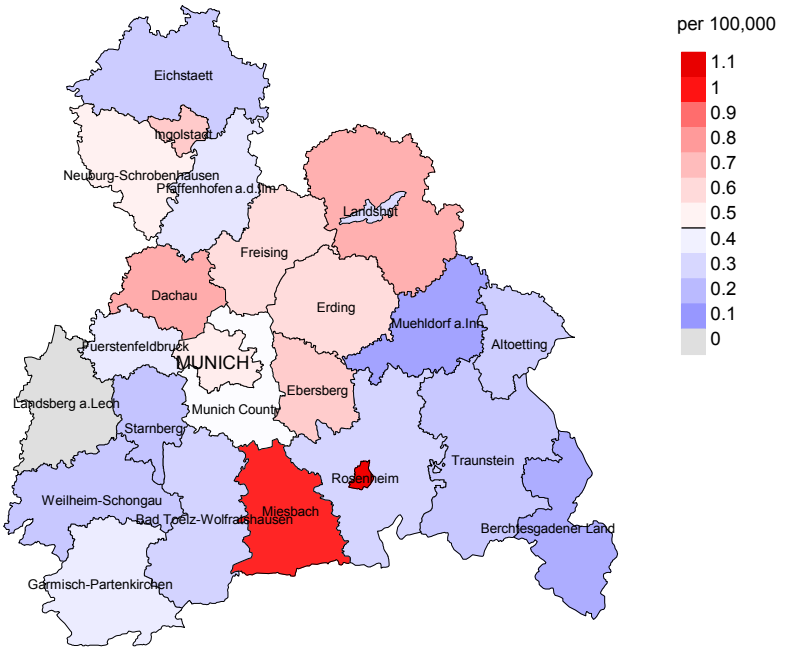


Figure 18. Distribution of age at death (bars) and age-specific mortality (all patients: solid line, patients with single primaries: dotted line). The age-specific incidence is additionally plotted for comparison (dashed line).

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

Average mortality (world standard population) 2007 - 2014: Males



Average mortality (world standard population) 2007 - 2014: Females

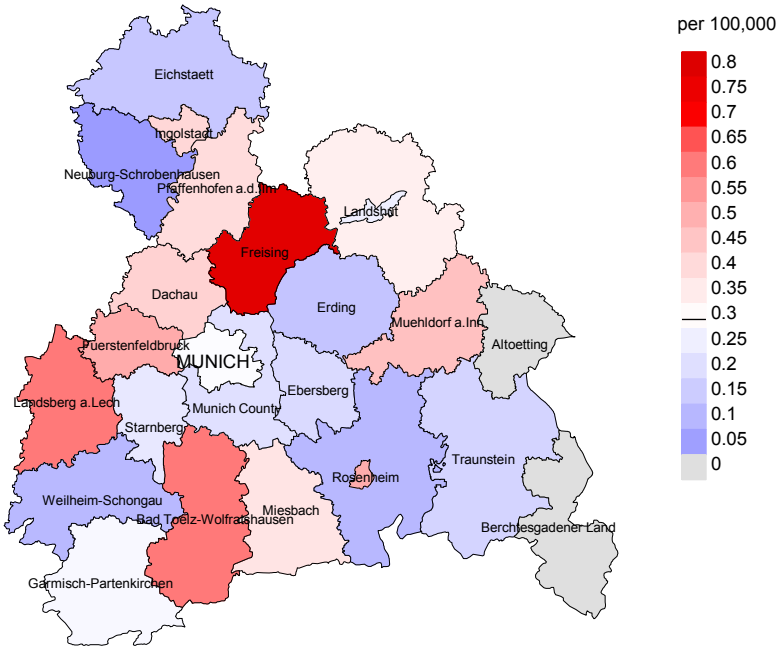
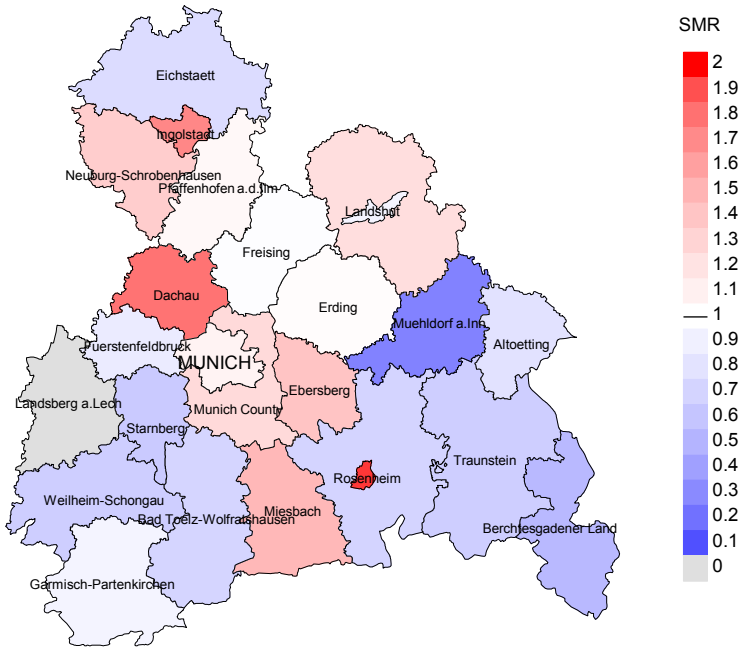


Figure 19a. Map of cancer mortality (world standard population) by county averaged for period 2007 to 2014. According to their individual mortality rates, the counties are displayed in different red and blue color temperatures where the fine white color indicates the population mean (males 0.5/100,000 WS N=150, females 0.3/100,000 WS N=113).

The results should be interpreted with caution! E.g., in county Ebersberg with a population of 65,347 female residents (averaged) in the period from 2007 to 2014 a total of 2 women died from hodgkin lymphoma. Therefore, the mean mortality rate for this cancer type in this area can be calculated at 0.2/100,000 (world standard population). Though, the value of this parameter may vary with an underlying probability of 99% between 0.0 and 1.1/100,000.

Standardized mortality ratio (SMR) 2007 - 2014: Males



Standardized mortality ratio (SMR) 2007 - 2014: Females

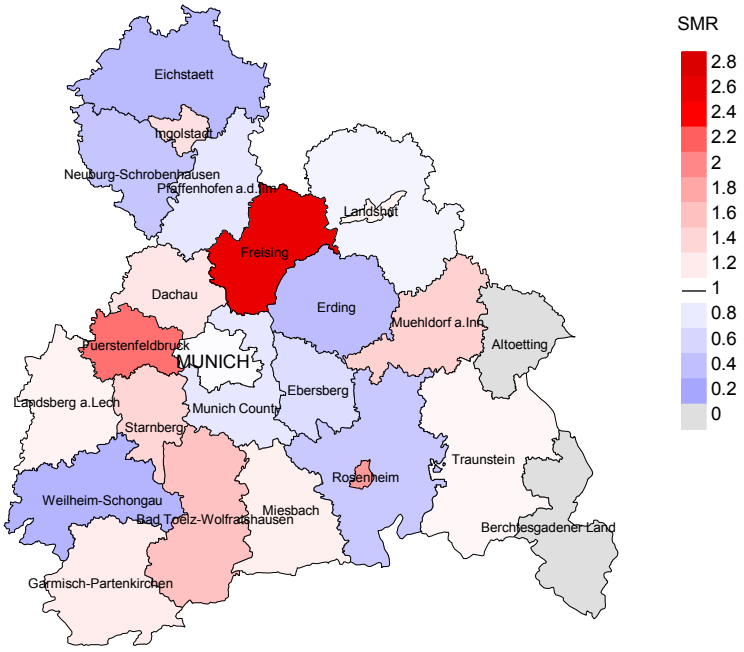


Figure 19b. Map of standardized mortality ratio (SMR, incl. DCO cases) by county averaged for period 2007 to 2014. According to their individual SMR values, the counties are displayed in different red and blue color temperatures where the fine white color indicates the population overall of 1.0 (males N=150, females N=113).

The results should be interpreted with caution! E.g., in county Ebersberg with a population of 64,924 female residents (averaged) in the period from 2007 to 2014 a total of 2 women died from hodgkin lymphoma. Therefore, the mean standardized mortality ratio (SMR) for this cancer type in this area can be calculated at 0.66. Though, the value of this parameter may vary with an underlying probability of 99% between 0.03 and 3.06, 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, where applicable. 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

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