16 All malignancies

Eingeschlossene Diagnosen entsprechend ICCC-3 (siehe Seite 95)

Seleted diagnoses according to ICCC-3 (see page 95)

Cases in Germany aged under 15 years (1980-2009): 46602
based on International Classification of Childhood Cancer, 3rd edition

Selected characteristics (Germany 2000-2009)

Relative frequency:	18053 / 18053 = 100 %
Relative frequency of trial patients:	93.0 %

Incidence rates per million:	**Girls**	**Boys**	**Total**
Number of cases:	8092	9961	18053
Standardized rate *:	147.0	171.4	159.5
Cumulative incidence:	2125	2482	2309
Sex ratio (m/f):			1.2

Age-specific incidence rates per million:

	<1	**1-4**	**5-9**	**10-14**
Number of cases :	1850	6161	4815	5227
Incidence rate:	261.1	208.1	122.2	120.7

Median age at diagnosis: 5 years 10 months

	5-year	**10-year**	**15-year**
Survival probabilities:	84 %	81 %	80 %

Mortality per million within 10 yrs. of diagnosis (1990-1999):

Number of deaths		**Standardized* mortality rate**	**Cumulative mortality**
N	% of all 4060 deaths		
4060	100.0 %	33.0	480

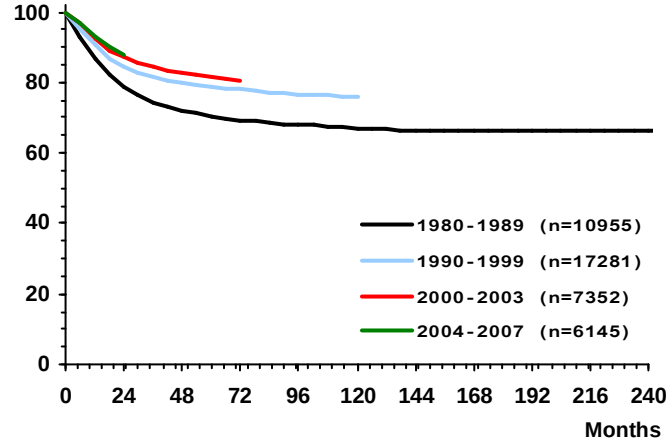
Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2009):
All malignancies

SN after all malignancies

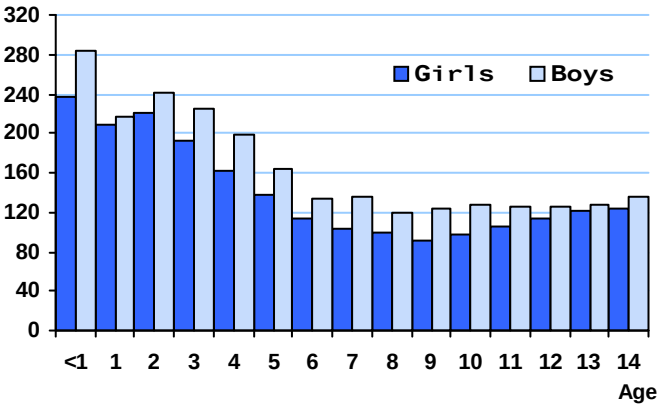
N	% of all 682 SN	Cumulative incidence
682	100.0 %	2.9 %

* Standard: Segi world standard population

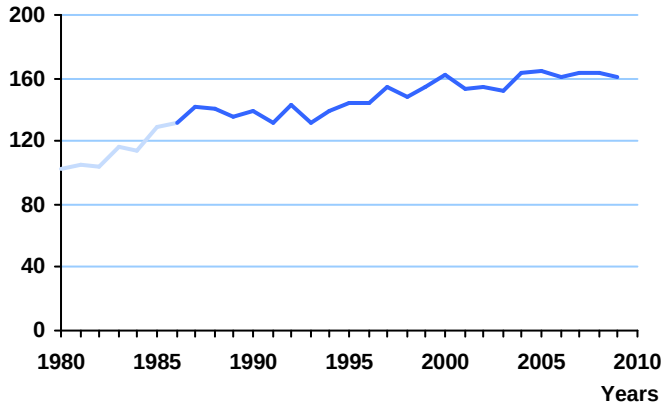
Survival probabilities by year of diagnosis (Germany 1980-2007)



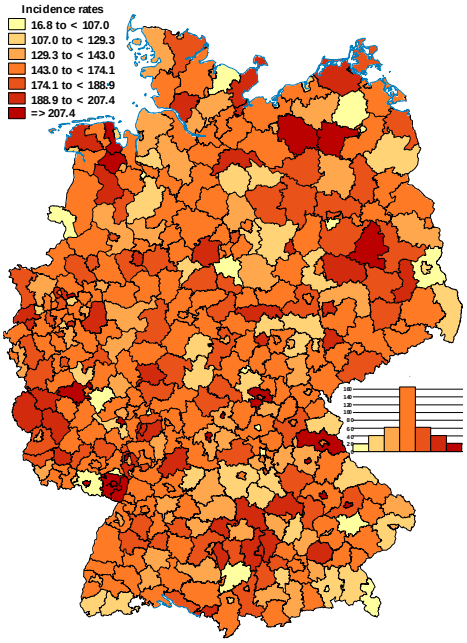
Age- and sex-specific incidence rates per million (Germany 2000-2009)



Standardized* annual incidence rates per million (Germany 1980-2009)



Standardized* incidence rates per million by districts (Landkreise) (Germany 2000-2009)



17 I Leukaemias, myeloproliferative and myelodysplastic diseases

(a) Lymphoid leukaemias
(b) Acute myeloid leukaemias
(c) Chronic myeloproliferative diseases
(d) Myelodysplastic syndrome and other myeloproliferative disease
(e) Unspecified and other specified leukaemias

Cases in Germany aged under 15 years (1980-2009): 16103
based on International Classification of Childhood Cancer, 3rd edition

Selected characteristics (Germany 2000-2009)

Relative frequency:	6122 / 18053 = 33.9 %
Relative frequency of trial patients:	99.2 %

Incidence rates per million:	**Girls**	**Boys**	**Total**
Number of cases:	2770	3352	6122
Standardized rate *:	51.6	58.6	55.2
Cumulative incidence:	734	840	788
Sex ratio (m/f):			1.2

Age-specific incidence rates per million:

	<1	**1-4**	**5-9**	**10-14**
Number of cases :	295	2773	1684	1370
Incidence rate:	41.6	93.7	42.7	31.6

Median age at diagnosis: 5 years 0 months

	5-year	**10-year**	**15-year**
Survival probabilities:	86 %	84 %	83 %

Mortality per million within 10 yrs. of diagnosis (1990-1999):

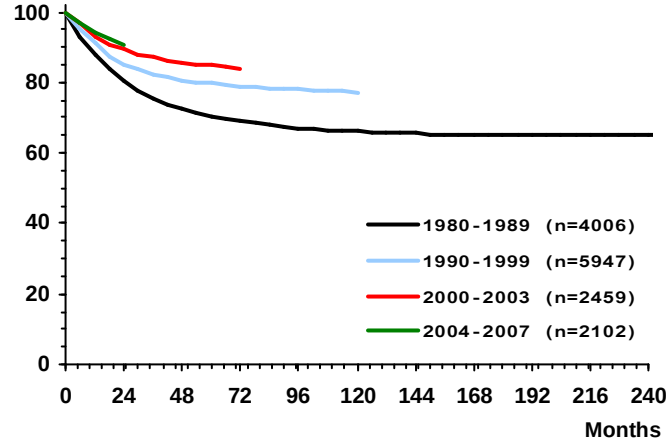
Number of deaths		**Standardized* mortality rate**	**Cumulative mortality**
N	% of all 4060 deaths		
1339	33.0 %	10.8	158

Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2009):
I Leukaemias, myeloproliferative and myelodysplastic diseases

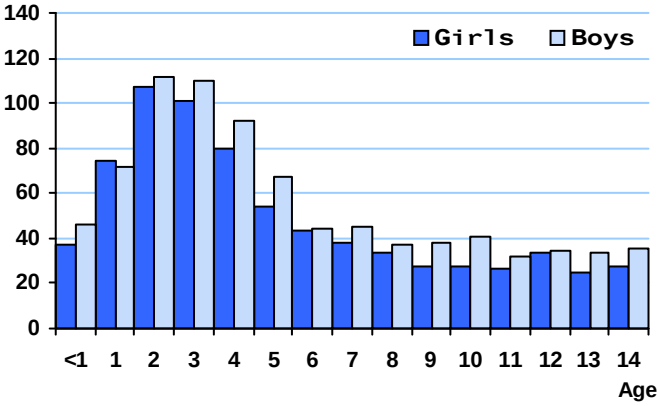
SN after I			**I as SN after any primary**		
N	% of all 682 SN	Cumulative incidence	N	% of all 682 SN	Cumulative incidence
252	37.0 %	3.0 %	205	30.1 %	0.6 %

* Standard: Segi world standard population

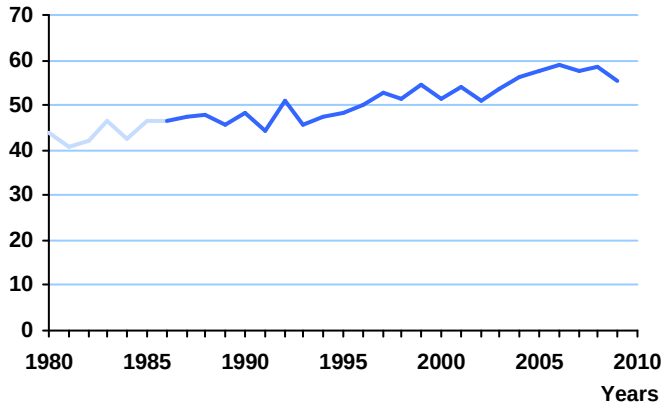
Survival probabilities by year of diagnosis (Germany 1980-2007)



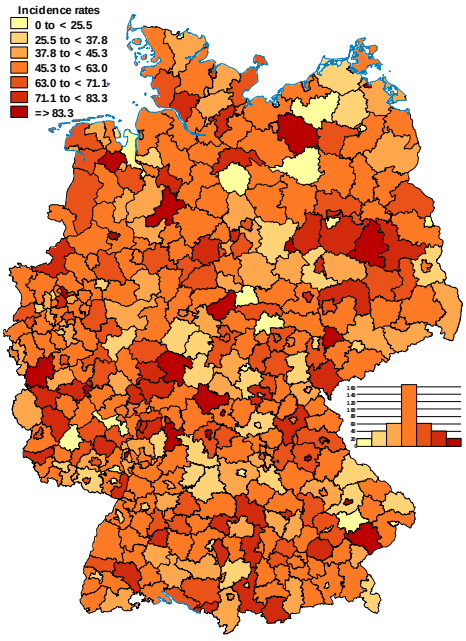
Age- and sex-specific incidence rates per million (Germany 2000-2009)



Standardized* annual incidence rates per million (Germany 1980-2009)



Standardized* incidence rates per million by districts (Landkreise) (Germany 2000-2009)



18 I (a) Lymphoid leukaemias

Until 2004, the average increase in incidence of Lymphoid Leukaemia (LL) was ca. 0.7% per year. This is similar to Europe. The literature considers this increase as real, not a registration artefact, possibly due to changes in life style. Based on international comparisons, completeness of registration is close to 100%. Compared to all childhood cancers, mortality is relatively low. LL is relatively rare as a second neoplasm.

Cases in Germany aged under 15 years (1980-2009): 12866
based on International Classification of Childhood Cancer, 3rd edition

Selected characteristics (Germany 2000-2009)

Relative frequency:	4795 / 18053 = 26.6 %
Relative frequency of trial patients:	99.7 %

Incidence rates per million:	**Girls**	**Boys**	**Total**
Number of cases:	2155	2640	4795
Standardized rate *:	40.5	46.5	43.6
Cumulative incidence:	573	663	619
Sex ratio (m/f):			1.2

Age-specific incidence rates per million:

	<1	**1-4**	**5-9**	**10-14**
Number of cases :	124	2364	1369	938
Incidence rate:	17.5	79.9	34.8	21.7

Median age at diagnosis: 4 years 10 months

	5-year	**10-year**	**15-year**
Survival probabilities:	90 %	88 %	87 %

Mortality per million within 10 yrs. of diagnosis (1990-1999):

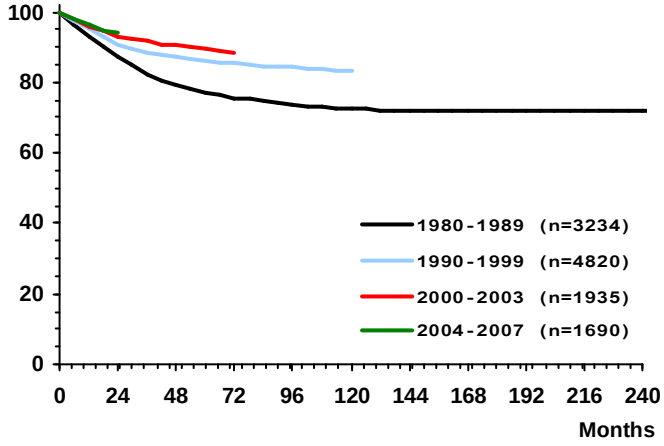
Number of deaths		**Standardized* mortality rate**	**Cumulative mortality**
N	% of all 4060 deaths		
786	19.4 %	6.3	93

Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2009):
I (a) Lymphoid leukaemias

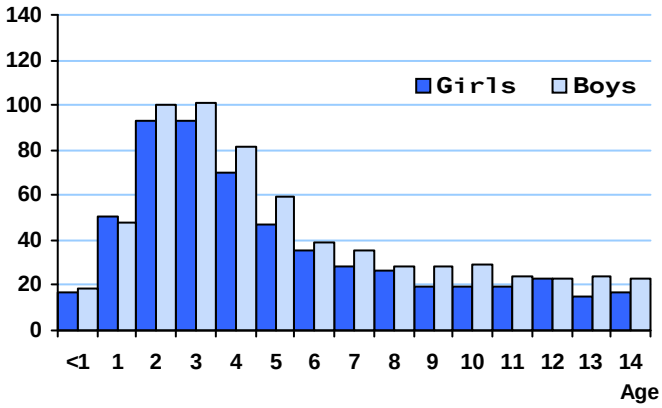
SN after I (a)			**I (a) as SN after any primary**		
N	% of all 682 SN	Cumulative incidence	N	% of all 682 SN	Cumulative incidence
213	31.2 %	3.0 %	39	5.7 %	0.1 %

* Standard: Segi world standard population

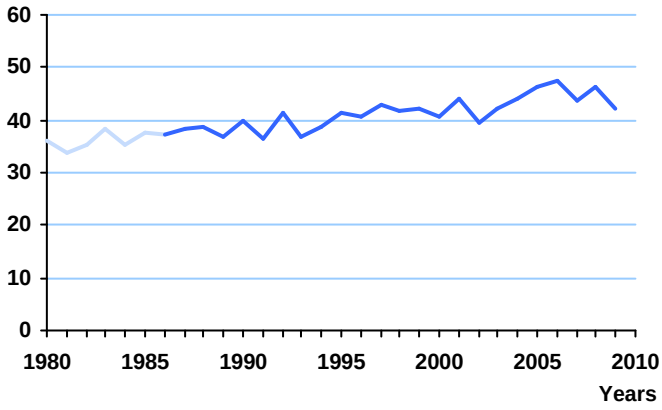
Survival probabilities by year of diagnosis (Germany 1980-2007)



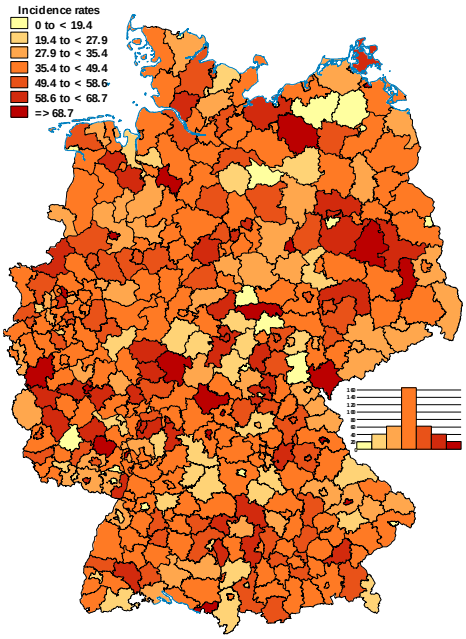
Age- and sex-specific incidence rates per million (Germany 2000-2009)



Standardized* annual incidence rates per million (Germany 1980-2009)



Standardized* incidence rates per million by districts (Landkreise) (Germany 2000-2009)



19 I (a) Lymphoid leukaemias - Extended ICCC-3

Germany (2000-2009)	N	%
Lymphoid leukaemias	**4795**	**100.0**
Precursor cell leukaemias	4677	97.5
Mature B-cell leukaemias	117	2.4
Mature T-cell and NK cell leukaemias	1	0.0
Lymphoid leukaemia, NOS	0	0.0

1 Precursor cell leukaemias

Cases in Germany aged under 15 years (1980-2009): 12558

based on International Classification of Childhood Cancer, 3rd edition

Selected characteristics (Germany 2000-2009)

Relative frequency: 4677 / 18053 = 25.9 %

Relative frequency of trial patients: 99.8 %

Incidence rates per million:	**Girls**	**Boys**	**Total**
Number of cases:	2124	2553	4677
Standardized rate *:	40.0	45.1	42.6
Cumulative incidence:	565	642	604

Sex ratio (m/f): 1.2

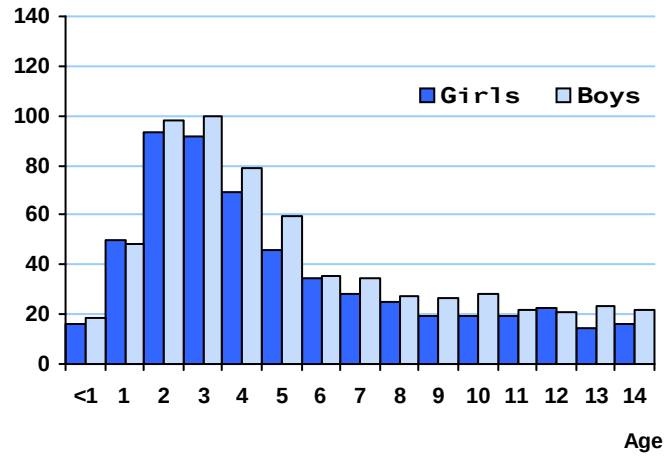
Age-specific incidence rates per million:

	<1	**1-4**	**5-9**	**10-14**
Number of cases:	122	2337	1320	898
Incidence rate:	17.2	79.0	33.5	20.7

Median age at diagnosis: 4 years 9 months

* Standard: Segi world standard population

Age- and sex-specific incidence rates per million (Germany 2000-2009)



2 Mature B-cell leukaemias

Cases in Germany aged under 15 years (1980-2009): 307

based on International Classification of Childhood Cancer, 3rd edition

Selected characteristics (Germany 2000-2009)

Relative frequency: 117 / 18053 = 0.6 %

Relative frequency of trial patients: 98.3 %

Incidence rates per million:	**Girls**	**Boys**	**Total**
Number of cases:	30	87	117
Standardized rate *:	0.5	1.4	1.0
Cumulative incidence:	8	21	15

Sex ratio (m/f): 2.9

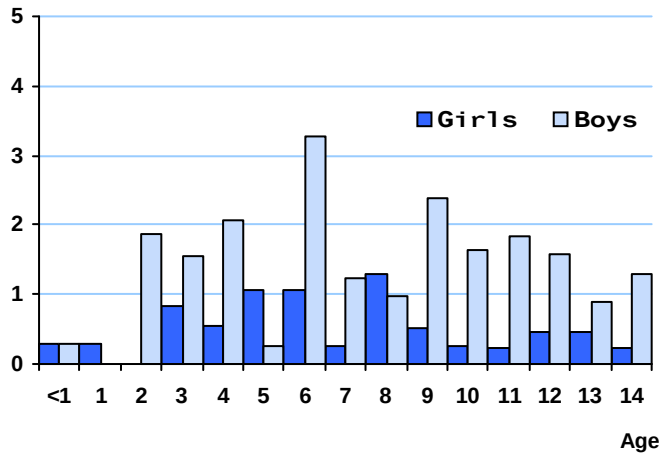
Age-specific incidence rates per million:

	<1	**1-4**	**5-9**	**10-14**
Number of cases:	2	27	49	39
Incidence rate:	0.3	0.9	1.2	0.9

Median age at diagnosis: 8 years 0 months

* Standard: Segi world standard population

Age- and sex-specific incidence rates per million (Germany 2000-2009)



20 I (b) Acute myeloid leukaemias

Based on international comparisons, completeness of registration is close to 100%. Compared to all childhood cancers, mortality is relatively high. Prognosis has improved considerably since 1980. AML occurs relatively frequently as second neoplasm.

Cases in Germany aged under 15 years (1980-2009): 2307
based on International Classification of Childhood Cancer, 3rd edition

Selected characteristics (Germany 2000-2009)

Relative frequency:	826 / 18053 = 4.6 %
Relative frequency of trial patients:	97.8 %

Incidence rates per million:	**Girls**	**Boys**	**Total**
Number of cases:	391	435	826
Standardized rate *:	7.3	7.5	7.4
Cumulative incidence:	103	108	106
Sex ratio (m/f):			1.1

Age-specific incidence rates per million:

	<1	**1-4**	**5-9**	**10-14**
Number of cases :	119	279	174	254
Incidence rate:	16.8	9.4	4.4	5.9

Median age at diagnosis: 5 years 5 months

	5-year	**10-year**	**15-year**
Survival probabilities:	66 %	65 %	64 %

Mortality per million within 10 yrs. of diagnosis (1990-1999):

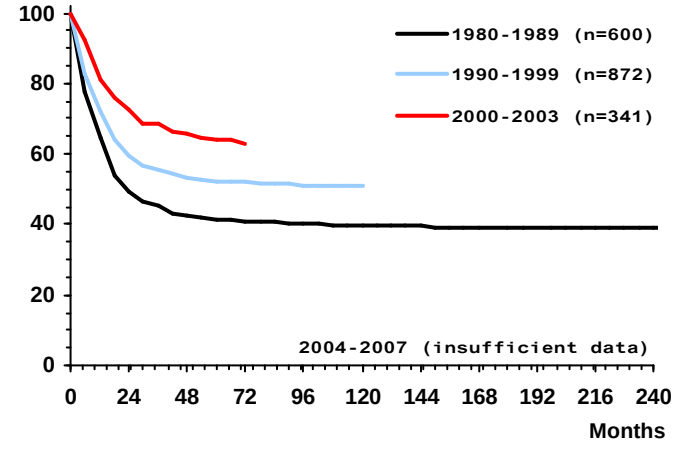
Number of deaths		**Standardized* mortality rate**	**Cumulative mortality**
N	% of all 4060 deaths		
427	10.5 %	3.5	51

Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2009):
I (b) Acute myeloid leukaemias

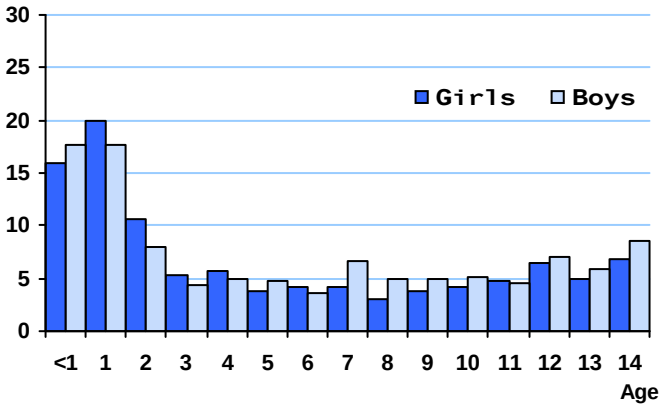
SN after I (b)			**I (b) as SN after any primary**		
N	% of all 682 SN	Cumulative incidence	N	% of all 682 SN	Cumulative incidence
26	3.8 %	2.5 %	120	17.6 %	0.4 %

* Standard: Segi world standard population

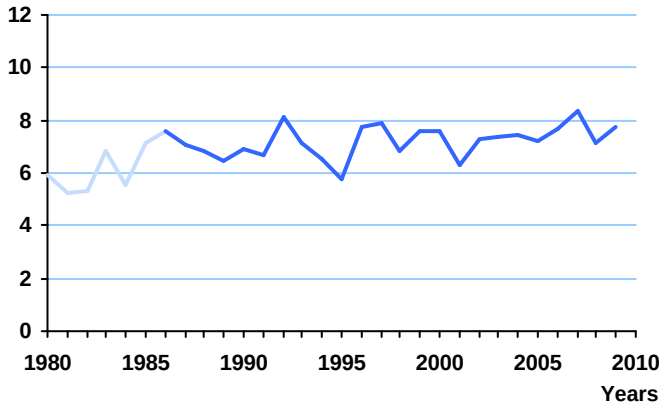
Survival probabilities by year of diagnosis (Germany 1980-2007)



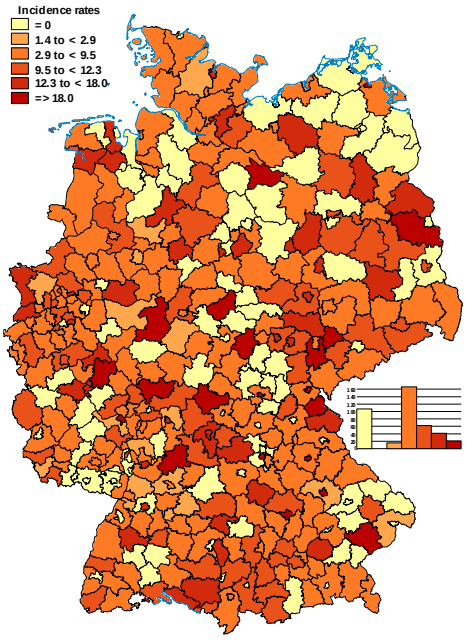
Age- and sex-specific incidence rates per million (Germany 2000-2009)



Standardized* annual incidence rates per million (Germany 1980-2009)



Standardized* incidence rates per million by districts (Landkreise) (Germany 2000-2009)



21 I (c) Chronic myeloproliferative diseases

Rare in early childhood. Based on international comparisons, completeness of registration is close to 100%. Second neoplasms after CM diseases are relatively rare, underreporting is a possibility.

Cases in Germany aged under 15 years (1980-2009): 219
based on International Classification of Childhood Cancer, 3rd edition

Selected characteristics (Germany 2000-2009)

Relative frequency:	80 / 18053 = 0.4 %
Relative frequency of trial patients:	86.3 %

Incidence rates per million:	**Girls**	**Boys**	**Total**
Number of cases:	45	35	80
Standardized rate *:	0.7	0.5	0.6
Cumulative incidence:	11	8	10
Sex ratio (m/f):			0.8

Age-specific incidence rates per million:

	<1	**1-4**	**5-9**	**10-14**
Number of cases :	0	9	30	41
Incidence rate:	0.0	0.3	0.8	0.9

Median age at diagnosis: 10 years 3 months

Survival probabilities:	**5-year**	**10-year**	**15-year**
	-	-	-

Mortality per million within 10 yrs. of diagnosis (1990-1999):

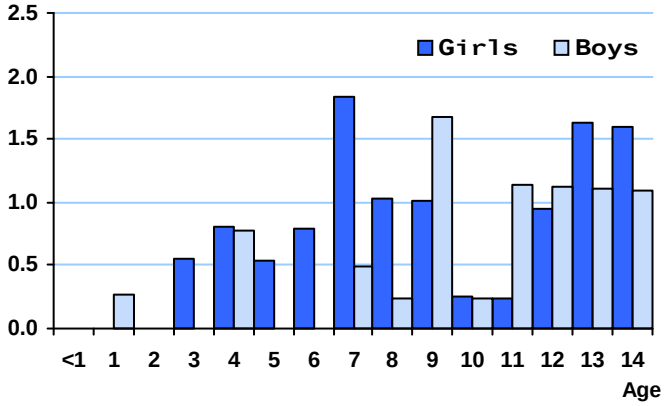
Number of deaths		Standardized*	Cumulative
N	% of all 4060 deaths	mortality rate	mortality
33	0.8 %	0.3	4

Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2009):
I (c) Chronic myeloproliferative diseases

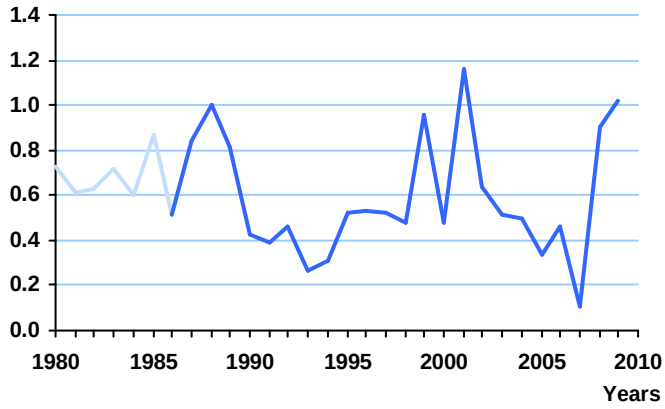
SN after I (c)			I (c) as SN after any primary		
N	% of all 682 SN	Cumulative incidence	N	% of all 682 SN	Cumulative incidence
2	0.3 %	1.5 %	1	0.1 %	0.0 %

* Standard: Segi world standard population

Age- and sex-specific incidence rates per million (Germany 2000-2009)



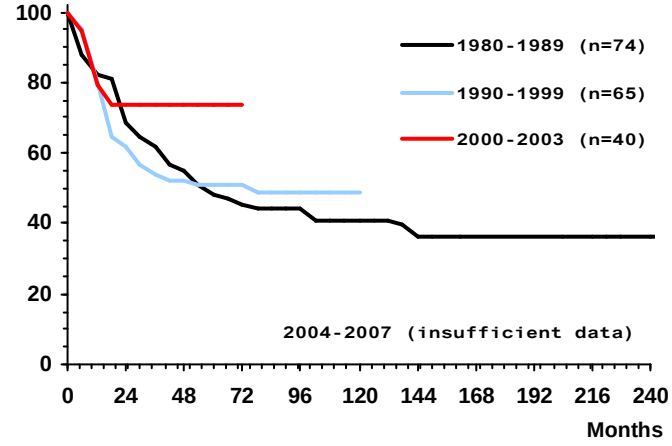
Standardized* annual incidence rates per million (Germany 1980-2009)



Standardized* incidence rates per million by districts (Landkreise) (Germany 2000-2009)

No map due to sparse data

Survival probabilities by year of diagnosis (Germany 1980-2007)



22 I (d) Myelodysplastic syndrome and other myeloproliferative diseases

MDS was reclassified as malignant at the introduction of ICD-O-3, so earlier registration is incomplete The visible trend is a registration artefact. Prognosis has improved considerably since 1980. MDS is relatively frequently followed by a second neoplasm within 20 years of diagnosis. MDS is relatively frequent as a second neoplasm.

Cases in Germany aged under 15 years (1980-2009): 561
based on International Classification of Childhood Cancer, 3rd edition

Selected characteristics (Germany 2000-2009)

Relative frequency:	357 / 18053 = 2.0 %
Relative frequency of trial patients:	98.0 %

Incidence rates per million:	**Girls**	**Boys**	**Total**
Number of cases:	149	208	357
Standardized rate *:	2.6	3.6	3.1
Cumulative incidence:	39	52	45
Sex ratio (m/f):			1.4

Age-specific incidence rates per million:

	<1	**1-4**	**5-9**	**10-14**
Number of cases :	38	108	92	119
Incidence rate:	5.4	3.6	2.3	2.7

Median age at diagnosis: 6 years 9 months

	5-year	**10-year**	**15-year**
Survival probabilities:	75 %	75 %	75 %

Mortality per million within 10 yrs. of diagnosis (1990-1999):

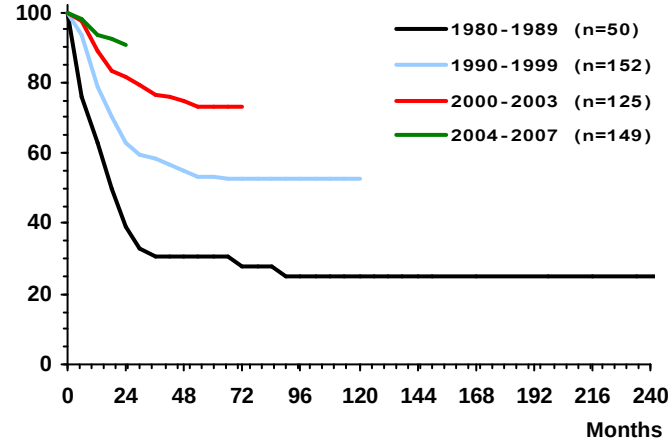
Number of deaths		**Standardized* mortality rate**	**Cumulative mortality**
N	% of all 4060 deaths		
73	1.8 %	0.6	9

Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2009):
I (d) Myelodysplastic syndrome and other myeloproliferative diseases

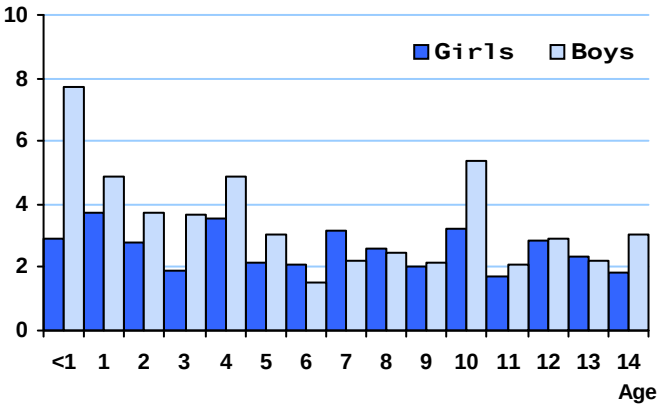
SN after I (d)			**I (d) as SN after any primary**		
N	% of all 682 SN	Cumulative incidence	N	% of all 682 SN	Cumulative incidence
5	0.7 %	6.1 %	44	6.5 %	0.1 %

* Standard: Segi world standard population

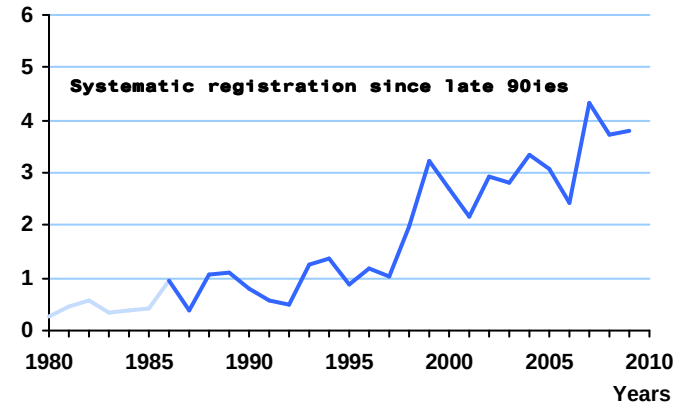
Survival probabilities by year of diagnosis (Germany 1980-2007)



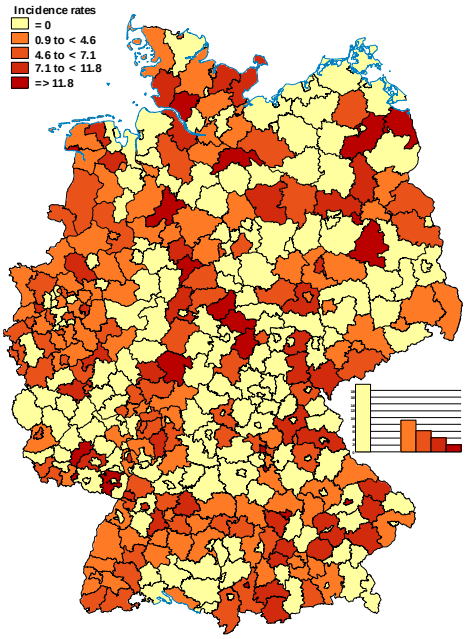
Age- and sex-specific incidence rates per million (Germany 2000-2009)



Standardized* annual incidence rates per million (Germany 1980-2009)



Standardized* incidence rates per million by districts (Landkreise) (Germany 2000-2009)



23 II Lymphomas and reticuloendothelial neoplasms

(a) Hodgkin lymphomas
(b) Non-Hodgkin lymphomas (except Burkitt lymphoma)
(c) Burkitt lymphoma
(d) Miscellaneous lymphoreticular neoplasms
(e) Unspecified lymphomas

Cases in Germany aged under 15 years (1980-2009): 5566
based on International Classification of Childhood Cancer, 3rd edition

Selected characteristics (Germany 2000-2009)

Relative frequency:	2062 / 18053 = 11.4 %
Relative frequency of trial patients:	96.5 %

Incidence rates per million:	**Girls**	**Boys**	**Total**
Number of cases:	688	1374	2062
Standardized rate *:	10.5	20.7	15.7
Cumulative incidence:	170	328	251

Sex ratio (m/f): 2.0

Age-specific incidence rates per million:

	<1	**1-4**	**5-9**	**10-14**
Number of cases :	16	225	696	1125
Incidence rate:	2.3	7.6	17.7	26.0

Median age at diagnosis: 10 years 7 months

Survival probabilities:	**5-year**	**10-year**	**15-year**
	94 %	93 %	92 %

Mortality per million within 10 yrs. of diagnosis (1990-1999):

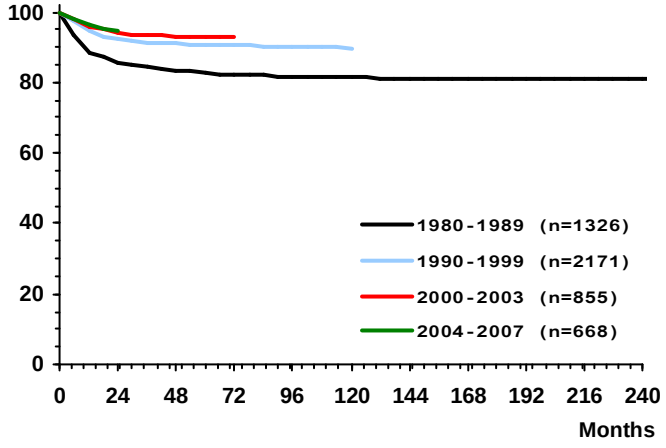
Number of deaths		**Standardized* mortality rate**	**Cumulative mortality**
N	% of all 4060 deaths		
219	5.4 %	1.7	26

Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2009):
II Lymphomas and reticuloendothelial neoplasms

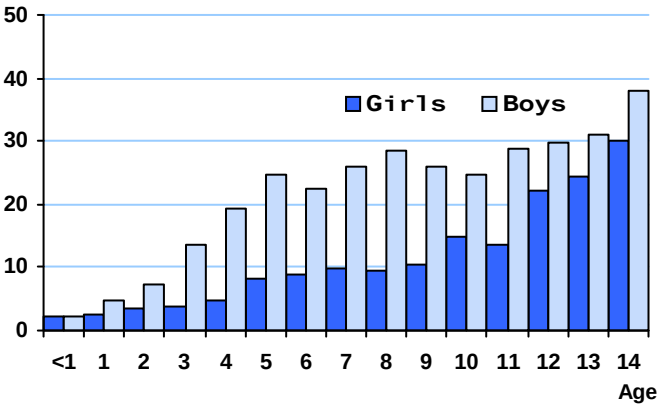
SN after II			**II as SN after any primary**		
N	% of all 682 SN	Cumulative incidence	N	% of all 682 SN	Cumulative incidence
115	16.9 %	4.9 %	71	10.4 %	0.3 %

* Standard: Segi world standard population

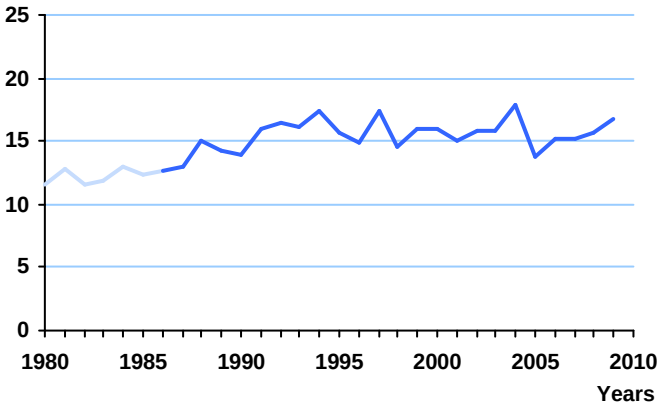
Survival probabilities by year of diagnosis (Germany 1980-2007)



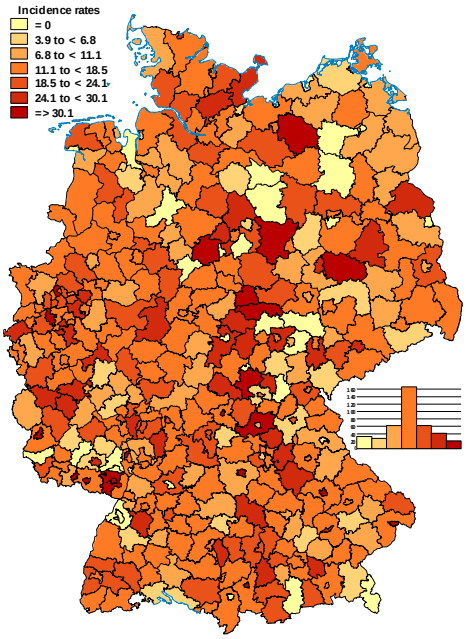
Age- and sex-specific incidence rates per million (Germany 2000-2009)



Standardized* annual incidence rates per million (Germany 1980-2009)



Standardized* incidence rates per million by districts (Landkreise) (Germany 2000-2009)



24 II (a) Hodgkin lymphomas

Hodgkin's diease (HD) is rare in early childhood. Based on international comparisons, completeness of registration is close to 100%. Compared to all childhood cancers, mortality is relatively low. HD is relatively frequently followed by a second neoplasm within 20 years of diagnosis.

Cases in Germany aged under 15 years (1980-2009): 2291
based on International Classification of Childhood Cancer, 3rd edition

Selected characteristics (Germany 2000-2009)

Relative frequency:	879 / 18053 = 4.9 %
Relative frequency of trial patients:	97.4 %

Incidence rates per million:	**Girls**	**Boys**	**Total**
Number of cases:	360	519	879
Standardized rate *:	5.1	7.4	6.3
Cumulative incidence:	87	121	104
Sex ratio (m/f):			1.4

Age-specific incidence rates per million:

	<1	**1-4**	**5-9**	**10-14**
Number of cases :	0	31	203	645
Incidence rate:	0.0	1.0	5.2	14.9

Median age at diagnosis: 12 years 5 months

	5-year	**10-year**	**15-year**
Survival probabilities:	98 %	97 %	96 %

Mortality per million within 10 yrs. of diagnosis (1990-1999):

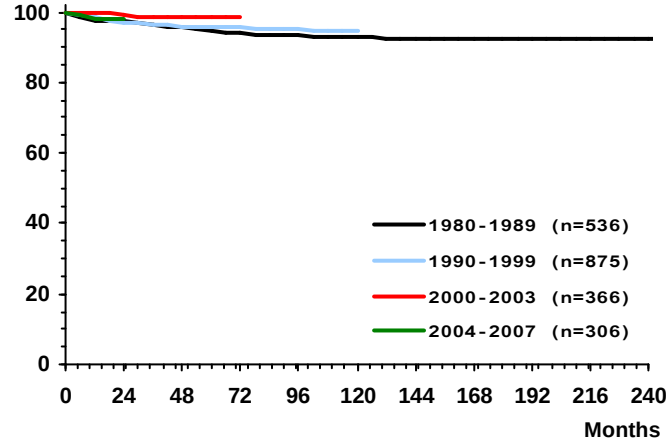
Number of deaths		**Standardized* mortality rate**	**Cumulative mortality**
N	% of all 4060 deaths		
47	1.2 %	0.3	5

Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2009):
II (a) Hodgkin lymphomas

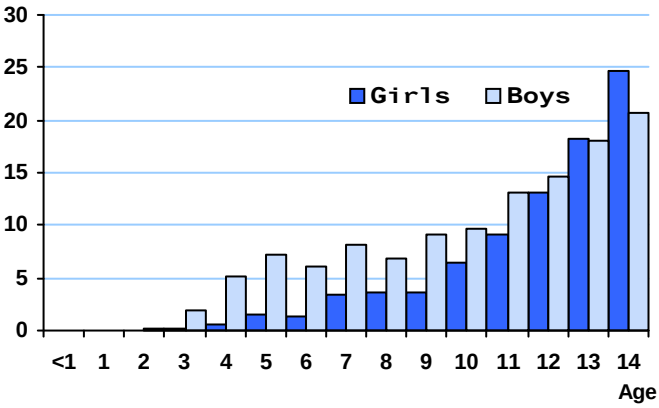
SN after II (a)			**II (a) as SN after any primary**		
N	% of all 682 SN	Cumulative incidence	N	% of all 682 SN	Cumulative incidence
58	8.5 %	8.4 %	15	2.2 %	0.1 %

* Standard: Segi world standard population

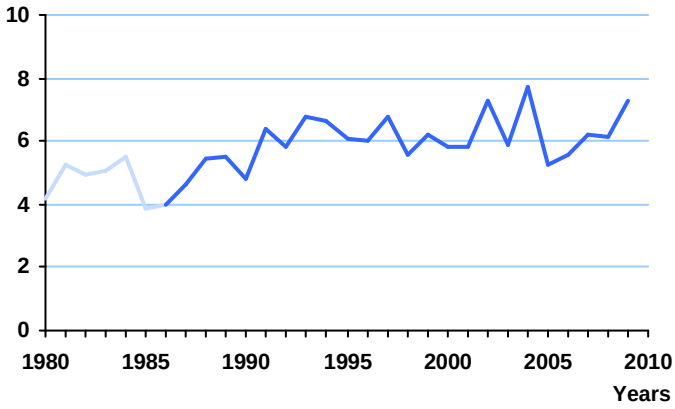
Survival probabilities by year of diagnosis (Germany 1980-2007)



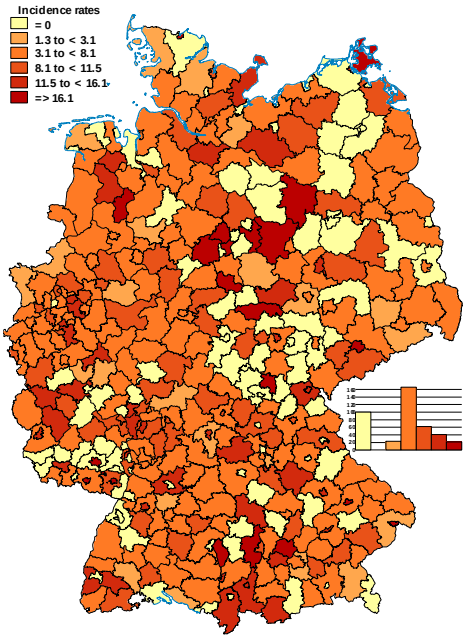
Age- and sex-specific incidence rates per million (Germany 2000-2009)



Standardized* annual incidence rates per million (Germany 1980-2009)



Standardized* incidence rates per million by districts (Landkreise) (Germany 2000-2009)



25 II (b) Non-Hodgkin lymphomas

Based on international comparisons, completeness of registration is close to 100%. Prognosis has improved considerably since 1980.

Cases in Germany aged under 15 years (1980-2009): 2165
based on International Classification of Childhood Cancer, 3rd edition

Selected characteristics (Germany 2000-2009)

Relative frequency:	792 / 18053 = 4.4 %
Relative frequency of trial patients:	94.8 %

Incidence rates per million:	**Girls**	**Boys**	**Total**
Number of cases:	254	538	792
Standardized rate *:	4.1	8.3	6.2
Cumulative incidence:	64	129	98
Sex ratio (m/f):			2.1

Age-specific incidence rates per million:

	<1	**1-4**	**5-9**	**10-14**
Number of cases :	9	122	310	351
Incidence rate:	1.3	4.1	7.9	8.1

Median age at diagnosis: 9 years 3 months

Survival probabilities:	**5-year**	**10-year**	**15-year**
	89 %	88 %	87 %

Mortality per million within 10 yrs. of diagnosis (1990-1999):

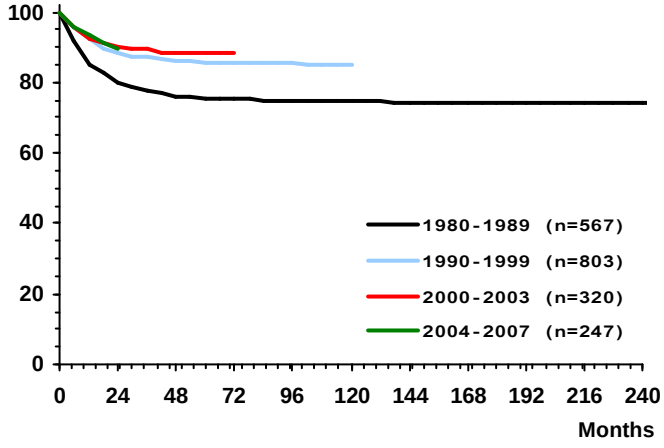
Number of deaths		Standardized*	Cumulative
N	% of all 4060 deaths	mortality rate	mortality
120	3.0 %	0.9	14

Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2009):
II (b) Non-Hodgkin lymphomas

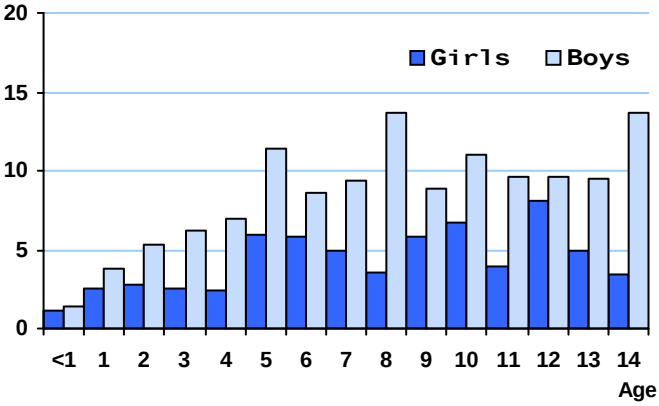
SN after II (b)			II (b) as SN after any primary		
N	% of all 682 SN	Cumulative incidence	N	% of all 682 SN	Cumulative incidence
44	6.5 %	3.3 %	47	6.9 %	0.2 %

* Standard: Segi world standard population

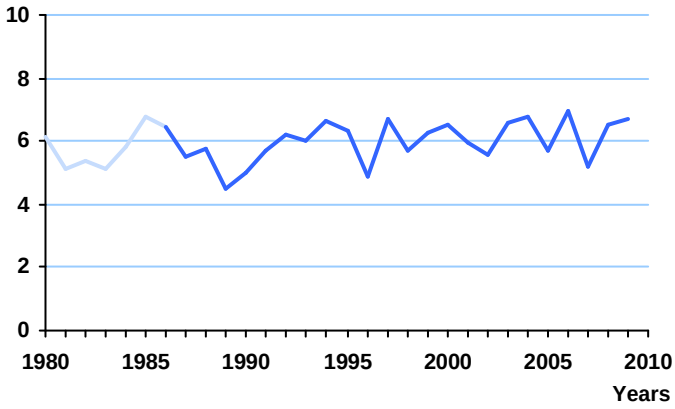
Survival probabilities by year of diagnosis (Germany 1980-2007)



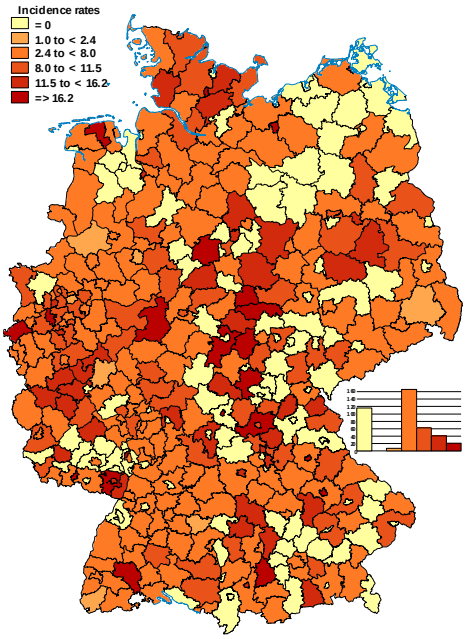
Age- and sex-specific incidence rates per million (Germany 2000-2009)



Standardized* annual incidence rates per million (Germany 1980-2009)



Standardized* incidence rates per million by districts (Landkreise) (Germany 2000-2009)



26 II (b) Non-Hodgkin lymphomas - Extended ICCC-3

Germany (2000-2009)	N	%
Non-Hodgkin lymphomas	**792**	**100.0**
Precursor cell lymphomas	344	43.4
Mature B-cell lymphomas (except Burkitt lymphoma)	159	20.1
Mature T-cell and NK-cell lymphomas	157	19.8
Non-Hodgkin lymphomas, NOS	132	16.7

1 Precursor cell lymphomas

Cases in Germany aged under 15 years (1980-2009): 875

based on International Classification of Childhood Cancer, 3rd edition

Selected characteristics (Germany 2000-2009)

Relative frequency:	344 / 18053 = 1.9 %
Relative frequency of trial patients:	95.9 %

Incidence rates per million:	**Girls**	**Boys**	**Total**
Number of cases:	114	230	344
Standardized rate *:	1.9	3.6	2.8
Cumulative incidence:	29	56	43

Sex ratio (m/f): 2.0

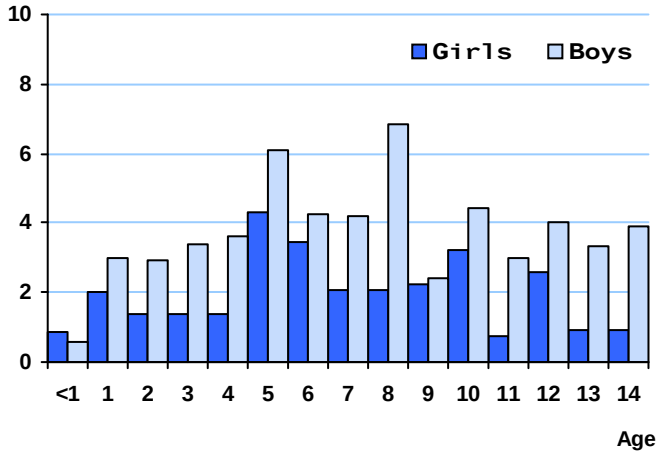
Age-specific incidence rates per million:

	<1	**1-4**	**5-9**	**10-14**
Number of cases:	5	71	150	118
Incidence rate:	0.7	2.4	3.8	2.7

Median age at diagnosis: 8 years 0 months

* Standard: Segi world standard population

Age- and sex-specific incidence rates per million (Germany 2000-2009)



2 Mature B-cell lymphomas (except Burkitt lymphoma)

Cases in Germany aged under 15 years (1980-2009): 332

based on International Classification of Childhood Cancer, 3rd edition

Selected characteristics (Germany 2000-2009)

Relative frequency:	159 / 18053 = 0.9 %
Relative frequency of trial patients:	97.5 %

Incidence rates per million:	**Girls**	**Boys**	**Total**
Number of cases:	50	109	159
Standardized rate *:	0.8	1.6	1.2
Cumulative incidence:	13	26	19

Sex ratio (m/f): 2.2

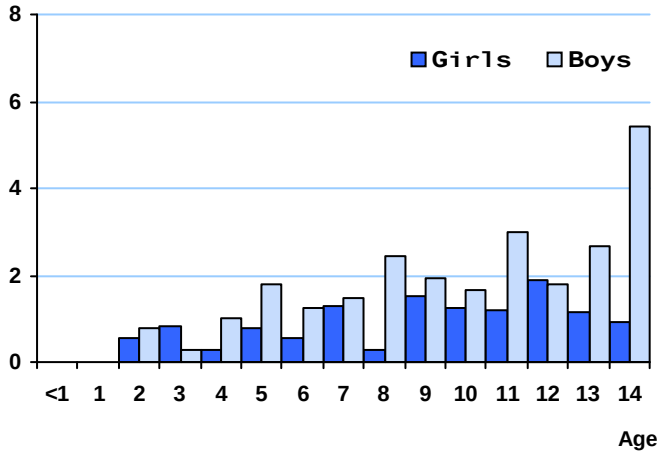
Age-specific incidence rates per million:

	<1	**1-4**	**5-9**	**10-14**
Number of cases:	0	14	53	92
Incidence rate:	0.0	0.5	1.3	2.1

Median age at diagnosis: 11 years 0 months

* Standard: Segi world standard population

Age- and sex-specific incidence rates per million (Germany 2000-2009)



27 II (b) Non-Hodgkin lymphomas - Extended ICCC-3

Germany (2000-2009)	N	%
Non-Hodgkin lymphomas	**792**	**100.0**
Precursor cell lymphomas	344	43.4
Mature B-cell lymphomas (except Burkitt lymphoma)	159	20.1
Mature T-cell and NK-cell lymphomas	157	19.8
Non-Hodgkin lymphomas, NOS	132	16.7

3 Mature T-cell and NK-cell lymphomas

Cases in Germany aged under 15 years (1980-2009): 374

based on International Classification of Childhood Cancer, 3rd edition

Selected characteristics (Germany 2000-2009)

Relative frequency:	157 / 18053 = 0.9 %
Relative frequency of trial patients:	94.9 %

Incidence rates per million:	**Girls**	**Boys**	**Total**
Number of cases:	52	105	157
Standardized rate *:	0.8	1.6	1.2
Cumulative incidence:	13	25	19

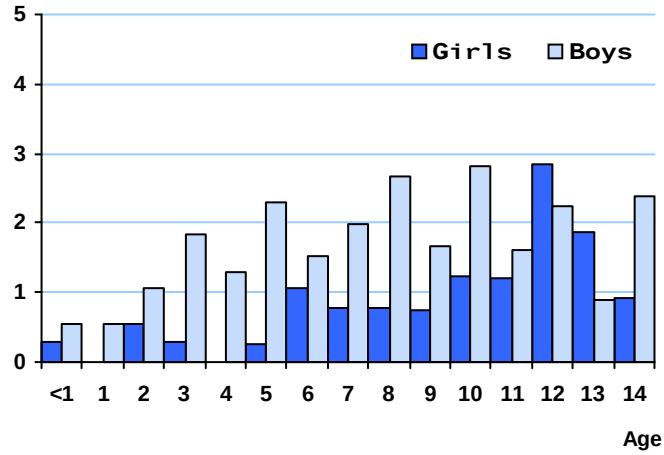
Sex ratio (m/f): 2.0

Age-specific incidence rates per million:	**<1**	**1-4**	**5-9**	**10-14**
Number of cases:	3	21	55	78
Incidence rate:	0.4	0.7	1.4	1.8

Median age at diagnosis: 9 years 9 months

* Standard: Segi world standard population

Age- and sex-specific incidence rates per million (Germany 2000-2009)



4 Non-Hodgkin lymphomas, NOS

Cases in Germany aged under 15 years (1980-2009): 584

based on International Classification of Childhood Cancer, 3rd edition

Selected characteristics (Germany 2000-2009)

Relative frequency:	132 / 18053 = 0.7 %
Relative frequency of trial patients:	88.6 %

Incidence rates per million:	**Girls**	**Boys**	**Total**
Number of cases:	38	94	132
Standardized rate *:	0.6	1.4	1.0
Cumulative incidence:	10	22	16

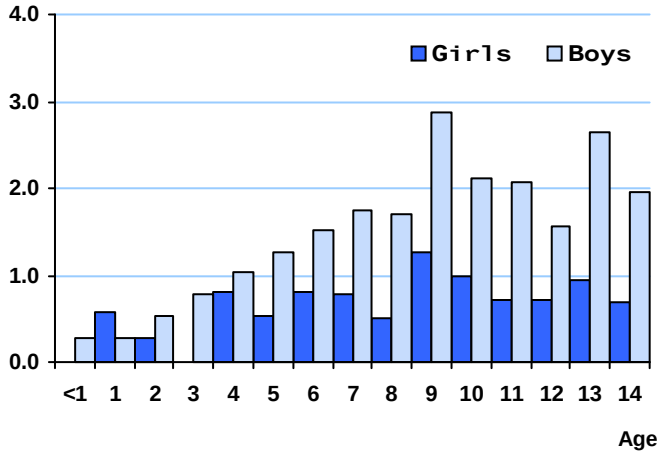
Sex ratio (m/f): 2.5

Age-specific incidence rates per million:	**<1**	**1-4**	**5-9**	**10-14**
Number of cases:	1	16	52	63
Incidence rate:	0.1	0.5	1.3	1.5

Median age at diagnosis: 9 years 10 months

* Standard: Segi world standard population

Age- and sex-specific incidence rates per million (Germany 2000-2009)



28 II (c) Burkitt lymphoma

Burkitt lymphoma (BL) is a subtype of Non-Hodgkin lymphomas. Based on international comparisons, completeness of registration is close to 100% since 1988. Prognosis has improved considerably since 1980. BL is rare as a second neoplasm.

Cases in Germany aged under 15 years (1980-2009): 991
based on International Classification of Childhood Cancer, 3rd edition

Selected characteristics (Germany 2000-2009)

Relative frequency:	377 / 18053 = 2.1 %
Relative frequency of trial patients:	98.7 %

Incidence rates per million:	**Girls**	**Boys**	**Total**
Number of cases:	68	309	377
Standardized rate *:	1.1	4.9	3.0
Cumulative incidence:	17	75	47
Sex ratio (m/f):			4.5

Age-specific incidence rates per million:

	<1	**1-4**	**5-9**	**10-14**
Number of cases :	1	68	182	126
Incidence rate:	0.1	2.3	4.6	2.9

Median age at diagnosis: 8 years 3 months

Survival probabilities:	**5-year**	**10-year**	**15-year**
	94 %	94 %	94 %

Mortality per million within 10 yrs. of diagnosis (1990-1999):

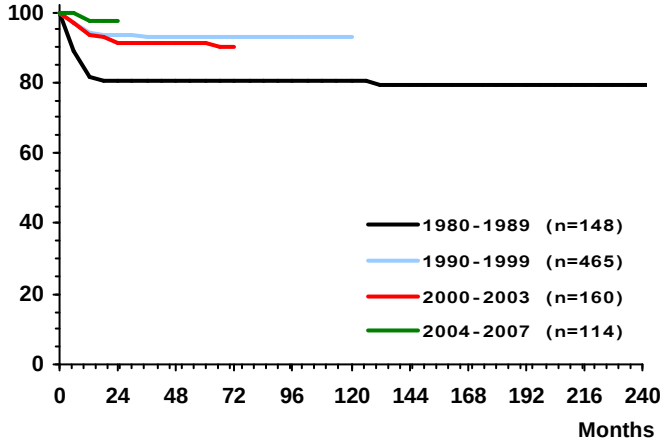
Number of deaths		Standardized*	Cumulative
N	% of all 4060 deaths	mortality rate	mortality
33	0.8 %	0.2	4

Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2009):
II (c) Burkitt lymphoma

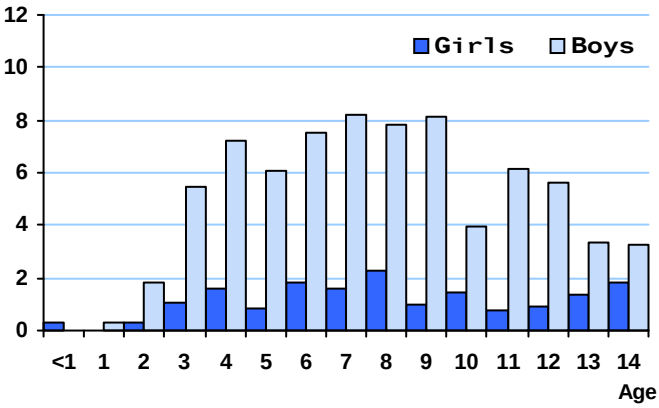
SN after II (c)			II (c) as SN after any primary		
N	% of all 682 SN	Cumulative incidence	N	% of all 682 SN	Cumulative incidence
13	1.9 %	2.0 %	3	0.4 %	0.0 %

* Standard: Segi world standard population

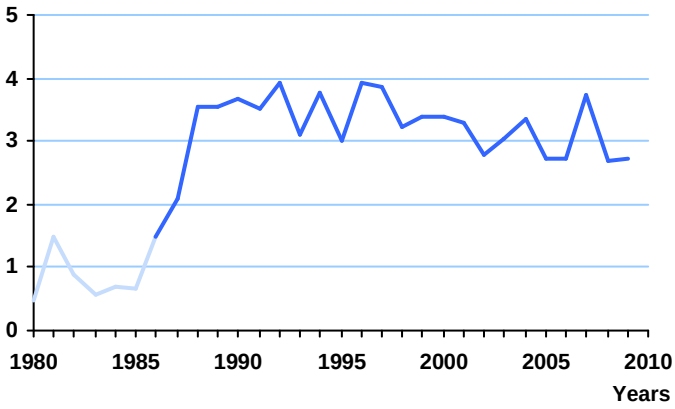
Survival probabilities by year of diagnosis (Germany 1980-2007)



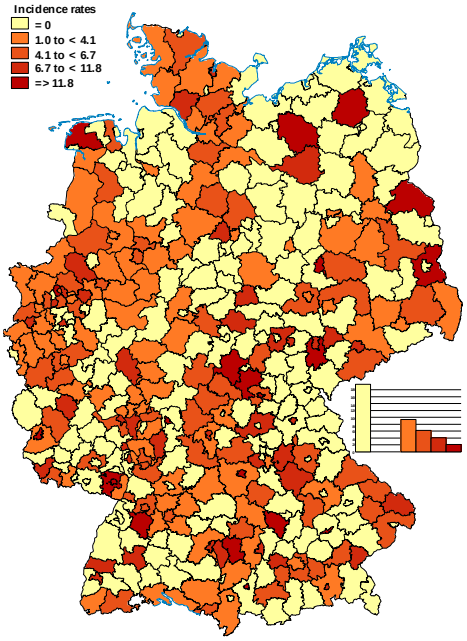
Age- and sex-specific incidence rates per million (Germany 2000-2009)



Standardized* annual incidence rates per million (Germany 1980-2009)



Standardized* incidence rates per million by districts (Landkreise) (Germany 2000-2009)



29 III CNS and miscellaneous intracranial and intraspinal neoplasms

(a) Ependymomas and choroid plexus tumour
(b) Astrocytomas
(c) Intracranial and intraspinal embryonal tumours
(d) Other gliomas
(e) Other specified intracranial and intraspinal neoplasms
(f) Unspecified intracranial and intraspinal neoplasms

Cases in Germany aged under 15 years (1980-2009): 9708
based on International Classification of Childhood Cancer, 3rd edition

Selected characteristics (Germany 2000-2009)

Relative frequency:	4133 / 18053 = 22.9 %
Relative frequency of trial patients:	88.3 %

Incidence rates per million:	**Girls**	**Boys**	**Total**
Number of cases:	1848	2285	4133
Standardized rate *:	32.7	38.3	35.6
Cumulative incidence:	482	565	525
Sex ratio (m/f):			1.2

Age-specific incidence rates per million:

	<1	**1-4**	**5-9**	**10-14**
Number of cases :	309	1182	1413	1229
Incidence rate:	43.6	39.9	35.9	28.4

Median age at diagnosis: 7 years 0 months

	5-year	**10-year**	**15-year**
Survival probabilities:	76 %	71 %	69 %

Mortality per million within 10 yrs. of diagnosis (1990-1999):

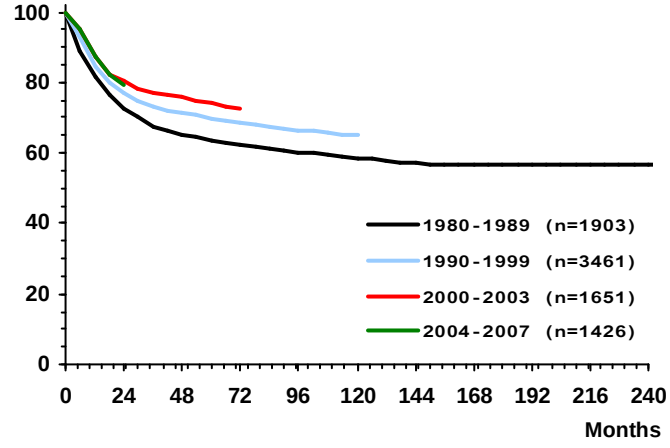
Number of deaths		**Standardized* mortality rate**	**Cumulative mortality**
N	% of all 4060 deaths		
1139	28.1 %	9.2	134

Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2009):
III CNS and miscellaneous intracranial and intraspinal neoplasms

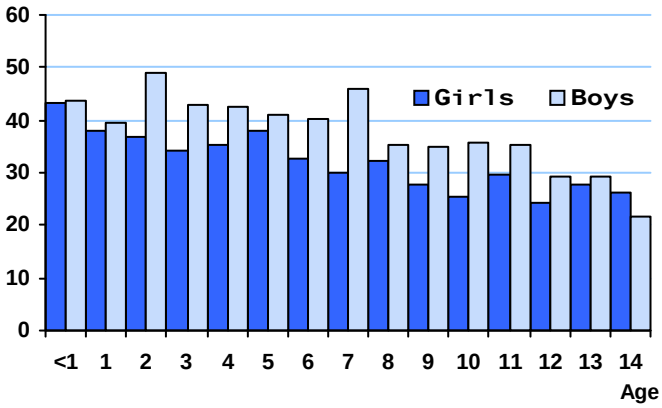
SN after III			**III as SN after any primary**		
N	% of all 682 SN	Cumulative incidence	N	% of all 682 SN	Cumulative incidence
115	16.9 %	2.7 %	147	21.6 %	0.7 %

* Standard: Segi world standard population

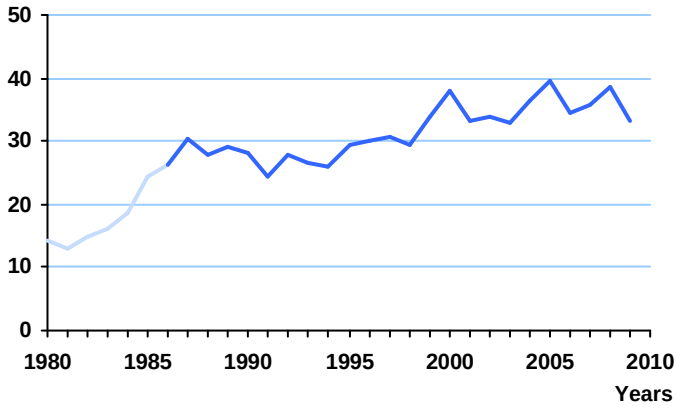
Survival probabilities by year of diagnosis (Germany 1980-2007)



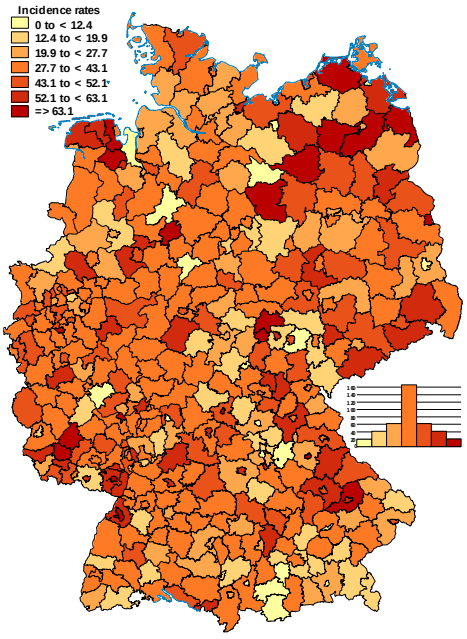
Age- and sex-specific incidence rates per million (Germany 2000-2009)



Standardized* annual incidence rates per million (Germany 1980-2009)



Standardized* incidence rates per million by districts (Landkreise) (Germany 2000-2009)



30 III (a) Ependymomas and choroid plexus tumour

Non-malignant forms are rare, otherwise completeness of registration exceeds 95%. Ependymomas are relatively rare as second neoplasms.

Cases in Germany aged under 15 years (1980-2009): 984
based on International Classification of Childhood Cancer, 3rd edition

Selected characteristics (Germany 2000-2009)

Relative frequency:	407 / 18053 = 2.3 %
Relative frequency of trial patients:	89.7 %

Incidence rates per million:	**Girls**	**Boys**	**Total**
Number of cases:	166	241	407
Standardized rate *:	3.2	4.3	3.8
Cumulative incidence:	45	61	53
Sex ratio (m/f):			1.5

Age-specific incidence rates per million:

	<1	**1-4**	**5-9**	**10-14**
Number of cases :	62	177	75	93
Incidence rate:	8.7	6.0	1.9	2.1

Median age at diagnosis: 4 years 0 months

	5-year	**10-year**	**15-year**
Survival probabilities:	79 %	71 %	69 %

Mortality per million within 10 yrs. of diagnosis (1990-1999):

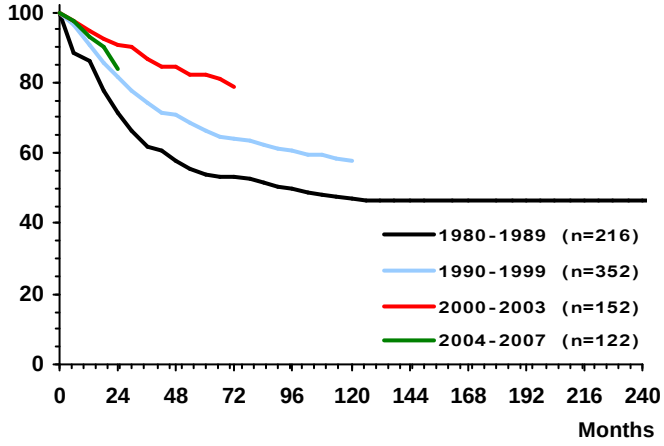
Number of deaths		**Standardized* mortality rate**	**Cumulative mortality**
N	% of all 4060 deaths		
139	3.4 %	1.2	17

Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2009):
III (a) Ependymomas and choroid plexus tumour

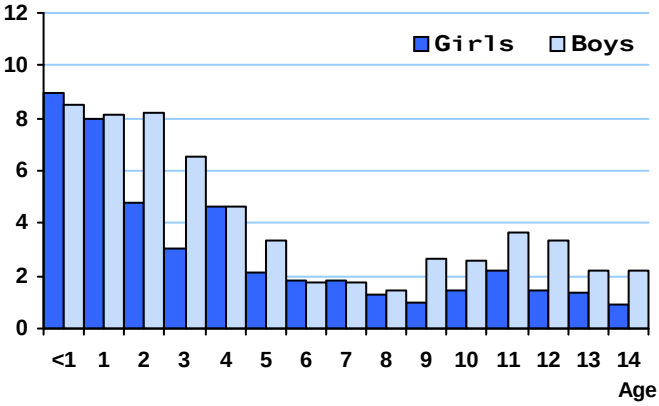
SN after III (a)			**III (a) as SN after any primary**		
N	% of all 682 SN	Cumulative incidence	N	% of all 682 SN	Cumulative incidence
14	2.1 %	2.9 %	6	0.9 %	0.0 %

* Standard: Segi world standard population

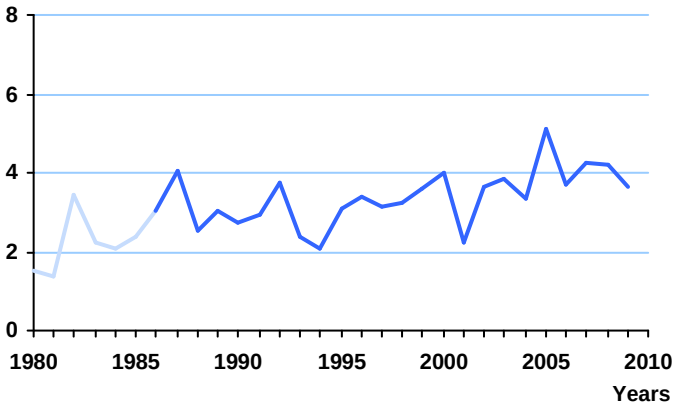
Survival probabilities by year of diagnosis (Germany 1980-2007)



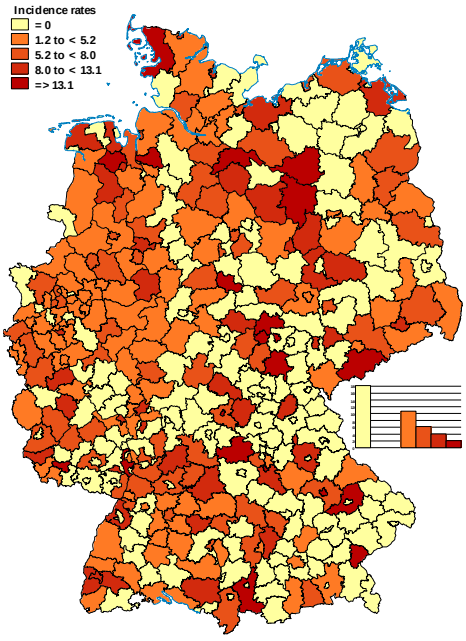
Age- and sex-specific incidence rates per million (Germany 2000-2009)



Standardized* annual incidence rates per million (Germany 1980-2009)



Standardized* incidence rates per million by districts (Landkreise) (Germany 2000-2009)



31 III (a) Ependymomas and choroid plexus tumour - Extended ICCC-3

Germany (2000-2009)	N	%
Ependymomas and choroid plexus tumour	**407**	**100.0**
Ependymomas	317	77.9
Choroid plexus tumour	90	22.1

1 Ependymomas

Cases in Germany aged under 15 years (1980-2009): 793

based on International Classification of Childhood Cancer, 3rd edition

Selected characteristics (Germany 2000-2009)

Relative frequency: 317 / 18053 = 1.8 %

Relative frequency of trial patients: 92.7 %

Incidence rates per million:	Girls	Boys	Total
Number of cases:	125	192	317
Standardized rate *:	2.4	3.4	2.9
Cumulative incidence:	33	48	41

Sex ratio (m/f): 1.5

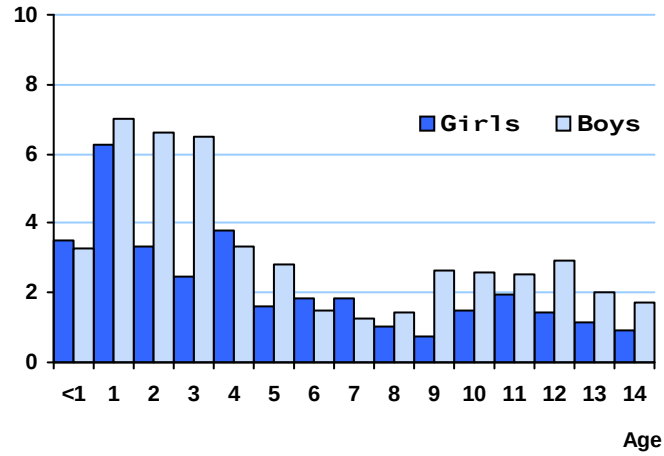
Age-specific incidence rates per million:

	<1	1-4	5-9	10-14
Number of cases:	24	146	66	81
Incidence rate:	3.4	4.9	1.7	1.9

Median age at diagnosis: 4 years 6 months

* Standard: Segi world standard population

Age- and sex-specific incidence rates per million (Germany 2000-2009)



2 Choroid plexus tumour

Cases in Germany aged under 15 years (1980-2009): 191

based on International Classification of Childhood Cancer, 3rd edition

Selected characteristics (Germany 2000-2009)

Relative frequency: 90 / 18053 = 0.5 %

Relative frequency of trial patients: 78.9 %

Incidence rates per million:	Girls	Boys	Total
Number of cases:	41	49	90
Standardized rate *:	0.9	0.9	0.9
Cumulative incidence:	11	13	12

Sex ratio (m/f): 1.2

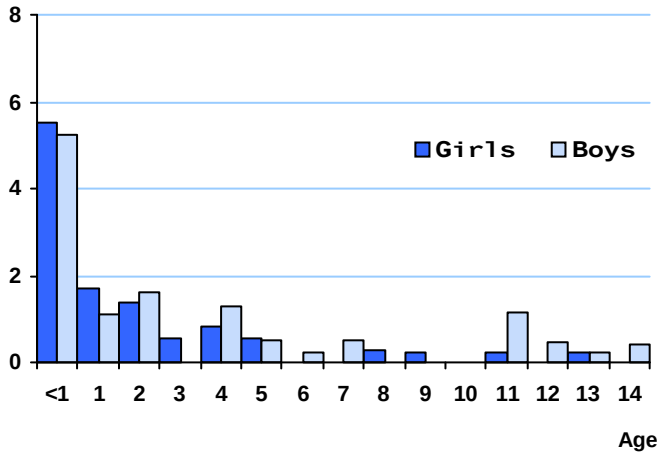
Age-specific incidence rates per million:

	<1	1-4	5-9	10-14
Number of cases:	38	31	9	12
Incidence rate:	5.4	1.0	0.2	0.3

Median age at diagnosis: 1 year 9 months

* Standard: Segi world standard population

Age- and sex-specific incidence rates per million (Germany 2000-2009)



32 III (b) Astrocytomas

Non-malignant forms of astrocytoma are frequent and may be underreported. The temporal trend is due to improvements in registration. Astrocytomas are relatively rarely followed by a second neoplasm within 20 years of diagnosis.

Cases in Germany aged under 15 years (1980-2009): 4193
based on International Classification of Childhood Cancer, 3rd edition

Selected characteristics (Germany 2000-2009)

Relative frequency:	1929 / 18053 = 10.7 %
Relative frequency of trial patients:	88.7 %

Incidence rates per million:	**Girls**	**Boys**	**Total**
Number of cases:	916	1013	1929
Standardized rate *:	16.0	16.7	16.3
Cumulative incidence:	238	249	244
Sex ratio (m/f):			1.1

Age-specific incidence rates per million:

	<1	**1-4**	**5-9**	**10-14**
Number of cases :	101	521	697	610
Incidence rate:	14.3	17.6	17.7	14.1

Median age at diagnosis: 7 years 3 months

	5-year	**10-year**	**15-year**
Survival probabilities:	80 %	77 %	75 %

Mortality per million within 10 yrs. of diagnosis (1990-1999):

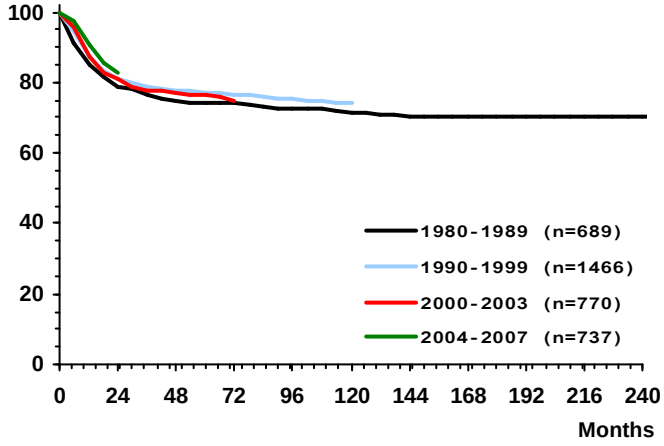
Number of deaths		**Standardized* mortality rate**	**Cumulative mortality**
N	% of all 4060 deaths		
357	8.8 %	2.7	42

Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2009):
III (b) Astrocytomas

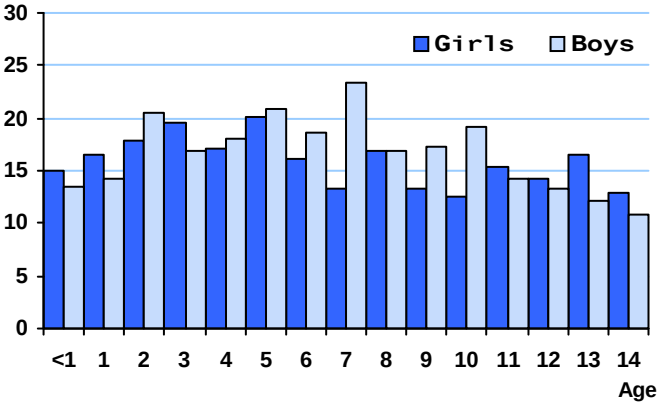
SN after III (b)			**III (b) as SN after any primary**		
N	% of all 682 SN	Cumulative incidence	N	% of all 682 SN	Cumulative incidence
25	3.7 %	1.5 %	69	10.1 %	0.3 %

* Standard: Segi world standard population

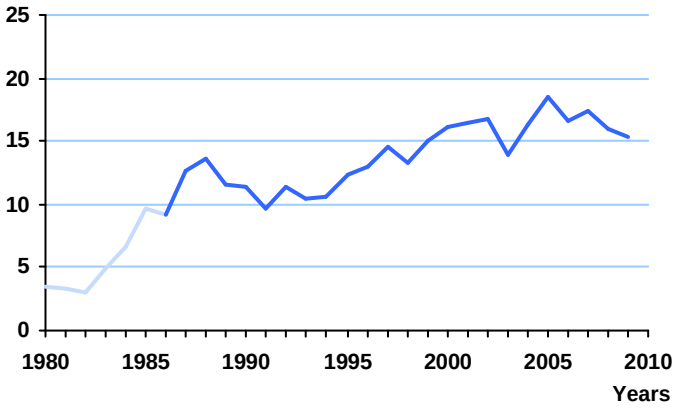
Survival probabilities by year of diagnosis (Germany 1980-2007)



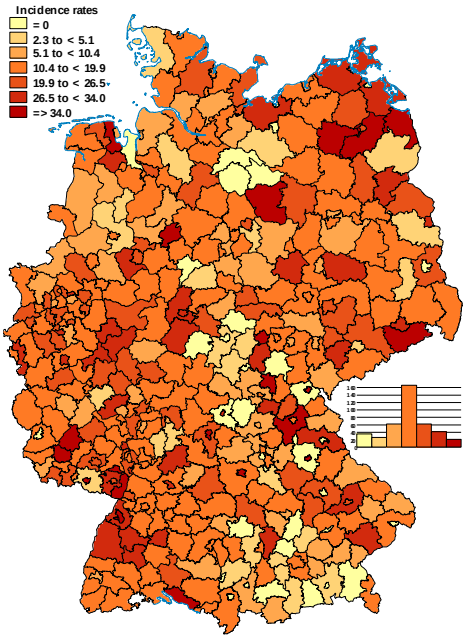
Age- and sex-specific incidence rates per million (Germany 2000-2009)



Standardized* annual incidence rates per million (Germany 1980-2009)



Standardized* incidence rates per million by districts (Landkreise) (Germany 2000-2009)



33 III (c) Intracranial and intraspinal embryonal tumours

All registered tumours are malignant. Completeness of registration exceeds 95%. Compared to all childhood cancers, mortality is relatively high. These tumours are relatively frequently followed by a second neoplasm within 20 years of diagnosis. These tumours are relatively rare as second neoplasms.

Cases in Germany aged under 15 years (1980-2009): 2291
based on International Classification of Childhood Cancer, 3rd edition

Selected characteristics (Germany 2000-2009)

Relative frequency:	881 / 18053 = 4.9 %
Relative frequency of trial patients:	91.6 %

Incidence rates per million:	**Girls**	**Boys**	**Total**
Number of cases:	344	537	881
Standardized rate *:	6.4	9.4	7.9
Cumulative incidence:	91	135	114
Sex ratio (m/f):			1.6

Age-specific incidence rates per million:

	<1	**1-4**	**5-9**	**10-14**
Number of cases :	96	293	324	168
Incidence rate:	13.5	9.9	8.2	3.9

Median age at diagnosis: 5 years 9 months

	5-year	**10-year**	**15-year**
Survival probabilities:	66 %	59 %	55 %

Mortality per million within 10 yrs. of diagnosis (1990-1999):

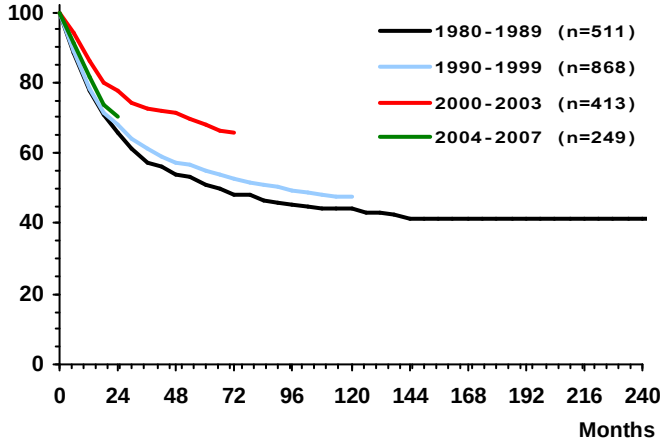
Number of deaths		**Standardized* mortality rate**	**Cumulative mortality**
N	% of all 4060 deaths		
444	10.9 %	3.7	53

Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2009):
III (c) Intracranial and intraspinal embryonal tumours

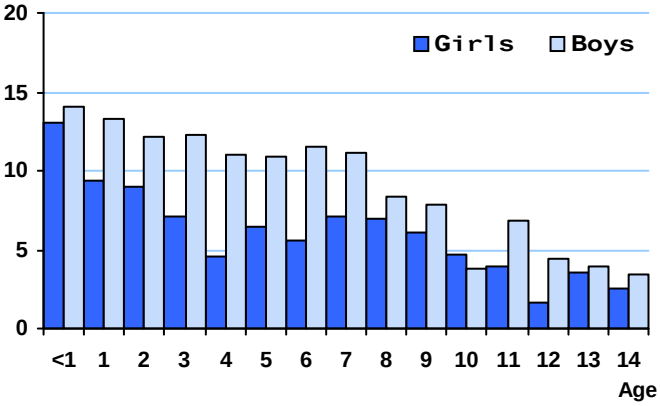
SN after III (c)			**III (c) as SN after any primary**		
N	% of all 682 SN	Cumulative incidence	N	% of all 682 SN	Cumulative incidence
62	9.1 %	5.3 %	13	1.9 %	0.1 %

* Standard: Segi world standard population

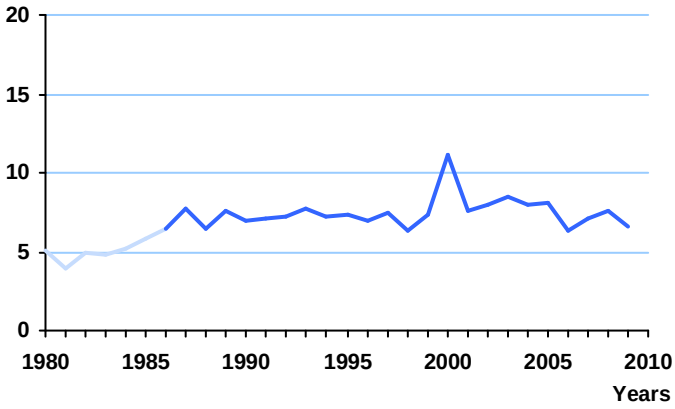
Survival probabilities by year of diagnosis (Germany 1980-2007)



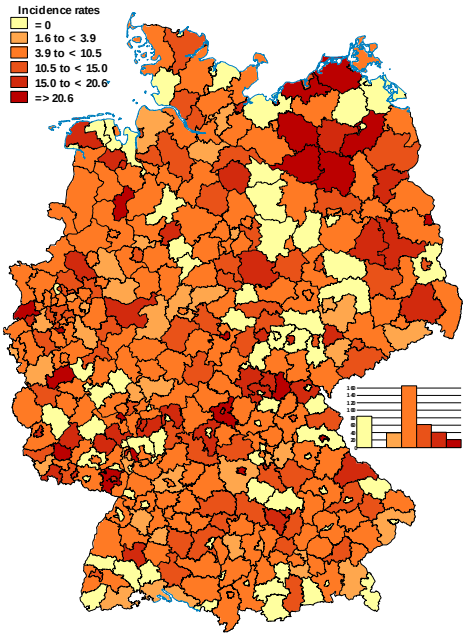
Age- and sex-specific incidence rates per million (Germany 2000-2009)



Standardized* annual incidence rates per million (Germany 1980-2009)



Standardized* incidence rates per million by districts (Landkreise) (Germany 2000-2009)



34 III (c) Intracranial and intraspinal embryonal tumours - Extended ICCC-3

Germany (2000-2009)	N	%
Intracranial and intraspinal embryonal tumours	**881**	**100.0**
Medulloblastomas	638	72.4
Primitive neuroectodermal tumour (PNET)	117	13.3
Medulloepithelioma	7	0.8
Atypical teratoid/rhabdoid tumour	119	13.5

1 Medulloblastomas

Cases in Germany aged under 15 years (1980-2009): 1767

based on International Classification of Childhood Cancer, 3rd edition

Selected characteristics (Germany 2000-2009)

Relative frequency:	638 / 18053 = 3.5 %
Relative frequency of trial patients:	98.0 %

Incidence rates per million:	**Girls**	**Boys**	**Total**
Number of cases:	245	393	638
Standardized rate *:	4.3	6.6	5.5
Cumulative incidence:	64	98	81

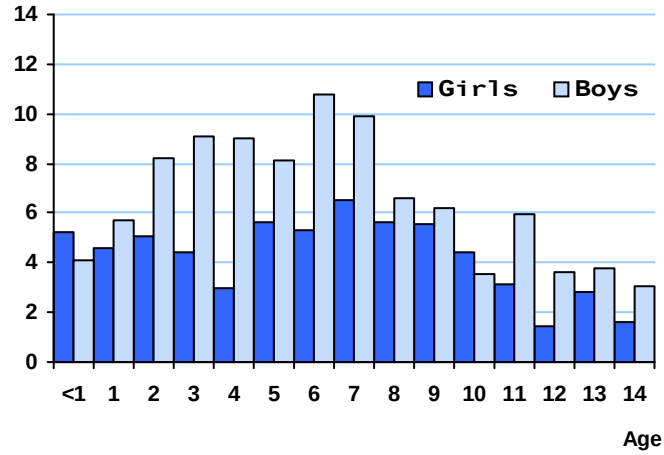
Sex ratio (m/f): 1.6

Age-specific incidence rates per million:	**<1**	**1-4**	**5-9**	**10-14**
Number of cases:	33	183	278	144
Incidence rate:	4.7	6.2	7.1	3.3

Median age at diagnosis: 6 years 9 months

* Standard: Segi world standard population

Age- and sex-specific incidence rates per million (Germany 2000-2009)



2 Primitive neuroectodermal tumour (PNET)

Cases in Germany aged under 15 years (1980-2009): 369

based on International Classification of Childhood Cancer, 3rd edition

Selected characteristics (Germany 2000-2009)

Relative frequency:	117 / 18053 = 0.6 %
Relative frequency of trial patients:	91.5 %

Incidence rates per million:	**Girls**	**Boys**	**Total**
Number of cases:	48	69	117
Standardized rate *:	0.9	1.2	1.1
Cumulative incidence:	13	18	15

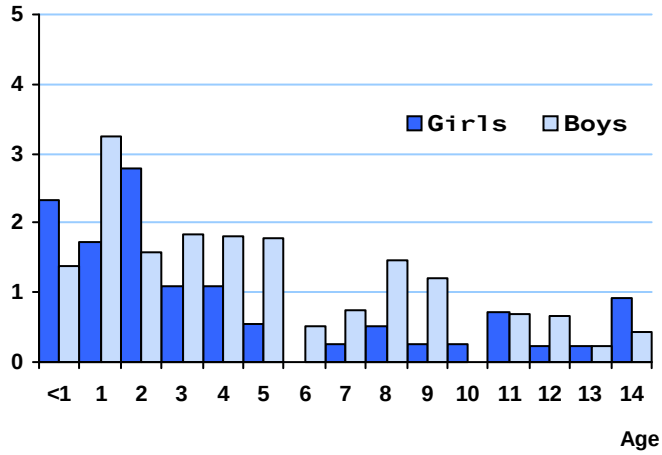
Sex ratio (m/f): 1.4

Age-specific incidence rates per million:	**<1**	**1-4**	**5-9**	**10-14**
Number of cases:	13	56	29	19
Incidence rate:	1.8	1.9	0.7	0.4

Median age at diagnosis: 4 years 0 months

* Standard: Segi world standard population

Age- and sex-specific incidence rates per million (Germany 2000-2009)



35 III (c) Intracranial and intraspinal embryonal tumours - Extended ICCC-3

Germany (2000-2009)	N	%
Intracranial and intraspinal embryonal tumours	**881**	**100.0**
Medulloblastomas	638	72.4
Primitive neuroectodermal tumour (PNET)	117	13.3
Medulloepithelioma	7	0.8
Atypical teratoid/rhabdoid tumour	119	13.5

4 Atypical teratoid/rhabdoid tumour

Cases in Germany aged under 15 years (1980-2009): 139

based on International Classification of Childhood Cancer, 3rd edition

Selected characteristics (Germany 2000-2009)

Relative frequency:	119 / 18053 = 0.7 %
Relative frequency of trial patients:	57.1 %

Incidence rates per million:	**Girls**	**Boys**	**Total**
Number of cases:	47	72	119
Standardized rate *:	1.0	1.4	1.2
Cumulative incidence:	13	19	16

Sex ratio (m/f): 1.5

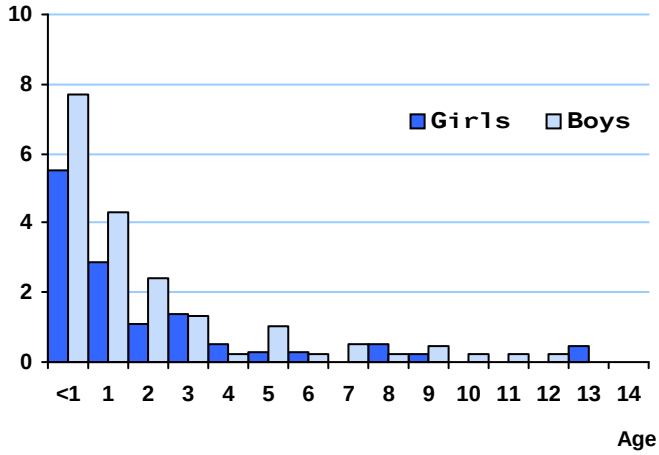
Age-specific incidence rates per million:

	<1	**1-4**	**5-9**	**10-14**
Number of cases:	47	52	15	5
Incidence rate:	6.6	1.8	0.4	0.1

Median age at diagnosis: 1 year 4 months

* Standard: Segi world standard population

Age- and sex-specific incidence rates per million (Germany 2000-2009)



36 III (d) Other gliomas

All registered tumours are malignant. Completeness of registration approaches 95%. The temporal trend is due to improvements in registration. Gliomas are relatively rarely followed by a second neoplasm (SN) within 20 years of diagnosis, underreporting of SN is a possibility.

Cases in Germany aged under 15 years (1980-2009): 706
based on International Classification of Childhood Cancer, 3rd edition

Selected characteristics (Germany 2000-2009)

Relative frequency:	336 / 18053 = 1.9 %
Relative frequency of trial patients:	82.7 %

Incidence rates per million:	**Girls**	**Boys**	**Total**
Number of cases:	165	171	336
Standardized rate *:	2.8	2.8	2.8
Cumulative incidence:	43	42	42
Sex ratio (m/f):			1.0

Age-specific incidence rates per million:

	<1	**1-4**	**5-9**	**10-14**
Number of cases :	16	77	127	116
Incidence rate:	2.3	2.6	3.2	2.7

Median age at diagnosis: 7 years 9 months

Survival probabilities:	**5-year**	**10-year**	**15-year**
	45 %	44 %	44 %

Mortality per million within 10 yrs. of diagnosis (1990-1999):

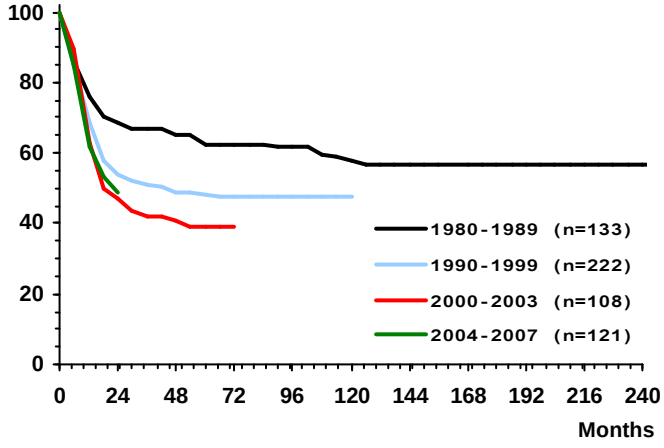
Number of deaths		Standardized*	Cumulative
N	% of all 4060 deaths	mortality rate	mortality
113	2.8 %	0.9	13

Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2009):
III (d) Other gliomas

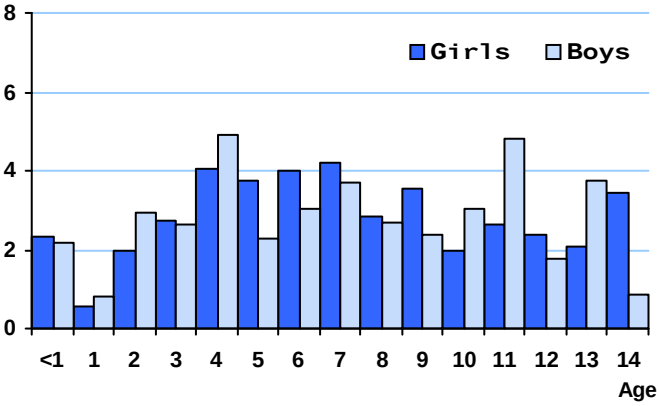
SN after III (d)			III (d) as SN after any primary		
N	% of all 682 SN	Cumulative incidence	N	% of all 682 SN	Cumulative incidence
6	0.9 %	1.5 %	17	2.5 %	0.1 %

* Standard: Segi world standard population

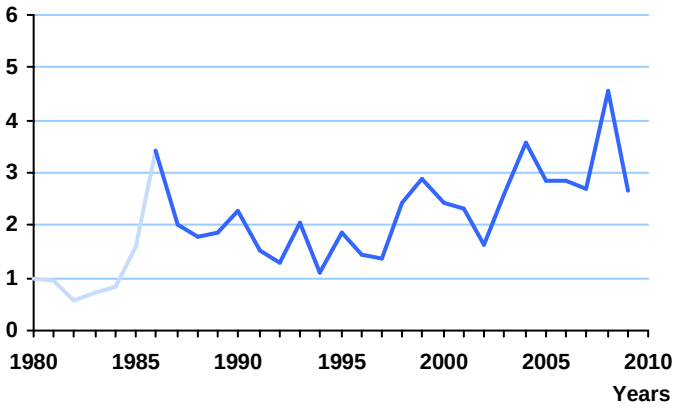
Survival probabilities by year of diagnosis (Germany 1980-2007)



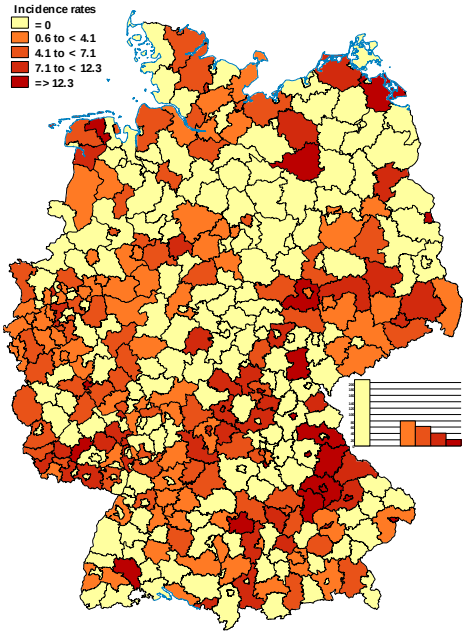
Age- and sex-specific incidence rates per million (Germany 2000-2009)



Standardized* annual incidence rates per million (Germany 1980-2009)



Standardized* incidence rates per million by districts (Landkreise) (Germany 2000-2009)



37 III (d) Other gliomas - Extended ICCC-3

Germany (2000-2009)	N	%
Other gliomas	**336**	**100.0**
Oligodendrogliomas	27	8.0
Mixed and unspecified gliomas	297	88.4
Neuroepithelial glial tumours of uncertain origin	12	3.6

1 Oligodendrogliomas

Cases in Germany aged under 15 years (1980-2009): 109

based on International Classification of Childhood Cancer, 3rd edition

Selected characteristics (Germany 2000-2009)

Relative frequency: 27 / 18053 = 0.1 %

Relative frequency of trial patients: 63.0 %

Incidence rates per million:	**Girls**	**Boys**	**Total**
Number of cases:	14	13	27
Standardized rate *:	0.2	0.2	0.2
Cumulative incidence:	4	3	3

Sex ratio (m/f): 0.9

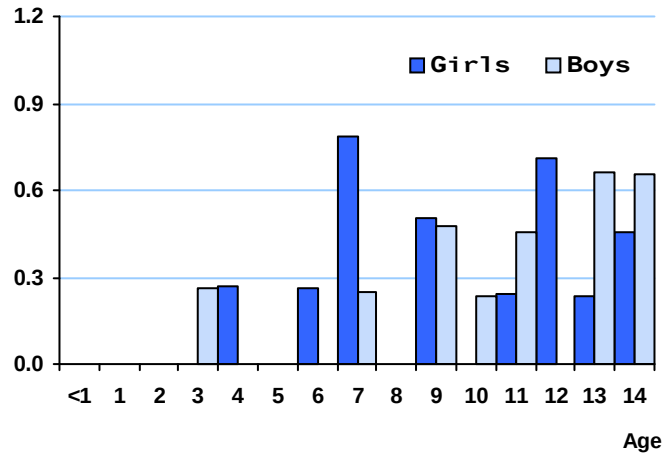
Age-specific incidence rates per million:

	<1	**1-4**	**5-9**	**10-14**
Number of cases:	0	2	9	16
Incidence rate:	0.0	0.1	0.2	0.4

Median age at diagnosis: 11 years 9 months

* Standard: Segi world standard population

Age- and sex-specific incidence rates per million (Germany 2000-2009)



2 Mixed and unspecified gliomas

Cases in Germany aged under 15 years (1980-2009): 578

based on International Classification of Childhood Cancer, 3rd edition

Selected characteristics (Germany 2000-2009)

Relative frequency: 297 / 18053 = 1.6 %

Relative frequency of trial patients: 84.5 %

Incidence rates per million:	**Girls**	**Boys**	**Total**
Number of cases:	145	152	297
Standardized rate *:	2.5	2.5	2.5
Cumulative incidence:	38	37	37

Sex ratio (m/f): 1.0

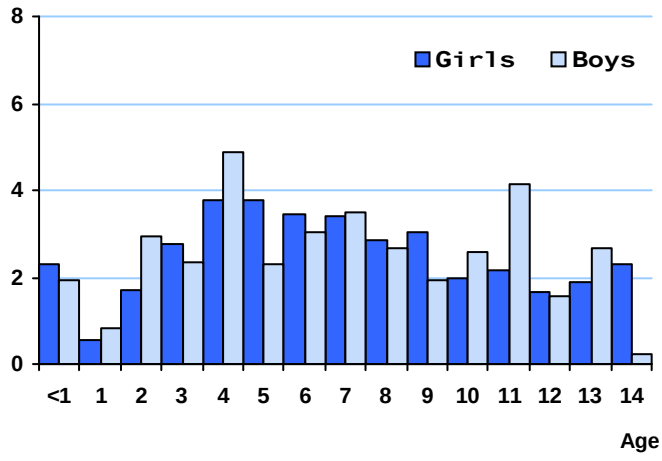
Age-specific incidence rates per million:

	<1	**1-4**	**5-9**	**10-14**
Number of cases:	15	74	117	91
Incidence rate:	2.1	2.5	3.0	2.1

Median age at diagnosis: 7 years 5 months

* Standard: Segi world standard population

Age- and sex-specific incidence rates per million (Germany 2000-2009)



38 III (e) Other specified intracranial and intraspinal neoplasms

Non-malignant forms are frequent and may be underreported. The temporal trend is due to improvements in registration. These tumours are relatively rarely followed by a second neoplasm (SN) within 20 years of diagnosis, underreporting of SN is a possibility. These tumours are relatively frequent as second neoplasms.

Cases in Germany aged under 15 years (1980-2009): 1180
based on International Classification of Childhood Cancer, 3rd edition

Selected characteristics (Germany 2000-2009)

Relative frequency:	519 / 18053 = 2.9 %
Relative frequency of trial patients:	87.9 %

Incidence rates per million:	**Girls**	**Boys**	**Total**
Number of cases:	235	284	519
Standardized rate *:	3.9	4.5	4.2
Cumulative incidence:	60	69	64
Sex ratio (m/f):			1.2

Age-specific incidence rates per million:

	<1	**1-4**	**5-9**	**10-14**
Number of cases :	22	102	173	222
Incidence rate:	3.1	3.4	4.4	5.1

Median age at diagnosis: 8 years 10 months

Survival probabilities:	**5-year**	**10-year**	**15-year**
	96 %	93 %	91 %

Mortality per million within 10 yrs. of diagnosis (1990-1999):

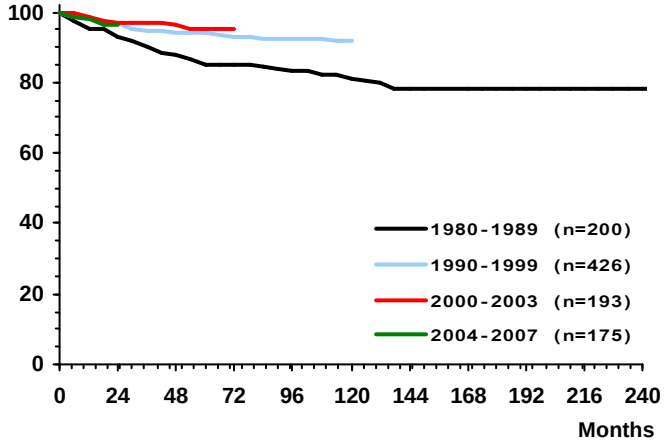
Number of deaths		Standardized*	Cumulative
N	% of all 4060 deaths	mortality rate	mortality
31	0.8 %	0.2	4

Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2009):
III (e) Other specified intracranial and intraspinal neoplasms

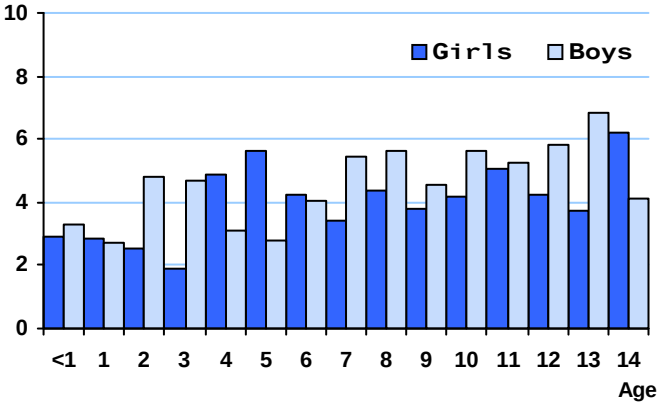
SN after III (e)			III (e) as SN after any primary		
N	% of all 682 SN	Cumulative incidence	N	% of all 682 SN	Cumulative incidence
7	1.0 %	1.1 %	37	5.4 %	0.2 %

* Standard: Segi world standard population

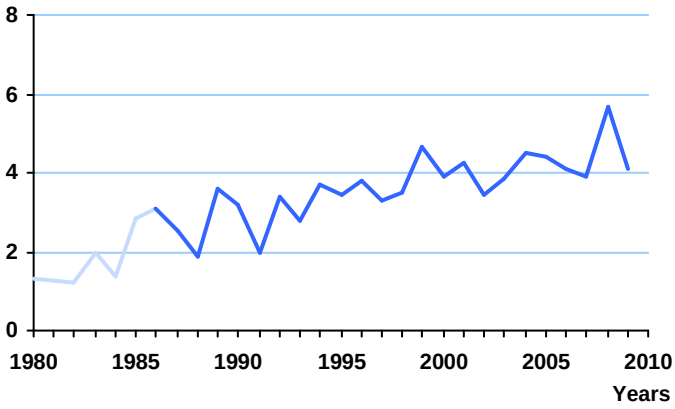
Survival probabilities by year of diagnosis (Germany 1980-2007)



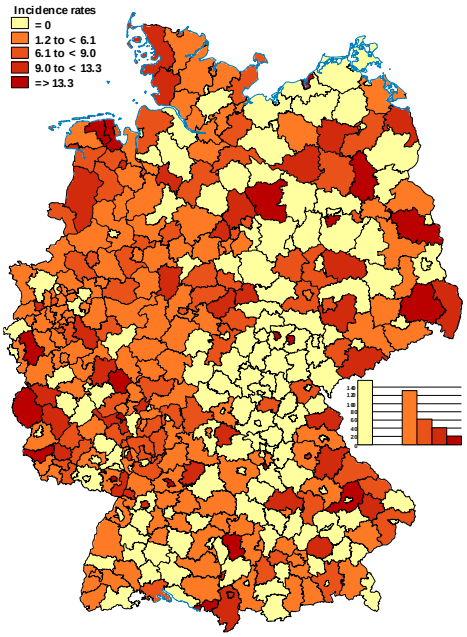
Age- and sex-specific incidence rates per million (Germany 2000-2009)



Standardized* annual incidence rates per million (Germany 1980-2009)



Standardized* incidence rates per million by districts (Landkreise) (Germany 2000-2009)



39 III (e) Other specified intracranial and intraspinal neoplasms - Extended ICCC-3

Germany (2000-2009)	N	%
Other specified intracranial and intraspinal neoplasms	**519**	**100.0**
Pituitary adenomas and carcinomas	28	5.4
Tumours of the sellar region (craniopharyngiomas)	190	36.6
Pineal parenchymal tumours	30	5.8
Neuronal and mixed neuronal-glial tumours	220	42.4
Meningiomas	51	9.8

1 Pituitary adenomas and carcinomas

Cases in Germany aged under 15 years (1980-2009): 72

based on International Classification of Childhood Cancer, 3rd edition

Selected characteristics (Germany 2000-2009)

Relative frequency:	28 / 18053 = 0.2 %
Relative frequency of trial patients:	67.9 %

Incidence rates per million:	**Girls**	**Boys**	**Total**
Number of cases:	15	13	28
Standardized rate *:	0.2	0.2	0.2
Cumulative incidence:	4	3	3

Sex ratio (m/f): 0.9

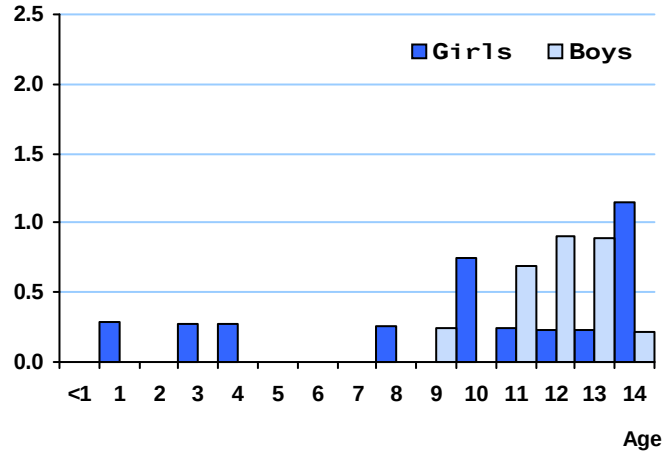
Age-specific incidence rates per million:

	<1	**1-4**	**5-9**	**10-14**
Number of cases:	0	3	2	23
Incidence rate:	0.0	0.1	0.1	0.5

Median age at diagnosis: 12 years 3 months

* Standard: Segi world standard population

Age- and sex-specific incidence rates per million (Germany 2000-2009)



2 Tumours of the sellar region (craniopharyngiomas)

Cases in Germany aged under 15 years (1980-2009): 492

based on International Classification of Childhood Cancer, 3rd edition

Selected characteristics (Germany 2000-2009)

Relative frequency:	190 / 18053 = 1.1 %
Relative frequency of trial patients:	94.2 %

Incidence rates per million:	**Girls**	**Boys**	**Total**
Number of cases:	91	99	190
Standardized rate *:	1.5	1.5	1.5
Cumulative incidence:	23	24	24

Sex ratio (m/f): 1.1

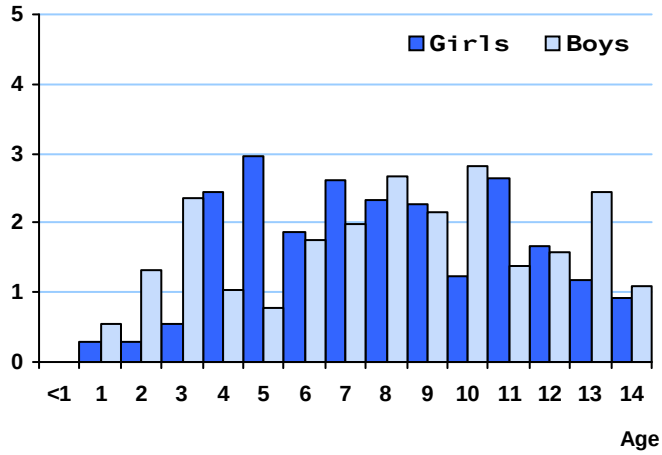
Age-specific incidence rates per million:

	<1	**1-4**	**5-9**	**10-14**
Number of cases:	0	33	84	73
Incidence rate:	0.0	1.1	2.1	1.7

Median age at diagnosis: 8 years 10 months

* Standard: Segi world standard population

Age- and sex-specific incidence rates per million (Germany 2000-2009)



40 III (e) Other specified intracranial and intraspinal neoplasms - Extended ICCC-3

Germany (2000-2009)	N	%
Other specified intracranial and intraspinal neoplasms	**519**	**100.0**
Pituitary adenomas and carcinomas	28	5.4
Tumours of the sellar region (craniopharyngiomas)	190	36.6
Pineal parenchymal tumours	30	5.8
Neuronal and mixed neuronal-glial tumours	220	42.4
Meningiomas	51	9.8

3 Pineal parenchymal tumours

Cases in Germany aged under 15 years (1980-2009): 104

based on International Classification of Childhood Cancer, 3rd edition

Selected characteristics (Germany 2000-2009)

Relative frequency: 30 / 18053 = 0.2 %

Relative frequency of trial patients: 83.3 %

Incidence rates per million:	**Girls**	**Boys**	**Total**
Number of cases:	11	19	30
Standardized rate *:	0.2	0.3	0.3
Cumulative incidence:	3	5	4

Sex ratio (m/f): 1.7

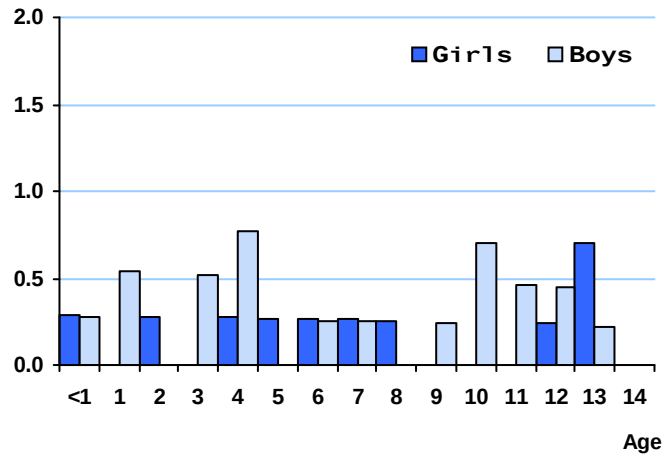
Age-specific incidence rates per million:

	<1	**1-4**	**5-9**	**10-14**
Number of cases:	2	9	7	12
Incidence rate:	0.3	0.3	0.2	0.3

Median age at diagnosis: 7 years 7 months

* Standard: Segi world standard population

Age- and sex-specific incidence rates per million (Germany 2000-2009)



4 Neuronal and mixed neuronal-glial tumours

Cases in Germany aged under 15 years (1980-2009): 392

based on International Classification of Childhood Cancer, 3rd edition

Selected characteristics (Germany 2000-2009)

Relative frequency: 220 / 18053 = 1.2 %

Relative frequency of trial patients: 87.3 %

Incidence rates per million:	**Girls**	**Boys**	**Total**
Number of cases:	92	128	220
Standardized rate *:	1.6	2.1	1.8
Cumulative incidence:	24	31	28

Sex ratio (m/f): 1.4

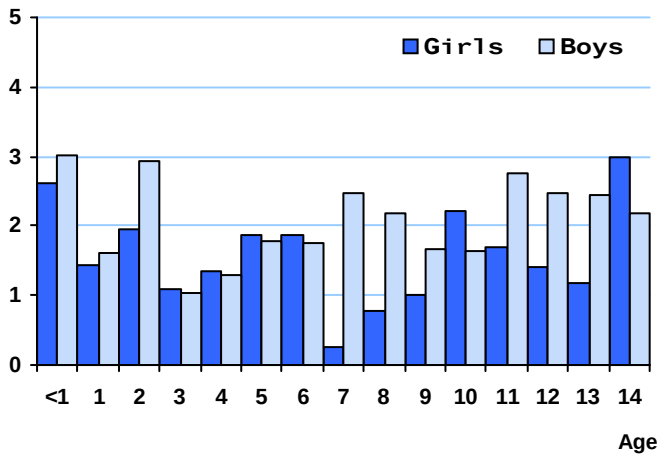
Age-specific incidence rates per million:

	<1	**1-4**	**5-9**	**10-14**
Number of cases:	20	47	62	91
Incidence rate:	2.8	1.6	1.6	2.1

Median age at diagnosis: 8 years 2 months

* Standard: Segi world standard population

Age- and sex-specific incidence rates per million (Germany 2000-2009)



41 III (e) Other specified intracranial and intraspinal neoplasms - Extended ICCC-3

Germany (2000-2009)	N	%
Other specified intracranial and intraspinal neoplasms	**519**	**100.0**
Pituitary adenomas and carcinomas	28	5.4
Tumours of the sellar region (craniopharyngiomas)	190	36.6
Pineal parenchymal tumours	30	5.8
Neuronal and mixed neuronal-glial tumours	220	42.4
Meningiomas	51	9.8

5 Meningiomas

Cases in Germany aged under 15 years (1980-2009): 120

based on International Classification of Childhood Cancer, 3rd edition

Selected characteristics (Germany 2000-2009)

Relative frequency:	51 / 18053 = 0.3 %
Relative frequency of trial patients:	80.4 %

Incidence rates per million:	**Girls**	**Boys**	**Total**
Number of cases:	26	25	51
Standardized rate *:	0.4	0.4	0.4
Cumulative incidence:	7	6	6

Sex ratio (m/f): 1.0

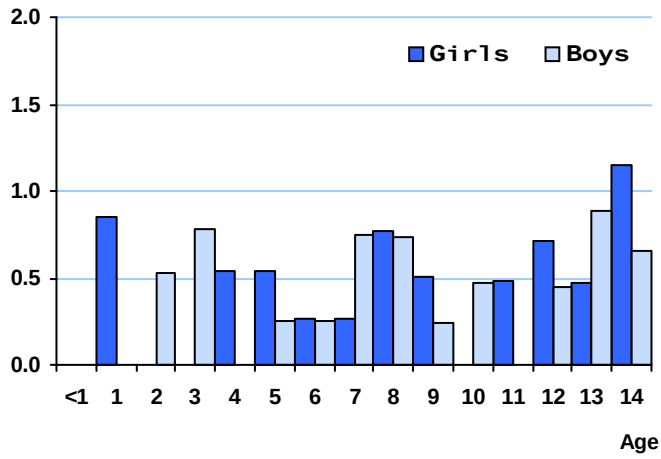
Age-specific incidence rates per million:

	<1	**1-4**	**5-9**	**10-14**
Number of cases:	0	10	18	23
Incidence rate:	0.0	0.3	0.5	0.5

Median age at diagnosis: 9 years 2 months

* Standard: Segi world standard population

Age- and sex-specific incidence rates per million (Germany 2000-2009)



42 IV (a) Neuroblastoma and ganglioneuroblastoma

Neuroblastoma (NB) is an embryonal tumor of early childhood. Spontaneous regression has been observed. A large study showed that screening does not reduce mortality. The higher incidence rate 1995-2001 is due to the screening study. Based on international comparisons, completeness of registration is close to 100%. Prognosis has improved considerably since 1980. NB is very rare as a second neoplasm.

Cases in Germany aged under 15 years (1980-2009): 3568
based on International Classification of Childhood Cancer, 3rd edition

Selected characteristics (Germany 2000-2009)

Relative frequency:	1300 / 18053 = 7.2 %
Relative frequency of trial patients:	99.2 %

Incidence rates per million:	**Girls**	**Boys**	**Total**
Number of cases:	596	704	1300
Standardized rate *:	12.8	14.5	13.7
Cumulative incidence:	167	188	178
Sex ratio (m/f):			1.2

Age-specific incidence rates per million:

	<1	**1-4**	**5-9**	**10-14**
Number of cases :	570	586	113	31
Incidence rate:	80.4	19.8	2.9	0.7

Median age at diagnosis: 1 year 3 months

	5-year	**10-year**	**15-year**
Survival probabilities:	79 %	77 %	75 %

Mortality per million within 10 yrs. of diagnosis (1990-1999):

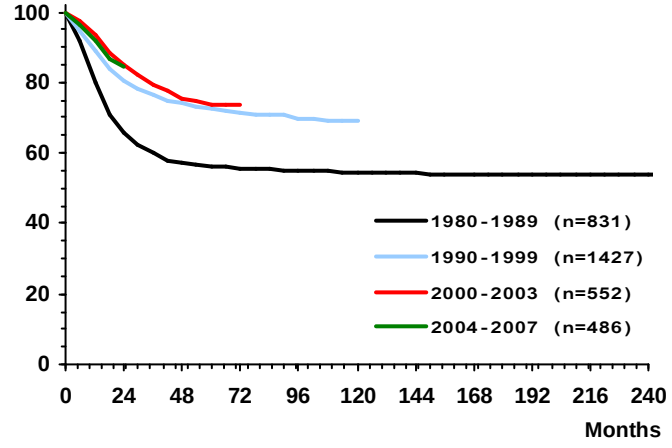
Number of deaths		**Standardized* mortality rate**	**Cumulative mortality**
N	% of all 4060 deaths		
431	10.6 %	3.9	52

Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2009):
IV (a) Neuroblastoma and ganglioneuroblastoma

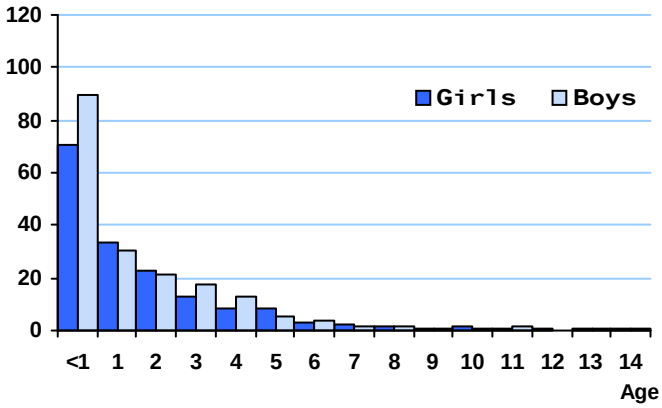
SN after IV (a)			**IV (a) as SN after any primary**		
N	% of all 682 SN	Cumulative incidence	N	% of all 682 SN	Cumulative incidence
44	6.5 %	2.4 %	7	1.0 %	0.0 %

* Standard: Segi world standard population

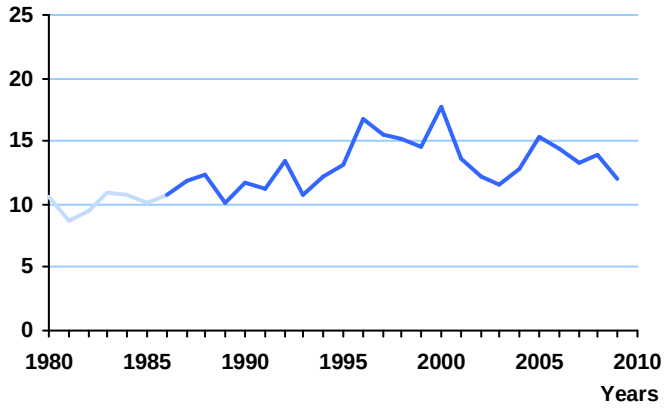
Survival probabilities by year of diagnosis (Germany 1980-2007)



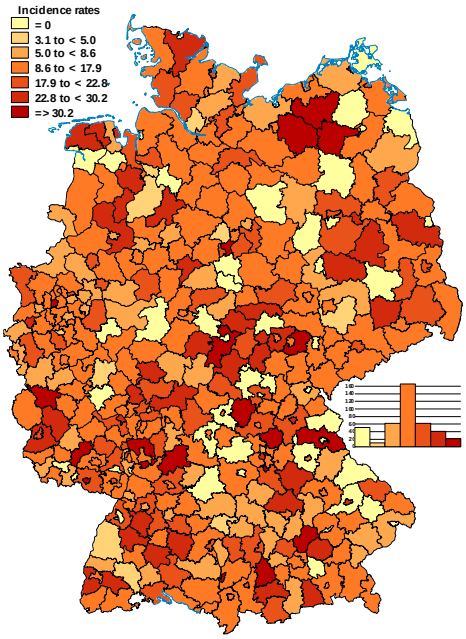
Age- and sex-specific incidence rates per million (Germany 2000-2009)



Standardized* annual incidence rates per million (Germany 1980-2009)



Standardized* incidence rates per million by districts (Landkreise) (Germany 2000-2009)



43 V Retinoblastoma

Retinoblastoma (RB) is an embryonal tumor of early childhood. Based on international comparisons, completeness of registration is close to 100%. RB is very rare as a second neoplasm.

Cases in Germany aged under 15 years (1980-2009): 1133
based on International Classification of Childhood Cancer, 3rd edition

Selected characteristics (Germany 2000-2009)

Relative frequency:	411 / 18053 = 2.3 %
Relative frequency of trial patients:	-

Incidence rates per million:	**Girls**	**Boys**	**Total**
Number of cases:	185	226	411
Standardized rate *:	4.1	4.7	4.4
Cumulative incidence:	52	61	56
Sex ratio (m/f):			1.2

Age-specific incidence rates per million:

	<1	**1-4**	**5-9**	**10-14**
Number of cases :	178	215	16	2
Incidence rate:	25.1	7.3	0.4	0.0

Median age at diagnosis: 1 year 2 months

	5-year	**10-year**	**15-year**
Survival probabilities:	99 %	98 %	98 %

Mortality per million within 10 yrs. of diagnosis (1990-1999):

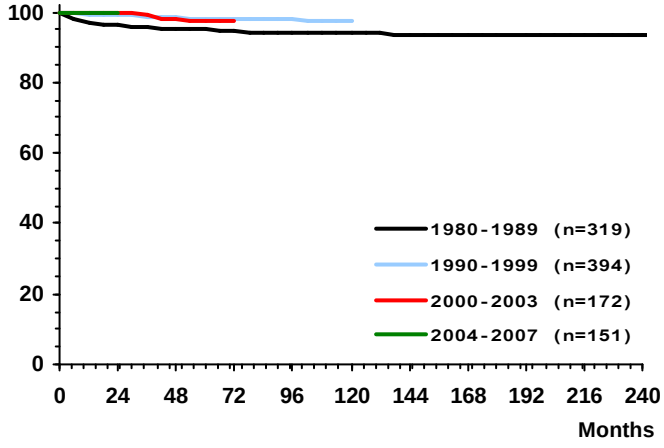
Number of deaths		**Standardized* mortality rate**	**Cumulative mortality**
N	% of all 4060 deaths		
9	0.2 %	0.1	1

Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2009):
V Retinoblastoma

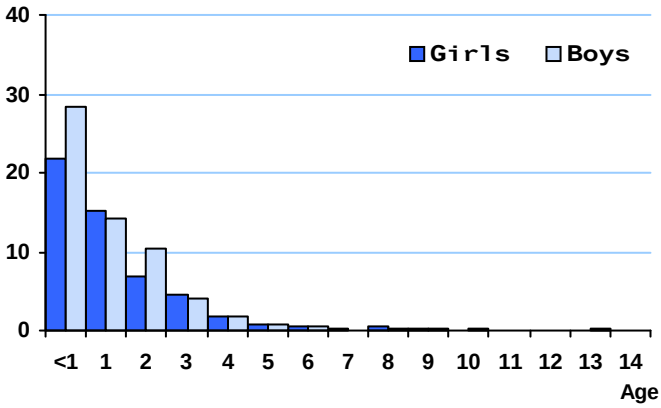
SN after V			**V as SN after any primary**		
N	% of all 682 SN	Cumulative incidence	N	% of all 682 SN	Cumulative incidence
20	2.9 %	2.8 %	3	0.4 %	0.0 %

* Standard: Segi world standard population

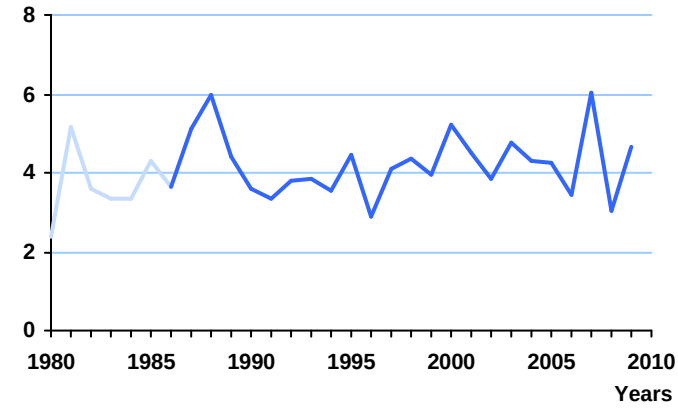
Survival probabilities by year of diagnosis (Germany 1980-2007)



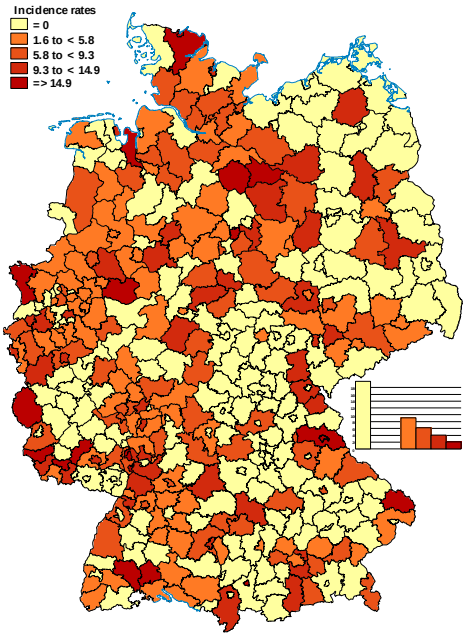
Age- and sex-specific incidence rates per million (Germany 2000-2009)



Standardized* annual incidence rates per million (Germany 1980-2009)



Standardized* incidence rates per million by districts (Landkreise) (Germany 2000-2009)



44 VI (a) Nephroblastoma and other non-epithelial renal tumours

Nephroblastoma is an embryonal tumor of early childhood. Based on international comparisons, completeness of registration is close to 100%. Nephroblastomas are relatively rarely followed by a second neoplasm within 20 years of diagnosis. Nephroblastoma is rare as a second neoplasm.

Cases in Germany aged under 15 years (1980-2009): 2743
based on International Classification of Childhood Cancer, 3rd edition

Selected characteristics (Germany 2000-2009)

Relative frequency:	1000 / 18053 = 5.5 %
Relative frequency of trial patients:	98.5 %

Incidence rates per million:	**Girls**	**Boys**	**Total**
Number of cases:	525	475	1000
Standardized rate *:	10.6	9.3	9.9
Cumulative incidence:	144	124	134
Sex ratio (m/f):			0.9

Age-specific incidence rates per million:

	<1	**1-4**	**5-9**	**10-14**
Number of cases :	167	576	218	39
Incidence rate:	23.6	19.5	5.5	0.9

Median age at diagnosis: 3 years 1 month

	5-year	**10-year**	**15-year**
Survival probabilities:	93 %	92 %	92 %

Mortality per million within 10 yrs. of diagnosis (1990-1999):

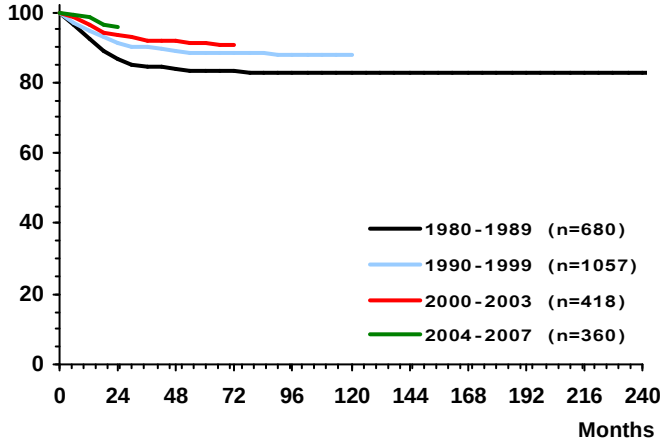
Number of deaths		**Standardized* mortality rate**	**Cumulative mortality**
N	% of all 4060 deaths		
129	3.2 %	1.2	16

Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2009):
VI (a) Nephroblastoma and other non-epithelial renal tumours

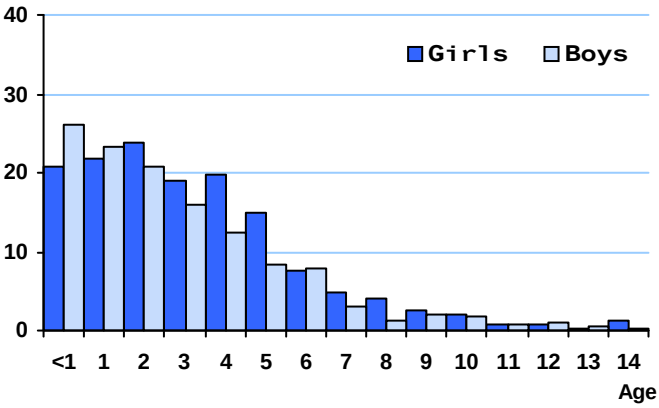
SN after VI (a)			**VI (a) as SN after any primary**		
N	% of all 682 SN	Cumulative incidence	N	% of all 682 SN	Cumulative incidence
26	3.8 %	1.8 %	8	1.2 %	0.0 %

* Standard: Segi world standard population

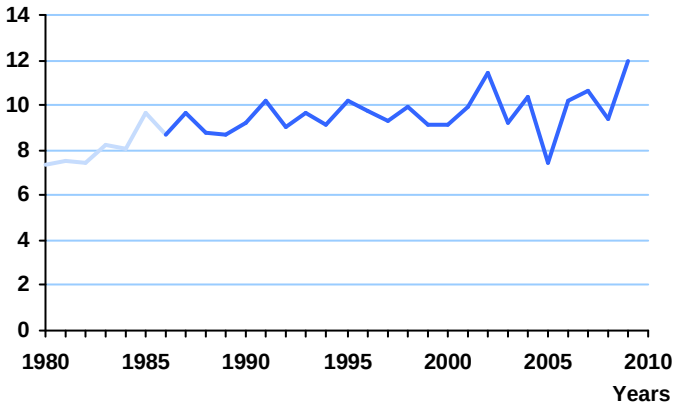
Survival probabilities by year of diagnosis (Germany 1980-2007)



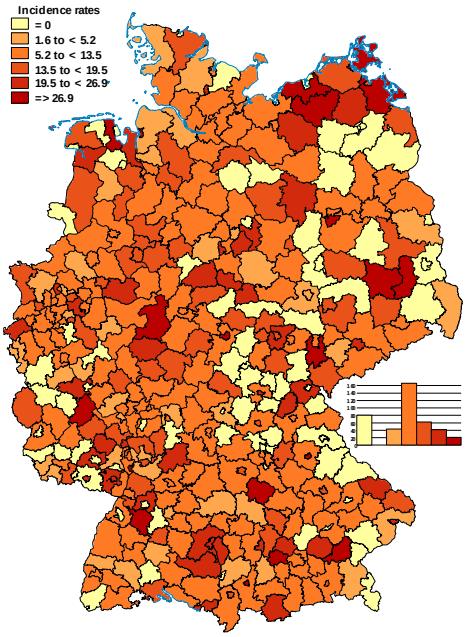
Age- and sex-specific incidence rates per million (Germany 2000-2009)



Standardized* annual incidence rates per million (Germany 1980-2009)



Standardized* incidence rates per million by districts (Landkreise) (Germany 2000-2009)



45 VI (a) Nephroblastoma and other non-epithelial renal tumours - Extended ICCC-3

Germany (2000-2009)	N	%
Nephroblastoma and other non-epithelial renal tumours	**1000**	**100.0**
Nephroblastoma	978	97.8
Rhabdoid renal tumour	13	1.3
Kidney sarcomas	8	0.8
Peripheral neuroectodermal tumour (pPNET) of kidney	1	0.1

1 Nephroblastoma

Cases in Germany aged under 15 years (1980-2009): 2657

based on International Classification of Childhood Cancer, 3rd edition

Selected characteristics (Germany 2000-2009)

Relative frequency:	978 / 18053 = 5.4 %
Relative frequency of trial patients:	98.9 %

Incidence rates per million:	**Girls**	**Boys**	**Total**
Number of cases:	517	461	978
Standardized rate *:	10.5	9.0	9.7
Cumulative incidence:	141	120	131

Sex ratio (m/f): 0.9

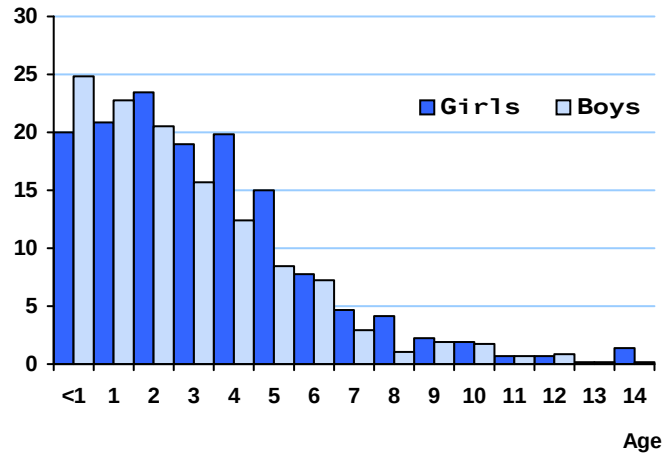
Age-specific incidence rates per million:

	<1	**1-4**	**5-9**	**10-14**
Number of cases:	159	568	214	37
Incidence rate:	22.4	19.2	5.4	0.9

Median age at diagnosis: 3 years 1 month

* Standard: Segi world standard population

Age- and sex-specific incidence rates per million (Germany 2000-2009)



2 Rhabdoid renal tumour

Cases in Germany aged under 15 years (1980-2009): 44

based on International Classification of Childhood Cancer, 3rd edition

Selected characteristics (Germany 2000-2009)

Relative frequency:	13 / 18053 = 0.1 %
Relative frequency of trial patients:	69.2 %

Incidence rates per million:	**Girls**	**Boys**	**Total**
Number of cases:	6	7	13
Standardized rate *:	0.1	0.1	0.1
Cumulative incidence:	2	2	2

Sex ratio (m/f): 1.2

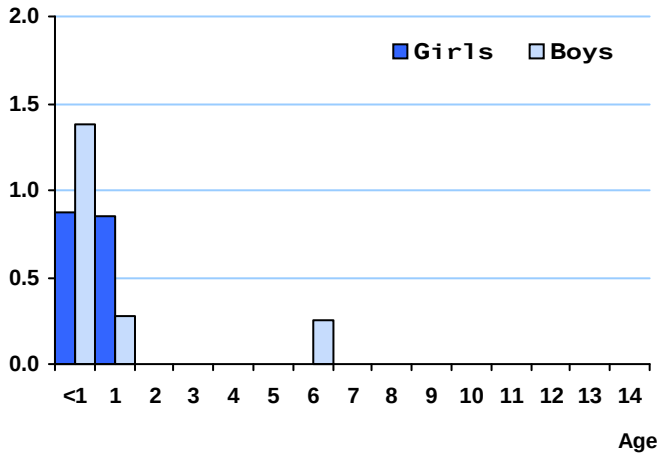
Age-specific incidence rates per million:

	<1	**1-4**	**5-9**	**10-14**
Number of cases:	8	4	1	0
Incidence rate:	1.1	0.1	0.0	0.0

Median age at diagnosis: 0 years 7 months

* Standard: Segi world standard population

Age- and sex-specific incidence rates per million (Germany 2000-2009)



46 VI (b) Renal carcinomas

Renal carcinomas are very rare in childhood and rarely treated in pediatric oncology units. Registration is likely to be incomplete.

Cases in Germany aged under 15 years (1980-2009): 48
based on International Classification of Childhood Cancer, 3rd edition

Selected characteristics (Germany 2000-2009)

Relative frequency:	23 / 18053 = 0.1 %
Relative frequency of trial patients:	73.9 %

Incidence rates per million:	**Girls**	**Boys**	**Total**
Number of cases:	14	9	23
Standardized rate *:	0.2	0.1	0.2
Cumulative incidence:	3	2	3
Sex ratio (m/f):			0.6

Age-specific incidence rates per million:

	<1	**1-4**	**5-9**	**10-14**
Number of cases :	0	1	6	16
Incidence rate:	0.0	0.0	0.2	0.4

Median age at diagnosis: 12 years 2 months

	5-year	**10-year**	**15-year**
Survival probabilities:	-	-	-

Mortality per million within 10 yrs. of diagnosis (1990-1999):

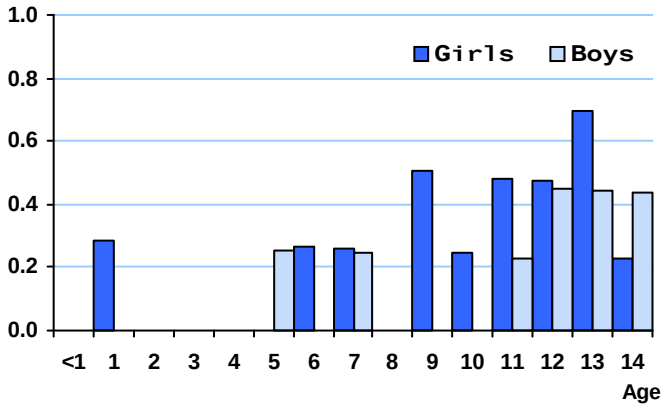
Number of deaths		**Standardized* mortality rate**	**Cumulative mortality**
N	% of all 4060 deaths		
2	0.0 %	0.0	0

Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2009):
VI (b) Renal carcinomas

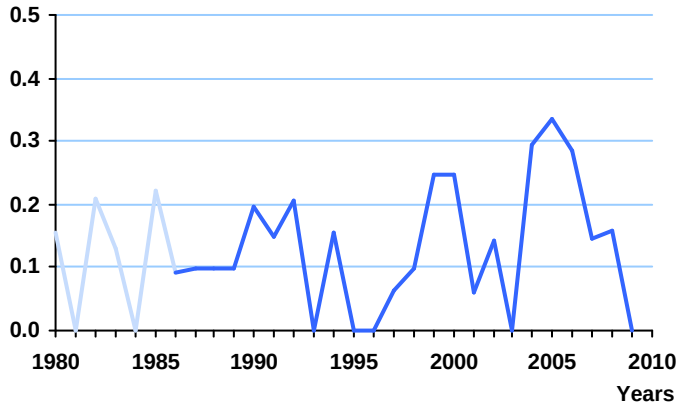
SN after VI (b)			**VI (b) as SN after any primary**		
N	% of all 682 SN	Cumulative incidence	N	% of all 682 SN	Cumulative incidence
1	0.1 %	2.5 %	4	0.6 %	0.0 %

* Standard: Segi world standard population

Age- and sex-specific incidence rates per million (Germany 2000-2009)



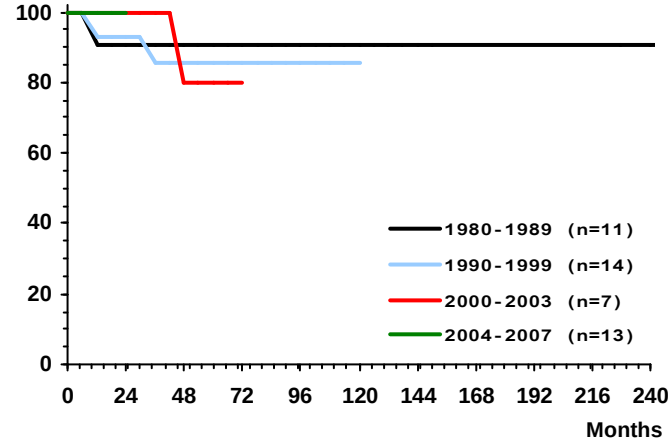
Standardized* annual incidence rates per million (Germany 1980-2009)



Standardized* incidence rates per million by districts (Landkreise) (Germany 2000-2009)

No map due to sparse data

Survival probabilities by year of diagnosis (Germany 1980-2007)



47 VII (a) Hepatoblastoma

Hepatoblastoma is an embryonal tumor of early childhood. Based on international comparisons, completeness of registration is close to 100%. Prognosis has improved considerably since 1980. Hepatoblastomas are relatively frequently followed by a second neoplasm within 20 years of diagnosis. Hepatoblastoma is very rare as a second neoplasm.

Cases in Germany aged under 15 years (1980-2009): 387
based on International Classification of Childhood Cancer, 3rd edition

Selected characteristics (Germany 2000-2009)

Relative frequency:	179 / 18053 = 1.0 %
Relative frequency of trial patients:	97.8 %

Incidence rates per million:	**Girls**	**Boys**	**Total**
Number of cases:	69	110	179
Standardized rate *:	1.5	2.2	1.9
Cumulative incidence:	19	29	24
Sex ratio (m/f):			1.6

Age-specific incidence rates per million:

	<1	**1-4**	**5-9**	**10-14**
Number of cases :	60	101	10	8
Incidence rate:	8.5	3.4	0.3	0.2

Median age at diagnosis: 1 year 5 months

	5-year	**10-year**	**15-year**
Survival probabilities:	76 %	75 %	75 %

Mortality per million within 10 yrs. of diagnosis (1990-1999):

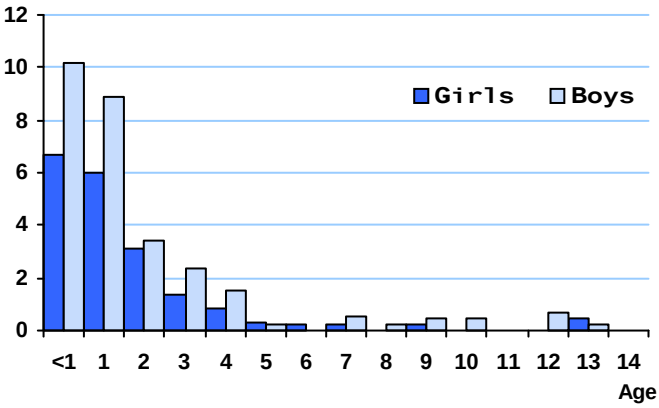
Number of deaths		**Standardized* mortality rate**	**Cumulative mortality**
N	% of all 4060 deaths		
37	0.9 %	0.4	5

Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2009):
VII (a) Hepatoblastoma

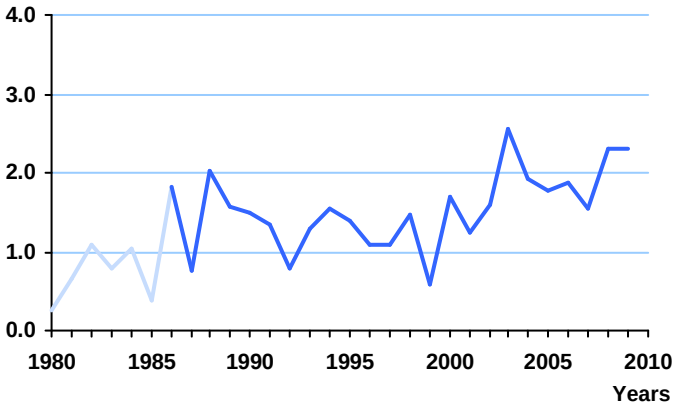
SN after VII (a)			**VII (a) as SN after any primary**		
N	% of all 682 SN	Cumulative incidence	N	% of all 682 SN	Cumulative incidence
3	0.4 %	3.0 %	2	0.3 %	0.0 %

* Standard: Segi world standard population

Age- and sex-specific incidence rates per million (Germany 2000-2009)



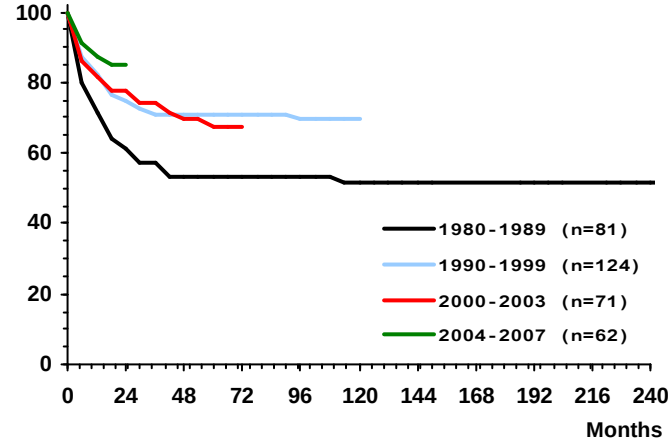
Standardized* annual incidence rates per million (Germany 1980-2009)



Standardized* incidence rates per million by districts (Landkreise) (Germany 2000-2009)

No map due to sparse data

Survival probabilities by year of diagnosis (Germany 1980-2007)



48 VII (b) Hepatic carcinomas

Hepatic carcinomas are rare in childhood. Registration may be incomplete. Prognosis has improved considerably since 1980. Hepatic carcinomas are relatively rarely followed by a second neoplasm (SN) within 20 years of diagnosis, underreporting of SN is a possibility.

Cases in Germany aged under 15 years (1980-2009): 99
based on International Classification of Childhood Cancer, 3rd edition

Selected characteristics (Germany 2000-2009)

Relative frequency:	43 / 18053 = 0.2 %
Relative frequency of trial patients:	88.4 %

Incidence rates per million:	**Girls**	**Boys**	**Total**
Number of cases:	16	27	43
Standardized rate *:	0.2	0.4	0.3
Cumulative incidence:	4	6	5
Sex ratio (m/f):			1.7

Age-specific incidence rates per million:

	<1	**1-4**	**5-9**	**10-14**
Number of cases :	0	3	16	24
Incidence rate:	0.0	0.1	0.4	0.6

Median age at diagnosis: 10 years 7 months

	5-year	**10-year**	**15-year**
Survival probabilities:	49 %	35 %	-

Mortality per million within 10 yrs. of diagnosis (1990-1999):

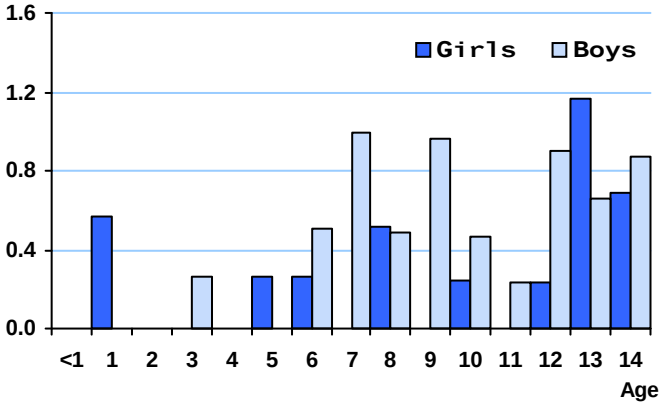
Number of deaths		**Standardized* mortality rate**	**Cumulative mortality**
N	% of all 4060 deaths		
12	0.3 %	0.1	1

Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2009):
VII (b) Hepatic carcinomas

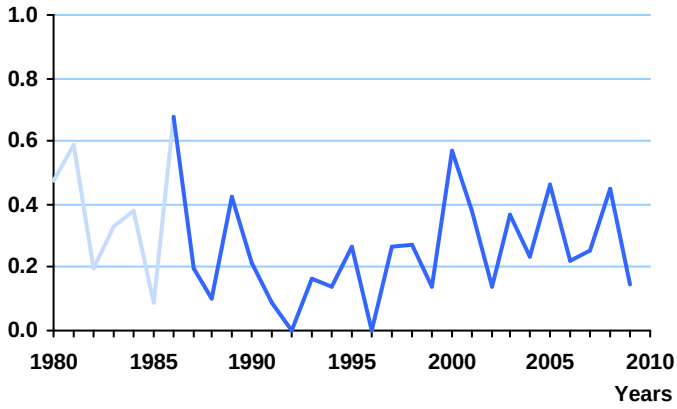
SN after VII (b)			**VII (b) as SN after any primary**		
N	% of all 682 SN	Cumulative incidence	N	% of all 682 SN	Cumulative incidence
0	0.0 %	0.0 %	3	0.4 %	0.0 %

* Standard: Segi world standard population

Age- and sex-specific incidence rates per million (Germany 2000-2009)



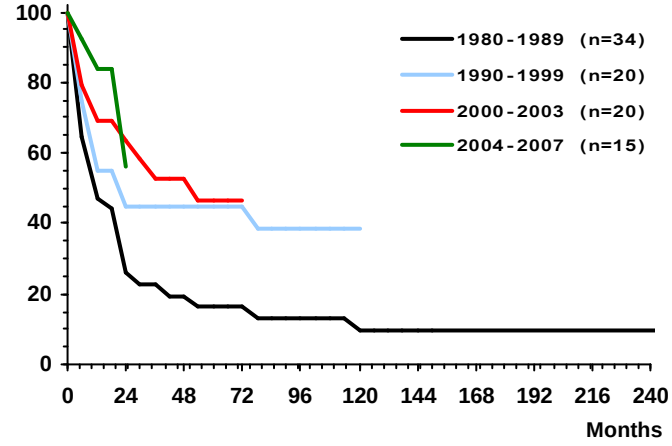
Standardized* annual incidence rates per million (Germany 1980-2009)



Standardized* incidence rates per million by districts (Landkreise) (Germany 2000-2009)

No map due to sparse data

Survival probabilities by year of diagnosis (Germany 1980-2007)



49 VIII Malignant bone tumours

(a) Osteosarcomas
(b) Chondrosarcomas
(c) Ewing tumour and related sarcomas of bone
(d) Other specified malignant bone tumours
(e) Unspecified malignant bone tumours

Cases in Germany aged under 15 years (1980-2009): 2209
based on International Classification of Childhood Cancer, 3rd edition

Selected characteristics (Germany 2000-2009)

Relative frequency:	810 / 18053 = 4.5 %
Relative frequency of trial patients:	98.0 %

Incidence rates per million:	**Girls**	**Boys**	**Total**
Number of cases:	390	420	810
Standardized rate *:	5.9	6.0	5.9
Cumulative incidence:	96	98	97

Sex ratio (m/f): 1.1

Age-specific incidence rates per million:

	<1	**1-4**	**5-9**	**10-14**
Number of cases :	5	50	208	547
Incidence rate:	0.7	1.7	5.3	12.6

Median age at diagnosis: 11 years 8 months

Survival probabilities:	**5-year**	**10-year**	**15-year**
	75 %	71 %	69 %

Mortality per million within 10 yrs. of diagnosis (1990-1999):

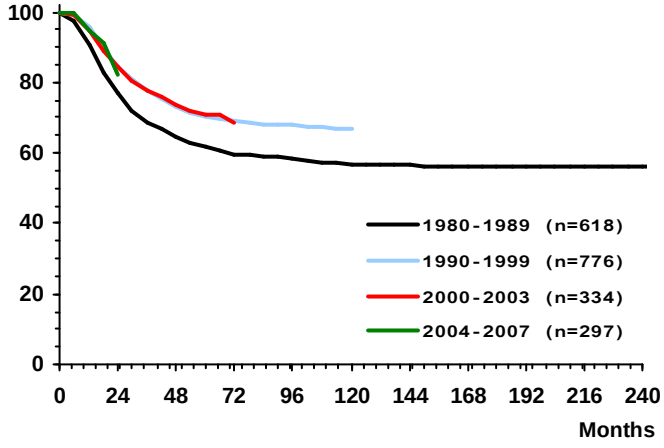
Number of deaths		Standardized*	Cumulative
N	% of all 4060 deaths	mortality rate	mortality
254	6.3 %	1.8	29

Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2009):
VIII Malignant bone tumours

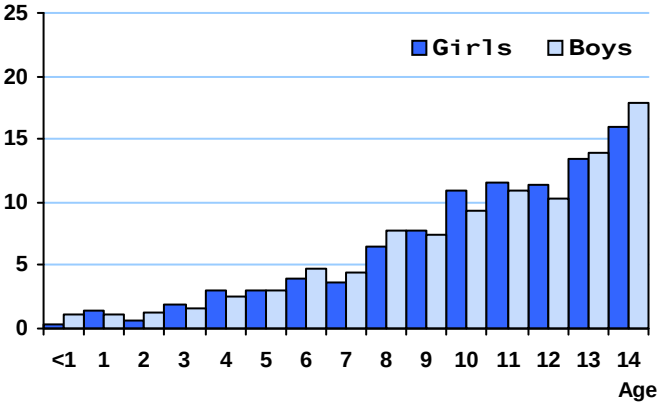
SN after VIII			VIII as SN after any primary		
N	% of all 682 SN	Cumulative incidence	N	% of all 682 SN	Cumulative incidence
39	5.7 %	2.8 %	45	6.6 %	0.2 %

* Standard: Segi world standard population

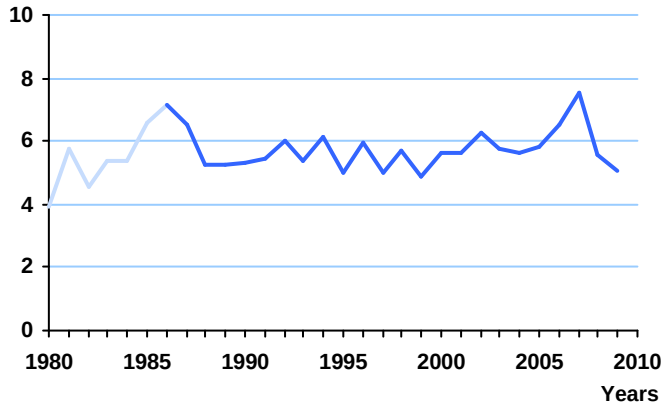
Survival probabilities by year of diagnosis (Germany 1980-2007)



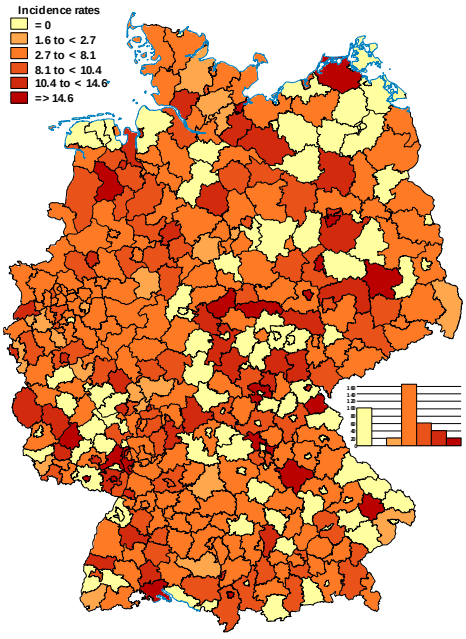
Age- and sex-specific incidence rates per million (Germany 2000-2009)



Standardized* annual incidence rates per million (Germany 1980-2009)



Standardized* incidence rates per million by districts (Landkreise) (Germany 2000-2009)



50 VIII (a) Osteosarcomas

Osteosarcomas are rare in early childhood. Completeness of registration exceeds 95%. Osteosarcomas are relatively frequent as second neoplasms.

Cases in Germany aged under 15 years (1980-2009): 1161
based on International Classification of Childhood Cancer, 3rd edition

Selected characteristics (Germany 2000-2009)

Relative frequency:	410 / 18053 = 2.3 %
Relative frequency of trial patients:	98.8 %

Incidence rates per million:	**Girls**	**Boys**	**Total**
Number of cases:	206	204	410
Standardized rate *:	3.0	2.8	2.9
Cumulative incidence:	50	47	49
Sex ratio (m/f):			1.0

Age-specific incidence rates per million:

	<1	**1-4**	**5-9**	**10-14**
Number of cases :	0	12	94	304
Incidence rate:	0.0	0.4	2.4	7.0

Median age at diagnosis: 12 years 3 months

Survival probabilities:	**5-year**	**10-year**	**15-year**
	77 %	73 %	71 %

Mortality per million within 10 yrs. of diagnosis (1990-1999):

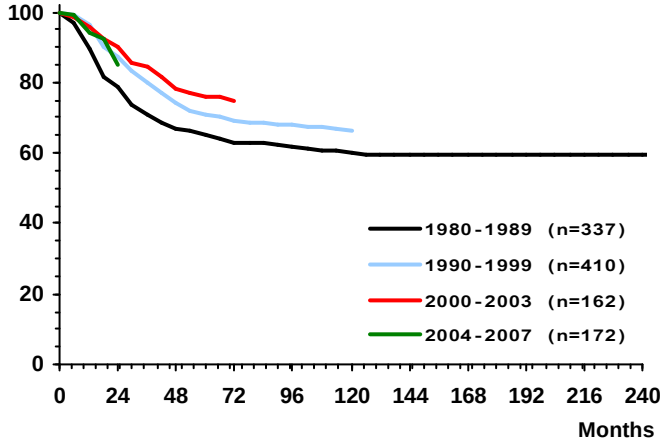
Number of deaths		Standardized*	Cumulative
N	% of all 4060 deaths	mortality rate	mortality
134	3.3 %	0.9	15

Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2009):
VIII (a) Osteosarcomas

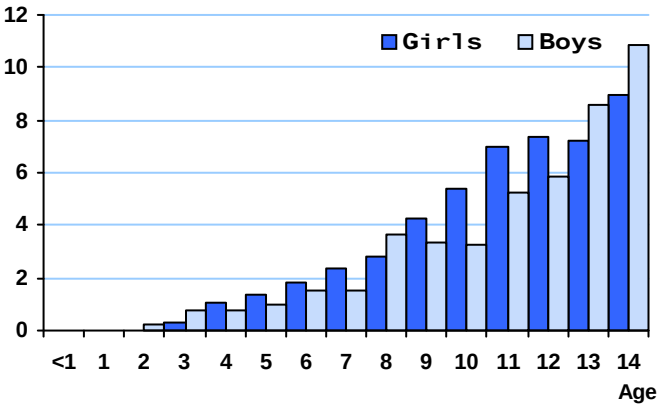
SN after VIII (a)			VIII (a) as SN after any primary		
N	% of all 682 SN	Cumulative incidence	N	% of all 682 SN	Cumulative incidence
14	2.1 %	1.9 %	32	4.7 %	0.1 %

* Standard: Segi world standard population

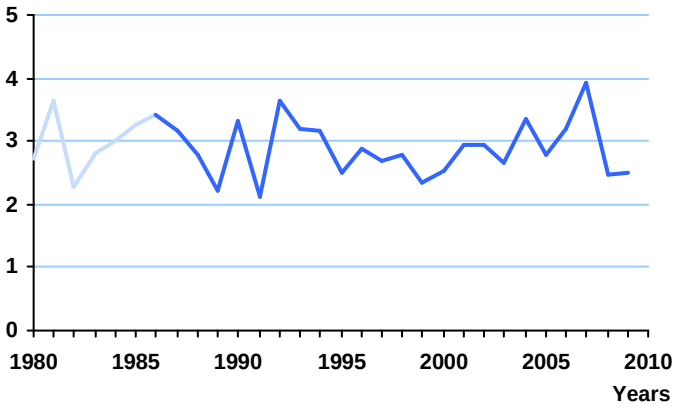
Survival probabilities by year of diagnosis (Germany 1980-2007)



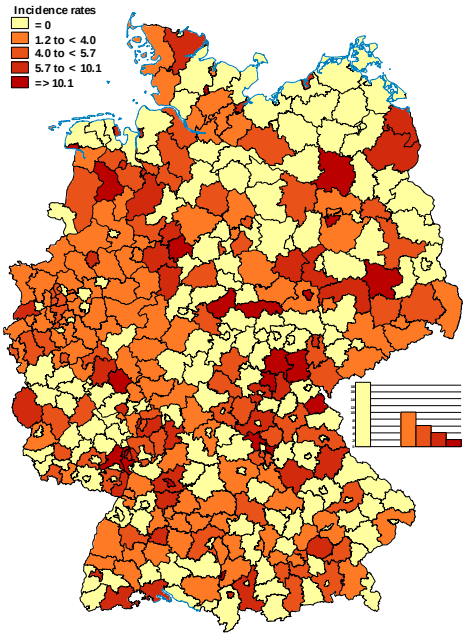
Age- and sex-specific incidence rates per million (Germany 2000-2009)



Standardized* annual incidence rates per million (Germany 1980-2009)



Standardized* incidence rates per million by districts (Landkreise) (Germany 2000-2009)



51 VIII (c) Ewing tumour and related sarcomas of bone

Completeness of registration exceeds 95%.

Cases in Germany aged under 15 years (1980-2009): 974
based on International Classification of Childhood Cancer, 3rd edition

Selected characteristics (Germany 2000-2009)

Relative frequency:	368 / 18053 = 2.0 %
Relative frequency of trial patients:	99.2 %

Incidence rates per million:	**Girls**	**Boys**	**Total**
Number of cases:	165	203	368
Standardized rate *:	2.5	3.0	2.8
Cumulative incidence:	41	48	45
Sex ratio (m/f):			1.2

Age-specific incidence rates per million:

	<1	**1-4**	**5-9**	**10-14**
Number of cases :	5	35	107	221
Incidence rate:	0.7	1.2	2.7	5.1

Median age at diagnosis: 10 years 10 months

Survival probabilities:	**5-year**	**10-year**	**15-year**
	72 %	69 %	67 %

Mortality per million within 10 yrs. of diagnosis (1990-1999):

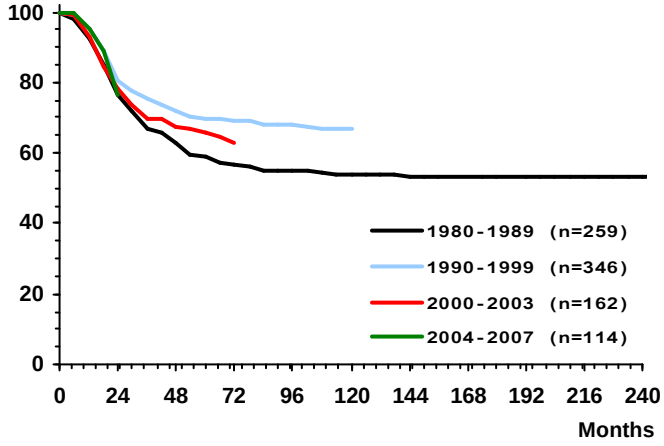
Number of deaths		Standardized*	Cumulative
N	% of all 4060 deaths	mortality rate	mortality
114	2.8 %	0.8	13

Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2009):
VIII (c) Ewing tumour and related sarcomas of bone

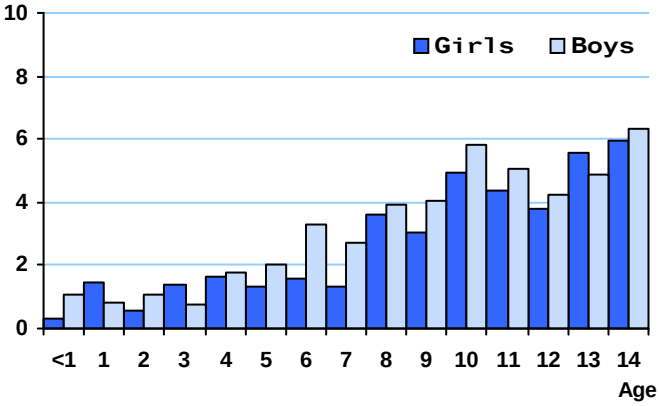
SN after VIII (c)			VIII (c) as SN after any primary		
N	% of all 682 SN	Cumulative incidence	N	% of all 682 SN	Cumulative incidence
23	3.4 %	3.7 %	10	1.5 %	0.0 %

* Standard: Segi world standard population

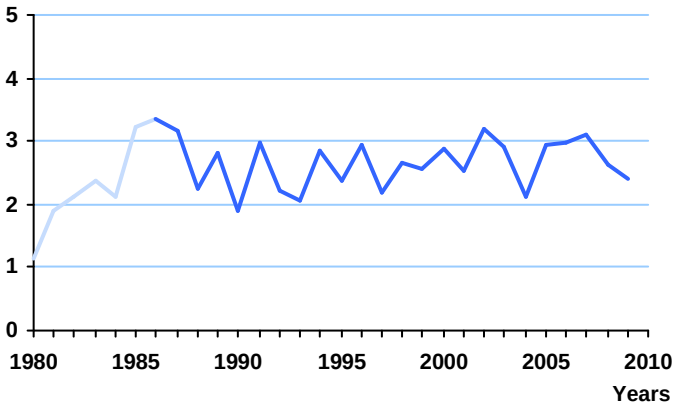
Survival probabilities by year of diagnosis (Germany 1980-2007)



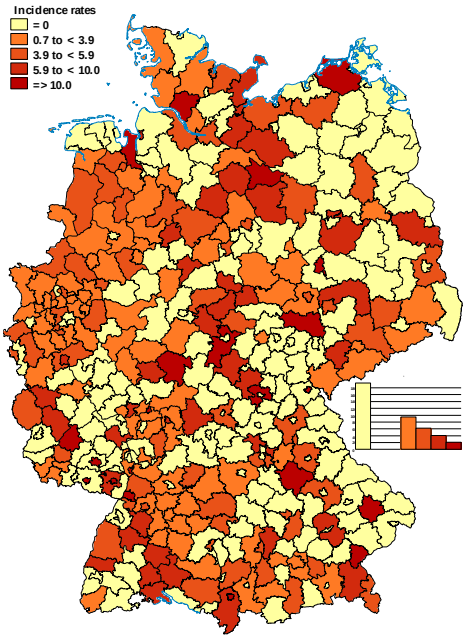
Age- and sex-specific incidence rates per million (Germany 2000-2009)



Standardized* annual incidence rates per million (Germany 1980-2009)



Standardized* incidence rates per million by districts (Landkreise) (Germany 2000-2009)



52 IX Soft tissue and other extraosseous sarcomas

(a) Rhabdomyosarcomas
(b) Fibrosarcomas, peripheral nerve sheath tumours and other fibrous neoplasms
(c) Kaposi sarcoma
(d) Other specified soft tissue sarcomas
(e) Unspecified soft tissue sarcomas

Cases in Germany aged under 15 years (1980-2009): 2912
based on International Classification of Childhood Cancer, 3rd edition

Selected characteristics (Germany 2000-2009)

Relative frequency:	1095 / 18053 = 6.1 %
Relative frequency of trial patients:	95.8 %

Incidence rates per million:	**Girls**	**Boys**	**Total**
Number of cases:	503	592	1095
Standardized rate *:	8.8	10.1	9.5
Cumulative incidence:	130	147	139
Sex ratio (m/f):			1.2

Age-specific incidence rates per million:

	<1	**1-4**	**5-9**	**10-14**
Number of cases :	120	320	279	376
Incidence rate:	16.9	10.8	7.1	8.7

Median age at diagnosis: 6 years 7 months

	5-year	**10-year**	**15-year**
Survival probabilities:	72 %	70 %	68 %

Mortality per million within 10 yrs. of diagnosis (1990-1999):

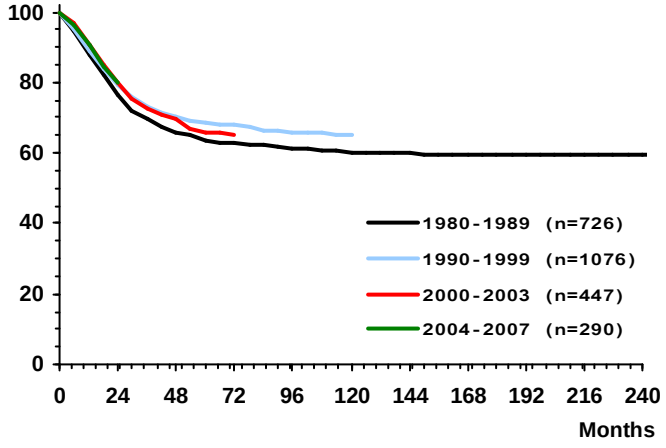
Number of deaths		**Standardized* mortality rate**	**Cumulative mortality**
N	% of all 4060 deaths		
371	9.1 %	3.0	44

Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2009):
IX Soft tissue and other extraosseous sarcomas

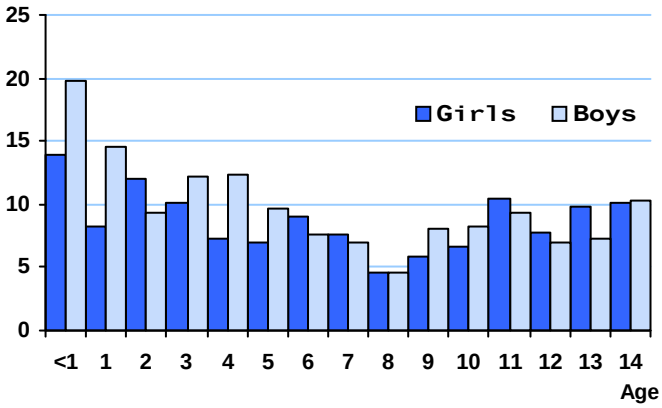
SN after IX			**IX as SN after any primary**		
N	% of all 682 SN	Cumulative incidence	N	% of all 682 SN	Cumulative incidence
49	7.2 %	3.0 %	45	6.6 %	0.2 %

* Standard: Segi world standard population

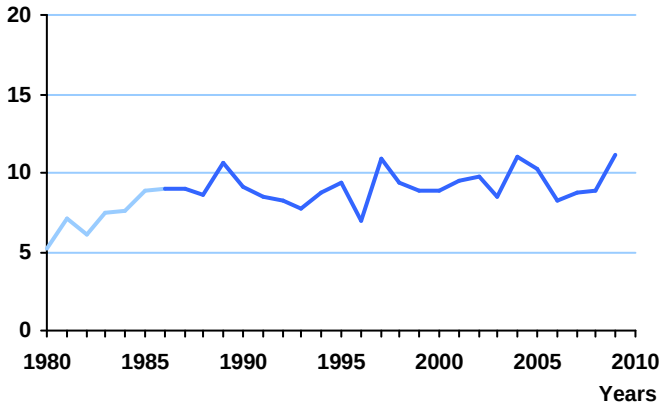
Survival probabilities by year of diagnosis (Germany 1980-2007)



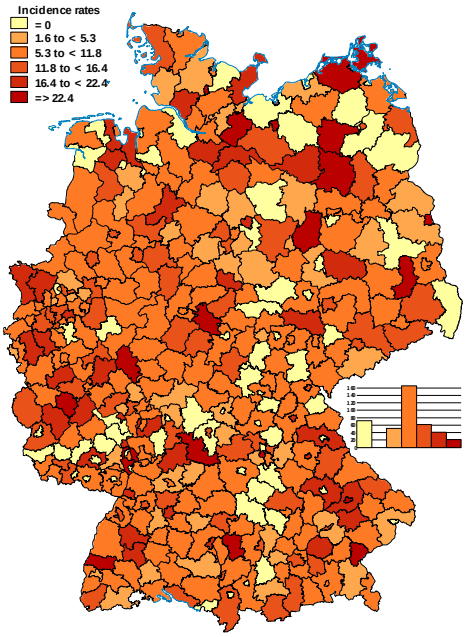
Age- and sex-specific incidence rates per million (Germany 2000-2009)



Standardized* annual incidence rates per million (Germany 1980-2009)



Standardized* incidence rates per million by districts (Landkreise) (Germany 2000-2009)



53 IX (a) Rhabdomyosarcomas

Completeness of registration exceeds 95%. Compared to all childhood cancers, mortality is relatively high. Rhabdomyosarcomas are relatively frequently followed by a second neoplasm within 20 years of diagnosis. Rhabdomyosarcoma is relatively rare as a second neoplasm.

Cases in Germany aged under 15 years (1980-2009): 1691
based on International Classification of Childhood Cancer, 3rd edition

Selected characteristics (Germany 2000-2009)

Relative frequency:	600 / 18053 = 3.3 %
Relative frequency of trial patients:	98.5 %

Incidence rates per million:	**Girls**	**Boys**	**Total**
Number of cases:	267	333	600
Standardized rate *:	4.9	5.9	5.4
Cumulative incidence:	70	84	77
Sex ratio (m/f):			1.2

Age-specific incidence rates per million:

	<1	**1-4**	**5-9**	**10-14**
Number of cases :	45	244	179	132
Incidence rate:	6.4	8.2	4.5	3.0

Median age at diagnosis: 5 years 2 months

Survival probabilities:	**5-year**	**10-year**	**15-year**
	73 %	71 %	70 %

Mortality per million within 10 yrs. of diagnosis (1990-1999):

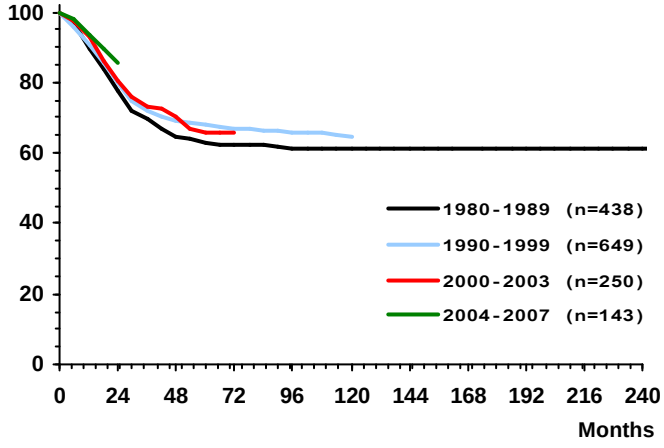
Number of deaths		Standardized*	Cumulative
N	% of all 4060 deaths	mortality rate	mortality
226	5.6 %	1.9	27

Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2009):
IX (a) Rhabdomyosarcomas

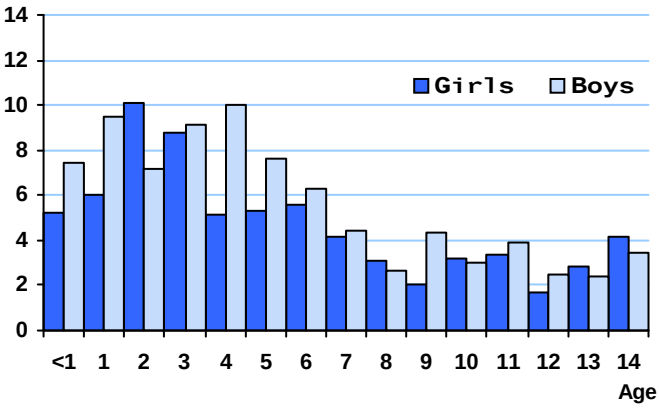
SN after IX (a)			IX (a) as SN after any primary		
N	% of all 682 SN	Cumulative incidence	N	% of all 682 SN	Cumulative incidence
34	5.0 %	3.5 %	11	1.6 %	0.0 %

* Standard: Segi world standard population

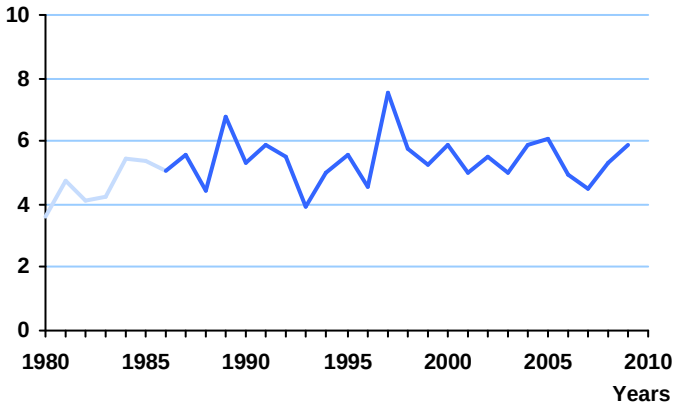
Survival probabilities by year of diagnosis (Germany 1980-2007)



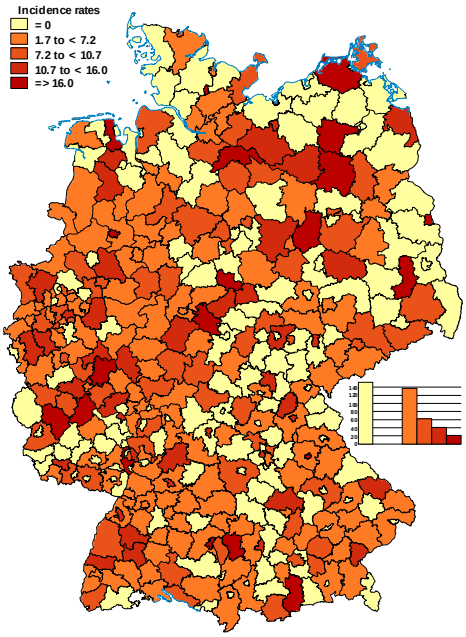
Age- and sex-specific incidence rates per million (Germany 2000-2009)



Standardized* annual incidence rates per million (Germany 1980-2009)



Standardized* incidence rates per million by districts (Landkreise) (Germany 2000-2009)



54 IX (b) Fibrosarcomas, peripheral nerve sheath tumours and other fibrous neoplasms

Completeness of registration exceeds 95%. These tumours are relatively frequent as second neoplasms.

Cases in Germany aged under 15 years (1980-2009): 257
based on International Classification of Childhood Cancer, 3rd edition

Selected characteristics (Germany 2000-2009)

Relative frequency:	106 / 18053 = 0.6 %
Relative frequency of trial patients:	86.8 %

Incidence rates per million:	**Girls**	**Boys**	**Total**
Number of cases:	53	53	106
Standardized rate *:	0.9	0.9	0.9
Cumulative incidence:	14	13	13
Sex ratio (m/f):			1.0

Age-specific incidence rates per million:

	<1	**1-4**	**5-9**	**10-14**
Number of cases :	31	12	17	46
Incidence rate:	4.4	0.4	0.4	1.1

Median age at diagnosis: 8 years 1 month

	5-year	**10-year**	**15-year**
Survival probabilities:	69 %	65 %	62 %

Mortality per million within 10 yrs. of diagnosis (1990-1999):

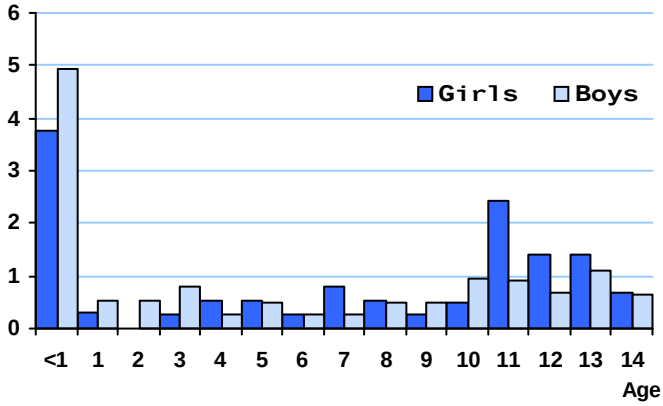
Number of deaths		Standardized*	Cumulative
N	% of all 4060 deaths	mortality rate	mortality
24	0.6 %	0.2	3

Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2009):
IX (b) Fibrosarcomas, peripheral nerve sheath tumours and other fibrous neoplasms

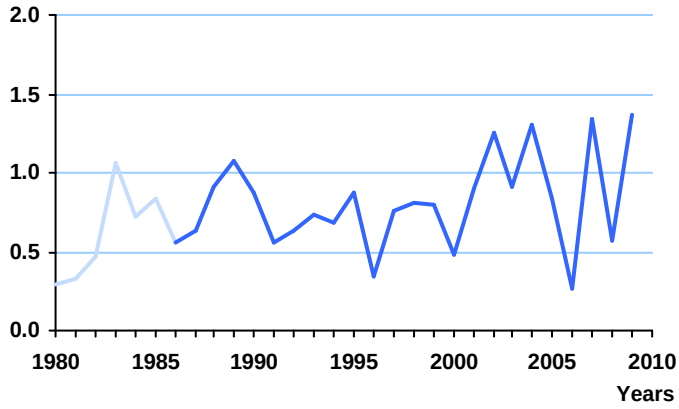
SN after IX (b)			IX (b) as SN after any primary		
N	% of all 682 SN	Cumulative incidence	N	% of all 682 SN	Cumulative incidence
4	0.6 %	2.6 %	11	1.6 %	0.1 %

* Standard: Segi world standard population

Age- and sex-specific incidence rates per million (Germany 2000-2009)



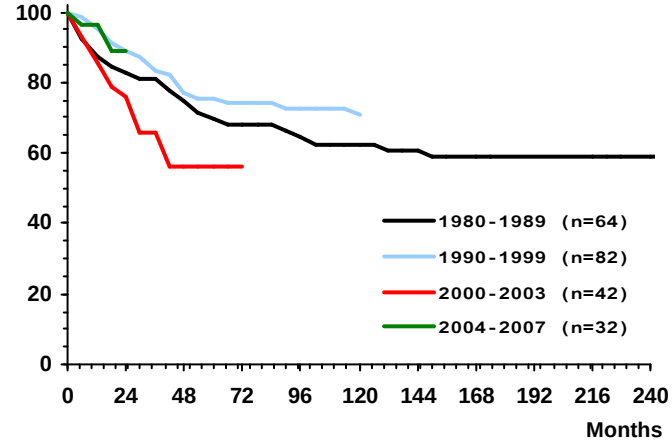
Standardized* annual incidence rates per million (Germany 1980-2009)



Standardized* incidence rates per million by districts (Landkreise) (Germany 2000-2009)

No map due to sparse data

Survival probabilities by year of diagnosis (Germany 1980-2007)



55 IX (b) Fibrosarcomas, peripheral nerve sheath tumours and other fibrous neoplasms - Extended ICCC-3

Germany (2000-2009)	N	%
Fibrosarcomas, peripheral nerve sheath tumours and other	**106**	**100.0**
Fibroblastic and myofibroblastic tumours	62	58.5
Nerve sheath tumours	44	41.5
Other fibrous neoplasms	0	0.0

1 Fibroblastic and myofibroblastic tumours

Cases in Germany aged under 15 years (1980-2009): 126

based on International Classification of Childhood Cancer, 3rd edition

Selected characteristics (Germany 2000-2009)

Relative frequency: 62 / 18053 = 0.3 %

Relative frequency of trial patients: 93.5 %

Incidence rates per million:	**Girls**	**Boys**	**Total**
Number of cases:	28	34	62
Standardized rate *:	0.5	0.6	0.6
Cumulative incidence:	7	9	8

Sex ratio (m/f): 1.2

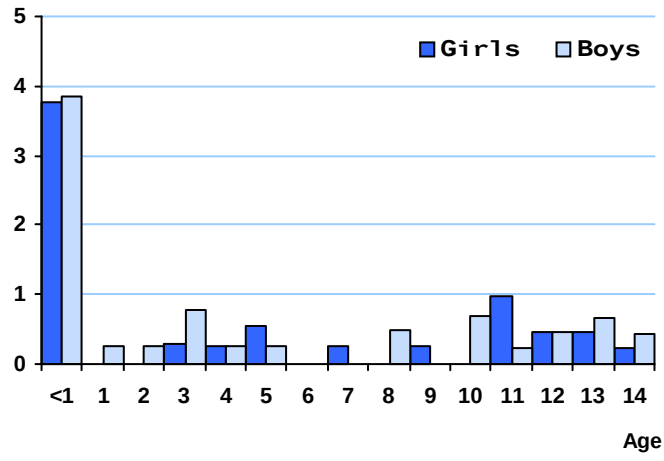
Age-specific incidence rates per million:

	<1	**1-4**	**5-9**	**10-14**
Number of cases:	27	8	7	20
Incidence rate:	3.8	0.3	0.2	0.5

Median age at diagnosis: 3 years 7 months

* Standard: Segi world standard population

Age- and sex-specific incidence rates per million (Germany 2000-2009)



2 Nerve sheath tumours

Cases in Germany aged under 15 years (1980-2009): 131

based on International Classification of Childhood Cancer, 3rd edition

Selected characteristics (Germany 2000-2009)

Relative frequency: 44 / 18053 = 0.2 %

Relative frequency of trial patients: 77.3 %

Incidence rates per million:	**Girls**	**Boys**	**Total**
Number of cases:	25	19	44
Standardized rate *:	0.4	0.3	0.3
Cumulative incidence:	6	5	5

Sex ratio (m/f): 0.8

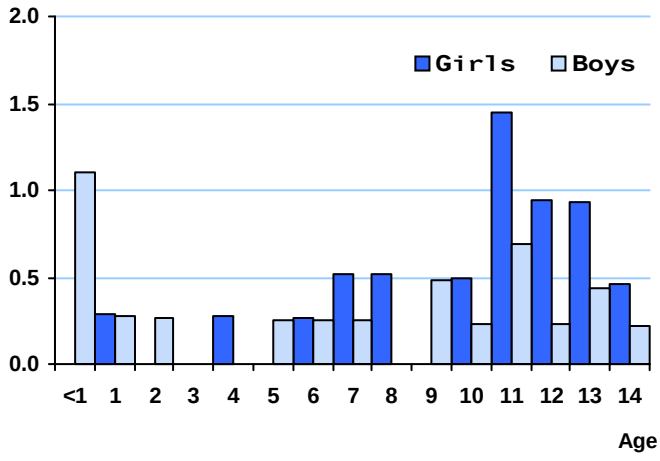
Age-specific incidence rates per million:

	<1	**1-4**	**5-9**	**10-14**
Number of cases:	4	4	10	26
Incidence rate:	0.6	0.1	0.3	0.6

Median age at diagnosis: 11 years 4 months

* Standard: Segi world standard population

Age- and sex-specific incidence rates per million (Germany 2000-2009)



56 IX (d) Other specified soft tissue sarcomas

Completeness of registration approaches 95%. These tumours are relatively rarely followed by a second neoplasm (SN) within 20 years of diagnosis, underreporting of SN is a possibility.

Cases in Germany aged under 15 years (1980-2009): 782
based on International Classification of Childhood Cancer, 3rd edition

Selected characteristics (Germany 2000-2009)

Relative frequency:	307 / 18053 = 1.7 %
Relative frequency of trial patients:	94.5 %

Incidence rates per million:	**Girls**	**Boys**	**Total**
Number of cases:	143	164	307
Standardized rate *:	2.3	2.7	2.5
Cumulative incidence:	36	40	38
Sex ratio (m/f):			1.1

Age-specific incidence rates per million:

	<1	**1-4**	**5-9**	**10-14**
Number of cases :	34	50	64	159
Incidence rate:	4.8	1.7	1.6	3.7

Median age at diagnosis: 10 years 2 months

	5-year	**10-year**	**15-year**
Survival probabilities:	74 %	70 %	69 %

Mortality per million within 10 yrs. of diagnosis (1990-1999):

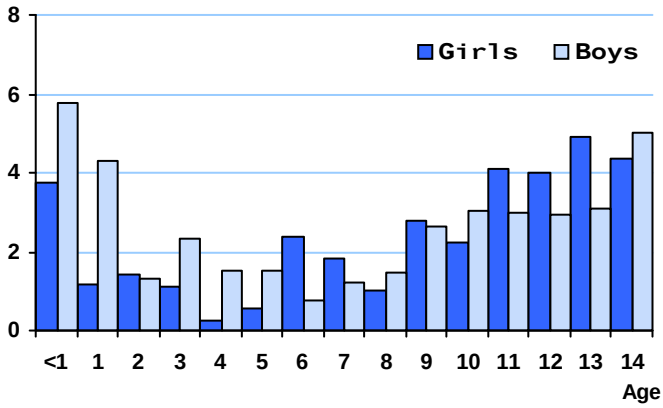
Number of deaths		**Standardized* mortality rate**	**Cumulative mortality**
N	% of all 4060 deaths		
98	2.4 %	0.8	12

Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2009):
IX (d) Other specified soft tissue sarcomas

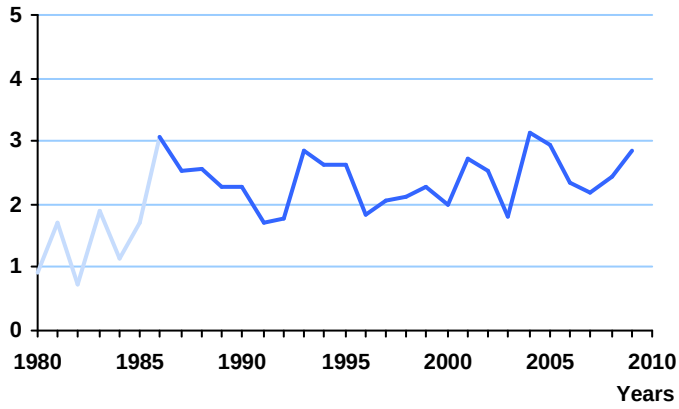
SN after IX (d)			**IX (d) as SN after any primary**		
N	% of all 682 SN	Cumulative incidence	N	% of all 682 SN	Cumulative incidence
9	1.3 %	1.9 %	20	2.9 %	0.1 %

* Standard: Segi world standard population

Age- and sex-specific incidence rates per million (Germany 2000-2009)

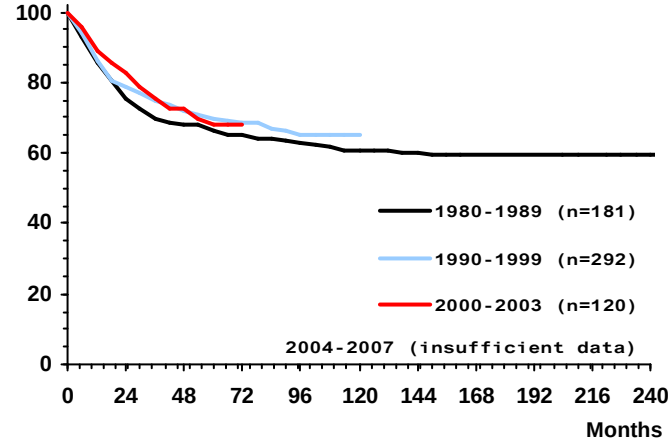


Standardized* annual incidence rates per million (Germany 1980-2009)



Standardized* incidence rates per million by districts (Landkreise) (Germany 2000-2009)

Survival probabilities by year of diagnosis (Germany 1980-2007)



No map due to sparse data

57 X Germ cell tumours, trophoblastic tumours and neoplasms of gonads

(a) Intracranial and intraspinal germ cell tumours
(b) Malignant extracranial and extragonadal germ cell tumours
(c) Malignant gonadal germ cell tumours
(d) Gonadal carcinomas
(e) Other and unspecified malignant gonadal tumours

Cases in Germany aged under 15 years (1980-2009): 1458
based on International Classification of Childhood Cancer, 3rd edition

Selected characteristics (Germany 2000-2009)

Relative frequency:	532 / 18053 = 2.9 %
Relative frequency of trial patients:	97.0 %

Incidence rates per million:	**Girls**	**Boys**	**Total**
Number of cases:	298	234	532
Standardized rate *:	5.2	4.0	4.6
Cumulative incidence:	77	58	67
Sex ratio (m/f):			0.8

Age-specific incidence rates per million:

	<1	**1-4**	**5-9**	**10-14**
Number of cases :	123	88	87	234
Incidence rate:	17.4	3.0	2.2	5.4

Median age at diagnosis: 9 years 1 month

	5-year	**10-year**	**15-year**
Survival probabilities:	96 %	95 %	94 %

Mortality per million within 10 yrs. of diagnosis (1990-1999):

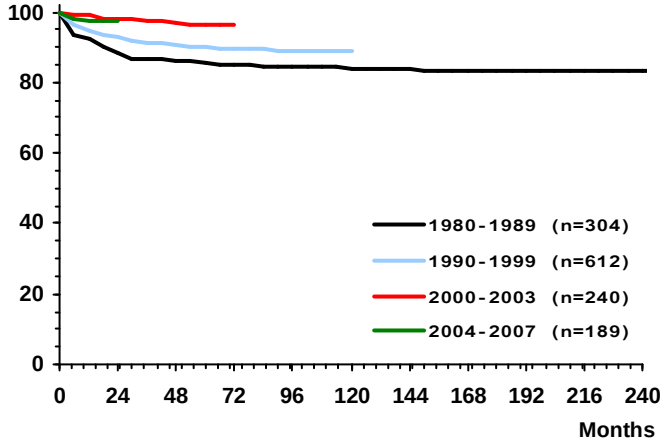
Number of deaths		**Standardized* mortality rate**	**Cumulative mortality**
N	% of all 4060 deaths		
66	1.6 %	0.5	8

Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2009):
X Germ cell tumours, trophoblastic tumours and neoplasms of gonads

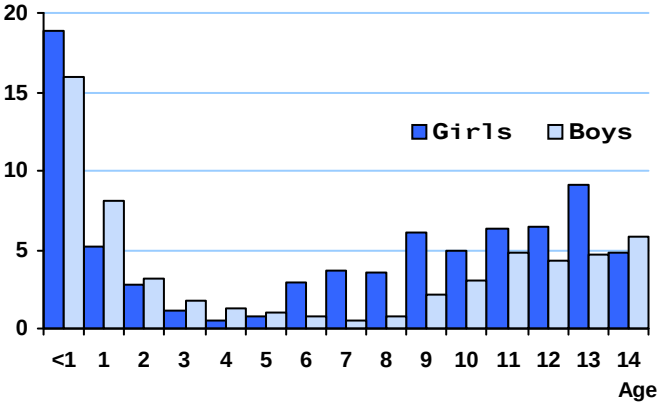
SN after X			**X as SN after any primary**		
N	% of all 682 SN	Cumulative incidence	N	% of all 682 SN	Cumulative incidence
11	1.6 %	1.4 %	5	0.7 %	0.0 %

* Standard: Segi world standard population

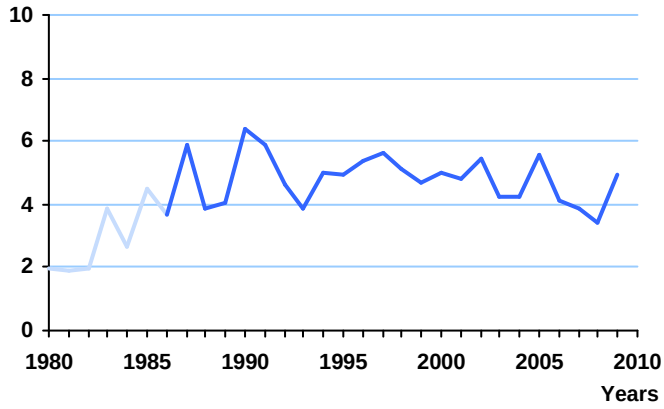
Survival probabilities by year of diagnosis (Germany 1980-2007)



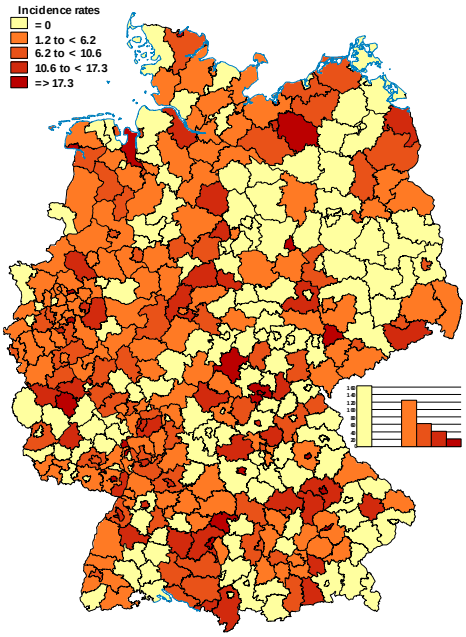
Age- and sex-specific incidence rates per million (Germany 2000-2009)



Standardized* annual incidence rates per million (Germany 1980-2009)



Standardized* incidence rates per million by districts (Landkreise) (Germany 2000-2009)



58 X (a) Intracranial and intraspinal germ cell tumours

Most frequent form is germinoma (malignant). Non-malignant forms constitute about 10%, early childhood cases are rare, some underreporting is likely. These tumours are relatively rarely followed by a second neoplasm (SN) within 20 years of diagnosis, underreporting of SN is a possibility. These tumours are very rare as second neoplasms.

Cases in Germany aged under 15 years (1980-2009): 391
based on International Classification of Childhood Cancer, 3rd edition

Selected characteristics (Germany 2000-2009)

Relative frequency:	155 / 18053 = 0.9 %
Relative frequency of trial patients:	96.1 %

Incidence rates per million:	**Girls**	**Boys**	**Total**
Number of cases:	62	93	155
Standardized rate *:	1.0	1.3	1.1
Cumulative incidence:	16	22	19
Sex ratio (m/f):			1.5

Age-specific incidence rates per million:

	<1	**1-4**	**5-9**	**10-14**
Number of cases :	5	6	41	103
Incidence rate:	0.7	0.2	1.0	2.4

Median age at diagnosis: 11 years 2 months

	5-year	**10-year**	**15-year**
Survival probabilities:	92 %	89 %	87 %

Mortality per million within 10 yrs. of diagnosis (1990-1999):

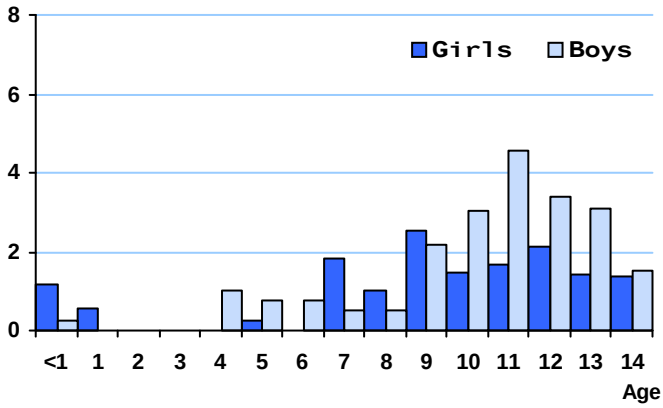
Number of deaths		**Standardized* mortality rate**	**Cumulative mortality**
N	% of all 4060 deaths		
35	0.9 %	0.3	4

Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2009):
X (a) Intracranial and intraspinal germ cell tumours

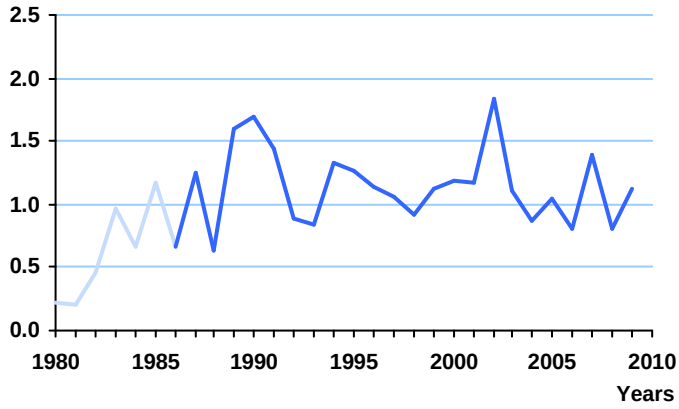
SN after X (a)			**X (a) as SN after any primary**		
N	% of all 682 SN	Cumulative incidence	N	% of all 682 SN	Cumulative incidence
2	0.3 %	0.7 %	1	0.1 %	0.0 %

* Standard: Segi world standard population

Age- and sex-specific incidence rates per million (Germany 2000-2009)



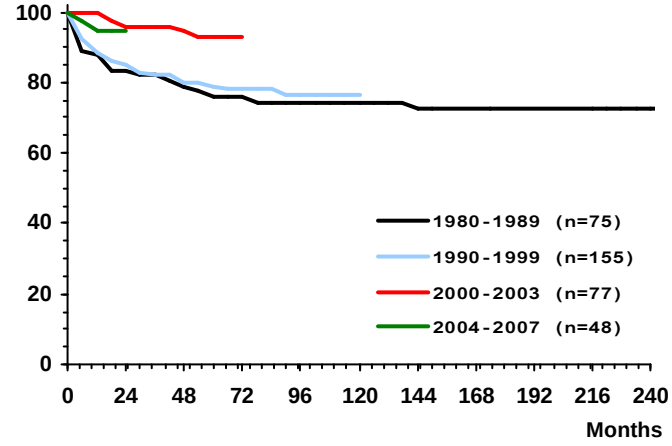
Standardized* annual incidence rates per million (Germany 1980-2009)



Standardized* incidence rates per million by districts (Landkreise) (Germany 2000-2009)

No map due to sparse data

Survival probabilities by year of diagnosis (Germany 1980-2007)



59 X (b) Malignant extracranial and extragonadal germ cell tumours

Completeness of registration exceeds 95%. These tumours are relatively rarely followed by a second neoplasm within 20 years of diagnosis. These tumours are very rare as second neoplasms.

Cases in Germany aged under 15 years (1980-2009): 431
based on International Classification of Childhood Cancer, 3rd edition

Selected characteristics (Germany 2000-2009)

Relative frequency:	151 / 18053 = 0.8 %
Relative frequency of trial patients:	96.7 %

Incidence rates per million:	**Girls**	**Boys**	**Total**
Number of cases:	96	55	151
Standardized rate *:	2.1	1.1	1.6
Cumulative incidence:	27	14	21
Sex ratio (m/f):			0.6

Age-specific incidence rates per million:

	<1	**1-4**	**5-9**	**10-14**
Number of cases :	88	40	6	17
Incidence rate:	12.4	1.4	0.2	0.4

Median age at diagnosis: 0 years 9 months

Survival probabilities:	**5-year**	**10-year**	**15-year**
	98 %	97 %	97 %

Mortality per million within 10 yrs. of diagnosis (1990-1999):

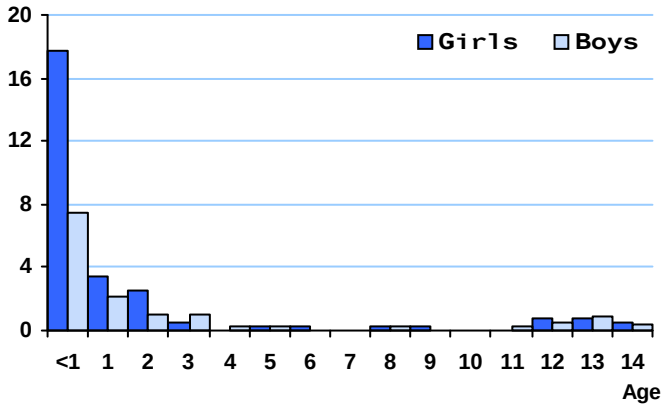
Number of deaths		Standardized* mortality rate	Cumulative mortality
N	% of all 4060 deaths		
17	0.4 %	0.2	2

Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2009):
X (b) Malignant extracranial and extragonadal germ cell tumours

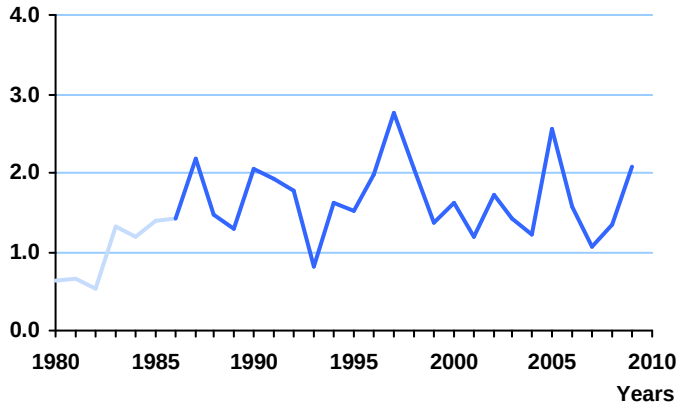
SN after X (b)			X (b) as SN after any primary		
N	% of all 682 SN	Cumulative incidence	N	% of all 682 SN	Cumulative incidence
4	0.6 %	1.6 %	1	0.1 %	0.0 %

* Standard: Segi world standard population

Age- and sex-specific incidence rates per million (Germany 2000-2009)



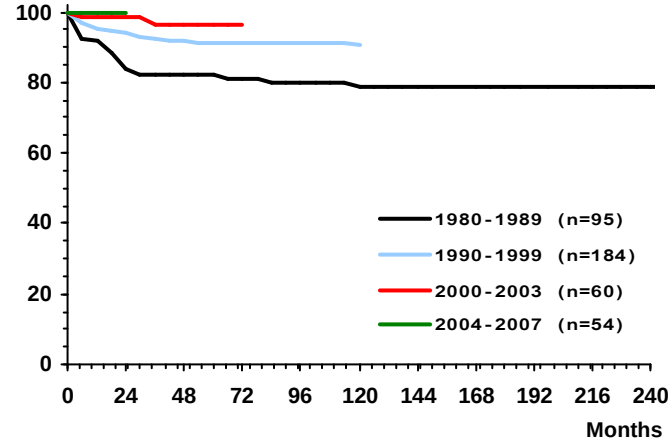
Standardized* annual incidence rates per million (Germany 1980-2009)



Standardized* incidence rates per million by districts (Landkreise) (Germany 2000-2009)

No map due to sparse data

Survival probabilities by year of diagnosis (Germany 1980-2007)



60 X (c) Malignant gonadal germ cell tumours

Girls are more and earlier affected than boys (in puberty). Age at diagnosis peaks at infancy and with puberty. Completeness of registration approaches 95%. These tumours are relatively rarely followed by a second neoplasm within 20 years of diagnosis. These tumours are very rare as second neoplasms.

Cases in Germany aged under 15 years (1980-2009): 596
based on International Classification of Childhood Cancer, 3rd edition

Selected characteristics (Germany 2000-2009)

Relative frequency:	219 / 18053 = 1.2 %
Relative frequency of trial patients:	99.1 %

Incidence rates per million:	**Girls**	**Boys**	**Total**
Number of cases:	133	86	219
Standardized rate *:	2.0	1.6	1.8
Cumulative incidence:	33	22	27
Sex ratio (m/f):			0.6

Age-specific incidence rates per million:

	<1	**1-4**	**5-9**	**10-14**
Number of cases :	30	42	38	109
Incidence rate:	4.2	1.4	1.0	2.5

Median age at diagnosis: 9 years 11 months

	5-year	**10-year**	**15-year**
Survival probabilities:	99 %	98 %	98 %

Mortality per million within 10 yrs. of diagnosis (1990-1999):

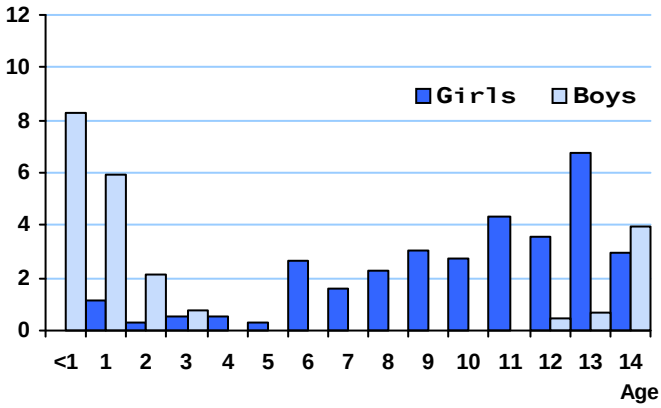
Number of deaths		**Standardized* mortality rate**	**Cumulative mortality**
N	% of all 4060 deaths		
9	0.2 %	0.1	1

Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2009):
X (c) Malignant gonadal germ cell tumours

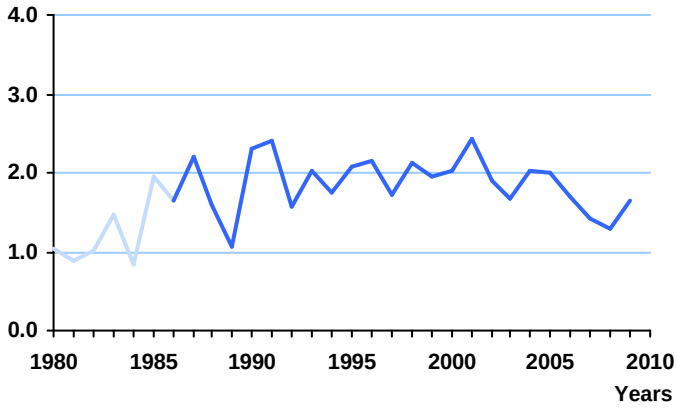
SN after X (c)			**X (c) as SN after any primary**		
N	% of all 682 SN	Cumulative incidence	N	% of all 682 SN	Cumulative incidence
5	0.7 %	1.7 %	3	0.4 %	0.0 %

* Standard: Segi world standard population

Age- and sex-specific incidence rates per million (Germany 2000-2009)



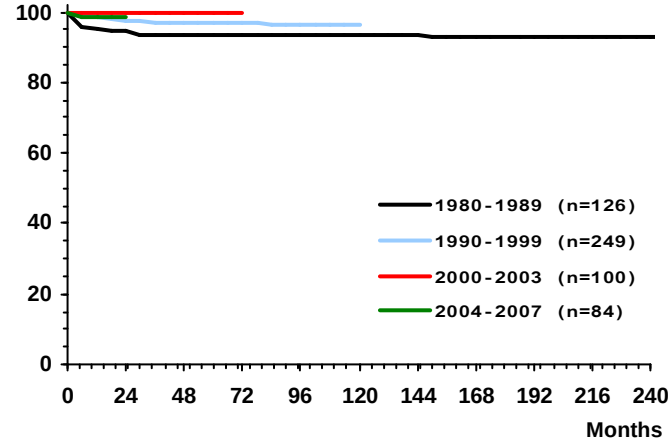
Standardized* annual incidence rates per million (Germany 1980-2009)



Standardized* incidence rates per million by districts (Landkreise) (Germany 2000-2009)

No map due to sparse data

Survival probabilities by year of diagnosis (Germany 1980-2007)



61 XI (a) Adrenocortical carcinomas

Based on international comparisons, completeness of registration is by now close to 100%. The temporal trend is due to improvements in registration. These carcinomas are relatively frequently followed by a second neoplasm within 20 years of diagnosis. These carcionmas have so for not been reported as second neoplasms.

Cases in Germany aged under 15 years (1980-2009): 63
based on International Classification of Childhood Cancer, 3rd edition

Selected characteristics (Germany 2000-2009)

Relative frequency:	34 / 18053 = 0.2 %
Relative frequency of trial patients:	97.1 %

Incidence rates per million:	**Girls**	**Boys**	**Total**
Number of cases:	23	11	34
Standardized rate *:	0.4	0.2	0.3
Cumulative incidence:	6	3	4
Sex ratio (m/f):			0.5

Age-specific incidence rates per million:

	<1	**1-4**	**5-9**	**10-14**
Number of cases :	4	14	9	7
Incidence rate:	0.6	0.5	0.2	0.2

Median age at diagnosis: 3 years 9 months

Survival probabilities:	**5-year**	**10-year**	**15-year**
	59 %	59 %	-

Mortality per million within 10 yrs. of diagnosis (1990-1999):

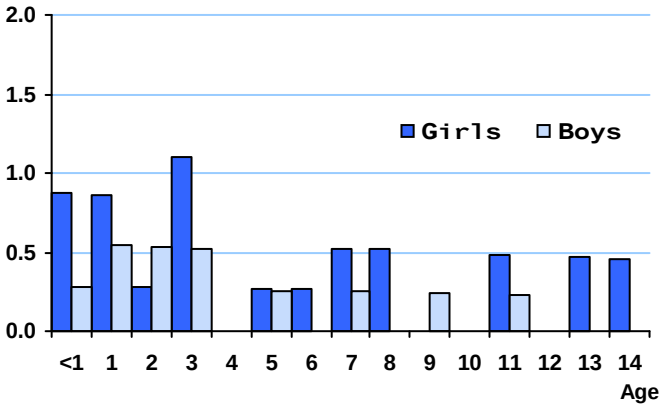
Number of deaths		Standardized*	Cumulative
N	% of all 4060 deaths	mortality rate	mortality
6	0.1 %	0.1	1

Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2009):
XI (a) Adrenocortical carcinomas

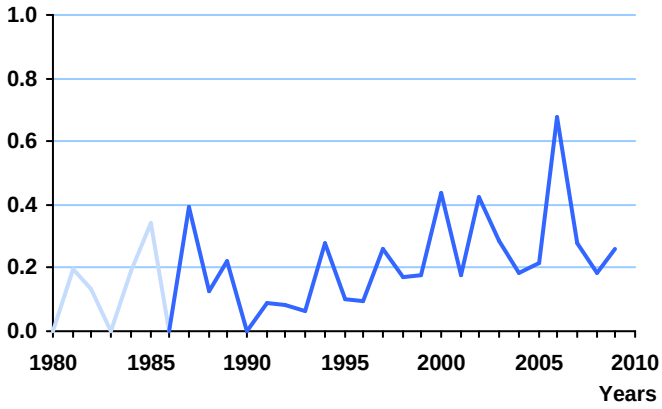
SN after XI (a)			XI (a) as SN after any primary		
N	% of all 682 SN	Cumulative incidence	N	% of all 682 SN	Cumulative incidence
4	0.6 %	8.7 %	0	0.0 %	0.0 %

* Standard: Segi world standard population

Age- and sex-specific incidence rates per million (Germany 2000-2009)



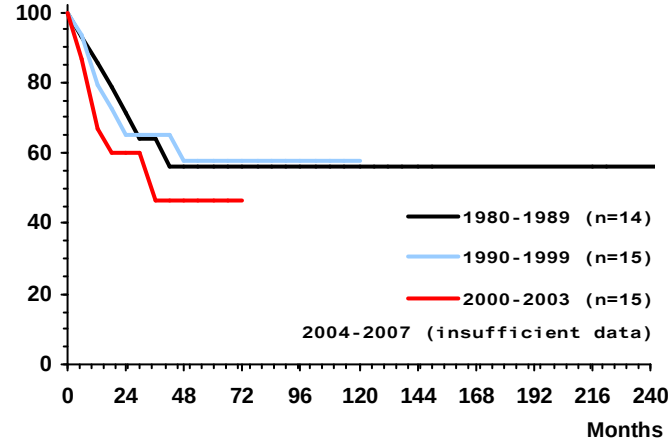
Standardized* annual incidence rates per million (Germany 1980-2009)



Standardized* incidence rates per million by districts (Landkreise) (Germany 2000-2009)

No map due to sparse data

Survival probabilities by year of diagnosis (Germany 1980-2007)



62 XI (b) Thyroid carcinomas

Thyroid carcinomas are rare in early childhood. Completeness of registration approaches 95%. Thyroid carcinomas are relatively rarely followed by a subsequent neoplasm within 20 years of diagnosis, a large fraction of them are second neoplasms. Thyroid carcinoma is relatively frequent as a second neoplasm.

Cases in Germany aged under 15 years (1980-2009): 253
based on International Classification of Childhood Cancer, 3rd edition

Selected characteristics (Germany 2000-2009)

Relative frequency:	137 / 18053 = 0.8 %
Relative frequency of trial patients:	89.1 %

Incidence rates per million:	**Girls**	**Boys**	**Total**
Number of cases:	85	52	137
Standardized rate *:	1.2	0.7	1.0
Cumulative incidence:	21	12	16
Sex ratio (m/f):			0.6

Age-specific incidence rates per million:

	<1	**1-4**	**5-9**	**10-14**
Number of cases :	1	4	30	102
Incidence rate:	0.1	0.1	0.8	2.4

Median age at diagnosis: 12 years 5 months

Survival probabilities:	**5-year**	**10-year**	**15-year**
	95 %	91 %	87 %

Mortality per million within 10 yrs. of diagnosis (1990-1999):

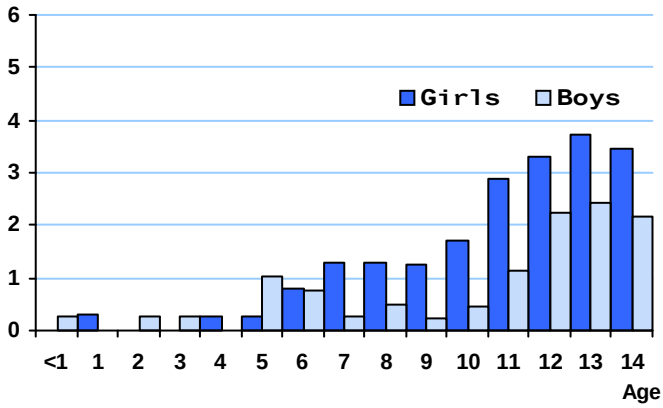
Number of deaths		**Standardized* mortality rate**	**Cumulative mortality**
N	% of all 4060 deaths		
6	0.1 %	0.0	1

Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2009):
XI (b) Thyroid carcinomas

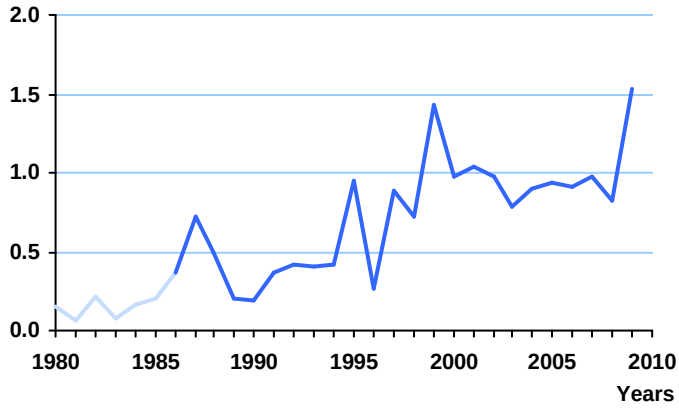
SN after XI (b)			**XI (b) as SN after any primary**		
N	% of all 682 SN	Cumulative incidence	N	% of all 682 SN	Cumulative incidence
1	0.1 %	0.6 %	61	8.9 %	0.4 %

* Standard: Segi world standard population

Age- and sex-specific incidence rates per million (Germany 2000-2009)



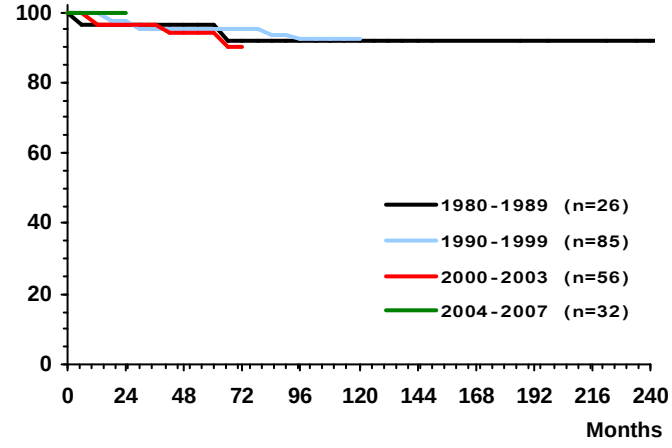
Standardized* annual incidence rates per million (Germany 1980-2009)



Standardized* incidence rates per million by districts (Landkreise) (Germany 2000-2009)

No map due to sparse data

Survival probabilities by year of diagnosis (Germany 1980-2007)



63 XI (c) Nasopharyngeal carcinomas

Nasopharyngeal carcinomas are rare in early childhood. Based on international comparisons, completeness of registration is close to 100%. So far no second neoplasm after this carcinoma has been reported.

Cases in Germany aged under 15 years (1980-2009): 65
based on International Classification of Childhood Cancer, 3rd edition

Selected characteristics (Germany 2000-2009)

Relative frequency:	25 / 18053 = 0.1 %
Relative frequency of trial patients:	100.0 %

Incidence rates per million:	**Girls**	**Boys**	**Total**
Number of cases:	7	18	25
Standardized rate *:	0.1	0.2	0.2
Cumulative incidence:	2	4	3
Sex ratio (m/f):			2.6

Age-specific incidence rates per million:

	<1	**1-4**	**5-9**	**10-14**
Number of cases :	0	1	0	24
Incidence rate:	0.0	0.0	0.0	0.6

Median age at diagnosis: 13 years 0 months

Survival probabilities:	**5-year**	**10-year**	**15-year**
	91 %	78 %	78 %

Mortality per million within 10 yrs. of diagnosis (1990-1999):

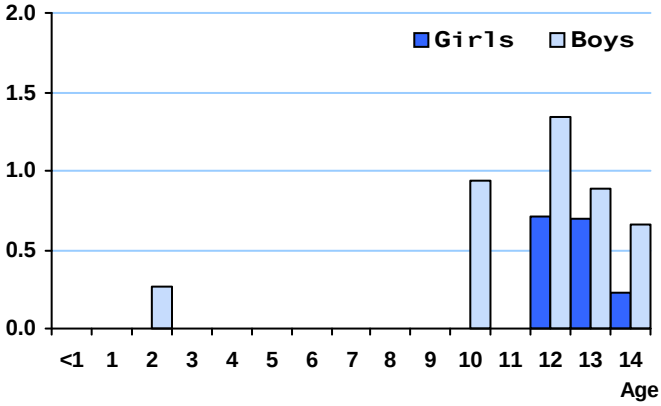
Number of deaths		Standardized*	Cumulative
N	% of all 4060 deaths	mortality rate	mortality
6	0.1 %	0.0	1

Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2009):
XI (c) Nasopharyngeal carcinomas

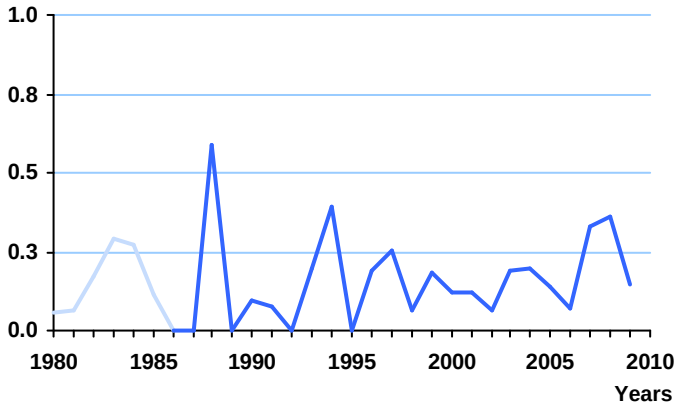
SN after XI (c)			XI (c) as SN after any primary		
N	% of all 682 SN	Cumulative incidence	N	% of all 682 SN	Cumulative incidence
0	0.0 %	0.0 %	3	0.4 %	0.0 %

* Standard: Segi world standard population

Age- and sex-specific incidence rates per million (Germany 2000-2009)



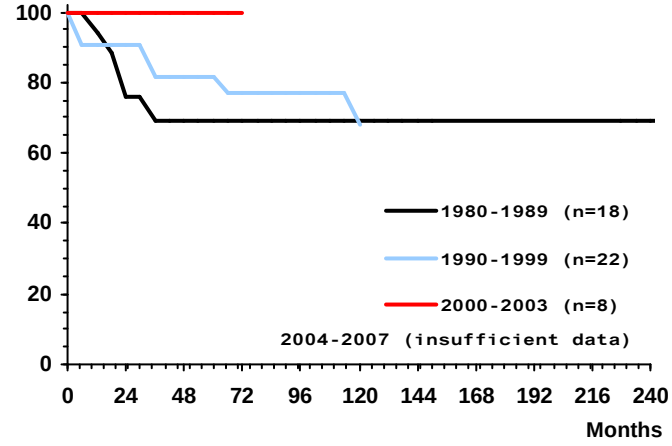
Standardized* annual incidence rates per million (Germany 1980-2009)



Standardized* incidence rates per million by districts (Landkreise) (Germany 2000-2009)

No map due to sparse data

Survival probabilities by year of diagnosis (Germany 1980-2007)



64 XI (d) Malignant melanomas

Early childhood cases of Malignant Melanoma (MM) are rare. Some underreporting is likely. The temporal trend is due to improvements in registration. So far no second neoplasm (SN) after MM has been reported, underreporting of SN is a possibility. Malignant melanoma is relatively frequent as a second neoplasm.

Cases in Germany aged under 15 years (1980-2009): 69
based on International Classification of Childhood Cancer, 3rd edition

Selected characteristics (Germany 2000-2009)

Relative frequency:	39 / 18053 = 0.2 %
Relative frequency of trial patients:	-

Incidence rates per million:	**Girls**	**Boys**	**Total**
Number of cases:	19	20	39
Standardized rate *:	0.3	0.3	0.3
Cumulative incidence:	5	5	5
Sex ratio (m/f):			1.1

Age-specific incidence rates per million:

	<1	**1-4**	**5-9**	**10-14**
Number of cases :	2	8	10	19
Incidence rate:	0.3	0.3	0.3	0.4

Median age at diagnosis: 9 years 7 months

Survival probabilities:	**5-year**	**10-year**	**15-year**
	74 %	-	-

Mortality per million within 10 yrs. of diagnosis (1990-1999):

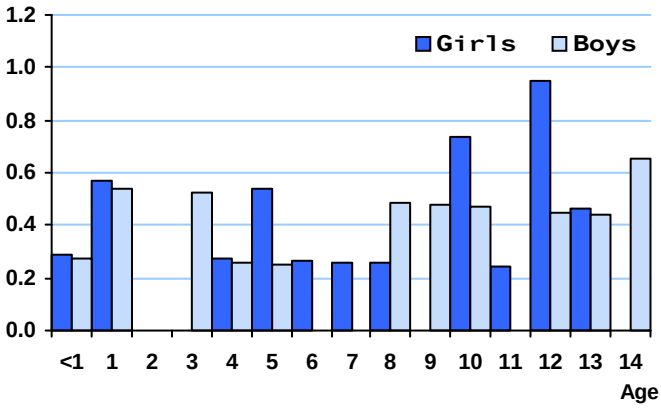
Number of deaths		Standardized*	Cumulative
N	% of all 4060 deaths	mortality rate	mortality
10	0.2 %	0.1	1

Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2009):
XI (d) Malignant melanomas

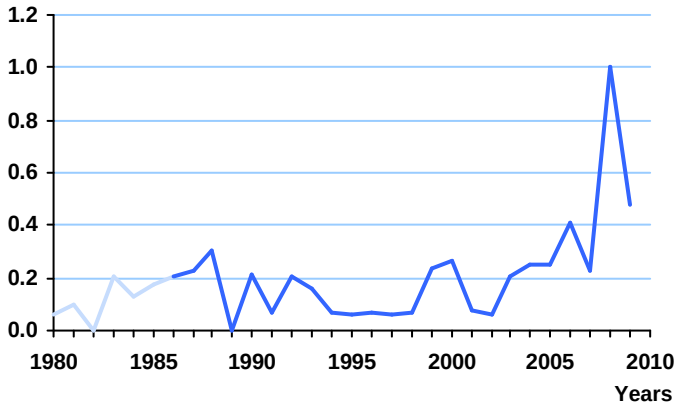
SN after XI (d)			XI (d) as SN after any primary		
N	% of all 682 SN	Cumulative incidence	N	% of all 682 SN	Cumulative incidence
0	0.0 %	0.0 %	13	1.9 %	0.1 %

* Standard: Segi world standard population

Age- and sex-specific incidence rates per million (Germany 2000-2009)



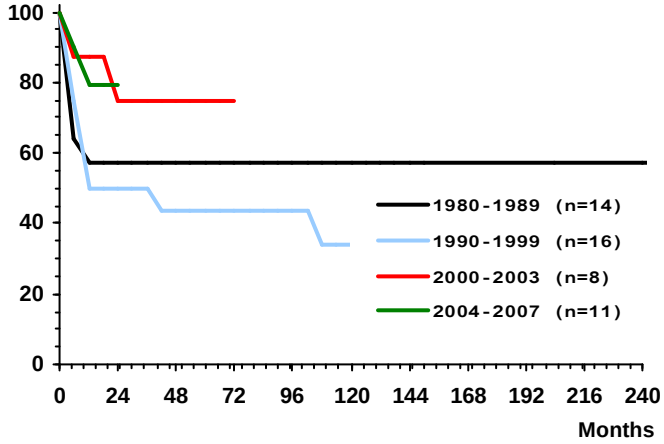
Standardized* annual incidence rates per million (Germany 1980-2009)



Standardized* incidence rates per million by districts (Landkreise) (Germany 2000-2009)

No map due to sparse data

Survival probabilities by year of diagnosis (Germany 1980-2007)



65 XII (a) Other specified malignant tumours

Most frequent form is pulmonary blastoma. Underreporting is likely. These carcinomas have so far not been reported as second neoplasms.

Cases in Germany aged under 15 years (1980-2009): 33
based on International Classification of Childhood Cancer, 3rd edition

Selected characteristics (Germany 2000-2009)

Relative frequency:	13 / 18053 = 0.1 %
Relative frequency of trial patients:	69.2 %

Incidence rates per million:	**Girls**	**Boys**	**Total**
Number of cases:	7	6	13
Standardized rate *:	0.1	0.1	0.1
Cumulative incidence:	2	2	2

Sex ratio (m/f): 0.9

Age-specific incidence rates per million:

	<1	**1-4**	**5-9**	**10-14**
Number of cases :	0	6	3	4
Incidence rate:	0.0	0.2	0.1	0.1

Median age at diagnosis: 6 years 5 months

Survival probabilities:	**5-year**	**10-year**	**15-year**
	86 %	86 %	-

Mortality per million within 10 yrs. of diagnosis (1990-1999):

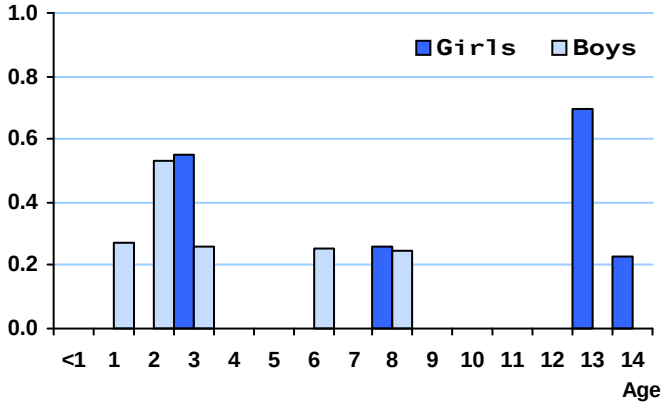
Number of deaths		Standardized*	Cumulative
N	% of all 4060 deaths	mortality rate	mortality
6	0.1 %	0.1	1

Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2009):
XII (a) Other specified malignant tumours

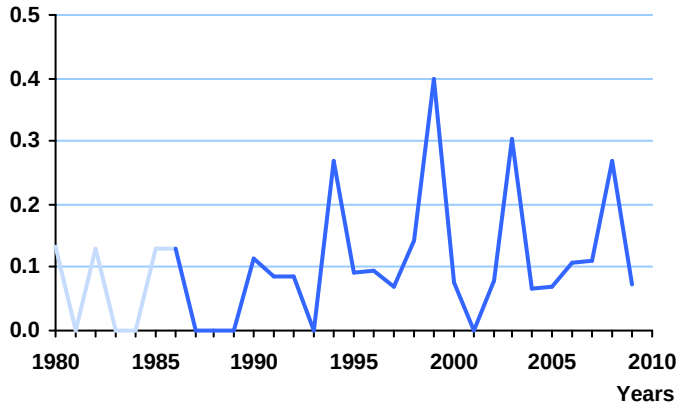
SN after XII (a)			XII (a) as SN after any primary		
N	% of all 682 SN	Cumulative incidence	N	% of all 682 SN	Cumulative incidence
1	0.1 %	4.0 %	0	0.0 %	0.0 %

* Standard: Segi world standard population

Age- and sex-specific incidence rates per million (Germany 2000-2009)



Standardized* annual incidence rates per million (Germany 1980-2009)



Standardized* incidence rates per million by districts (Landkreise) (Germany 2000-2009)

No map due to sparse data

Survival probabilities by year of diagnosis (Germany 1980-2007)