

**Systematische Darstellung epidemiologischer Kenngrößen der häufigsten ICC-3 Diagnosen /  
Systematic Presentation of Descriptive Measures for Frequent ICC-3 Diagnoses**

	Seite / Page
<b>All malignancies</b>	<b>11</b>
<b>I Leukaemias, myeloproliferative and myelodysplastic diseases</b>	<b>12</b>
I (a) Lymphoid leukaemias	13
I (a) 1 Precursor cell leukaemias	14
I (a) 2 Mature B-cell leukaemias	14
I (b) Acute myeloid leukaemias	15
I (c) Chronic myeloproliferative diseases	16
I (d) Myelodysplastic syndrome and other myeloproliferative diseases	17
<b>II Lymphomas and reticuloendothelial neoplasms</b>	<b>18</b>
II (a) Hodgkin lymphomas	19
II (b) Non-Hodgkin lymphomas	20
II (b) 1 Precursor cell lymphomas	21
II (b) 2 Mature B-cell lymphomas, except Burkitt lymphoma	21
II (b) 3 Mature T-cell and NK-cell lymphomas	22
II (b) 4 Non-Hodgkin lymphomas, NOS	22
II (c) Burkitt lymphoma	23
<b>III CNS and miscellaneous intracranial and intraspinal neoplasms</b>	<b>24</b>
III (a) Ependymomas and choroid plexus tumour	25
III (a) 1 Ependymomas	26

**Systematische Darstellung epidemiologischer Kenngrößen der häufigsten ICCC-3 Diagnosen /  
Systematic Presentation of Descriptive Measures for Frequent ICCC-3 Diagnoses**

	<b>Seite / Page</b>
III (a) 2 Choroid plexus tumour	26
III (b) Astrocytomas	27
III (c) Intracranial and intraspinal embryonal tumours	28
III (c) 1 Medulloblastomas	29
III (c) 2 Primitive neuroectodermal tumour (PNET)	29
III (c) 4 Atypical teratoid/rhabdoid tumour	30
III (d) Other gliomas	31
III (d) 1 Oligodendrogliomas	32
III (d) 2 Mixed and unspecified gliomas	32
III (e) Other specified intracranial and intraspinal neoplasms	33
III (e) 1 Pituitary adenomas and carcinomas	34
III (e) 2 Tumours of the sellar region (Craniopharyngiomas)	34
III (e) 3 Pineal parenchymal tumours	35
III (e) 4 Neuronal and mixed neuronal-gliar tumours	35
III (e) 5 Meningiomas	36
IV (a) Neuroblastoma and ganglioneuroblastom	37
<b>V Retinoblastoma</b>	<b>38</b>
VI (a) Nephroblastoma and other non-epithelial renal tumours	39
VI (a) 1 Nephroblastoma	40

**Systematische Darstellung epidemiologischer Kenngrößen der häufigsten ICCC-3 Diagnosen /  
Systematic Presentation of Descriptive Measures for Frequent ICCC-3 Diagnoses**

	<b>Seite / Page</b>
VI (a) 2 Rhabdoid renal tumour	40
VI (b) Renal carcinomas	41
VII (a) Hepatoblastoma	42
VII (b) Hepatic carcinomas	43
<b>VIII Malignant bone tumours</b>	<b>44</b>
VIII (a) Osteosarcomas	45
VIII (c) Ewing tumour and related sarcomas of bone	46
<b>IX Soft tissue and other extrasosseous sarcomas</b>	<b>47</b>
IX (a) Rhabdomyosarcomas	48
IX (b) Fibrosarcomas, peripheral nerve sheath tumours and other fibrous neoplasms	49
IX (b) 1 Fibroblastic and myofibroblastic tumours	50
IX (b) 2 Nerve sheath tumours	50
IX (d) Other specified soft tissue sarcomas	51
<b>X Germ cell tumours, trophoblastic tumours and neoplasms of gonads</b>	<b>52</b>
X (a) Intracranial and intraspinal germ cell tumours	53
X (b) Malignant extracranial and extragonadal germ cell tumours	54
X (c) Malignant gonadal germ cell tumours	55
XI (a) Adrenocortical carcinomas	56
XI (b) Thyroid carcinomas	57

**Systematische Darstellung epidemiologischer Kenngrößen der häufigsten ICCC-3 Diagnosen /  
Systematic Presentation of Descriptive Measures for Frequent ICCC-3 Diagnoses**

	<b>Seite / Page</b>
XI (c) Nasopharyngeal carcinomas	58
XI (d) Malignant melanomas	59
XII (a) Other specified malignant tumours	60

Eingeschlossene Diagnosen entsprechend ICCC-3 (siehe Methoden)

Selected diagnoses according to ICCC-3 (see Methods)

**Cases in Germany aged under 15 years (1980-2010): 48397**

**Selected characteristics (Germany 2001-2010)**

<b>Relative frequency:</b>	17876 / 17876 = 100 %		
<b>Relative frequency of trial patients:</b>	93.3 %		
<b>Incidence rates per million:</b>	<b>Girls</b>	<b>Boys</b>	<b>Total</b>
Number of cases:	7985	9891	17876
Standardized rate*:	147.3	172.9	160.4
Cumulative incidence:	2130	2504	2322
<b>Sex ratio (m/f):</b>	1.2		

**Age-specific incidence rates per million:**

	<1	1-4	5-9	10-14
Number of cases :	1856	6069	4787	5164
Incidence rate:	265.9	208.1	123.3	121.4

**Median age at diagnosis:** 5 years 11 months

<b>Survival probabilities:</b>	<b>5-year</b>	<b>10-year</b>	<b>15-year</b>
	83 %	81 %	80 %

**Mortality per million within 10 yrs. of diagnosis (1991-2000):**

Number of deaths		Standardized*	Cumulative
N	% of all 4151 deaths	mortality rate	mortality
4151	100.0 %	33.0	479

**Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2010):**

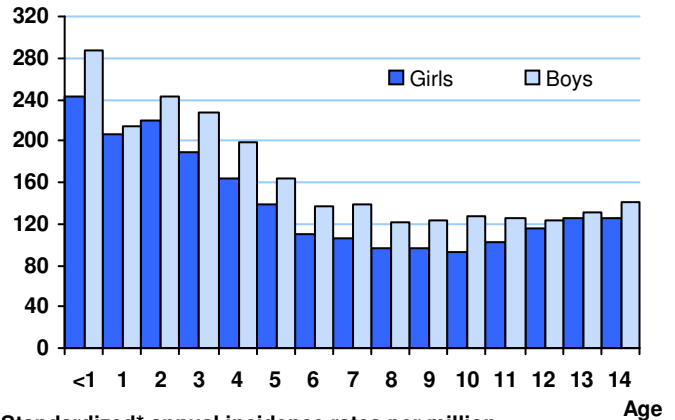
All malignancies

**SN after all malignancies**

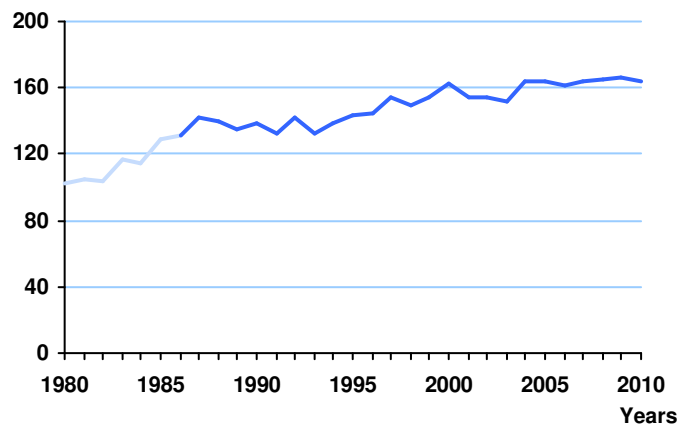
N	% of all	Cumulative
775	100.0 %	3.2 %
		incidence

\* Standard: Segi world standard population

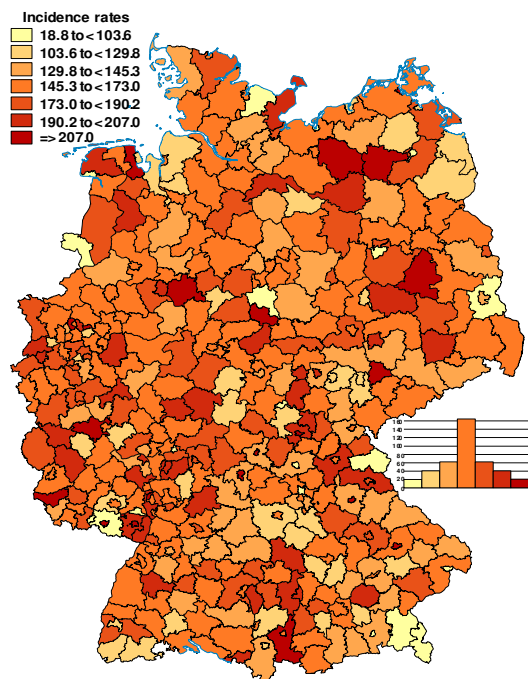
**Age- and sex-specific incidence rates per million (Germany 2001-2010)**



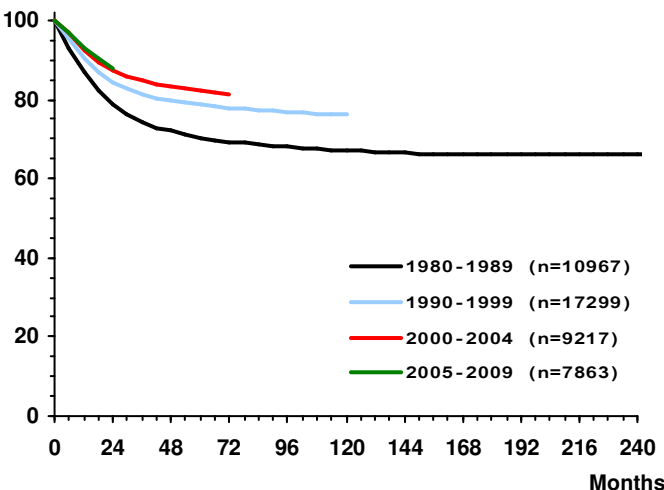
**Standardized\* annual incidence rates per million (Germany 1980-2010)**



**Standardized\* incidence rates per million by districts (Landkreise) (Germany 2001-2010)**



**Survival probabilities by year of diagnosis (Germany 1980-2009)**



- (a) Hodgkin lymphomas
- (b) Non-Hodgkin lymphomas (except Burkitt lymphoma)
- (c) Burkitt lymphoma

- (d) Myelodysplastic syndrome and other myeloproliferative disease
- (e) Unspecified and other specified leukaemias

**Cases in Germany aged under 15 years (1980-2010): 16684**

**Selected characteristics (Germany 2001-2010)**

<b>Relative frequency:</b>	6089 / 17876 = 34.1 %		
<b>Relative frequency of trial patients:</b>	99.2 %		
<b>Incidence rates per million:</b>	<b>Girls</b>	<b>Boys</b>	<b>Total</b>
Number of cases:	2757	3332	6089
Standardized rate*:	52.2	59.3	55.8
Cumulative incidence:	742	848	797
<b>Sex ratio (m/f):</b>	1.2		

**Age-specific incidence rates per million:**

	<1	1-4	5-9	10-14
Number of cases :	308	2756	1678	1347
Incidence rate:	44.1	94.5	43.2	31.7

**Median age at diagnosis:** 4 years 11 months

<b>Survival probabilities:</b>	<b>5-year</b>	<b>10-year</b>	<b>15-year</b>
	87 %	84 %	83 %

**Mortality per million within 10 yrs. of diagnosis (1991-2000):**

Number of deaths		Standardized*	Cumulative
N	% of all 4151 deaths	mortality rate	mortality
1348	32.5 %	10.6	155

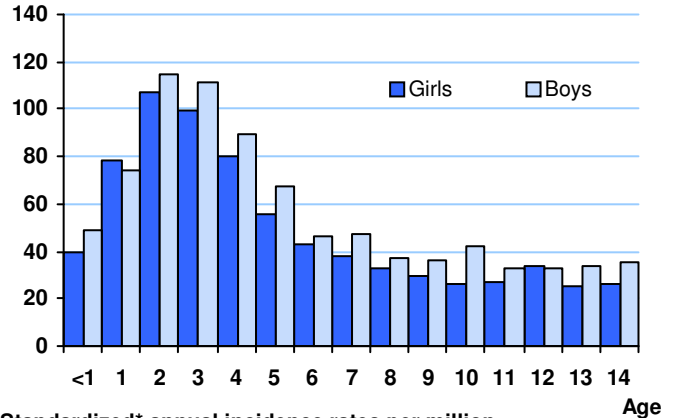
**Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2010):**

I Leukaemias, myeloproliferative and myelodysplastic diseases

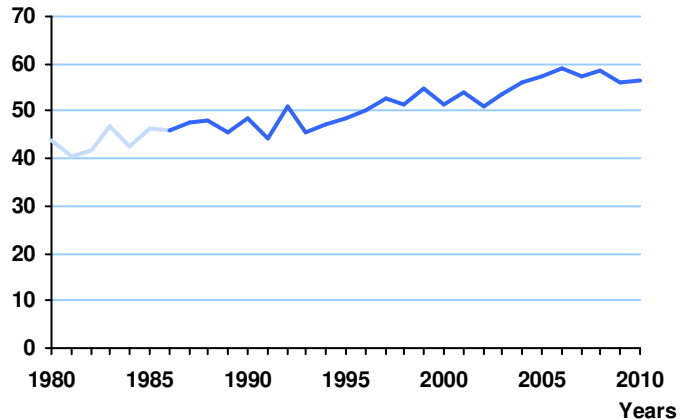
SN after I			I as SN after any primary		
N	% of all 775 SN	Cumulative incidence	N	% of all 775 SN	Cumulative incidence
285	36.8 %	3.2 %	223	28.8 %	0.7 %

\* Standard: Segi world standard population

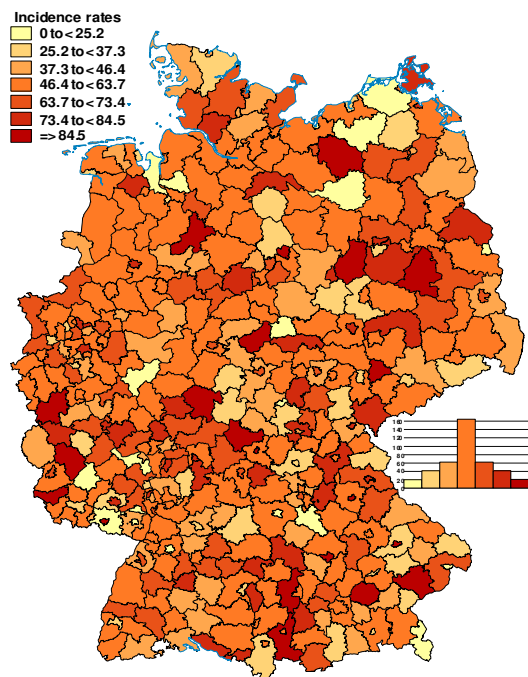
**Age- and sex-specific incidence rates per million (Germany 2001-2010)**



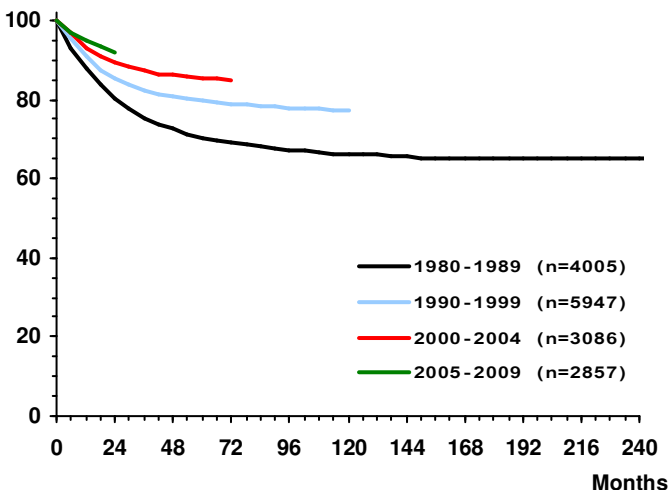
**Standardized\* annual incidence rates per million (Germany 1980-2010)**



**Standardized\* incidence rates per million by districts (Landkreise) (Germany 2001-2010)**



**Survival probabilities by year of diagnosis (Germany 1980-2009)**



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 (1980-2010): 13315

Selected characteristics (Germany 2001-2010)

Relative frequency:	4767 / 17876 = 27.2 %		
Relative frequency of trial patients:	99.8 %		
<b>Incidence rates per million:</b>	<b>Girls</b>	<b>Boys</b>	<b>Total</b>
Number of cases:	2145	2622	4767
Standardized rate*:	41.0	46.9	44.0
Cumulative incidence:	579	669	625
<b>Sex ratio (m/f):</b>	1.2		

Age-specific incidence rates per million:

	<1	1-4	5-9	10-14
Number of cases :	134	2339	1376	918
Incidence rate:	19.2	80.2	35.4	21.6

Median age at diagnosis: 4 years 10 months

<b>Survival probabilities:</b>	<b>5-year</b>	<b>10-year</b>	<b>15-year</b>
	90 %	88 %	87 %

Mortality per million within 10 yrs. of diagnosis (1991-2000):

Number of deaths		Standardized*	Cumulative
N	% of all 4151 deaths	mortality rate	mortality
797	19.2 %	6.3	92

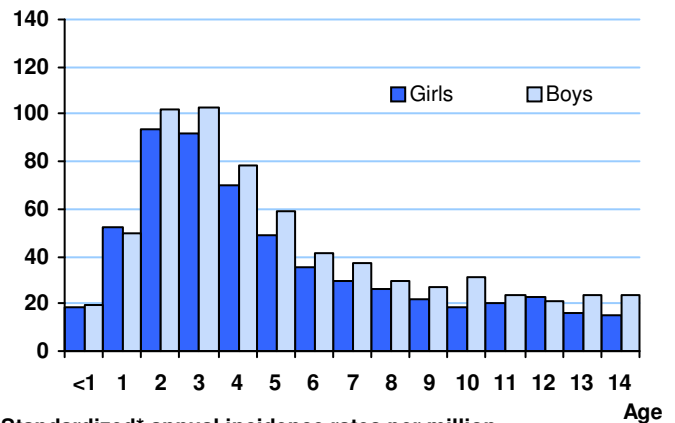
Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2010):

I (a) Lymphoid leukaemias

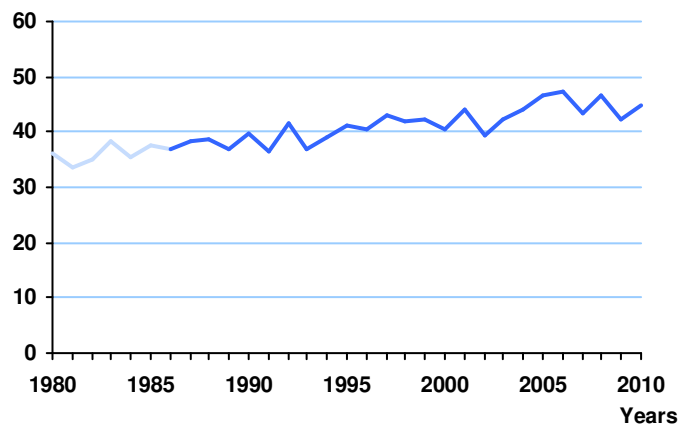
SN after I (a)			I (a) as SN after any primary		
N	% of all 775 SN	Cumulative incidence	N	% of all 775 SN	Cumulative incidence
238	30.7 %	3.2 %	43	5.5 %	0.1 %

\* Standard: Segi world standard population

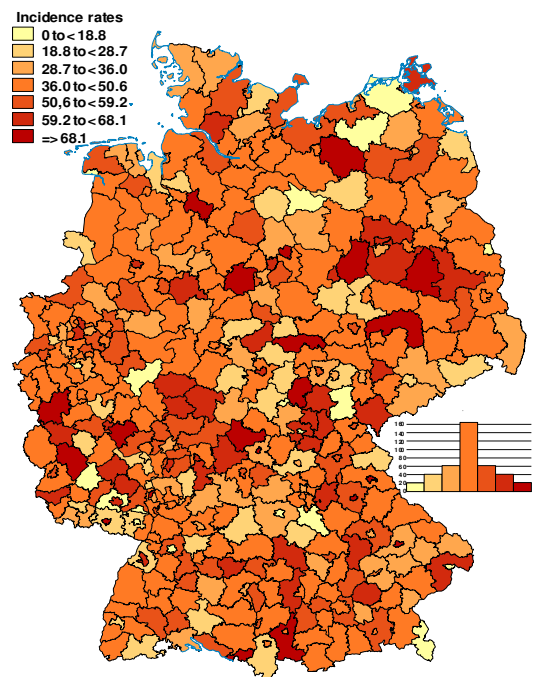
Age- and sex-specific incidence rates per million (Germany 2001-2010)



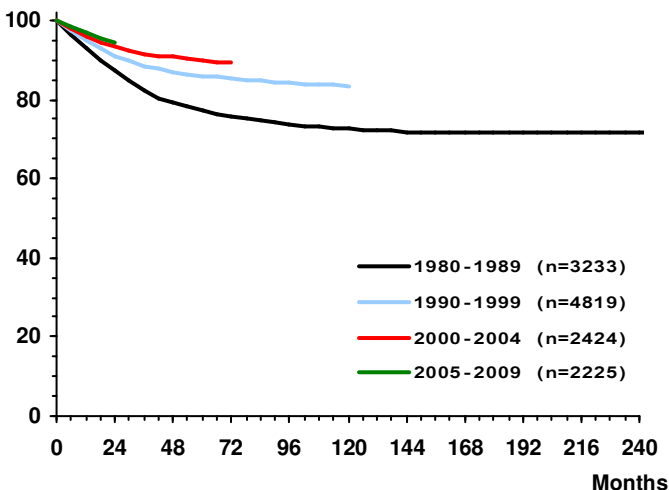
Standardized\* annual incidence rates per million (Germany 1980-2010)



Standardized\* incidence rates per million by districts (Landkreise) (Germany 2001-2010)



Survival probabilities by year of diagnosis (Germany 1980-2009)



Germany (2001-2010)	N	%
<b>Lymphoid leukaemias</b>	<b>4767</b>	<b>100.0</b>
Precursor cell leukaemias	4655	97.7
Mature B-cell leukaemias	111	2.3
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 (1980-2010): 13000

### Selected characteristics (Germany 2001-2010)

Relative frequency:	4655 / 17876 = 26.0 %		
Relative frequency of trial patients:	99.8 %		
<b>Incidence rates per million:</b>	<b>Girls</b>	<b>Boys</b>	<b>Total</b>
Number of cases:	2119	2536	4655
Standardized rate *:	40.5	45.5	43.0
Cumulative incidence:	572	647	611
<b>Sex ratio (m/f):</b>	1.2		

### Age-specific incidence rates per million:

	<1	1-4	5-9	10-14
Number of cases:	131	2313	1326	885
Incidence rate:	18.8	79.3	34.1	20.8
<b>Median age at diagnosis:</b>	4 years 9 months			

\* Standard: Segi world standard population

## 2 Mature B-cell leukaemias

Cases in Germany aged under 15 years (1980-2010): 314

### Selected characteristics (Germany 2001-2010)

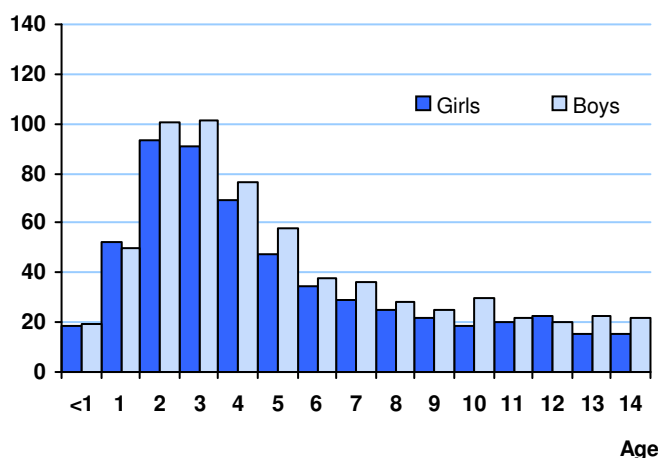
Relative frequency:	111 / 17876 = 0.6 %		
Relative frequency of trial patients:	99.1 %		
<b>Incidence rates per million:</b>	<b>Girls</b>	<b>Boys</b>	<b>Total</b>
Number of cases:	25	86	111
Standardized rate *:	0.4	1.4	0.9
Cumulative incidence:	7	21	14
<b>Sex ratio (m/f):</b>	3.4		

### Age-specific incidence rates per million:

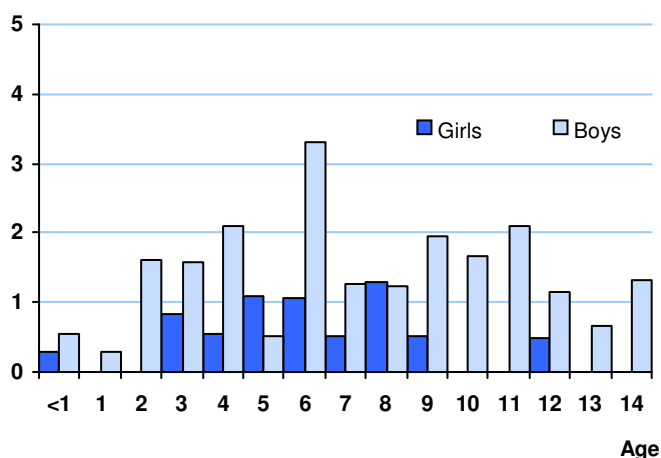
	<1	1-4	5-9	10-14
Number of cases:	3	26	50	32
Incidence rate:	0.4	0.9	1.3	0.8
<b>Median age at diagnosis:</b>	7 years 5 months			

\* Standard: Segi world standard population

Age- and sex-specific incidence rates per million (Germany 2001-2010)



Age- and sex-specific incidence rates per million (Germany 2001-2010)





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

Cases in Germany aged under 15 years (1980-2010): 2371

Selected characteristics (Germany 2001-2010)

Relative frequency:	795 / 17876 = 4.5 %		
Relative frequency of trial patients:	97.6 %		
<b>Incidence rates per million:</b>	<b>Girls</b>	<b>Boys</b>	<b>Total</b>
Number of cases:	379	416	795
Standardized rate*:	7.2	7.4	7.3
Cumulative incidence:	102	106	104
<b>Sex ratio (m/f):</b>	1.1		

Age-specific incidence rates per million:

	<1	1-4	5-9	10-14
Number of cases :	115	288	158	234
Incidence rate:	16.5	9.9	4.1	5.5

Median age at diagnosis: 4 years 11 months

<b>Survival probabilities:</b>	<b>5-year</b>	<b>10-year</b>	<b>15-year</b>
	70 %	68 %	67 %

Mortality per million within 10 yrs. of diagnosis (1991-2000):

Number of deaths		Standardized*	Cumulative
N	% of all 4151 deaths	mortality rate	mortality
421	10.1 %	3.3	49

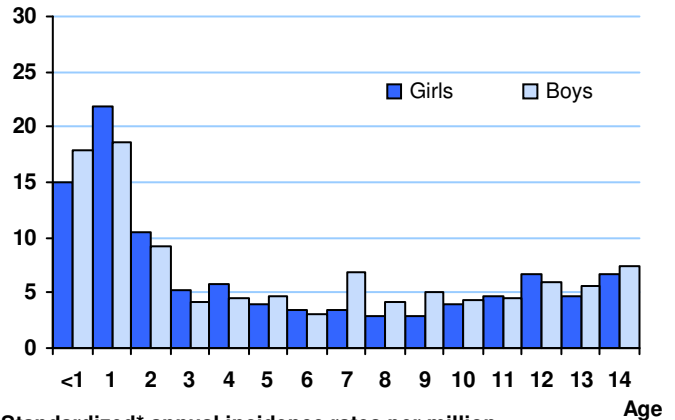
Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2010):

I (b) Acute myeloid leukaemias

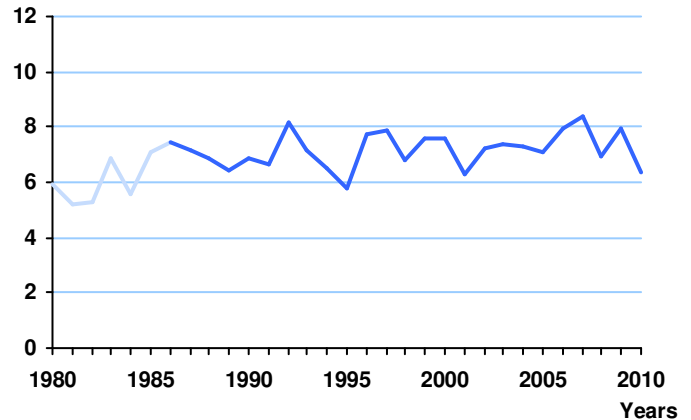
SN after I (b)			I (b) as SN after any primary		
N	% of all 775 SN	Cumulative incidence	N	% of all 775 SN	Cumulative incidence
32	4.1 %	2.9 %	124	16.0 %	0.3 %

\* Standard: Segi world standard population

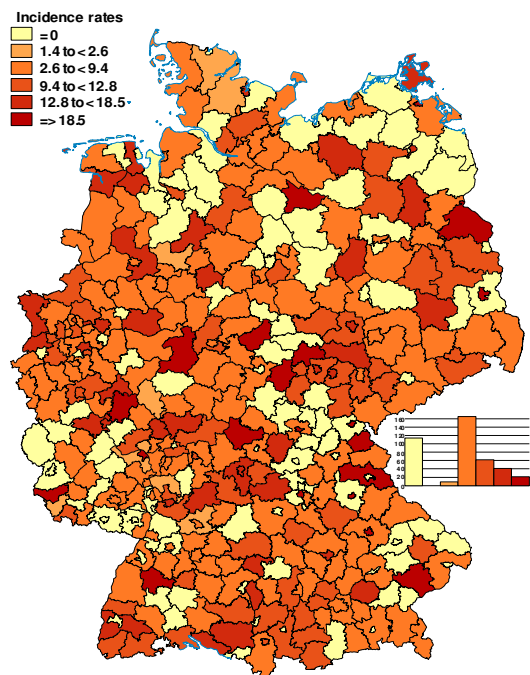
Age- and sex-specific incidence rates per million (Germany 2001-2010)



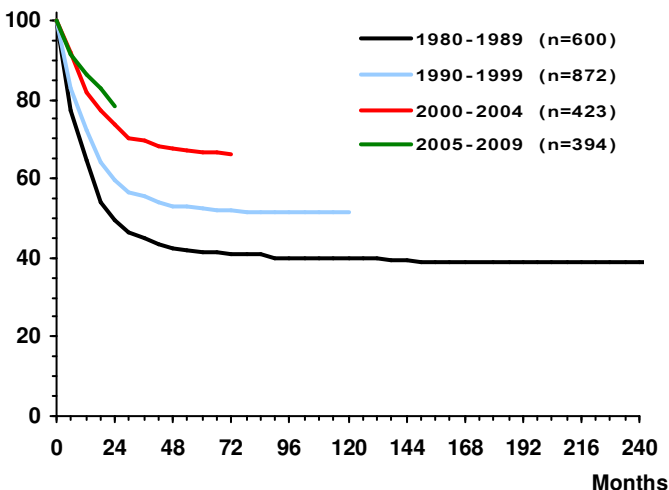
Standardized\* annual incidence rates per million (Germany 1980-2010)



Standardized\* incidence rates per million by districts (Landkreise) (Germany 2001-2010)



Survival probabilities by year of diagnosis (Germany 1980-2009)



Chronic myeloproliferative (CM) diseases are 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 (1980-2010): 226**

**Selected characteristics (Germany 2001-2010)**

<b>Relative frequency:</b>	80 / 17876 = 0.5 %		
<b>Relative frequency of trial patients:</b>	86.3 %		
<b>Incidence rates per million:</b>	<b>Girls</b>	<b>Boys</b>	<b>Total</b>
Number of cases:	43	37	80
Standardized rate*:	0.7	0.6	0.6
Cumulative incidence:	11	9	10
<b>Sex ratio (m/f):</b>	0.9		

**Age-specific incidence rates per million:**

	<1	1-4	5-9	10-14
Number of cases :	0	10	29	41
Incidence rate:	0.0	0.3	0.7	1.0

**Median age at diagnosis:** 10 years 3 months

<b>Survival probabilities:</b>	<b>5-year</b>	<b>10-year</b>	<b>15-year</b>
	-	-	-

**Mortality per million within 10 yrs. of diagnosis (1991-2000):**

Number of deaths		Standardized* mortality rate	Cumulative mortality
N	% of all 4151 deaths		
33	0.8 %	0.2	4

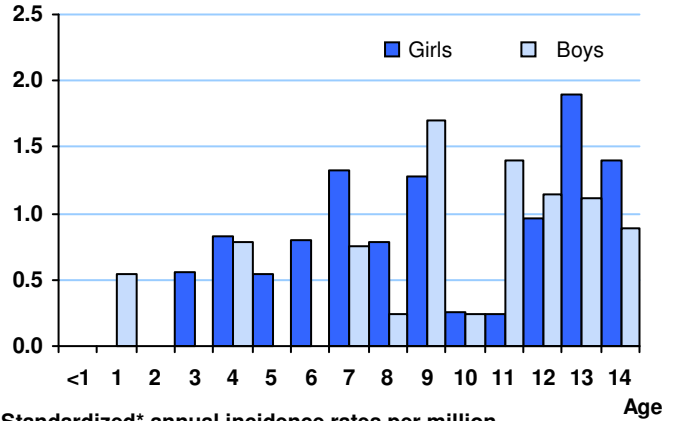
**Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2010):**

I (c) Chronic myeloproliferative diseases

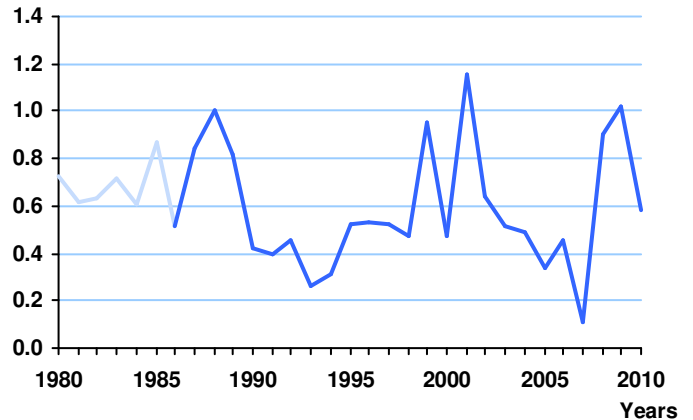
SN after I (c)			I (c) as SN after any primary		
N	% of all 775 SN	Cumulative incidence	N	% of all 775 SN	Cumulative incidence
2	0.3 %	1.4 %	3	0.4 %	0.0 %

\* Standard: Segi world standard population

**Age- and sex-specific incidence rates per million (Germany 2001-2010)**



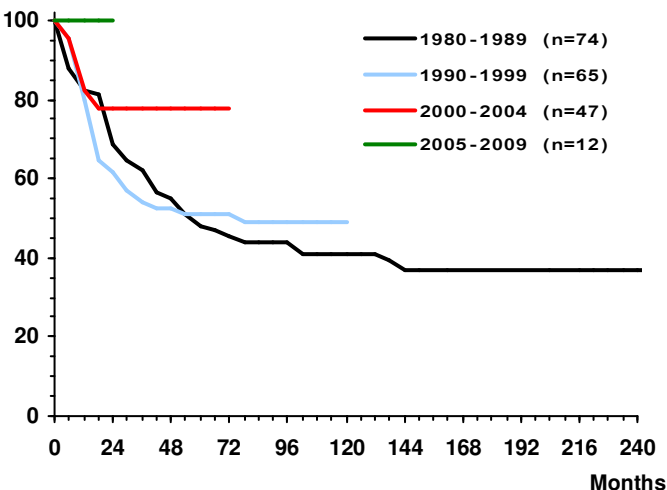
**Standardized\* annual incidence rates per million (Germany 1980-2010)**



**Standardized\* incidence rates per million by districts (Landkreise) (Germany 2001-2010)**

No map due to sparse data

**Survival probabilities by year of diagnosis (Germany 1980-2009)**



Myelodysplastic syndrome (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 (1980-2010): 614

Selected characteristics (Germany 2001-2010)

Relative frequency:	377 / 17876 = 2.2 %		
Relative frequency of trial patients:	97.6 %		
<b>Incidence rates per million:</b>	<b>Girls</b>	<b>Boys</b>	<b>Total</b>
Number of cases:	159	218	377
Standardized rate*:	2.8	3.8	3.3
Cumulative incidence:	42	55	48
<b>Sex ratio (m/f):</b>	1.4		

Age-specific incidence rates per million:

	<1	1-4	5-9	10-14
Number of cases :	41	104	97	135
Incidence rate:	5.9	3.6	2.5	3.2
<b>Median age at diagnosis:</b>	7 years 3 months			

<b>Survival probabilities:</b>	<b>5-year</b>	<b>10-year</b>	<b>15-year</b>
	78 %	77 %	75 %

Mortality per million within 10 yrs. of diagnosis (1991-2000):

<b>Number of deaths</b>		<b>Standardized* mortality rate</b>	<b>Cumulative mortality</b>
N	% of all 4151 deaths		
80	1.9 %	0.6	9

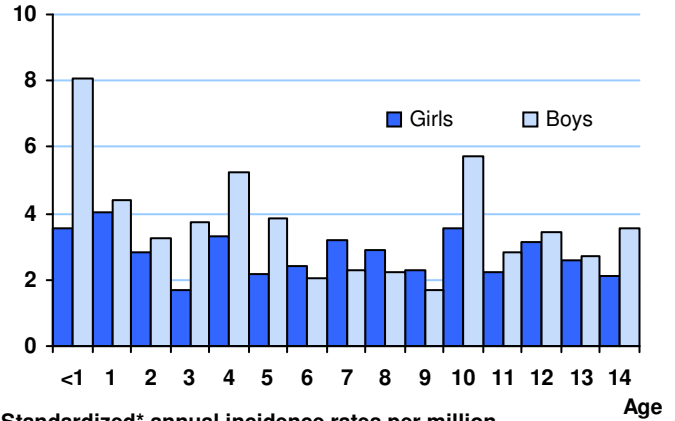
Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2010):

I (d) Myelodysplastic syndrome and other myeloproliferative disease

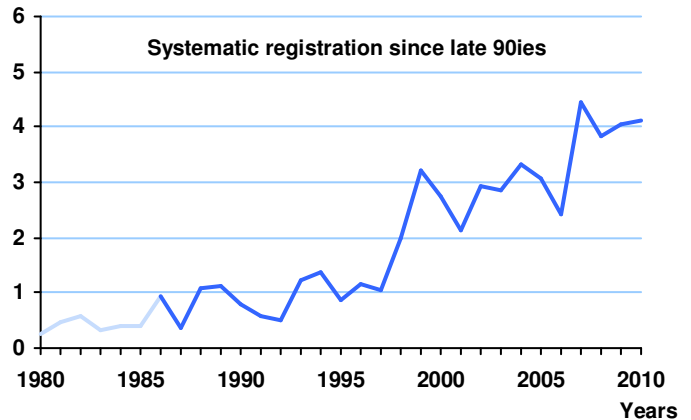
<b>SN after I (d)</b>			<b>I (d) as SN after any primary</b>		
	% of all 775 SN	Cumulative incidence		% of all 775 SN	Cumulative incidence
N	775 SN	5.8 %	N	775 SN	0.2 %
6	0.8 %	5.8 %	52	6.7 %	0.2 %

\* Standard: Segi world standard population

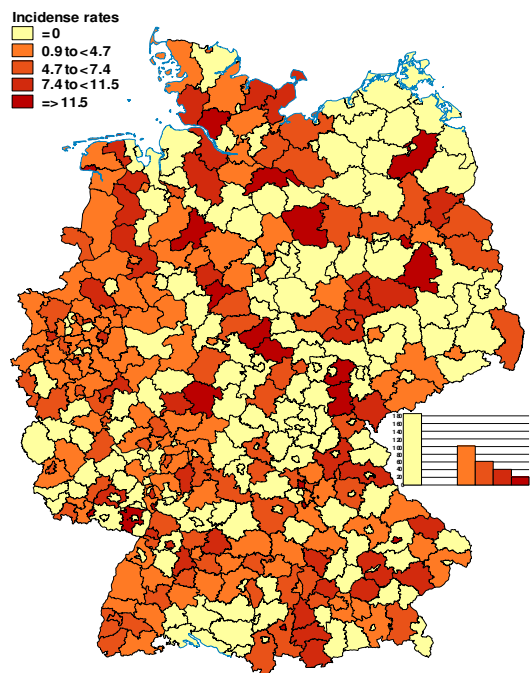
Age- and sex-specific incidence rates per million (Germany 2001-2010)



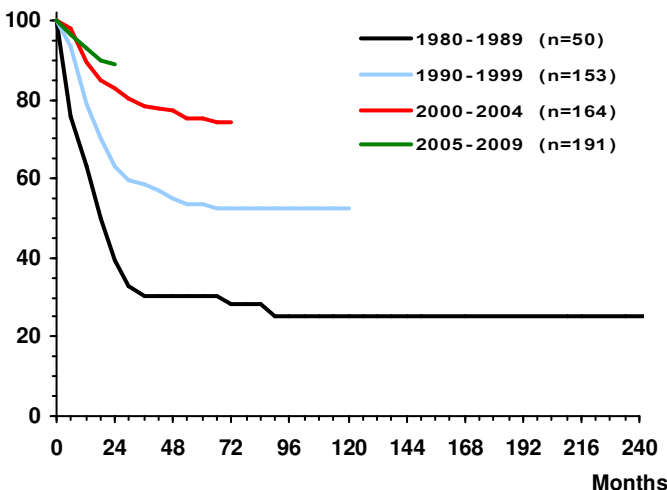
Standardized\* annual incidence rates per million (Germany 1980-2010)



Standardized\* incidence rates per million by districts (Landkreise) (Germany 2001-2010)



Survival probabilities by year of diagnosis (Germany 1980-2009)



- (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 (1980-2010): 5762**

**Selected characteristics (Germany 2001-2010)**

<b>Relative frequency:</b>	2037 / 17876 = 11.4 %		
<b>Relative frequency of trial patients:</b>	96.4 %		
<b>Incidence rates per million:</b>	<b>Girls</b>	<b>Boys</b>	<b>Total</b>
Number of cases:	662	1375	2037
Standardized rate*:	10.2	21.1	15.8
Cumulative incidence:	166	333	252
<b>Sex ratio (m/f):</b>	2.1		

<b>Age-specific incidence rates per million:</b>				
	<1	1-4	5-9	10-14
Number of cases :	13	221	688	1115
Incidence rate:	1.9	7.6	17.7	26.2
<b>Median age at diagnosis:</b>	10 years 7 months			

<b>Survival probabilities:</b>	<b>5-year</b>	<b>10-year</b>	<b>15-year</b>
	94 %	92 %	91 %

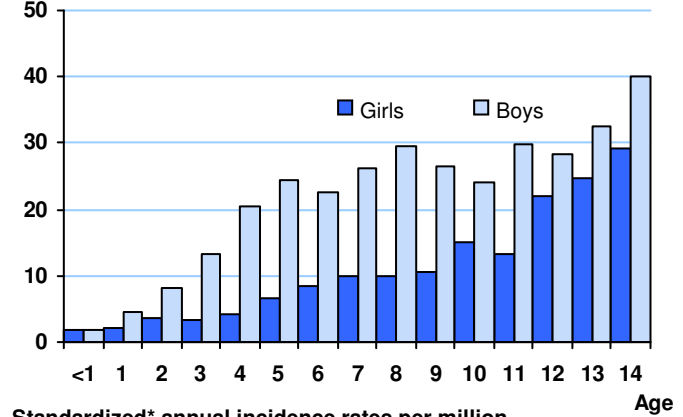
<b>Mortality per million within 10 yrs. of diagnosis (1991-2000):</b>			
<b>Number of deaths</b>		<b>Standardized* mortality rate</b>	<b>Cumulative mortality</b>
N	% of all 4151 deaths		
225	5.4 %	1.7	26

**Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2010):**  
II Lymphomas and reticuloendothelial neoplasms

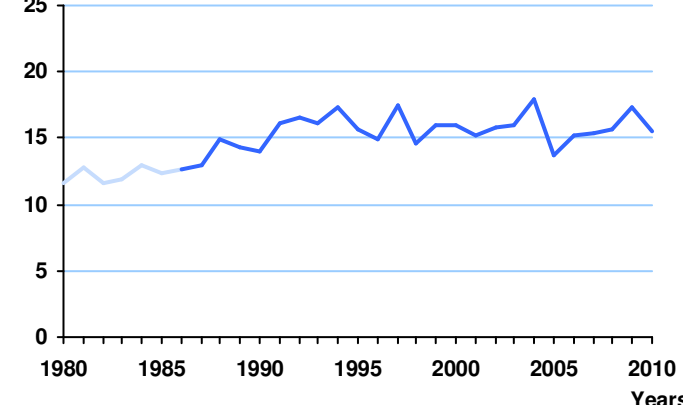
<b>SN after II</b>			<b>II as SN after any primary</b>		
N	% of all 775 SN	Cumulative incidence	N	% of all 775 SN	Cumulative incidence
129	16.6 %	5.1 %	80	10.3 %	0.3 %

\* Standard: Segi world standard population

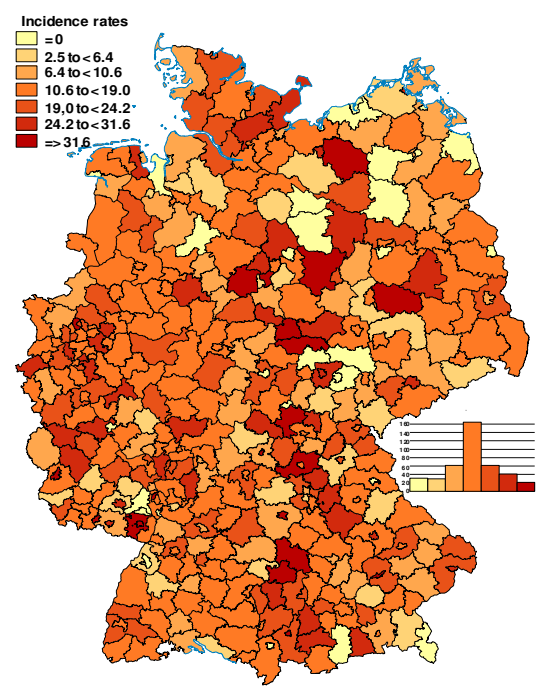
**Age- and sex-specific incidence rates per million (Germany 2001-2010)**



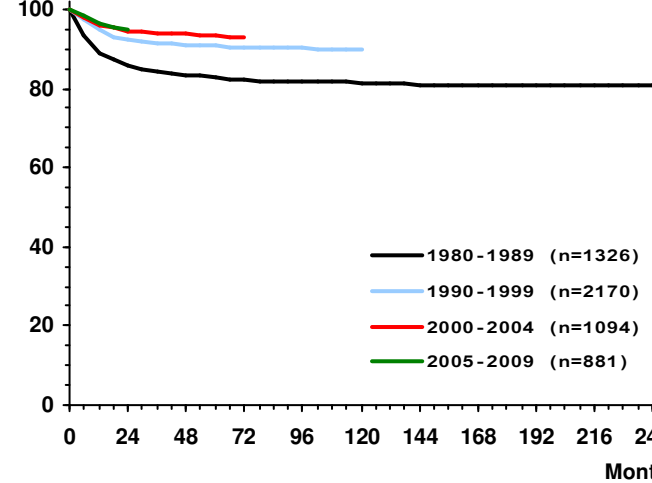
**Standardized\* annual incidence rates per million (Germany 1980-2010)**



**Standardized\* incidence rates per million by districts (Landkreise) (Germany 2001-2010)**



**Survival probabilities by year of diagnosis (Germany 1980-2009)**



Hodgkin's disease (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 (1980-2010): 2363

Selected characteristics (Germany 2001-2010)

Relative frequency:	864 / 17876 = 4.9 %		
Relative frequency of trial patients:	97.5 %		
<b>Incidence rates per million:</b>	<b>Girls</b>	<b>Boys</b>	<b>Total</b>
Number of cases:	343	521	864
Standardized rate*:	5.0	7.6	6.3
Cumulative incidence:	84	124	104
<b>Sex ratio (m/f):</b>	1.5		

Age-specific incidence rates per million:

	<1	1-4	5-9	10-14
Number of cases :	0	33	202	629
Incidence rate:	0.0	1.1	5.2	14.8

Median age at diagnosis: 12 years 6 months

<b>Survival probabilities:</b>	<b>5-year</b>	<b>10-year</b>	<b>15-year</b>
	98 %	97 %	96 %

Mortality per million within 10 yrs. of diagnosis (1991-2000):

Number of deaths		Standardized*	Cumulative
N	% of all 4151 deaths	mortality rate	mortality
45	1.1 %	0.3	5

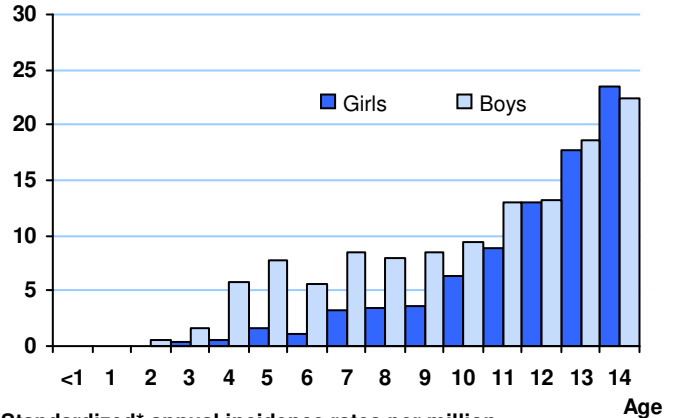
Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2010):

II (a) Hodgkin lymphomas

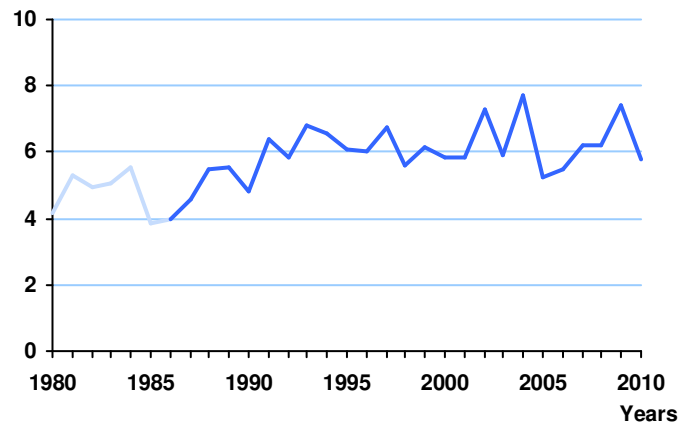
SN after II (a)			II (a) as SN after any primary		
N	% of all 775 SN	Cumulative incidence	N	% of all 775 SN	Cumulative incidence
66	8.5 %	10.0 %	17	2.2 %	0.1 %

\* Standard: Segi world standard population

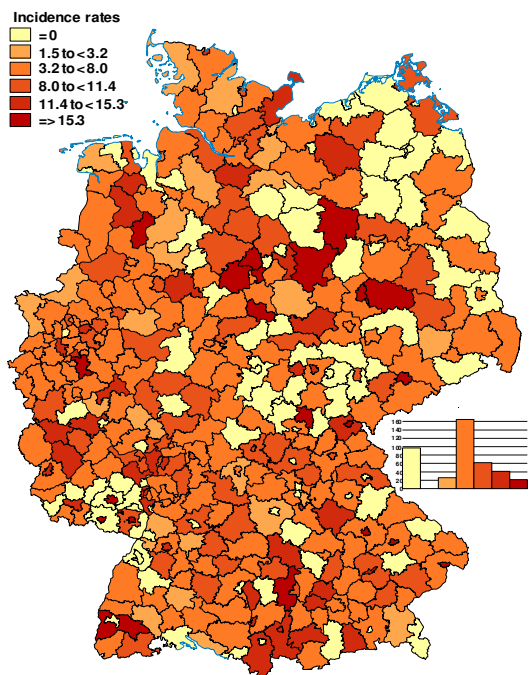
Age- and sex-specific incidence rates per million (Germany 2001-2010)



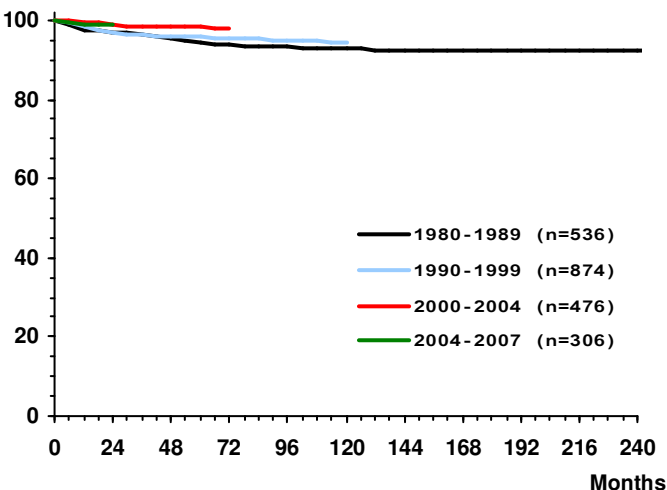
Standardized\* annual incidence rates per million (Germany 1980-2010)



Standardized\* incidence rates per million by districts (Landkreise) (Germany 2001-2010)



Survival probabilities by year of diagnosis (Germany 1980-2009)



Based on international comparisons, completeness of registration is close to 100%. Prognosis has improved considerably since 1980. Burkitt Lymphomas are presented as a separate entity.

**Cases in Germany aged under 15 years (1980-2010): 2261**

**Selected characteristics (Germany 2001-2010)**

<b>Relative frequency:</b>	800 / 17876 = 4.6 %		
<b>Relative frequency of trial patients:</b>	94.6 %		
<b>Incidence rates per million:</b>	<b>Girls</b>	<b>Boys</b>	<b>Total</b>
Number of cases:	251	549	800
Standardized rate*:	4.1	8.6	6.4
Cumulative incidence:	64	134	100
<b>Sex ratio (m/f):</b>	2.2		

<b>Age-specific incidence rates per million:</b>				
	<1	1-4	5-9	10-14
Number of cases :	7	123	309	361
Incidence rate:	1.0	4.2	8.0	8.5
<b>Median age at diagnosis:</b>	9 years 4 months			

<b>Survival probabilities:</b>	<b>5-year</b>	<b>10-year</b>	<b>15-year</b>
	88 %	86 %	85 %

**Mortality per million within 10 yrs. of diagnosis (1991-2000):**

Number of deaths		Standardized* mortality rate	Cumulative mortality
N	% of all 4151 deaths		
131	3.2 %	1.0	15

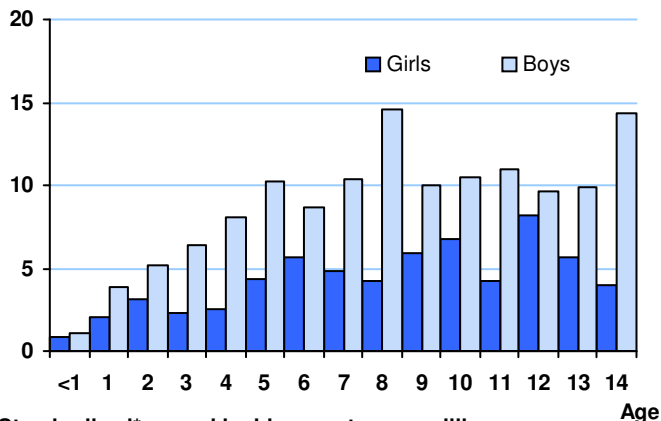
**Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2010):**

II (b) Non-Hodgkin lymphomas

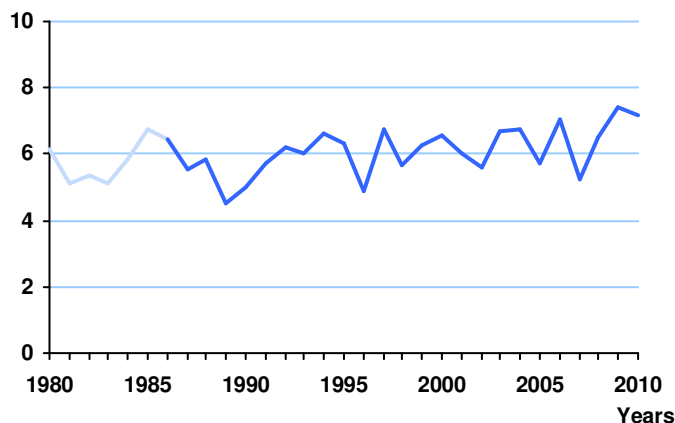
SN after II (b)			II (b) as SN after any primary		
N	% of all 775 SN	Cumulative incidence	N	% of all 775 SN	Cumulative incidence
48	6.2 %	3.6 %	52	6.7 %	0.2 %

\* Standard: Segi world standard population

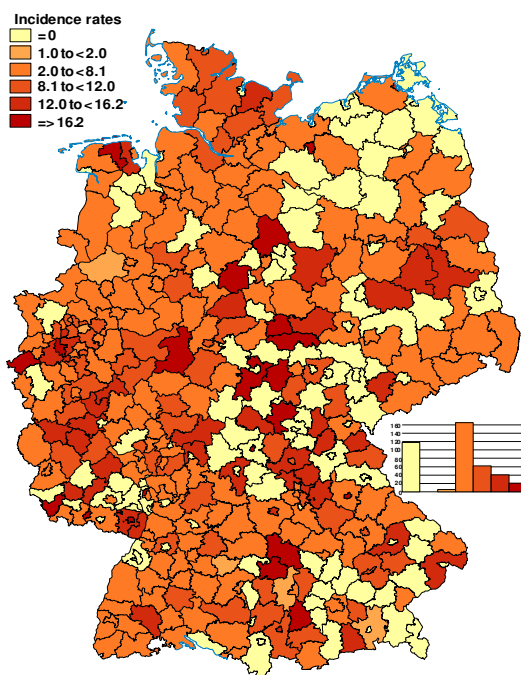
**Age- and sex-specific incidence rates per million (Germany 2001-2010)**



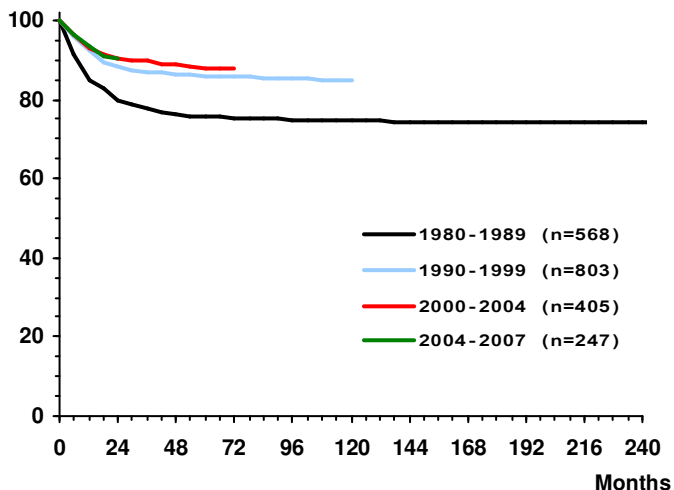
**Standardized\* annual incidence rates per million (Germany 1980-2010)**



**Standardized\* incidence rates per million by districts (Landkreise) (Germany 2001-2010)**



**Survival probabilities by year of diagnosis (Germany 1980-2009)**



Germany (2001-2010)	N	%
<b>Non-Hodgkin lymphomas</b>	<b>800</b>	<b>100.0</b>
Precursor cell lymphomas	327	40.9
Mature B-cell lymphomas (except Burkitt lymphoma)	156	19.5
Mature T-cell and NK-cell lymphomas	165	20.6
Non-Hodgkin lymphomas, NOS	152	19.0

**1 Precursor cell lymphomas**

Cases in Germany aged under 15 years (1980-2010): 899

**Selected characteristics (Germany 2001-2010)**

<b>Relative frequency:</b>	327 / 17876 = 1.8 %		
<b>Relative frequency of trial patients:</b>	95.1 %		
<b>Incidence rates per million:</b>	<b>Girls</b>	<b>Boys</b>	<b>Total</b>
Number of cases:	105	222	327
Standardized rate *:	1.8	3.6	2.7
Cumulative incidence:	27	55	41
<b>Sex ratio (m/f):</b>	2.1		

<b>Age-specific incidence rates per million:</b>	<1	1-4	5-9	10-14
Number of cases:	5	64	139	119
Incidence rate:	0.7	2.2	3.6	2.8
<b>Median age at diagnosis:</b>	8 years 3 months			

\* Standard: Segi world standard population

**2 Mature B-cell lymphomas (except Burkitt lymphoma)**

Cases in Germany aged under 15 years (1980-2010): 350

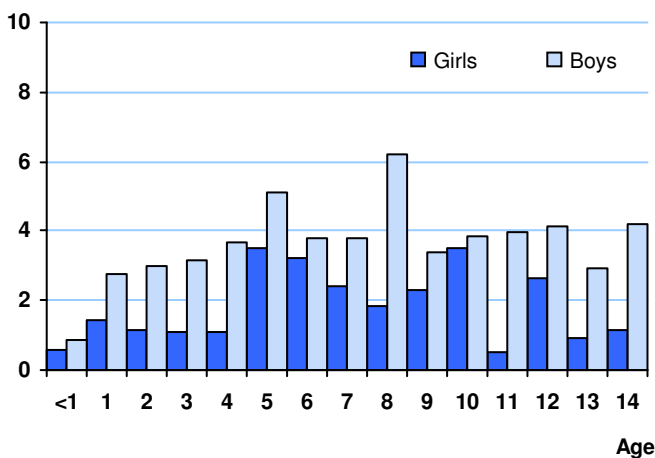
**Selected characteristics (Germany 2001-2010)**

<b>Relative frequency:</b>	156 / 17876 = 0.9 %		
<b>Relative frequency of trial patients:</b>	96.8 %		
<b>Incidence rates per million:</b>	<b>Girls</b>	<b>Boys</b>	<b>Total</b>
Number of cases:	46	110	156
Standardized rate *:	0.7	1.6	1.2
Cumulative incidence:	12	26	19
<b>Sex ratio (m/f):</b>	2.4		

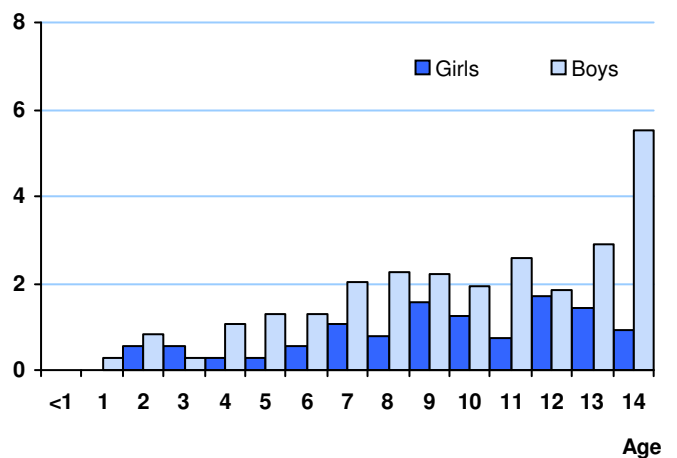
<b>Age-specific incidence rates per million:</b>	<1	1-4	5-9	10-14
Number of cases:	0	14	52	90
Incidence rate:	0.0	0.5	1.3	2.1
<b>Median age at diagnosis:</b>	10 years 11 months			

\* Standard: Segi world standard population

**Age- and sex-specific incidence rates per million (Germany 2001-2010)**



**Age- and sex-specific incidence rates per million (Germany 2001-2010)**



Germany (2001-2010)	N	%
<b>Non-Hodgkin lymphomas</b>	800	100.0
Precursor cell lymphomas	327	40.9
Mature B-cell lymphomas (except Burkitt lymphoma)	156	19.5
Mature T-cell and NK-cell lymphomas	165	20.6
Non-Hodgkin lymphomas, NOS	152	19.0

### 3 Mature T-cell and NK-cell lymphomas

Cases in Germany aged under 15 years (1980-2010): 400

#### Selected characteristics (Germany 2001-2010)

Relative frequency:	165 / 17876 = 0.9 %		
Relative frequency of trial patients:	93.9 %		
<b>Incidence rates per million:</b>	<b>Girls</b>	<b>Boys</b>	<b>Total</b>
Number of cases:	59	106	165
Standardized rate *:	0.9	1.7	1.3
Cumulative incidence:	15	26	21
<b>Sex ratio (m/f):</b>	1.8		

#### Age-specific incidence rates per million:

	<1	1-4	5-9	10-14
Number of cases:	2	25	56	82
Incidence rate:	0.3	0.9	1.4	1.9
<b>Median age at diagnosis:</b>	9 years 9 months			

\* Standard: Segi world standard population

### 4 Non-Hodgkin lymphomas, NOS

Cases in Germany aged under 15 years (1980-2010): 612

#### Selected characteristics (Germany 2001-2010)

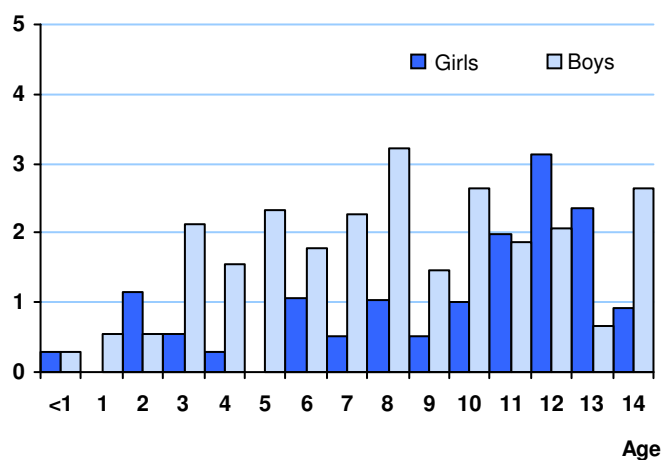
Relative frequency:	152 / 17876 = 0.9 %		
Relative frequency of trial patients:	92.1 %		
<b>Incidence rates per million:</b>	<b>Girls</b>	<b>Boys</b>	<b>Total</b>
Number of cases:	41	111	152
Standardized rate *:	0.7	1.7	1.2
Cumulative incidence:	11	27	19
<b>Sex ratio (m/f):</b>	2.7		

#### Age-specific incidence rates per million:

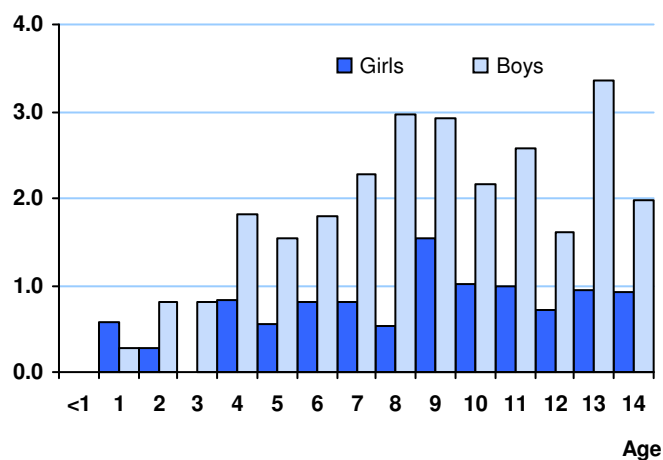
	<1	1-4	5-9	10-14
Number of cases:	0	20	62	70
Incidence rate:	0.0	0.7	1.6	1.6
<b>Median age at diagnosis:</b>	9 years 8 months			

\* Standard: Segi world standard population

Age- and sex-specific incidence rates per million (Germany 2001-2010)



Age- and sex-specific incidence rates per million (Germany 2001-2010)





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 (1980-2010): 1018**

**Selected characteristics (Germany 2001-2010)**

<b>Relative frequency:</b>	361 / 17876 = 2.1 %		
<b>Relative frequency of trial patients:</b>	98.6 %		
<b>Incidence rates per million:</b>	<b>Girls</b>	<b>Boys</b>	<b>Total</b>
Number of cases:	63	298	361
Standardized rate*:	1.0	4.8	3.0
Cumulative incidence:	16	74	46
<b>Sex ratio (m/f):</b>	4.7		

**Age-specific incidence rates per million:**

	<b>&lt;1</b>	<b>1-4</b>	<b>5-9</b>	<b>10-14</b>
Number of cases :	1	63	174	123
Incidence rate:	0.1	2.2	4.5	2.9
<b>Median age at diagnosis:</b>	8 years 3 months			

<b>Survival probabilities:</b>	<b>5-year</b>	<b>10-year</b>	<b>15-year</b>
	95 %	94 %	94 %

**Mortality per million within 10 yrs. of diagnosis (1991-2000):**

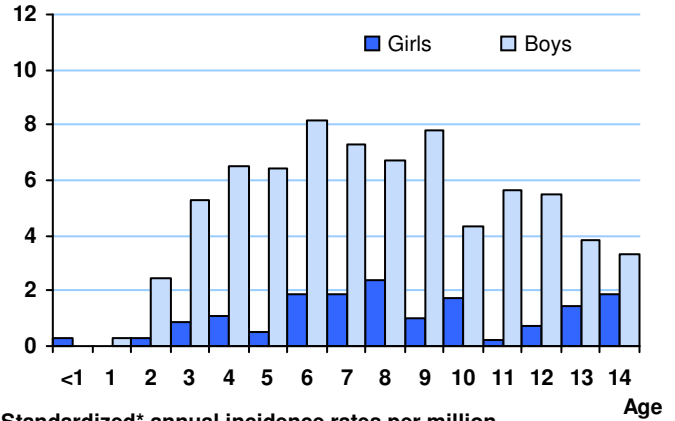
Number of deaths		Standardized* mortality rate	Cumulative mortality
N	% of all 4151 deaths		
33	0.8 %	0.2	4

**Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2010):**  
II (c) Burkitt lymphoma

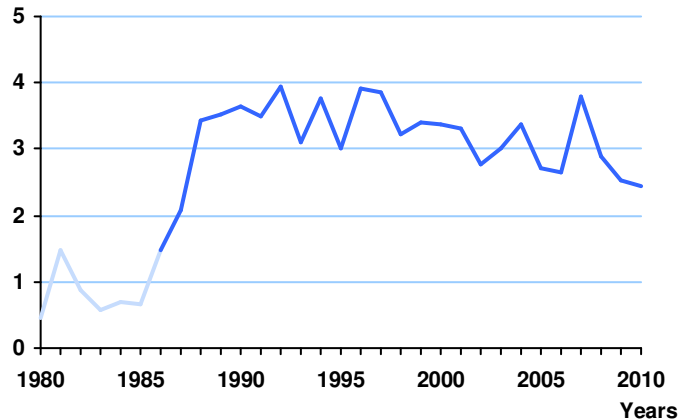
SN after II (c)			II (c) as SN after any primary		
	% of all	Cumulative incidence		% of all	Cumulative incidence
N	775 SN		N	775 SN	
15	1.9 %	2.1 %	3	0.4 %	0.0 %

\* Standard: Segi world standard population

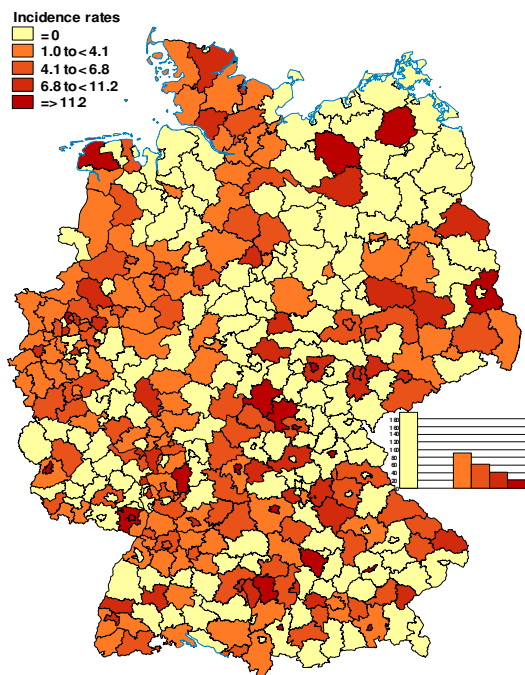
**Age- and sex-specific incidence rates per million (Germany 2001-2010)**



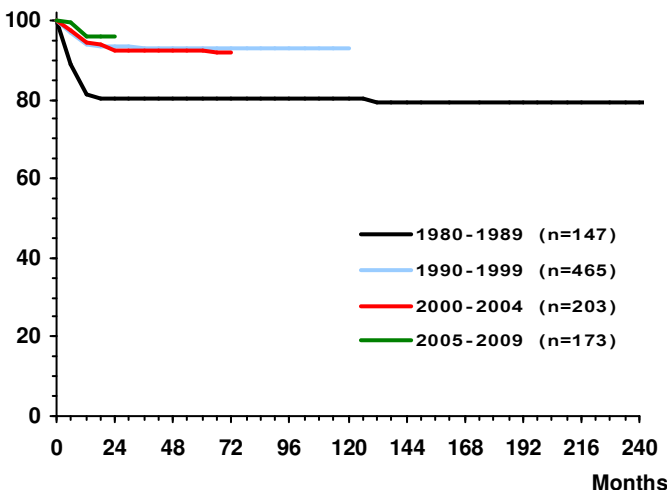
**Standardized\* annual incidence rates per million (Germany 1980-2010)**



**Standardized\* incidence rates per million by districts (Landkreise) (Germany 2001-2010)**



**Survival probabilities by year of diagnosis (Germany 1980-2009)**



- (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 (1980-2010): 10216**

**Selected characteristics (Germany 2001-2010)**

<b>Relative frequency:</b>	4159 / 17876 = 23.3 %		
<b>Relative frequency of trial patients:</b>	89.5 %		
<b>Incidence rates per million:</b>	<b>Girls</b>	<b>Boys</b>	<b>Total</b>
Number of cases:	1856	2303	4159
Standardized rate*:	33.3	39.3	36.4
Cumulative incidence:	491	579	536
<b>Sex ratio (m/f):</b>	1.2		

<b>Age-specific incidence rates per million:</b>				
	<1	1-4	5-9	10-14
Number of cases :	306	1209	1416	1228
Incidence rate:	43.8	41.5	36.5	28.9
<b>Median age at diagnosis:</b>	6 years 11 months			

<b>Survival probabilities:</b>	<b>5-year</b>	<b>10-year</b>	<b>15-year</b>
	76 %	71 %	69 %

**Mortality per million within 10 yrs. of diagnosis (1991-2000):**

Number of deaths		Standardized* mortality rate	Cumulative mortality
N	% of all 4151 deaths		
1184	28.5 %	9.4	137

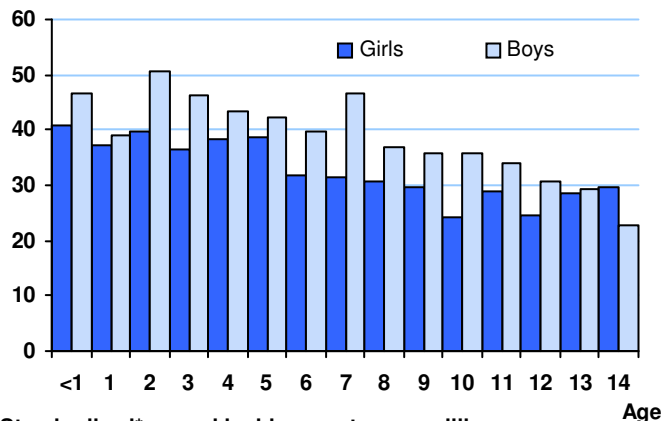
**Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2010):**

III CNS and miscellaneous intracranial and intraspinal neoplasms

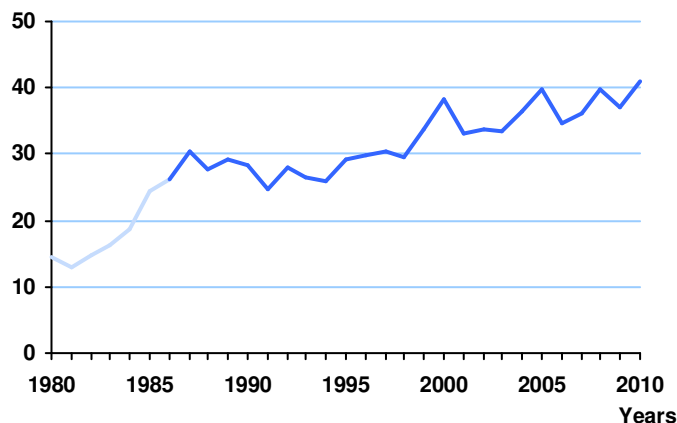
SN after III			III as SN after any primary		
N	% of all 775 SN	Cumulative incidence	N	% of all 775 SN	Cumulative incidence
137	17.7 %	3.2 %	171	22.1 %	0.7 %

\* Standard: Segi world standard population

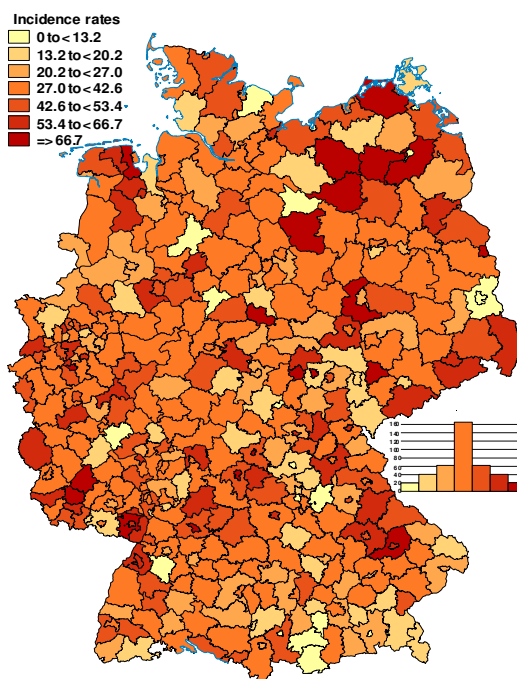
**Age- and sex-specific incidence rates per million (Germany 2001-2010)**



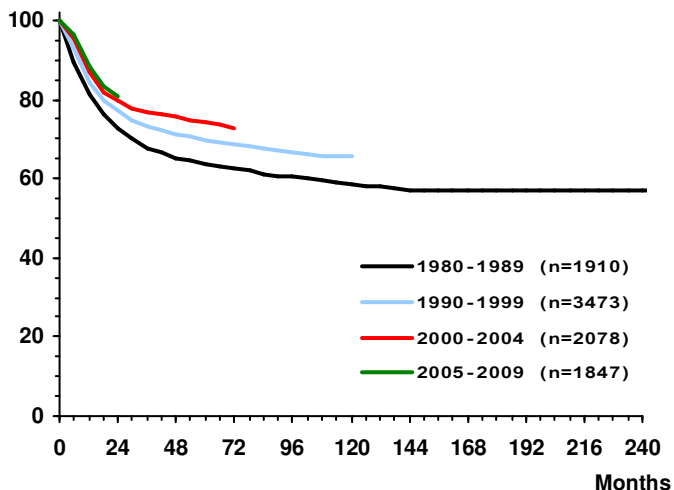
**Standardized\* annual incidence rates per million (Germany 1980-2010)**



**Standardized\* incidence rates per million by districts (Landkreise) (Germany 2001-2010)**



**Survival probabilities by year of diagnosis (Germany 1980-2009)**



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

Cases in Germany aged under 15 years (1980-2010): 1030

Selected characteristics (Germany 2001-2010)

Relative frequency:	408 / 17876 = 2.3 %		
Relative frequency of trial patients:	91.2 %		
<b>Incidence rates per million:</b>	<b>Girls</b>	<b>Boys</b>	<b>Total</b>
Number of cases:	172	236	408
Standardized rate*:	3.4	4.3	3.9
Cumulative incidence:	47	61	54
<b>Sex ratio (m/f):</b>	1.4		

Age-specific incidence rates per million:

	<1	1-4	5-9	10-14
Number of cases :	70	179	73	86
Incidence rate:	10.0	6.1	1.9	2.0

Median age at diagnosis: 3 years 9 months

<b>Survival probabilities:</b>	<b>5-year</b>	<b>10-year</b>	<b>15-year</b>
	80 %	71 %	68 %

Mortality per million within 10 yrs. of diagnosis (1991-2000):

<b>Number of deaths</b>		<b>Standardized* mortality rate</b>	<b>Cumulative mortality</b>
N	% of all 4151 deaths		
138	3.3 %	1.2	16

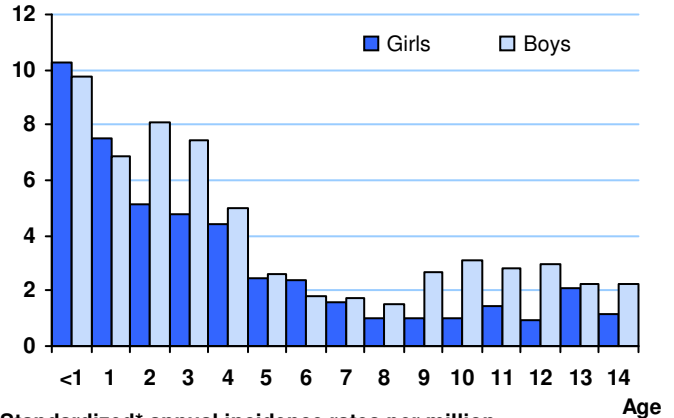
Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2010):

III (a) Ependymomas and choroid plexus tumour

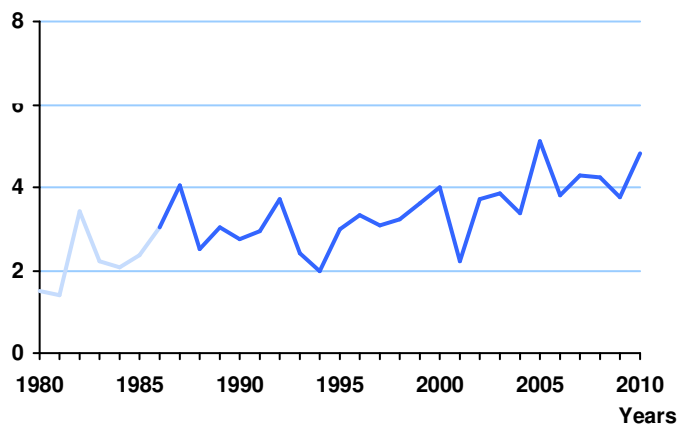
<b>SN after III (a)</b>			<b>III (a) as SN after any primary</b>		
	% of all	Cumulative incidence		% of all	Cumulative incidence
N	775 SN		N	775 SN	
14	1.8 %	2.8 %	7	0.9 %	0.0 %

\* Standard: Segi world standard population

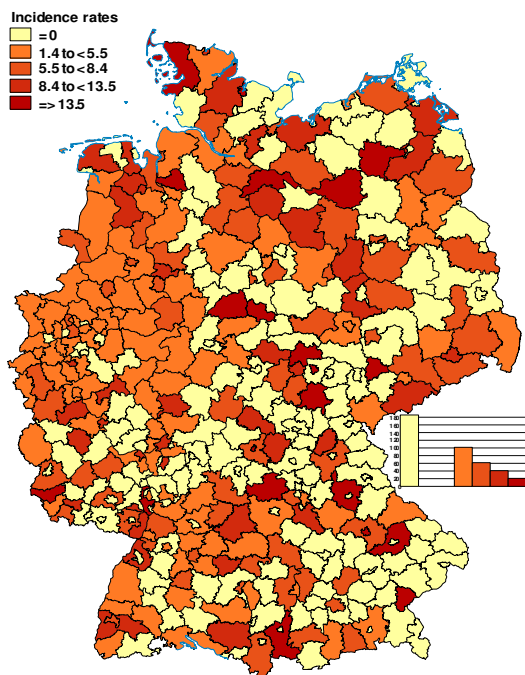
Age- and sex-specific incidence rates per million (Germany 2001-2010)



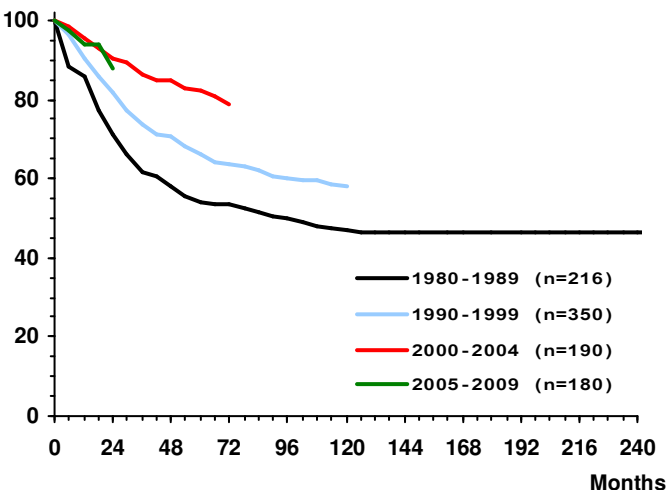
Standardized\* annual incidence rates per million (Germany 1980-2010)



Standardized\* incidence rates per million by districts (Landkreise) (Germany 2001-2010)



Survival probabilities by year of diagnosis (Germany 1980-2009)



Germany (2001-2010)	N	%
<b>Ependymomas and choroid plexus tumour</b>	<b>408</b>	<b>100.0</b>
Ependymomas	322	78.9
Choroid plexus tumour	86	21.1

## 1 Ependymomas

Cases in Germany aged under 15 years (1980-2010): 833

### Selected characteristics (Germany 2001-2010)

<b>Relative frequency:</b>	322 / 17876 = 1.8 %		
<b>Relative frequency of trial patients:</b>	93.5 %		
<b>Incidence rates per million:</b>	<b>Girls</b>	<b>Boys</b>	<b>Total</b>
Number of cases:	129	193	322
Standardized rate *:	2.5	3.5	3.0
Cumulative incidence:	35	49	42
<b>Sex ratio (m/f):</b>	1.5		

### Age-specific incidence rates per million:

	<1	1-4	5-9	10-14
Number of cases:	28	151	66	77
Incidence rate:	4.0	5.2	1.7	1.8

**Median age at diagnosis:** 4 years 2 months

\* Standard: Segi world standard population

## 2 Choroid plexus tumour

Cases in Germany aged under 15 years (1980-2010): 197

### Selected characteristics (Germany 2001-2010)

<b>Relative frequency:</b>	86 / 17876 = 0.5 %		
<b>Relative frequency of trial patients:</b>	82.6 %		
<b>Incidence rates per million:</b>	<b>Girls</b>	<b>Boys</b>	<b>Total</b>
Number of cases:	43	43	86
Standardized rate *:	0.9	0.9	0.9
Cumulative incidence:	12	11	12
<b>Sex ratio (m/f):</b>	1.0		

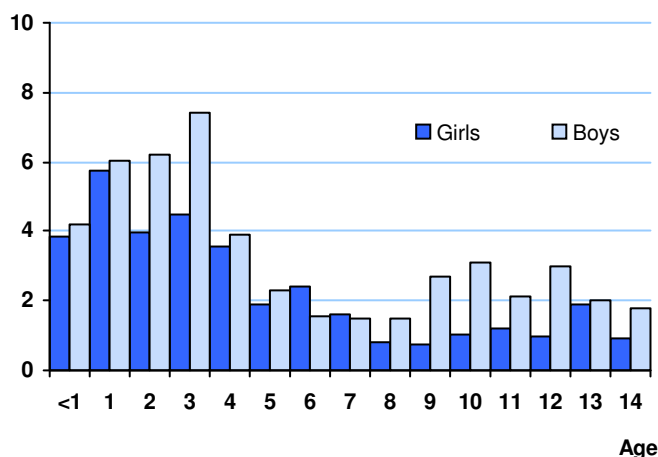
### Age-specific incidence rates per million:

	<1	1-4	5-9	10-14
Number of cases:	42	28	7	9
Incidence rate:	6.0	1.0	0.2	0.2

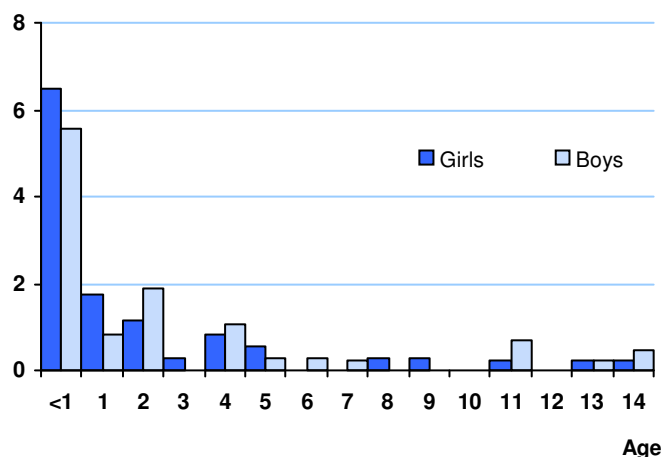
**Median age at diagnosis:** 1 year 2 months

\* Standard: Segi world standard population

Age- and sex-specific incidence rates per million (Germany 2001-2010)



Age- and sex-specific incidence rates per million (Germany 2001-2010)



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 (1980-2010): 4441**

**Selected characteristics (Germany 2001-2010)**

<b>Relative frequency:</b>	1962 / 17876 = 11.2 %		
<b>Relative frequency of trial patients:</b>	90.4 %		
<b>Incidence rates per million:</b>	<b>Girls</b>	<b>Boys</b>	<b>Total</b>
Number of cases:	922	1040	1962
Standardized rate*:	16.3	17.5	16.9
Cumulative incidence:	243	260	252
<b>Sex ratio (m/f):</b>	1.1		

**Age-specific incidence rates per million:**

	<b>&lt;1</b>	<b>1-4</b>	<b>5-9</b>	<b>10-14</b>
Number of cases :	97	550	692	623
Incidence rate:	13.9	18.9	17.8	14.7

**Median age at diagnosis:** 7 years 3 months

<b>Survival probabilities:</b>	<b>5-year</b>	<b>10-year</b>	<b>15-year</b>
	80 %	77 %	75 %

**Mortality per million within 10 yrs. of diagnosis (1991-2000):**

<b>Number of deaths</b>		<b>Standardized*</b>	<b>Cumulative</b>
N	% of all 4151 deaths	<b>mortality rate</b>	<b>mortality</b>
384	9.3 %	2.9	44

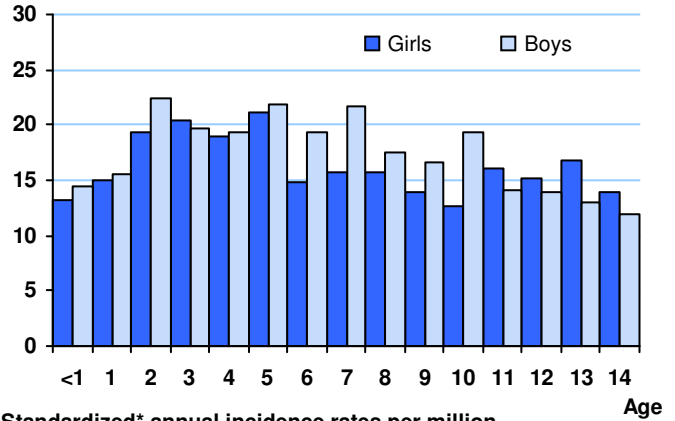
**Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2010):**

III (b) Astrocytomas

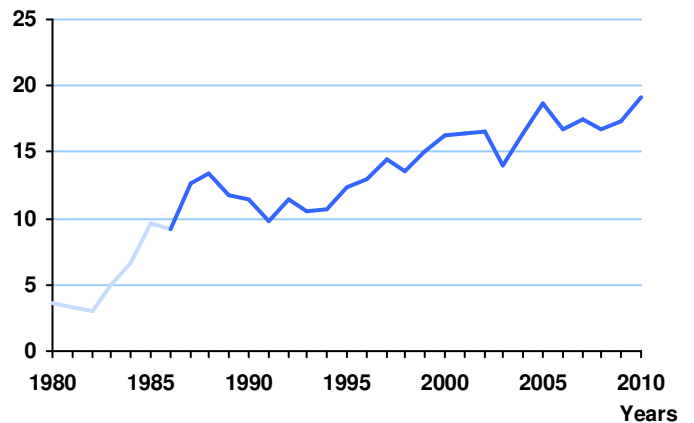
<b>SN after III (b)</b>			<b>III (b) as SN after any primary</b>		
N	% of all 775 SN	Cumulative incidence	N	% of all 775 SN	Cumulative incidence
32	4.1 %	1.9 %	80	10.3 %	0.3 %

\* Standard: Segi world standard population

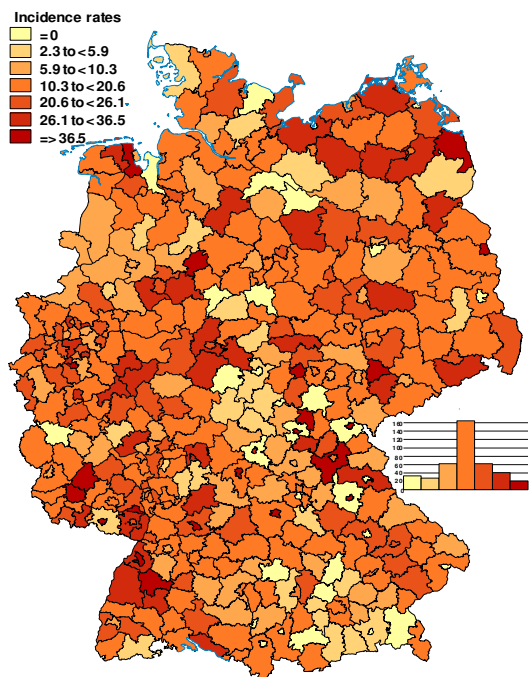
**Age- and sex-specific incidence rates per million (Germany 2001-2010)**



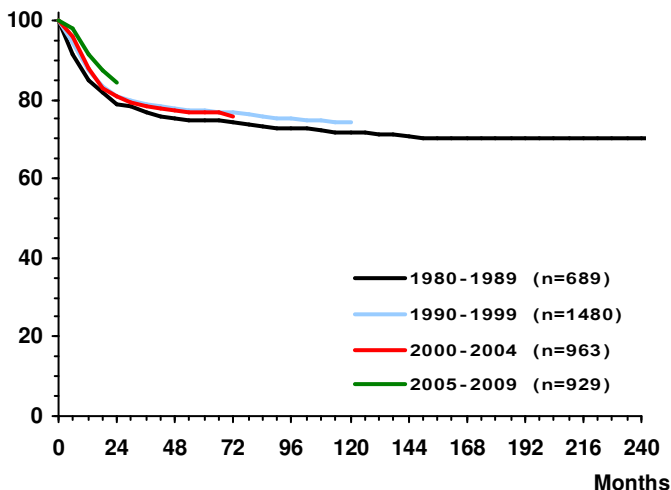
**Standardized\* annual incidence rates per million (Germany 1980-2010)**



**Standardized\* incidence rates per million by districts (Landkreise) (Germany 2001-2010)**



**Survival probabilities by year of diagnosis (Germany 1980-2009)**



All registered tumours are malignant. Based on international comparisons, 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 (1980-2010): 2374

Selected characteristics (Germany 2001-2010)

Relative frequency:	831 / 17876 = 4.7 %		
Relative frequency of trial patients:	92.4 %		
<b>Incidence rates per million:</b>	<b>Girls</b>	<b>Boys</b>	<b>Total</b>
Number of cases:	318	513	831
Standardized rate*:	6.0	9.1	7.6
Cumulative incidence:	86	131	109
<b>Sex ratio (m/f):</b>	1.6		

Age-specific incidence rates per million:

	<1	1-4	5-9	10-14
Number of cases :	88	275	322	146
Incidence rate:	12.6	9.4	8.3	3.4

Median age at diagnosis: 5 years 10 months

<b>Survival probabilities:</b>	<b>5-year</b>	<b>10-year</b>	<b>15-year</b>
	66 %	59 %	56 %

Mortality per million within 10 yrs. of diagnosis (1991-2000):

<b>Number of deaths</b>		<b>Standardized* mortality rate</b>	<b>Cumulative mortality</b>
N	% of all 4151 deaths		
459	11.1 %	3.8	53

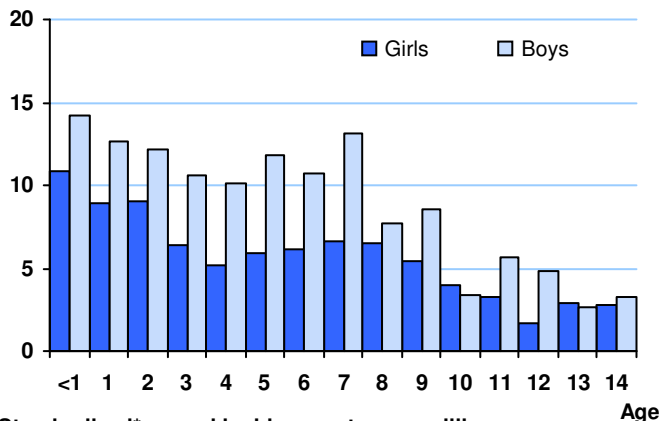
Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2010):

III (c) Intracranial and intraspinal embryonal tumours

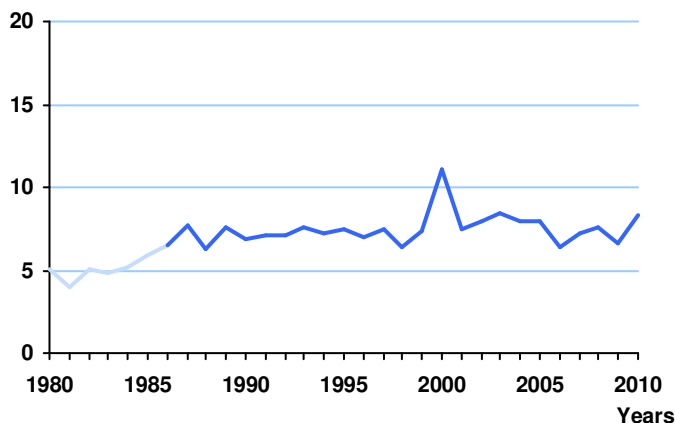
<b>SN after III (c)</b>			<b>III (c) as SN after any primary</b>		
	% of all	Cumulative incidence		% of all	Cumulative incidence
N	775 SN		N	775 SN	
72	9.3 %	6.3 %	14	1.8 %	0.1 %

\* Standard: Segi world standard population

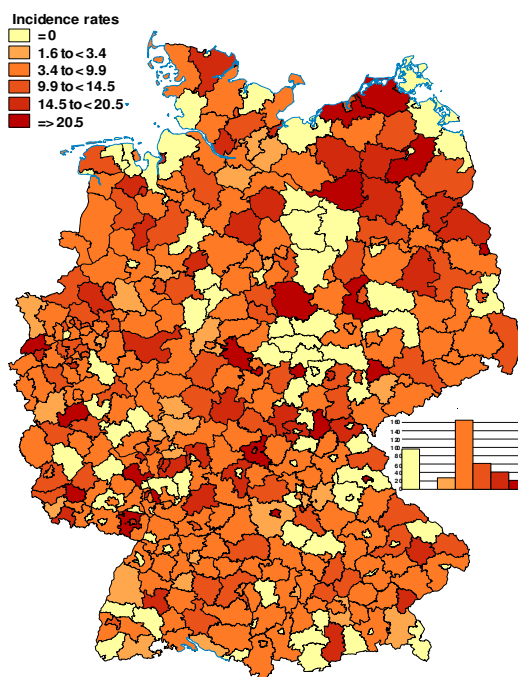
Age- and sex-specific incidence rates per million (Germany 2001-2010)



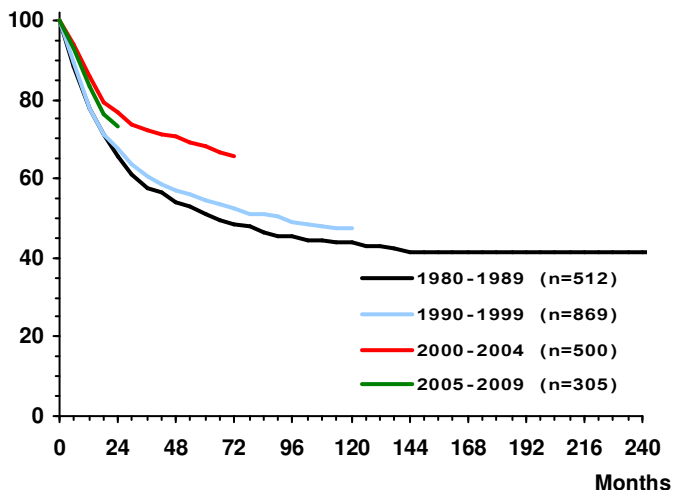
Standardized\* annual incidence rates per million (Germany 1980-2010)



Standardized\* incidence rates per million by districts (Landkreise) (Germany 2001-2010)



Survival probabilities by year of diagnosis (Germany 1980-2009)



Germany (2001-2010)	N	%
<b>Intracranial and intraspinal embryonal tumours</b>	<b>831</b>	<b>100.0</b>
Medulloblastomas	595	71.6
Primitive neuroectodermal tumour (PNET)	107	12.9
Medulloepithelioma	7	0.8
Atypical teratoid/rhabdoid tumour	122	14.7

## 1 Medulloblastomas

Cases in Germany aged under 15 years (1980-2010): 1820

based on International Classification of Childhood Cancer, 3rd edition

### Selected characteristics (Germany 2001-2010)

Relative frequency:	595 / 17876 = 3.3 %		
Relative frequency of trial patients:	98.5 %		
<b>Incidence rates per million:</b>	<b>Girls</b>	<b>Boys</b>	<b>Total</b>
Number of cases:	223	372	595
Standardized rate *:	4.0	6.4	5.2
Cumulative incidence:	59	94	77
<b>Sex ratio (m/f):</b>	1.7		

### Age-specific incidence rates per million:

	<1	1-4	5-9	10-14
Number of cases:	23	172	278	122
Incidence rate:	3.3	5.9	7.2	2.9

Median age at diagnosis: 6 years 8 months

\* Standard: Segi world standard population

## 2 Primitive neuroectodermal tumour (PNET)

Cases in Germany aged under 15 years (1980-2010): 376

### Selected characteristics (Germany 2001-2010)

Relative frequency:	107 / 17876 = 0.6 %		
Relative frequency of trial patients:	93.5 %		
<b>Incidence rates per million:</b>	<b>Girls</b>	<b>Boys</b>	<b>Total</b>
Number of cases:	44	63	107
Standardized rate *:	0.9	1.1	1.0
Cumulative incidence:	12	16	14
<b>Sex ratio (m/f):</b>	1.4		

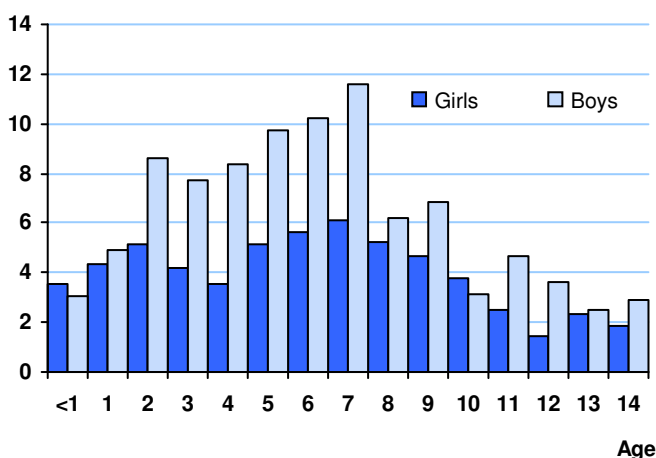
### Age-specific incidence rates per million:

	<1	1-4	5-9	10-14
Number of cases:	9	51	26	21
Incidence rate:	1.3	1.7	0.7	0.5

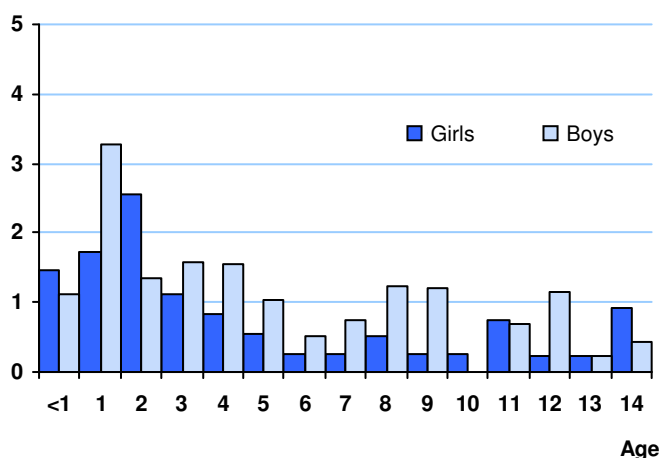
Median age at diagnosis: 4 years 3 months

\* Standard: Segi world standard population

Age- and sex-specific incidence rates per million (Germany 2001-2010)



Age- and sex-specific incidence rates per million (Germany 2001-2010)



Germany (2001-2010)	N	%
<b>Intracranial and intraspinal embryonal tumours</b>	831	100.0
Medulloblastomas	595	71.6
Primitive neuroectodermal tumour (PNET)	107	12.9
Medulloepithelioma	7	0.8
Atypical teratoid/rhabdoid tumour	122	14.7

#### 4 Atypical teratoid/rhabdoid tumour

Cases in Germany aged under 15 years (1980-2010): 162

##### Selected characteristics (Germany 2001-2010)

Relative frequency: 122 / 17876 = 0.7 %

Relative frequency of trial patients: 61.5 %

Incidence rates per million:	Girls	Boys	Total
Number of cases:	47	75	122
Standardized rate *:	1.0	1.5	1.3
Cumulative incidence:	13	20	17
<b>Sex ratio (m/f):</b>			1.6

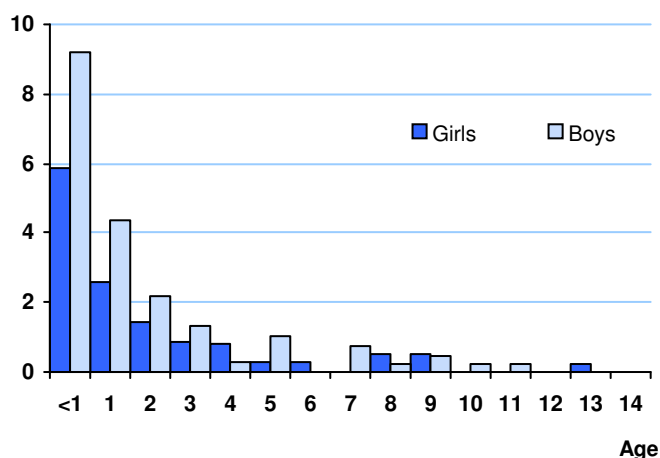
##### Age-specific incidence rates per million:

	<1	1-4	5-9	10-14
Number of cases:	53	50	16	3
Incidence rate:	7.6	1.7	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 2001-2010)





All registered tumours are malignant. Based on international comparisons, 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 (1980-2010): 743**

**Selected characteristics (Germany 2001-2010)**

<b>Relative frequency:</b>	342 / 17876 = 2.0 %		
<b>Relative frequency of trial patients:</b>	83.3 %		
<b>Incidence rates per million:</b>	<b>Girls</b>	<b>Boys</b>	<b>Total</b>
Number of cases:	167	175	342
Standardized rate*:	2.9	2.9	2.9
Cumulative incidence:	44	44	44
<b>Sex ratio (m/f):</b>	1.0		

<b>Age-specific incidence rates per million:</b>				
	<1	1-4	5-9	10-14
Number of cases :	16	82	130	114
Incidence rate:	2.3	2.8	3.3	2.7
<b>Median age at diagnosis:</b>	7 years 8 months			

<b>Survival probabilities:</b>	<b>5-year</b>	<b>10-year</b>	<b>15-year</b>
	42 %	41 %	41 %

**Mortality per million within 10 yrs. of diagnosis (1991-2000):**

<b>Number of deaths</b>		<b>Standardized*</b>	<b>Cumulative</b>
N	% of all 4151 deaths	<b>mortality rate</b>	<b>mortality</b>
123	3.0 %	0.9	14

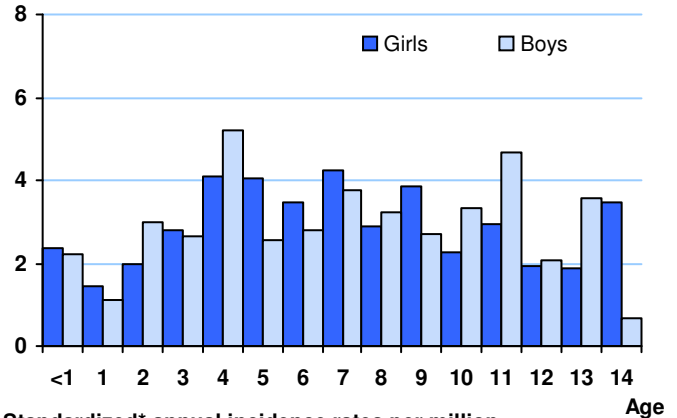
**Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2010):**

III (d) Other gliomas

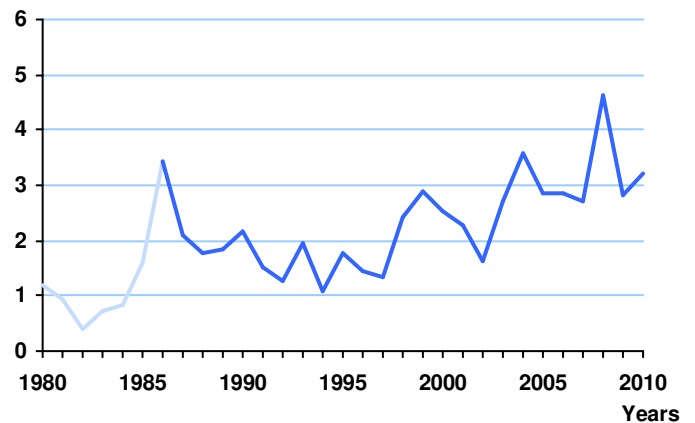
<b>SN after III (d)</b>			<b>III (d) as SN after any primary</b>		
N	% of all 775 SN	Cumulative incidence	N	% of all 775 SN	Cumulative incidence
6	0.8 %	1.3 %	19	2.5 %	0.1 %

\* Standard: Segi world standard population

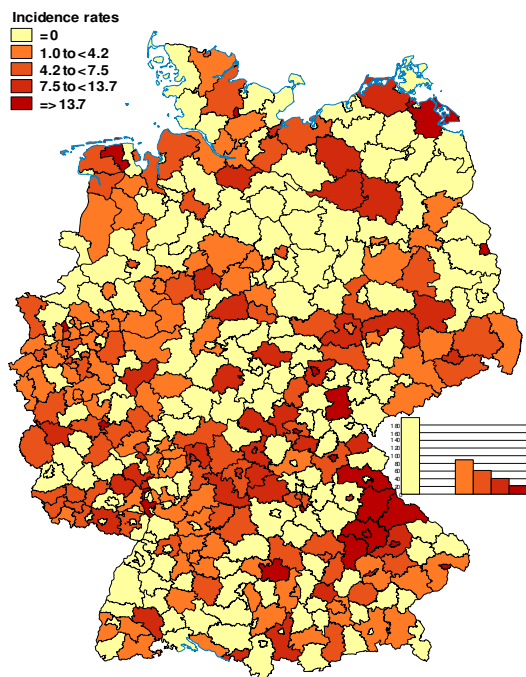
**Age- and sex-specific incidence rates per million (Germany 2001-2010)**



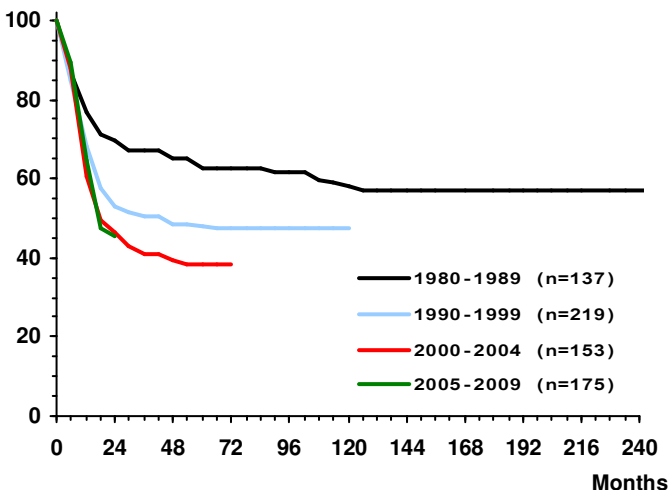
**Standardized\* annual incidence rates per million (Germany 1980-2010)**



**Standardized\* incidence rates per million by districts (Landkreise) (Germany 2001-2010)**



**Survival probabilities by year of diagnosis (Germany 1980-2009)**



Germany (2001-2010)	N	%
<b>Other gliomas</b>	<b>342</b>	<b>100.0</b>
Oligodendrogliomas	20	5.8
Mixed and unspecified gliomas	308	90.1
Neuroepithelial glial tumours of uncertain origin	14	4.1

## 1 Oligodendrogliomas

Cases in Germany aged under 15 years (1980-2010): 110

### Selected characteristics (Germany 2001-2010)

Relative frequency:	20 / 17876 = 0.1 %		
Relative frequency of trial patients:	70.0 %		
<b>Incidence rates per million:</b>	<b>Girls</b>	<b>Boys</b>	<b>Total</b>
Number of cases:	10	10	20
Standardized rate *:	0.2	0.1	0.2
Cumulative incidence:	3	2	2
<b>Sex ratio (m/f):</b>	1.0		

### Age-specific incidence rates per million:

	<1	1-4	5-9	10-14
Number of cases:	0	1	9	10
Incidence rate:	0.0	0.0	0.2	0.2
<b>Median age at diagnosis:</b>	10 years 5 months			

\* Standard: Segi world standard population

## 2 Mixed and unspecified gliomas

Cases in Germany aged under 15 years (1980-2010): 611

### Selected characteristics (Germany 2001-2010)

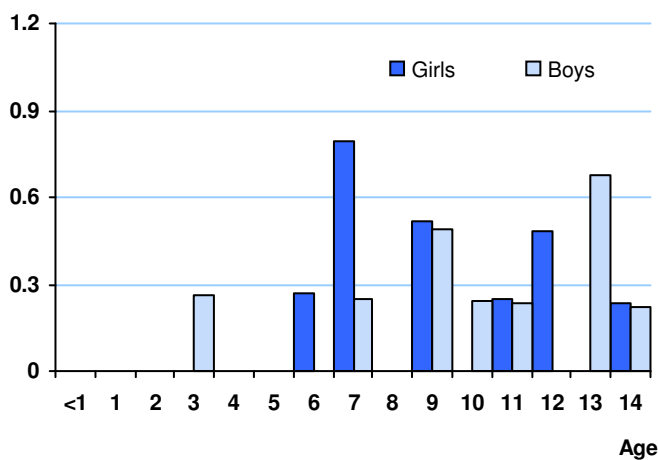
Relative frequency:	308 / 17876 = 1.7 %		
Relative frequency of trial patients:	84.1 %		
<b>Incidence rates per million:</b>	<b>Girls</b>	<b>Boys</b>	<b>Total</b>
Number of cases:	150	158	308
Standardized rate *:	2.6	2.6	2.6
Cumulative incidence:	39	39	39
<b>Sex ratio (m/f):</b>	1.1		

### Age-specific incidence rates per million:

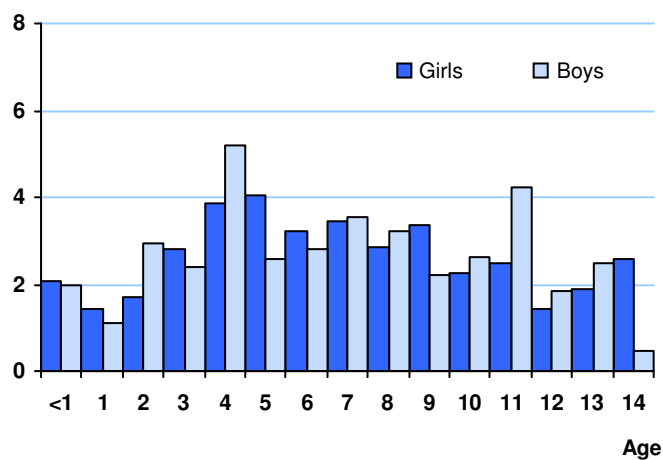
	<1	1-4	5-9	10-14
Number of cases:	14	79	121	94
Incidence rate:	2.0	2.7	3.1	2.2
<b>Median age at diagnosis:</b>	7 years 7 months			

\* Standard: Segi world standard population

Age- and sex-specific incidence rates per million (Germany 2001-2010)



Age- and sex-specific incidence rates per million (Germany 2001-2010)



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 (1980-2010): 1265

Selected characteristics (Germany 2001-2010)

Relative frequency:	550 / 17876 = 3.1 %		
Relative frequency of trial patients:	88.5 %		
<b>Incidence rates per million:</b>	<b>Girls</b>	<b>Boys</b>	<b>Total</b>
Number of cases:	250	300	550
Standardized rate*:	4.2	4.8	4.5
Cumulative incidence:	65	74	69
<b>Sex ratio (m/f):</b>	1.2		

Age-specific incidence rates per million:

	<1	1-4	5-9	10-14
Number of cases :	22	109	182	237
Incidence rate:	3.2	3.7	4.7	5.6

Median age at diagnosis: 9 years 2 months

<b>Survival probabilities:</b>	<b>5-year</b>	<b>10-year</b>	<b>15-year</b>
	95 %	93 %	90 %

Mortality per million within 10 yrs. of diagnosis (1991-2000):

Number of deaths		Standardized*	Cumulative
N	% of all 4151 deaths	mortality rate	mortality
32	0.8 %	0.2	4

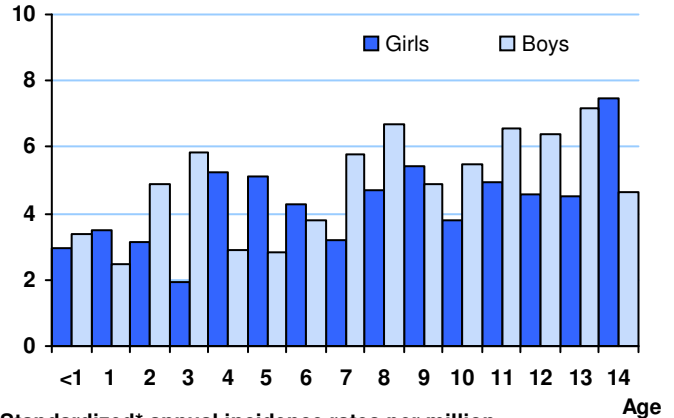
Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2010):

III (e) Other specified intracranial and intraspinal neoplasms

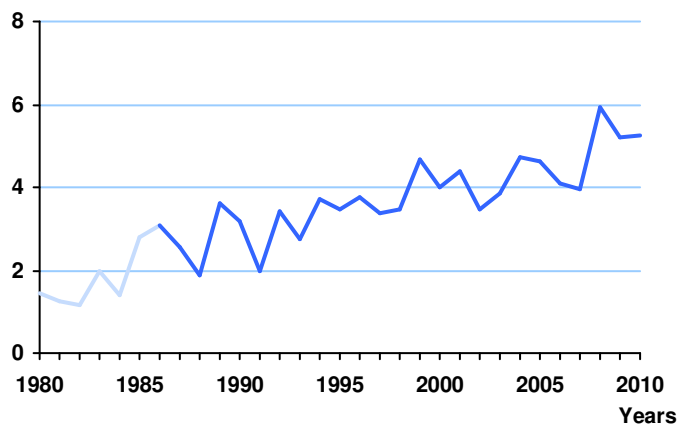
SN after III (e)			III (e) as SN after any primary		
N	% of all 775 SN	Cumulative incidence	N	% of all 775 SN	Cumulative incidence
12	1.5 %	2.4 %	46	5.9 %	0.3 %

\* Standard: Segi world standard population

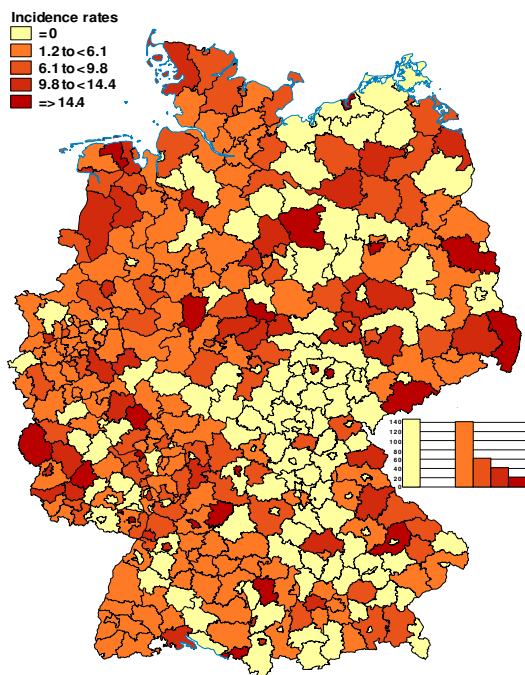
Age- and sex-specific incidence rates per million (Germany 2001-2010)



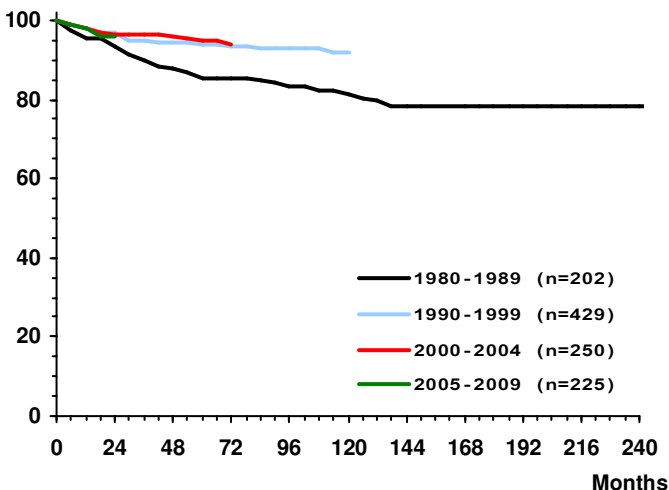
Standardized\* annual incidence rates per million (Germany 1980-2010)



Standardized\* incidence rates per million by districts (Landkreise) (Germany 2001-2010)



Survival probabilities by year of diagnosis (Germany 1980-2009)



Germany (2001-2010)	N	%
<b>Other specified intracranial and intraspinal neoplasms</b>	<b>550</b>	<b>100.0</b>
Pituitary adenomas and carcinomas	30	5.5
Tumours of the sellar region (craniopharyngiomas)	194	35.3
Pineal parenchymal tumours	30	5.5
Neuronal and mixed neuronal-glial tumours	243	44.2
Meningiomas	53	9.6

## 1 Pituitary adenomas and carcinomas

Cases in Germany aged under 15 years (1980-2010): 77

### Selected characteristics (Germany 2001-2010)

Relative frequency:	30 / 17876 = 0.2 %		
Relative frequency of trial patients:	63.3 %		
<b>Incidence rates per million:</b>	<b>Girls</b>	<b>Boys</b>	<b>Total</b>
Number of cases:	15	15	30
Standardized rate *:	0.2	0.2	0.2
Cumulative incidence:	4	3	4
<b>Sex ratio (m/f):</b>	1.0		

### Age-specific incidence rates per million:

	<1	1-4	5-9	10-14
Number of cases:	0	3	3	24
Incidence rate:	0.0	0.1	0.1	0.6
<b>Median age at diagnosis:</b>	12 years 9 months			

\* Standard: Segi world standard population

## 2 Tumours of the sellar region (craniopharyngiomas)

Cases in Germany aged under 15 years (1980-2010): 520

### Selected characteristics (Germany 2001-2010)

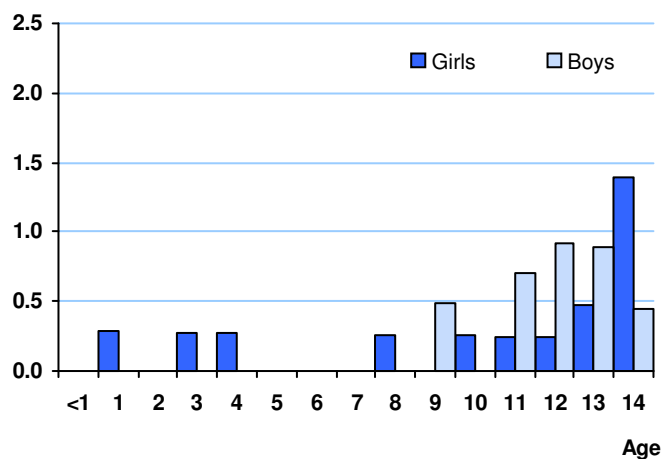
Relative frequency:	194 / 17876 = 1.1 %		
Relative frequency of trial patients:	97.4 %		
<b>Incidence rates per million:</b>	<b>Girls</b>	<b>Boys</b>	<b>Total</b>
Number of cases:	94	100	194
Standardized rate *:	1.6	1.6	1.6
Cumulative incidence:	24	25	24
<b>Sex ratio (m/f):</b>	1.1		

### Age-specific incidence rates per million:

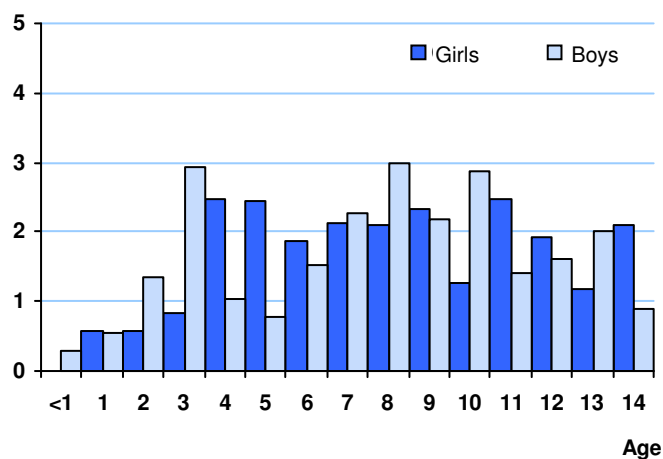
	<1	1-4	5-9	10-14
Number of cases:	1	38	80	75
Incidence rate:	0.1	1.3	2.1	1.8
<b>Median age at diagnosis:</b>	8 years 10 months			

\* Standard: Segi world standard population

Age- and sex-specific incidence rates per million (Germany 2001-2010)



Age- and sex-specific incidence rates per million (Germany 2001-2010)



Germany (2001-2010)	N	%
<b>Other specified intracranial and intraspinal neoplasms</b>	<b>550</b>	<b>100.0</b>
Pituitary adenomas and carcinomas	30	5.5
Tumours of the sellar region (craniopharyngiomas)	194	35.3
Pineal parenchymal tumours	30	5.5
Neuronal and mixed neuronal-glial tumours	243	44.2
Meningiomas	53	9.6

### 3 Pineal parenchymal tumours

Cases in Germany aged under 15 years (1980-2010): 109

#### Selected characteristics (Germany 2001-2010)

<b>Relative frequency:</b>	30 / 17876 = 0.2 %		
<b>Relative frequency of trial patients:</b>	86.7 %		
<b>Incidence rates per million:</b>	<b>Girls</b>	<b>Boys</b>	<b>Total</b>
Number of cases:	13	17	30
Standardized rate *:	0.2	0.3	0.3
Cumulative incidence:	3	4	4
<b>Sex ratio (m/f):</b>	1.3		

#### Age-specific incidence rates per million:

	<1	1-4	5-9	10-14
Number of cases:	1	9	9	11
Incidence rate:	0.1	0.3	0.2	0.3

**Median age at diagnosis:** 7 years 10 months

\* Standard: Segi world standard population

### 4 Neuronal and mixed neuronal-glial tumours

Cases in Germany aged under 15 years (1980-2010): 433

#### Selected characteristics (Germany 2001-2010)

<b>Relative frequency:</b>	243 / 17876 = 1.4 %		
<b>Relative frequency of trial patients:</b>	87.7 %		
<b>Incidence rates per million:</b>	<b>Girls</b>	<b>Boys</b>	<b>Total</b>
Number of cases:	100	143	243
Standardized rate *:	1.7	2.3	2.0
Cumulative incidence:	26	35	31
<b>Sex ratio (m/f):</b>	1.4		

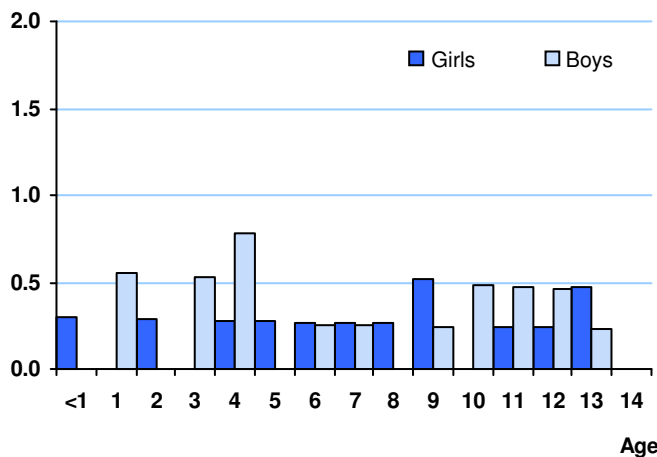
#### Age-specific incidence rates per million:

	<1	1-4	5-9	10-14
Number of cases:	20	48	70	105
Incidence rate:	2.9	1.6	1.8	2.5

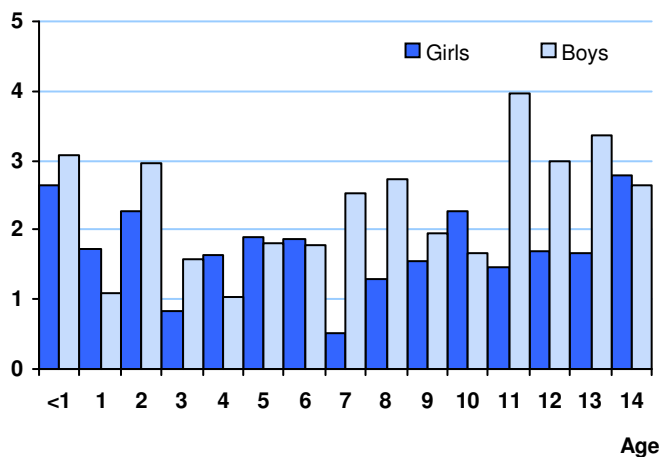
**Median age at diagnosis:** 8 years 8 months

\* Standard: Segi world standard population

Age- and sex-specific incidence rates per million (Germany 2001-2010)



Age- and sex-specific incidence rates per million (Germany 2001-2010)



Germany (2001-2010)	N	%
<b>Other specified intracranial and intraspinal neoplasms</b>	<b>550</b>	<b>100.0</b>
Pituitary adenomas and carcinomas	30	5.5
Tumours of the sellar region (craniopharyngiomas)	194	35.3
Pineal parenchymal tumours	30	5.5
Neuronal and mixed neuronal-glial tumours	243	44.2
Meningiomas	53	9.6

## 5 Meningiomas

Cases in Germany aged under 15 years (1980-2010): 126

### Selected characteristics (Germany 2001-2010)

Relative frequency: 53 / 17876 = 0.3 %

Relative frequency of trial patients: 75.5 %

Incidence rates per million:	Girls	Boys	Total
Number of cases:	28	25	53
Standardized rate *:	0.5	0.4	0.4
Cumulative incidence:	7	6	7
<b>Sex ratio (m/f):</b>			0.9

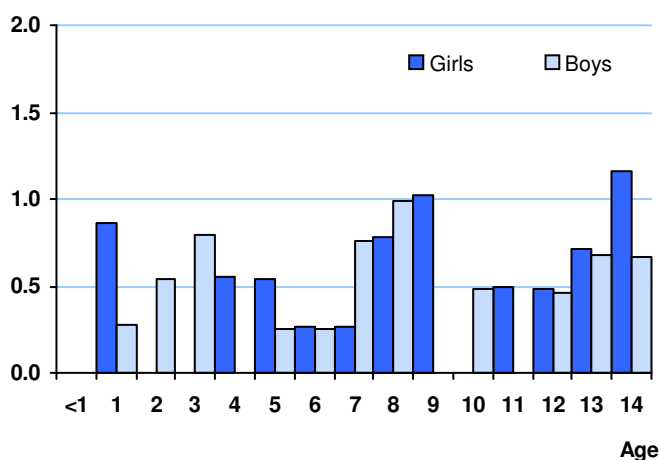
### Age-specific incidence rates per million:

	<1	1-4	5-9	10-14
Number of cases:	0	11	20	22
Incidence rate:	0.0	0.4	0.5	0.5

Median age at diagnosis: 8 years 10 months

\* Standard: Segi world standard population

### Age- and sex-specific incidence rates per million (Germany 2001-2010)



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 (1980-2010): 3690**

**Selected characteristics (Germany 2001-2010)**

<b>Relative frequency:</b>	1240 / 17876 = 7.1 %		
<b>Relative frequency of trial patients:</b>	99.0 %		
<b>Incidence rates per million:</b>	<b>Girls</b>	<b>Boys</b>	<b>Total</b>
Number of cases:	570	670	1240
Standardized rate*:	12.5	14.1	13.3
Cumulative incidence:	162	182	172
<b>Sex ratio (m/f):</b>	1.2		

<b>Age-specific incidence rates per million:</b>				
	<1	1-4	5-9	10-14
Number of cases :	575	536	101	28
Incidence rate:	82.4	18.4	2.6	0.7
<b>Median age at diagnosis:</b>	1 year 2 months			

<b>Survival probabilities:</b>	<b>5-year</b>	<b>10-year</b>	<b>15-year</b>
	78 %	75 %	74 %

**Mortality per million within 10 yrs. of diagnosis (1991-2000):**

<b>Number of deaths</b>		<b>Standardized*</b>	<b>Cumulative</b>
N	% of all 4151 deaths	<b>mortality rate</b>	<b>mortality</b>
445	10.7 %	3.9	53

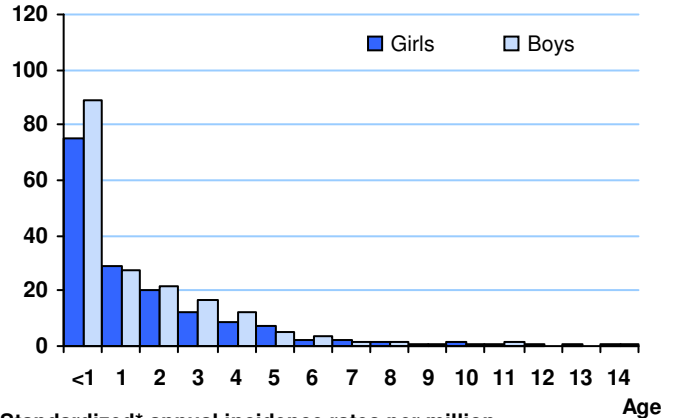
**Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2010):**

IV (a) Neuroblastoma and ganglioneuroblastoma

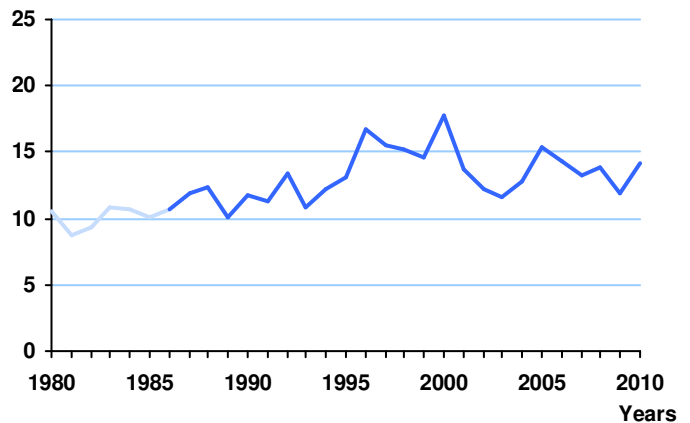
<b>SN after IV (a)</b>			<b>IV (a) as SN after any primary</b>		
N	% of all 775 SN	Cumulative incidence	N	% of all 775 SN	Cumulative incidence
49	6.3 %	2.5 %	9	1.2 %	0.0 %

\* Standard: Segi world standard population

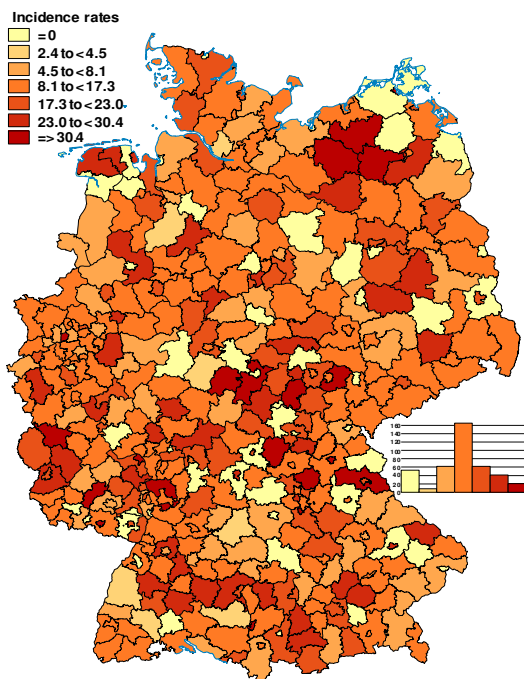
**Age- and sex-specific incidence rates per million (Germany 2001-2010)**



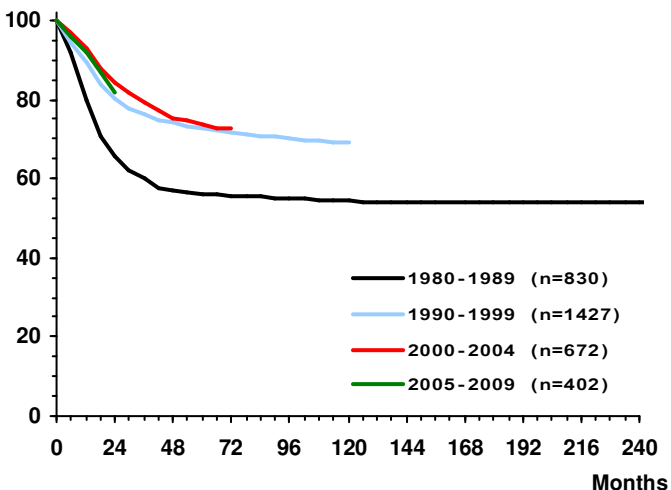
**Standardized\* annual incidence rates per million (Germany 1980-2010)**



**Standardized\* incidence rates per million by districts (Landkreise) (Germany 2001-2010)**



**Survival probabilities by year of diagnosis (Germany 1980-2009)**



Retinoblastoma (RB) is an embryonal tumor of early childhood. The gene variant leading to RB is known. Hereditary cases are earlier than spontaneous mutations and often bilateral. 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 (1980-2010): 1170

Selected characteristics (Germany 2001-2010)

Relative frequency:	396 / 17876 = 2.3 %		
Relative frequency of trial patients:	-		
<b>Incidence rates per million:</b>	<b>Girls</b>	<b>Boys</b>	<b>Total</b>
Number of cases:	179	217	396
Standardized rate*:	4.0	4.6	4.3
Cumulative incidence:	51	59	55
<b>Sex ratio (m/f):</b>	1.2		

<b>Age-specific incidence rates per million:</b>				
	<1	1-4	5-9	10-14
Number of cases :	173	203	18	2
Incidence rate:	24.8	7.0	0.5	0.0
<b>Median age at diagnosis:</b>	1 year 2 months			

<b>Survival probabilities:</b>	<b>5-year</b>	<b>10-year</b>	<b>15-year</b>
	98 %	98 %	98 %

Mortality per million within 10 yrs. of diagnosis (1991-2000):

<b>Number of deaths</b>		<b>Standardized* mortality rate</b>	<b>Cumulative mortality</b>
N	% of all 4151 deaths		
9	0.2 %	0.1	1

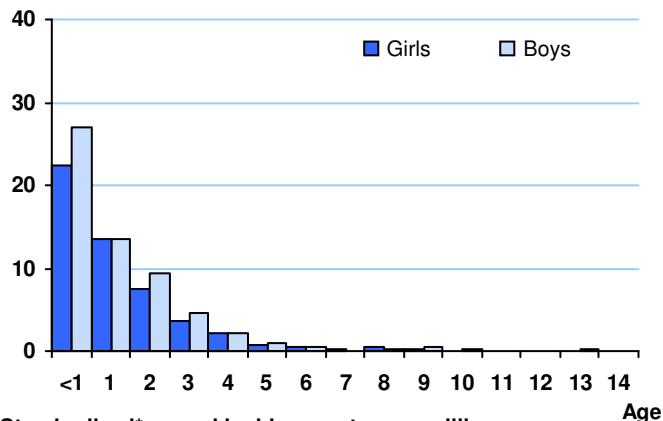
Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2010):

V Retinoblastoma

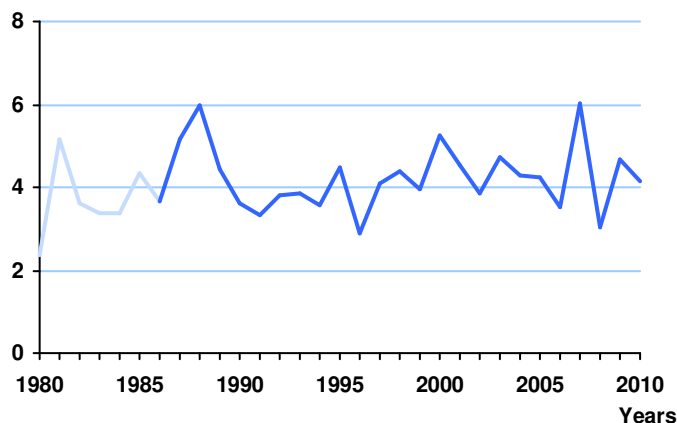
<b>SN after V</b>			<b>V as SN after any primary</b>		
N	% of all 775 SN	Cumulative incidence	N	% of all 775 SN	Cumulative incidence
24	3.1 %	3.1 %	3	0.4 %	0.0 %

\* Standard: Segi world standard population

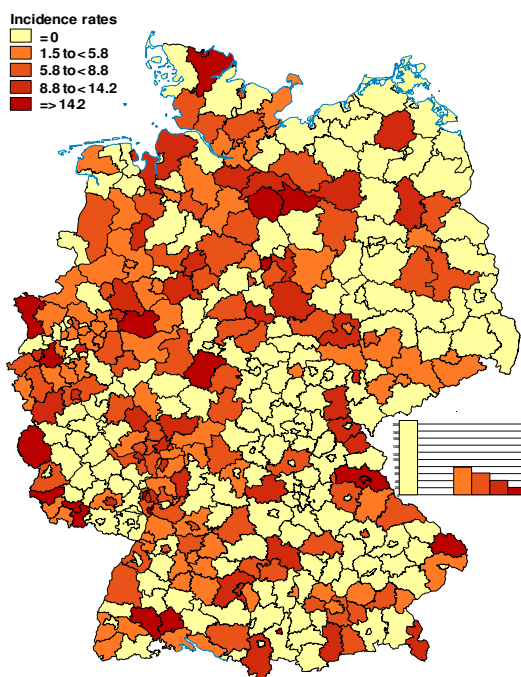
Age- and sex-specific incidence rates per million (Germany 2001-2010)



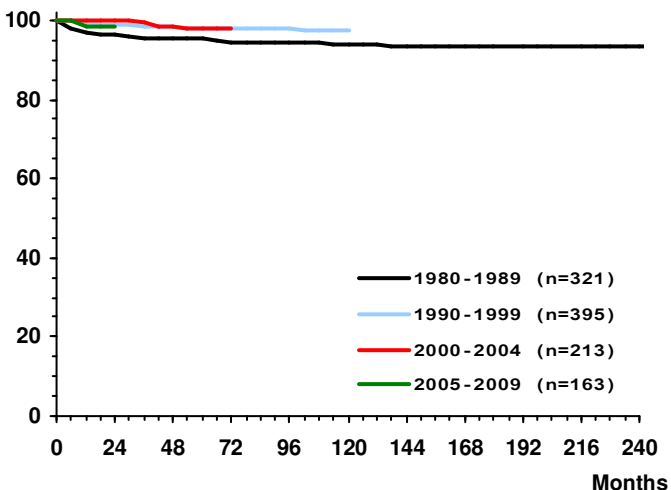
Standardized\* annual incidence rates per million (Germany 1980-2010)



Standardized\* incidence rates per million by districts (Landkreise) (Germany 2001-2010)



Survival probabilities by year of diagnosis (Germany 1980-2009)





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

### Cases in Germany aged under 15 years (1980-2010): 2823

#### Selected characteristics (Germany 2001-2010)

<b>Relative frequency:</b>	980 / 17876 = 5.6 %		
<b>Relative frequency of trial patients:</b>	98.7 %		
<b>Incidence rates per million:</b>	<b>Girls</b>	<b>Boys</b>	<b>Total</b>
Number of cases:	509	471	980
Standardized rate *:	10.5	9.3	9.9
Cumulative incidence:	141	125	133
<b>Sex ratio (m/f):</b>	0.9		

#### Age-specific incidence rates per million:

	<1	1-4	5-9	10-14
Number of cases :	167	557	212	44
Incidence rate:	23.9	19.1	5.5	1.0

**Median age at diagnosis:** 3 years 1 month

<b>Survival probabilities:</b>	<b>5-year</b>	<b>10-year</b>	<b>15-year</b>
	93 %	93 %	92 %

#### Mortality per million within 10 yrs. of diagnosis (1991-2000):

Number of deaths		Standardized*	Cumulative
N	% of all 4151 deaths	mortality rate	mortality
123	3.0 %	1.1	15

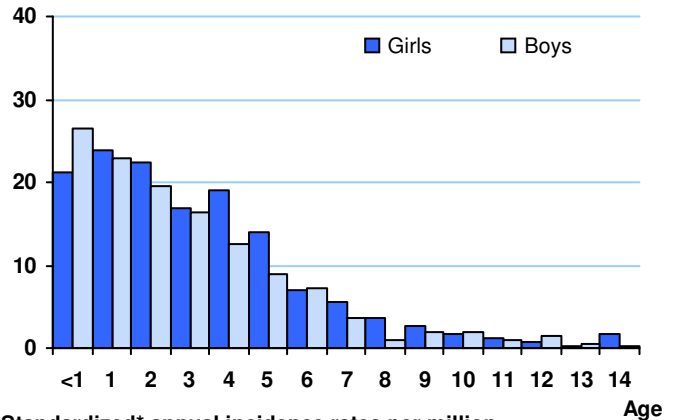
#### Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2010):

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

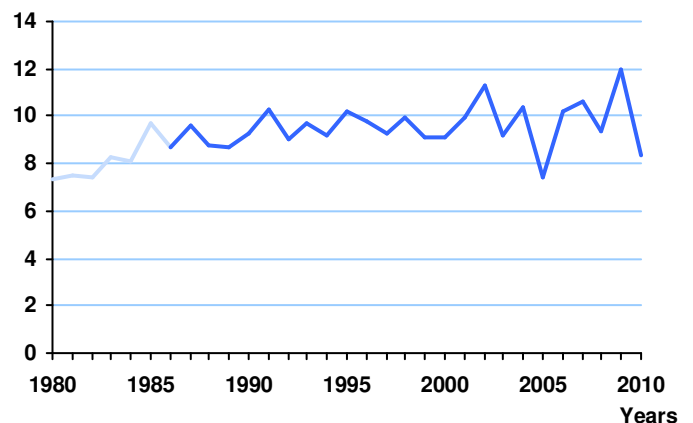
SN after VI (a)			VI (a) as SN after any primary		
N	% of all 775 SN	Cumulative incidence	N	% of all 775 SN	Cumulative incidence
31	4.0 %	2.1 %	8	1.0 %	0.0 %

\* Standard: Segi world standard population

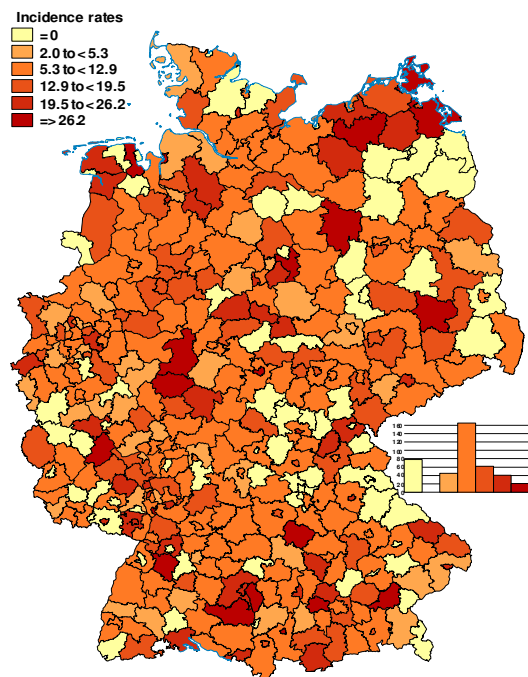
#### Age- and sex-specific incidence rates per million (Germany 2001-2010)



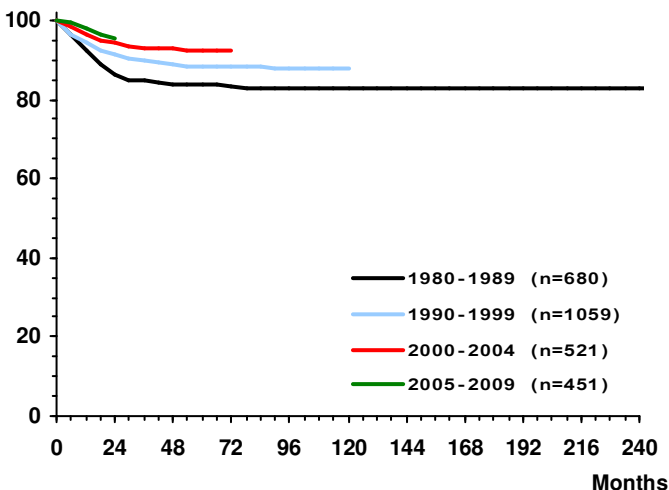
#### Standardized\* annual incidence rates per million (Germany 1980-2010)



#### Standardized\* incidence rates per million by districts (Landkreise) (Germany 2001-2010)



#### Survival probabilities by year of diagnosis (Germany 1980-2009)



Germany (2001-2010)	N	%
<b>Nephroblastoma and other non-epithelial renal tumours</b>	<b>980</b>	<b>100.0</b>
Nephroblastoma	959	97.9
Rhabdoid renal tumour	13	1.3
Kidney sarcomas	7	0.7
Peripheral neuroectodermal tumour (pPNET) of kidney	1	0.1

## 1 Nephroblastoma

Cases in Germany aged under 15 years (1980-2010): 2732

### Selected characteristics (Germany 2001-2010)

Relative frequency:	959 / 17876 = 5.4 %		
Relative frequency of trial patients:	99.0 %		
<b>Incidence rates per million:</b>	<b>Girls</b>	<b>Boys</b>	<b>Total</b>
Number of cases:	501	458	959
Standardized rate *:	10.3	9.1	9.7
Cumulative incidence:	139	121	130
<b>Sex ratio (m/f):</b>	0.9		

### Age-specific incidence rates per million:

	<1	1-4	5-9	10-14
Number of cases:	159	550	208	42
Incidence rate:	22.8	18.9	5.4	1.0

**Median age at diagnosis:** 3 years 1 month

\* Standard: Segi world standard population

## 2 Rhabdoid renal tumour

Cases in Germany aged under 15 years (1980-2010): 45

### Selected characteristics (Germany 2001-2010)

Relative frequency:	13 / 17876 = 0.1 %		
Relative frequency of trial patients:	76.9 %		
<b>Incidence rates per million:</b>	<b>Girls</b>	<b>Boys</b>	<b>Total</b>
Number of cases:	6	7	13
Standardized rate *:	0.1	0.1	0.1
Cumulative incidence:	2	2	2
<b>Sex ratio (m/f):</b>	1.2		

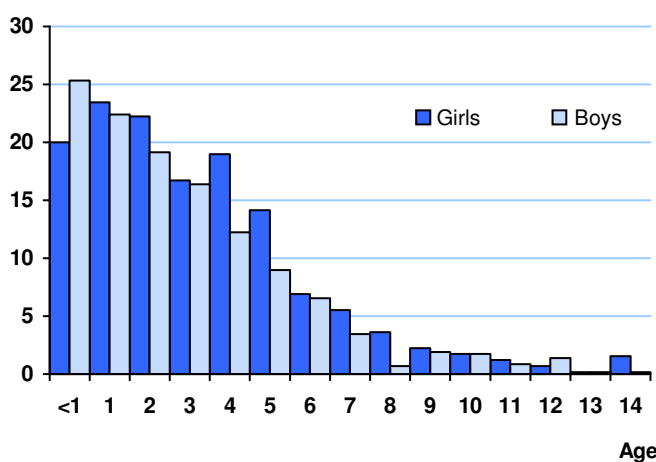
### Age-specific incidence rates per million:

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

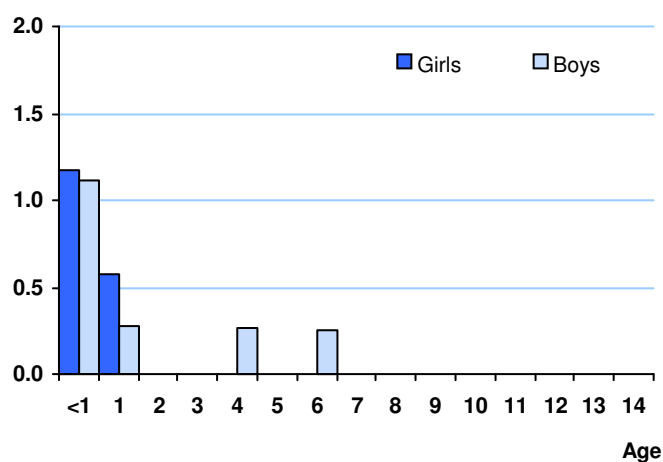
**Median age at diagnosis:** 0 years 10 months

\* Standard: Segi world standard population

Age- and sex-specific incidence rates per million (Germany 2001-2010)



Age- and sex-specific incidence rates per million (Germany 2001-2010)



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 (1980-2010): 53**

**Selected characteristics (Germany 2001-2010)**

<b>Relative frequency:</b>	24 / 17876 = 0.1 %		
<b>Relative frequency of trial patients:</b>	70.8 %		
<b>Incidence rates per million:</b>	<b>Girls</b>	<b>Boys</b>	<b>Total</b>
Number of cases:	14	10	24
Standardized rate*:	0.2	0.1	0.2
Cumulative incidence:	4	2	3
<b>Sex ratio (m/f):</b>	0.7		

**Age-specific incidence rates per million:**

	<1	1-4	5-9	10-14
Number of cases :	0	1	6	17
Incidence rate:	0.0	0.0	0.2	0.4

**Median age at diagnosis:** 11 years 9 months

<b>Survival probabilities:</b>	<b>5-year</b>	<b>10-year</b>	<b>15-year</b>
	-	-	-

**Mortality per million within 10 yrs. of diagnosis (1991-2000):**

<b>Number of deaths</b>		<b>Standardized* mortality rate</b>	<b>Cumulative mortality</b>
<b>N</b>	<b>% of all 4151 deaths</b>		
3	0.1 %	0.0	0

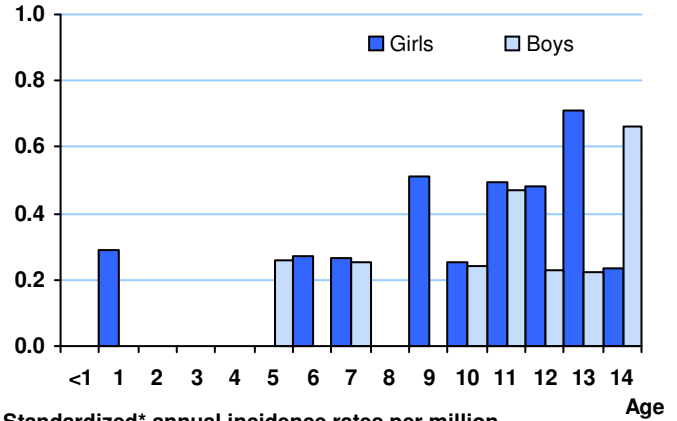
**Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2010):**

VI (b) Renal carcinomas

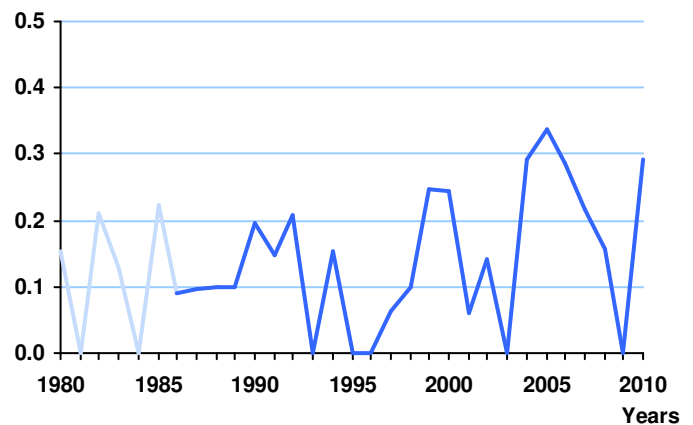
<b>SN after VI (b)</b>			<b>VI (b) as SN after any primary</b>		
	<b>% of all 775 SN</b>	<b>Cumulative incidence</b>		<b>% of all 775 SN</b>	<b>Cumulative incidence</b>
N			N		
1	0.1 %	2.3 %	4	0.5 %	0.0 %

\* Standard: Segi world standard population

**Age- and sex-specific incidence rates per million (Germany 2001-2010)**



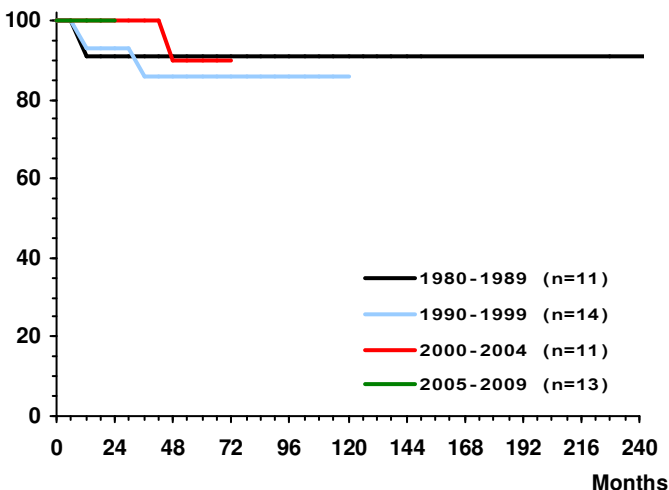
**Standardized\* annual incidence rates per million (Germany 1980-2010)**



**Standardized\* incidence rates per million by districts (Landkreise) (Germany 2001-2010)**

No map due to sparse data

**Survival probabilities by year of diagnosis (Germany 1980-2009)**



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.

**Cases in Germany aged under 15 years (1980-2010): 404**

**Selected characteristics (Germany 2001-2010)**

<b>Relative frequency:</b>	179 / 17876 = 1.0 %		
<b>Relative frequency of trial patients:</b>	98.9 %		
<b>Incidence rates per million:</b>	<b>Girls</b>	<b>Boys</b>	<b>Total</b>
Number of cases:	73	106	179
Standardized rate*:	1.6	2.2	1.9
Cumulative incidence:	21	28	25
<b>Sex ratio (m/f):</b>	1.5		

**Age-specific incidence rates per million:**

	<b>&lt;1</b>	<b>1-4</b>	<b>5-9</b>	<b>10-14</b>
Number of cases :	60	99	11	9
Incidence rate:	8.6	3.4	0.3	0.2
<b>Median age at diagnosis:</b>	1 year 5 months			

<b>Survival probabilities:</b>	<b>5-year</b>	<b>10-year</b>	<b>15-year</b>
	75 %	74 %	74 %

**Mortality per million within 10 yrs. of diagnosis (1991-2000):**

Number of deaths		Standardized* mortality rate	Cumulative mortality
N	% of all 4151 deaths		
37	0.9 %	0.3	4

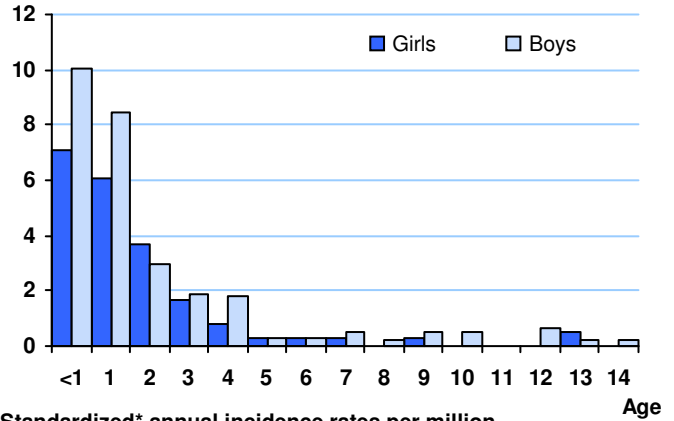
**Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2010):**

VII (a) Hepatoblastoma

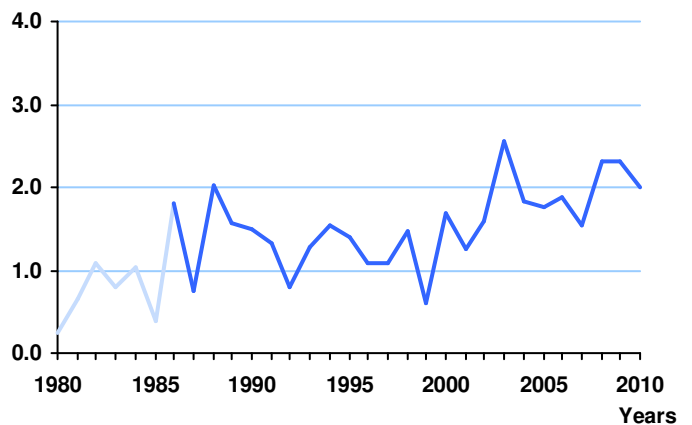
SN after VII (a)			VII (a) as SN after any primary		
N	% of all 775 SN	Cumulative incidence	N	% of all 775 SN	Cumulative incidence
3	0.4 %	2.8 %	2	0.3 %	0.0 %

\* Standard: Segi world standard population

**Age- and sex-specific incidence rates per million (Germany 2001-2010)**



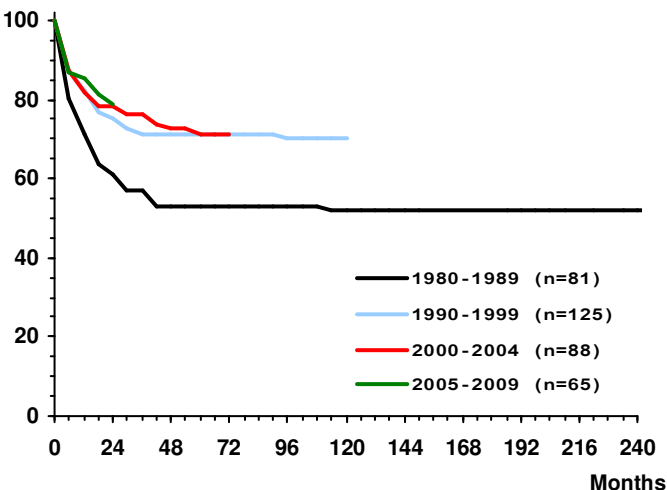
**Standardized\* annual incidence rates per million (Germany 1980-2010)**



**Standardized\* incidence rates per million by districts (Landkreise) (Germany 2001-2010)**

No map due to sparse data

**Survival probabilities by year of diagnosis (Germany 1980-2009)**



Hepatic carcinomas are rare in childhood. Registration may be incomplete. Prognosis has improved considerably since 1980. So far, no second neoplasm (SN) has been observed after a hepatic carcinoma within 20 years of diagnosis, underreporting of SN is a possibility.

Cases in Germany aged under 15 years (1980-2010): 100

Selected characteristics (Germany 2001-2010)

Relative frequency:	36 / 17876 = 0.2 %		
Relative frequency of trial patients:	80.6 %		
<b>Incidence rates per million:</b>	<b>Girls</b>	<b>Boys</b>	<b>Total</b>
Number of cases:	13	23	36
Standardized rate*:	0.2	0.3	0.3
Cumulative incidence:	3	5	4
<b>Sex ratio (m/f):</b>	1.8		

Age-specific incidence rates per million:

	<1	1-4	5-9	10-14
Number of cases :	0	3	11	22
Incidence rate:	0.0	0.1	0.3	0.5

Median age at diagnosis: 12 years 6 months

<b>Survival probabilities:</b>	<b>5-year</b>	<b>10-year</b>	<b>15-year</b>
	-	-	-

Mortality per million within 10 yrs. of diagnosis (1991-2000):

<b>Number of deaths</b>		<b>Standardized* mortality rate</b>	<b>Cumulative mortality</b>
N	% of all 4151 deaths		
16	0.4 %	0.1	2

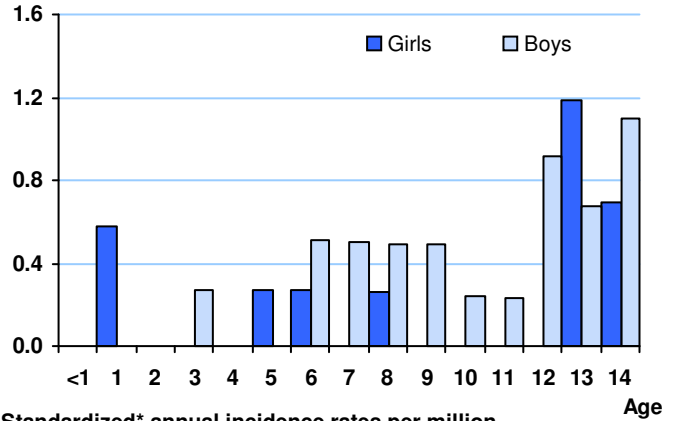
Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2010):

VII (b) Hepatic carcinomas

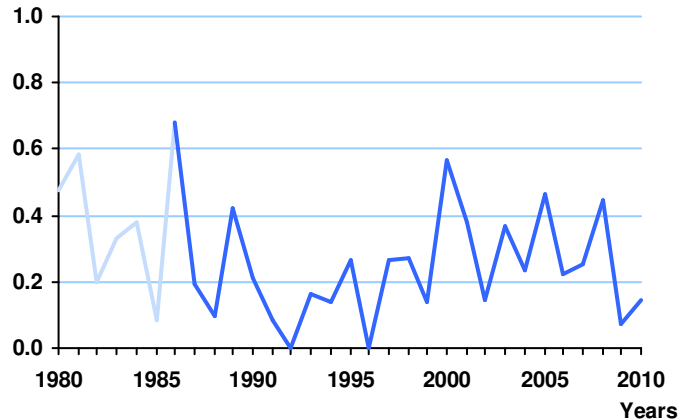
<b>SN after VII (b)</b>			<b>VII (b) as SN after any primary</b>		
	% of all 775 SN	Cumulative incidence		% of all 775 SN	Cumulative incidence
N			N		
0	0.0 %	0.0 %	4	0.5 %	0.0 %

\* Standard: Segi world standard population

Age- and sex-specific incidence rates per million (Germany 2001-2010)



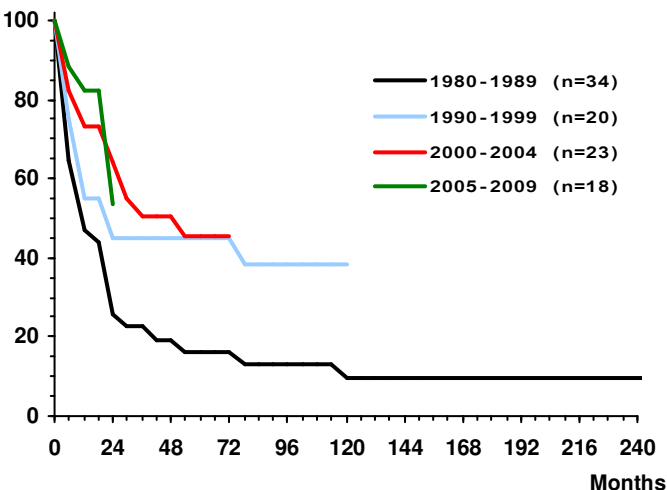
Standardized\* annual incidence rates per million (Germany 1980-2010)



Standardized\* incidence rates per million by districts (Landkreise) (Germany 2001-2010)

No map due to sparse data

Survival probabilities by year of diagnosis (Germany 1980-2009)



- (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 (1980-2010): 2285**

**Selected characteristics (Germany 2001-2010)**

<b>Relative frequency:</b>	802 / 17876 = 4.5 %		
<b>Relative frequency of trial patients:</b>	97.6 %		
<b>Incidence rates per million:</b>	<b>Girls</b>	<b>Boys</b>	<b>Total</b>
Number of cases:	379	423	802
Standardized rate*:	5.8	6.2	6.0
Cumulative incidence:	95	101	98
<b>Sex ratio (m/f):</b>	1.1		

<b>Age-specific incidence rates per million:</b>				
	<1	1-4	5-9	10-14
Number of cases :	5	51	209	537
Incidence rate:	0.7	1.7	5.4	12.6
<b>Median age at diagnosis:</b>	11 years 8 months			

<b>Survival probabilities:</b>	<b>5-year</b>	<b>10-year</b>	<b>15-year</b>
	73 %	69 %	68 %

**Mortality per million within 10 yrs. of diagnosis (1991-2000):**

Number of deaths		Standardized* mortality rate	Cumulative mortality
N	% of all 4151 deaths		
265	6.4 %	1.8	30

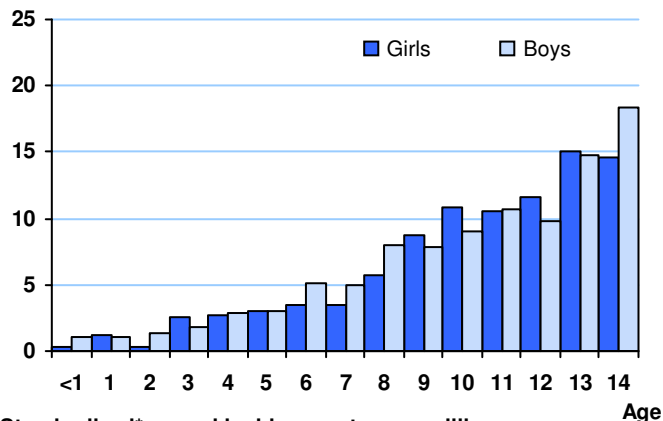
**Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2010):**

VIII Malignant bone tumours

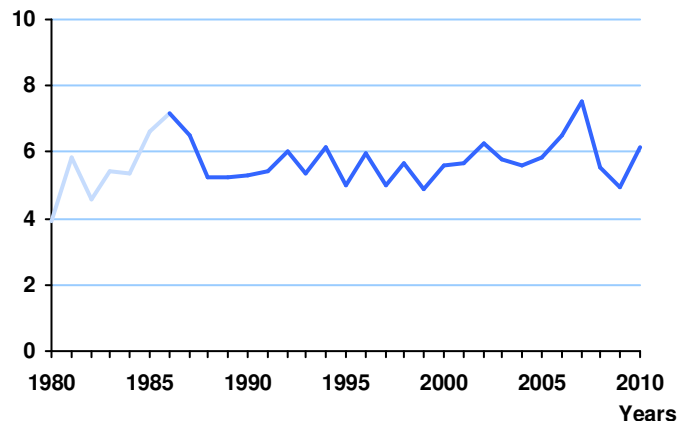
SN after VIII			VIII as SN after any primary		
N	% of all 775 SN	Cumulative incidence	N	% of all 775 SN	Cumulative incidence
42	5.4 %	3.0 %	48	6.2 %	0.2 %

\* Standard: Segi world standard population

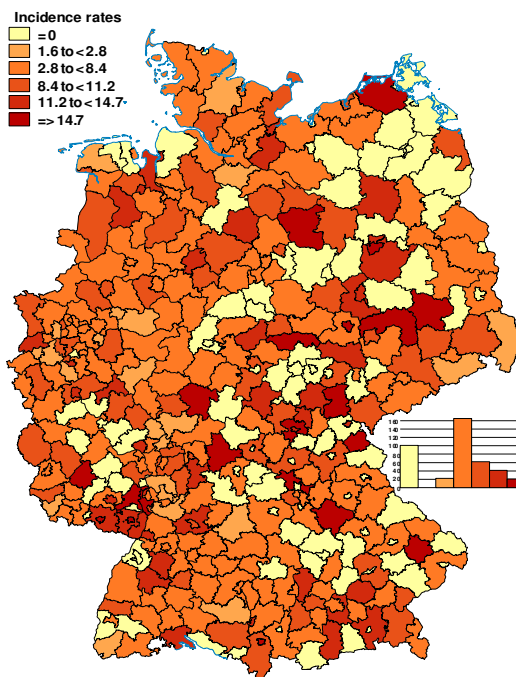
**Age- and sex-specific incidence rates per million (Germany 2001-2010)**



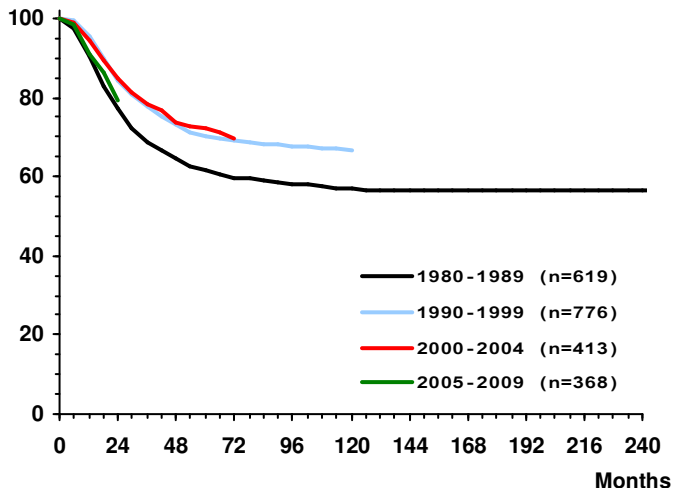
**Standardized\* annual incidence rates per million (Germany 1980-2010)**



**Standardized\* incidence rates per million by districts (Landkreise) (Germany 2001-2010)**



**Survival probabilities by year of diagnosis (Germany 1980-2009)**



Osteosarcomas are rare in early childhood. Based on international comparisons, completeness of registration exceeds 95%. Osteosarcomas are relatively frequent as second neoplasms.

Cases in Germany aged under 15 years (1980-2010): 1200

Selected characteristics (Germany 2001-2010)

Relative frequency:	410 / 17876 = 2.3 %		
Relative frequency of trial patients:	98.3 %		
<b>Incidence rates per million:</b>	<b>Girls</b>	<b>Boys</b>	<b>Total</b>
Number of cases:	204	206	410
Standardized rate*:	3.0	2.9	3.0
Cumulative incidence:	50	48	49
<b>Sex ratio (m/f):</b>	1.0		

Age-specific incidence rates per million:

	<1	1-4	5-9	10-14
Number of cases :	0	11	89	310
Incidence rate:	0.0	0.4	2.3	7.3

Median age at diagnosis: 12 years 4 months

<b>Survival probabilities:</b>	<b>5-year</b>	<b>10-year</b>	<b>15-year</b>
	75 %	71 %	70 %

Mortality per million within 10 yrs. of diagnosis (1991-2000):

Number of deaths		Standardized*	Cumulative
N	% of all 4151 deaths	mortality rate	mortality
137	3.3 %	0.9	15

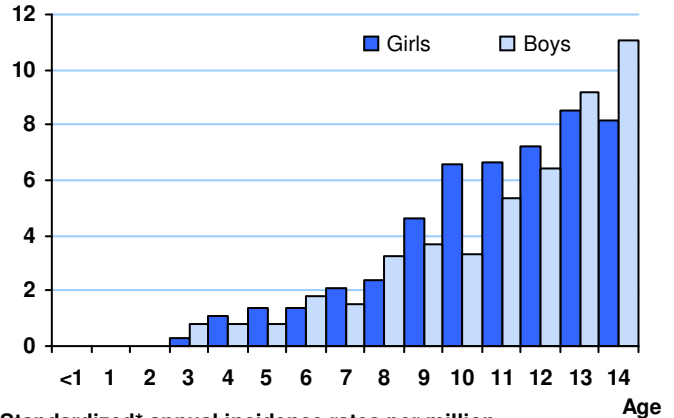
Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2010):

VIII (a) Osteosarcomas

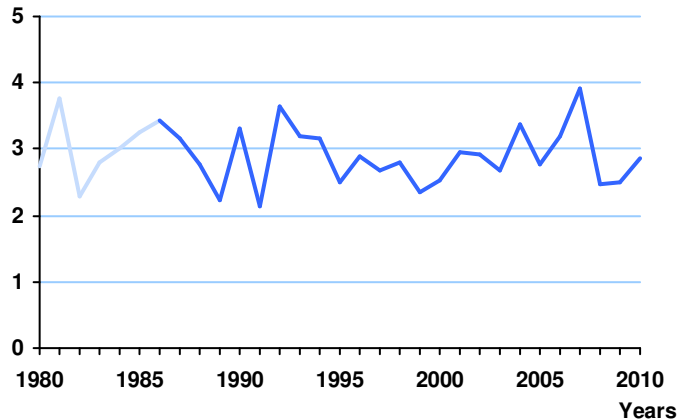
SN after VIII (a)			VIII (a) as SN after any primary		
N	% of all 775 SN	Cumulative incidence	N	% of all 775 SN	Cumulative incidence
16	2.1 %	2.2 %	33	4.3 %	0.1 %

\* Standard: Segi world standard population

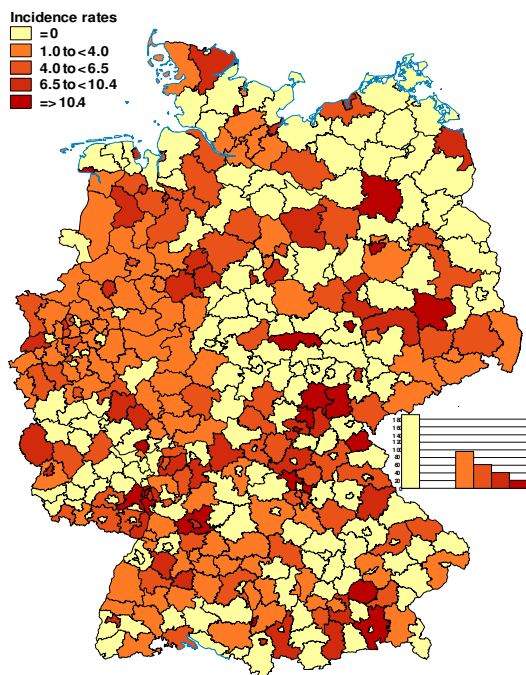
Age- and sex-specific incidence rates per million (Germany 2001-2010)



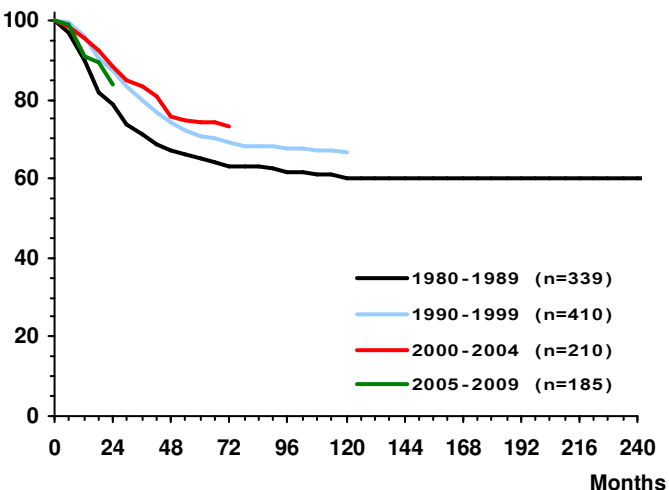
Standardized\* annual incidence rates per million (Germany 1980-2010)



Standardized\* incidence rates per million by districts (Landkreise) (Germany 2001-2010)



Survival probabilities by year of diagnosis (Germany 1980-2009)



Based on international comparisons, completeness of registration exceeds 95%.

Cases in Germany aged under 15 years (1980-2010): 1010

Selected characteristics (Germany 2001-2010)

Relative frequency:	361 / 17876 = 2.1 %		
Relative frequency of trial patients:	99.2 %		
<b>Incidence rates per million:</b>	<b>Girls</b>	<b>Boys</b>	<b>Total</b>
Number of cases:	157	204	361
Standardized rate*:	2.5	3.1	2.8
Cumulative incidence:	40	49	45
<b>Sex ratio (m/f):</b>	1.3		

Age-specific incidence rates per million:

	<1	1-4	5-9	10-14
Number of cases :	5	37	112	207
Incidence rate:	0.7	1.3	2.9	4.9

Median age at diagnosis: 10 years 9 months

<b>Survival probabilities:</b>	<b>5-year</b>	<b>10-year</b>	<b>15-year</b>
	71 %	66 %	65 %

Mortality per million within 10 yrs. of diagnosis (1991-2000):

Number of deaths		Standardized*	Cumulative
N	% of all 4151 deaths	mortality rate	mortality
120	2.9 %	0.8	13

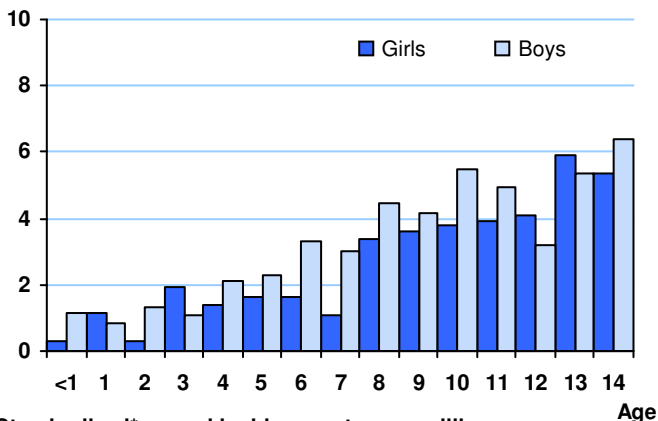
Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2010):

VIII (c) Ewing tumour and related sarcomas of bone

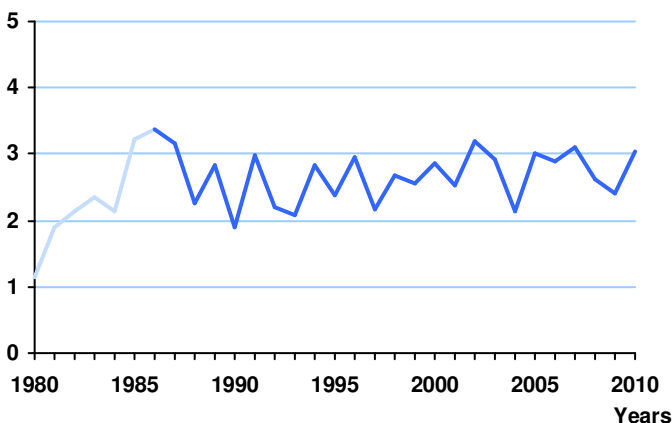
SN after VIII (c)			VIII (c) as SN after any primary		
N	% of all 775 SN	Cumulative incidence	N	% of all 775 SN	Cumulative incidence
24	3.1 %	4.0 %	12	1.5 %	0.0 %

\* Standard: Segi world standard population

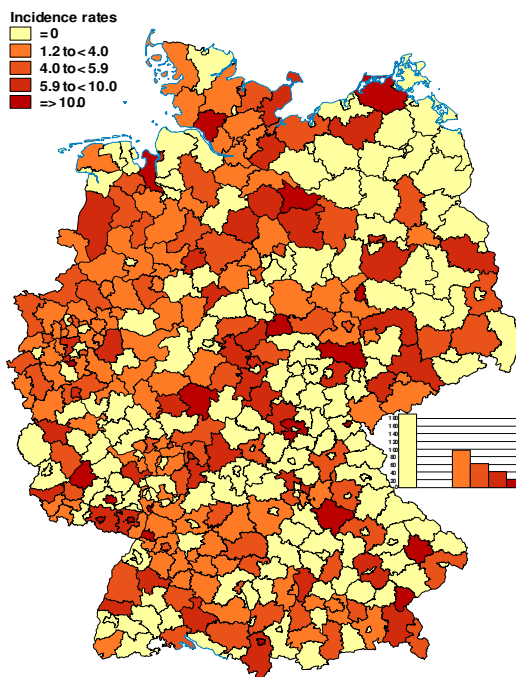
Age- and sex-specific incidence rates per million (Germany 2001-2010)



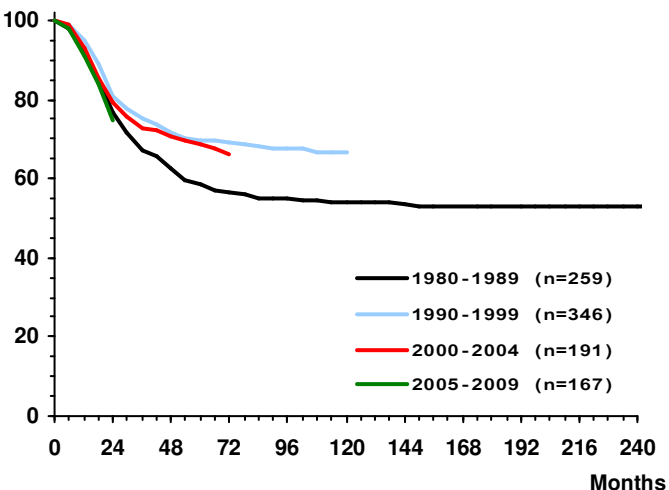
Standardized\* annual incidence rates per million (Germany 1980-2010)



Standardized\* incidence rates per million by districts (Landkreise) (Germany 2001-2010)



Survival probabilities by year of diagnosis (Germany 1980-2009)





- (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 (1980-2010): 2990

Selected characteristics (Germany 2001-2010)

Relative frequency:	1064 / 17876 = 6.0 %		
Relative frequency of trial patients:	95.7 %		
<b>Incidence rates per million:</b>	<b>Girls</b>	<b>Boys</b>	<b>Total</b>
Number of cases:	488	576	1064
Standardized rate*:	8.7	10.0	9.4
Cumulative incidence:	129	146	137
<b>Sex ratio (m/f):</b>	1.2		

Age-specific incidence rates per million:

	<1	1-4	5-9	10-14
Number of cases :	124	301	278	361
Incidence rate:	17.8	10.3	7.2	8.5

Median age at diagnosis: 6 years 9 months

<b>Survival probabilities:</b>	<b>5-year</b>	<b>10-year</b>	<b>15-year</b>
	73 %	70 %	68 %

Mortality per million within 10 yrs. of diagnosis (1991-2000):

<b>Number of deaths</b>		<b>Standardized*</b>	<b>Cumulative</b>
N	% of all 4151 deaths	<b>mortality rate</b>	<b>mortality</b>
376	9.1 %	3.0	43

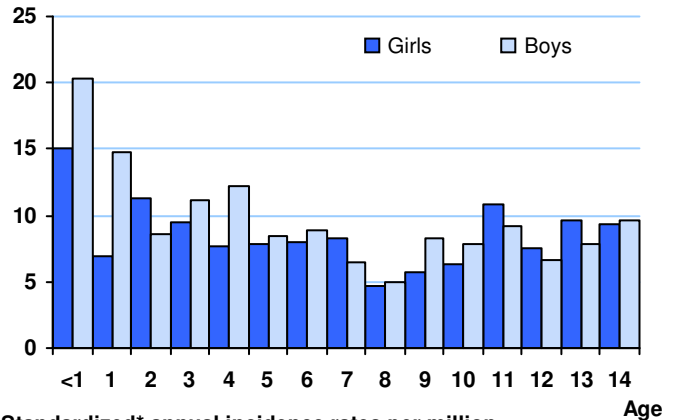
Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2010):

IX Soft tissue and other extraosseous sarcomas

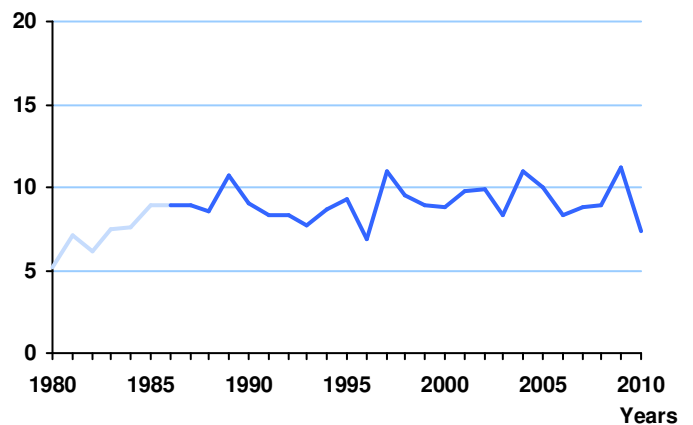
<b>SN after IX</b>			<b>IX as SN after any primary</b>		
N	% of all 775 SN	Cumulative incidence	N	% of all 775 SN	Cumulative incidence
52	6.7 %	3.0 %	52	6.7 %	0.2 %

\* Standard: Segi world standard population

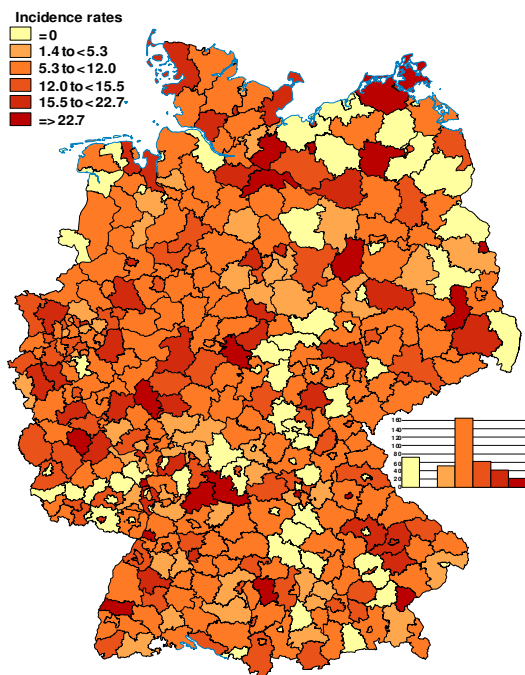
Age- and sex-specific incidence rates per million (Germany 2001-2010)



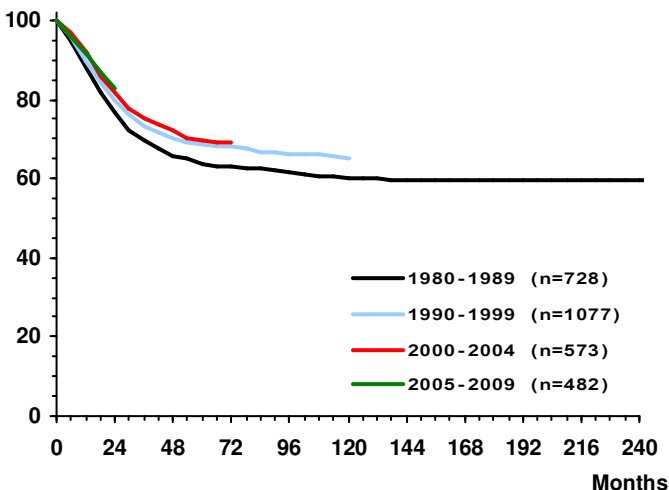
Standardized\* annual incidence rates per million (Germany 1980-2010)



Standardized\* incidence rates per million by districts (Landkreise) (Germany 2001-2010)



Survival probabilities by year of diagnosis (Germany 1980-2009)



Based on international comparisons, completeness of registration exceeds 95%. Compared to all childhood cancers, mortality is relatively high.

Cases in Germany aged under 15 years (1980-2010): 1734

Selected characteristics (Germany 2001-2010)

Relative frequency:	572 / 17876 = 3.3 %		
Relative frequency of trial patients:	98.4 %		
<b>Incidence rates per million:</b>	<b>Girls</b>	<b>Boys</b>	<b>Total</b>
Number of cases:	259	313	572
Standardized rate*:	4.8	5.6	5.2
Cumulative incidence:	69	80	75
<b>Sex ratio (m/f):</b>	1.2		

<b>Age-specific incidence rates per million:</b>	<1	1-4	5-9	10-14
Number of cases :	47	229	173	123
Incidence rate:	6.7	7.9	4.5	2.9
<b>Median age at diagnosis:</b>	5 years 2 months			

<b>Survival probabilities:</b>	<b>5-year</b>	<b>10-year</b>	<b>15-year</b>
	73 %	71 %	70 %

Mortality per million within 10 yrs. of diagnosis (1991-2000):

Number of deaths		Standardized*	Cumulative
N	% of all 4151 deaths	mortality rate	mortality
231	5.6 %	1.9	27

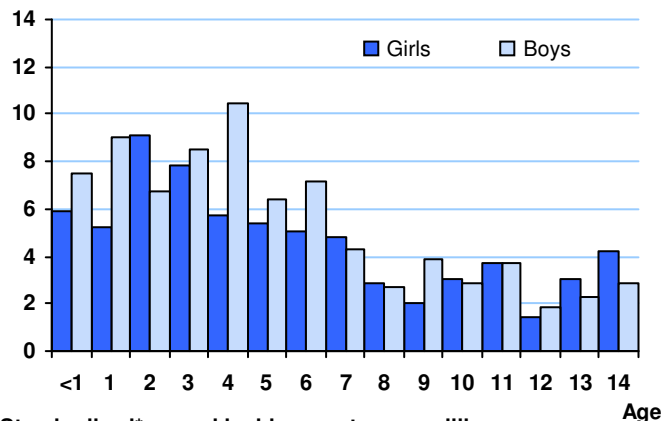
Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2010):

IX (a) Rhabdomyosarcomas

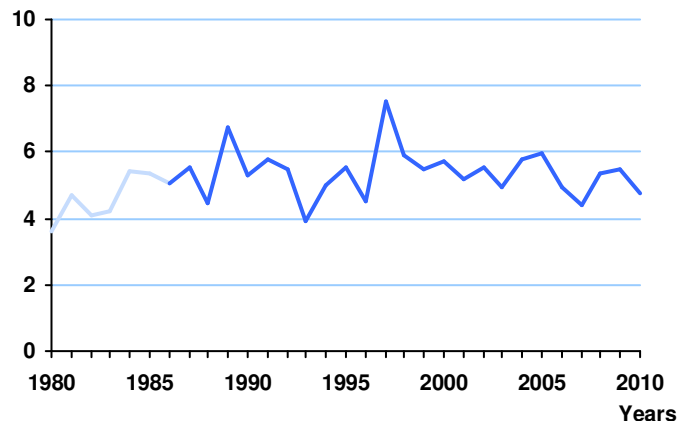
SN after IX (a)			IX (a) as SN after any primary		
N	% of all 775 SN	Cumulative incidence	N	% of all 775 SN	Cumulative incidence
37	4.8 %	3.4 %	12	1.5 %	0.0 %

\* Standard: Segi world standard population

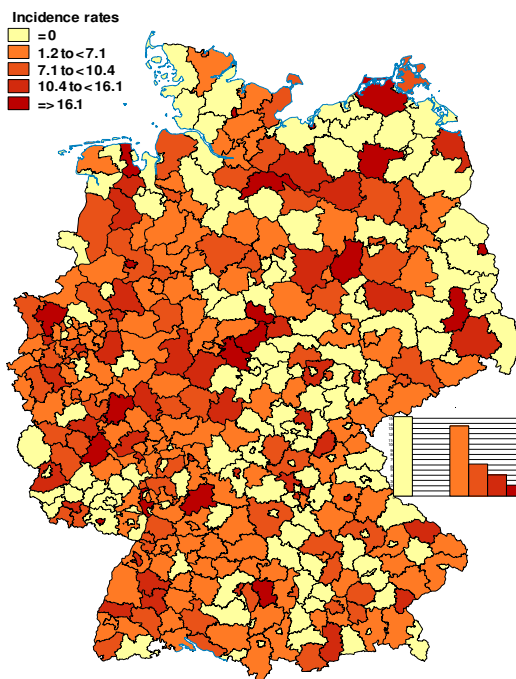
Age- and sex-specific incidence rates per million (Germany 2001-2010)



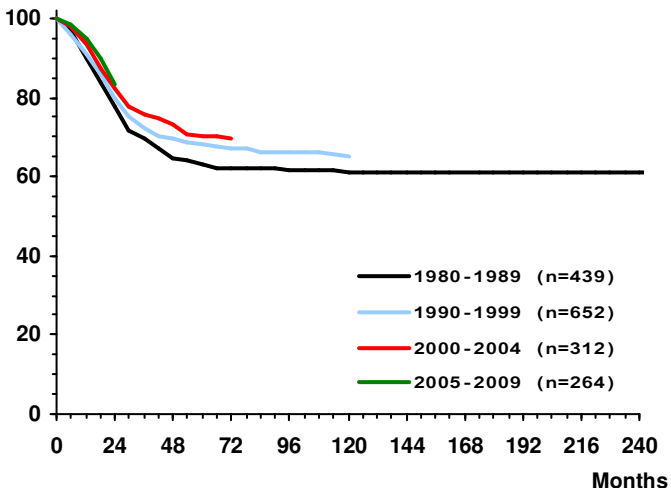
Standardized\* annual incidence rates per million (Germany 1980-2010)



Standardized\* incidence rates per million by districts (Landkreise) (Germany 2001-2010)



Survival probabilities by year of diagnosis (Germany 1980-2009)



Based on international comparisons, completeness of registration exceeds 95%. These tumours are relatively frequent as second neoplasms.

**Cases in Germany aged under 15 years (1980-2010): 265**

**Selected characteristics (Germany 2001-2010)**

<b>Relative frequency:</b>	109 / 17876 = 0.6 %		
<b>Relative frequency of trial patients:</b>	87.2 %		
<b>Incidence rates per million:</b>	<b>Girls</b>	<b>Boys</b>	<b>Total</b>
Number of cases:	52	57	109
Standardized rate*:	0.9	1.0	1.0
Cumulative incidence:	14	14	14
<b>Sex ratio (m/f):</b>	1.1		

**Age-specific incidence rates per million:**

	<b>&lt;1</b>	<b>1-4</b>	<b>5-9</b>	<b>10-14</b>
Number of cases :	29	13	18	49
Incidence rate:	4.2	0.4	0.5	1.2
<b>Median age at diagnosis:</b>	8 years 6 months			

<b>Survival probabilities:</b>	<b>5-year</b>	<b>10-year</b>	<b>15-year</b>
	68 %	64 %	61 %

**Mortality per million within 10 yrs. of diagnosis (1991-2000):**

<b>Number of deaths</b>		<b>Standardized*</b>	<b>Cumulative</b>
N	% of all 4151 deaths	<b>mortality rate</b>	<b>mortality</b>
23	0.6 %	0.2	3

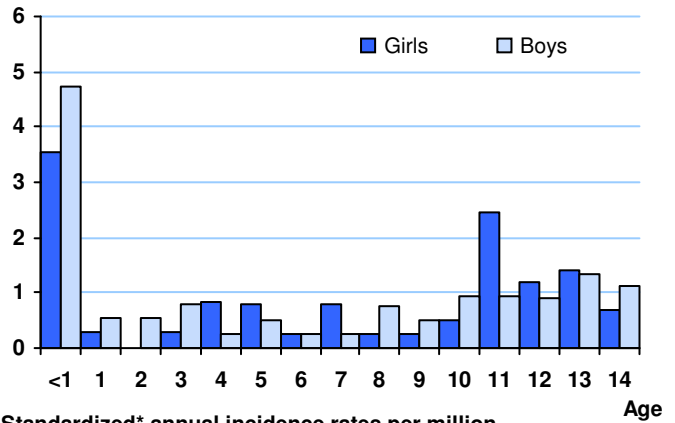
**Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2010):**

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

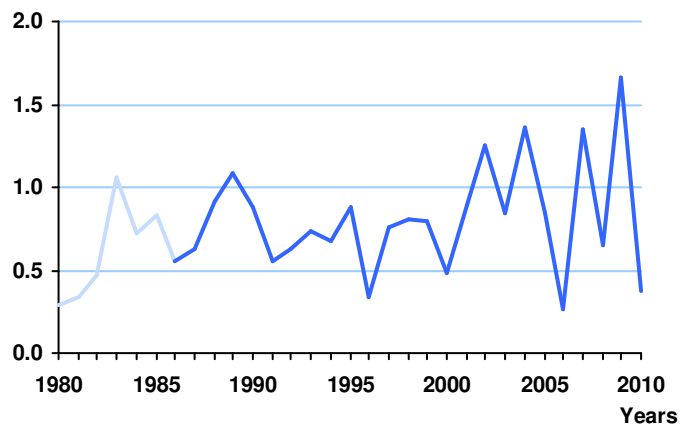
<b>SN after IX (b)</b>			<b>IX (b) as SN after any primary</b>		
	% of all	Cumulative		% of all	Cumulative
N	775 SN	incidence	N	775 SN	incidence
4	0.5 %	2.4 %	14	1.8 %	0.1 %

\* Standard: Segi world standard population

**Age- and sex-specific incidence rates per million (Germany 2001-2010)**



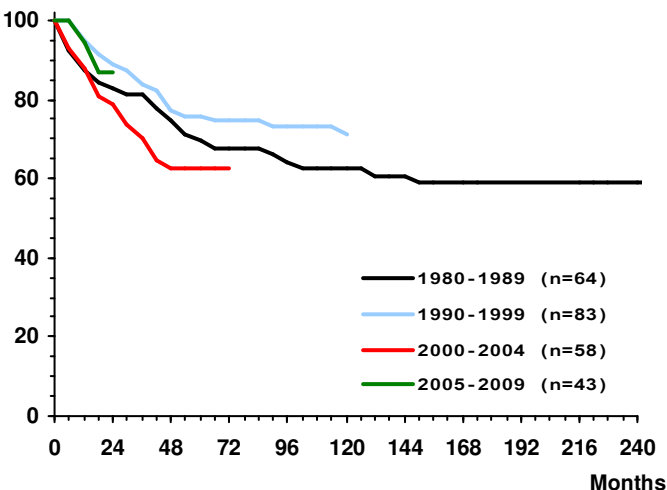
**Standardized\* annual incidence rates per million (Germany 1980-2010)**



**Standardized\* incidence rates per million by districts (Landkreise) (Germany 2001-2010)**

No map due to sparse data

**Survival probabilities by year of diagnosis (Germany 1980-2009)**



Germany (2001-2010)	N	%
<b>Fibrosarcomas, peripheral nerve sheath tumours and other</b>	<b>109</b>	<b>100.0</b>
Fibroblastic and myofibroblastic tumours	62	56.9
Nerve sheath tumours	47	43.1
Other fibrous neoplasms	0	0.0

## 1 Fibroblastic and myofibroblastic tumour

Cases in Germany aged under 15 years (1980-2010): 129

### Selected characteristics (Germany 2001-2010)

Relative frequency:	62 / 17876 = 0.3 %		
Relative frequency of trial patients:	91.9 %		
<b>Incidence rates per million:</b>	<b>Girls</b>	<b>Boys</b>	<b>Total</b>
Number of cases:	27	35	62
Standardized rate *:	0.5	0.6	0.6
Cumulative incidence:	7	9	8
<b>Sex ratio (m/f):</b>	1.3		

### Age-specific incidence rates per million:

	<1	1-4	5-9	10-14
Number of cases:	26	9	7	20
Incidence rate:	3.7	0.3	0.2	0.5
<b>Median age at diagnosis:</b>	3 years 8 months			

\* Standard: Segi world standard population

## 2 Nerve sheath tumours

Cases in Germany aged under 15 years (1980-2010): 136

### Selected characteristics (Germany 2001-2010)

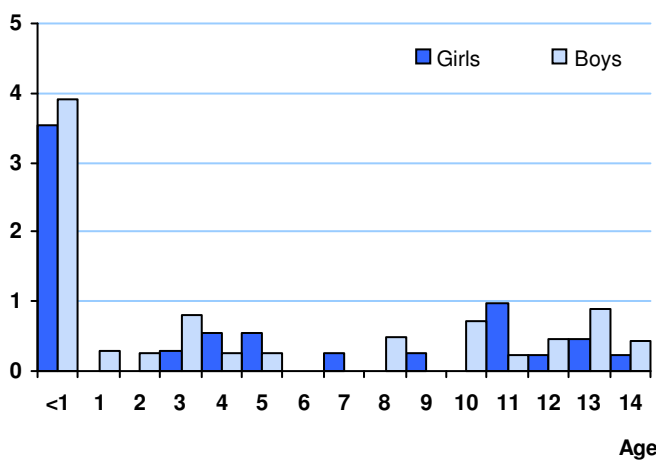
Relative frequency:	47 / 17876 = 0.3 %		
Relative frequency of trial patients:	80.9 %		
<b>Incidence rates per million:</b>	<b>Girls</b>	<b>Boys</b>	<b>Total</b>
Number of cases:	25	22	47
Standardized rate *:	0.4	0.4	0.4
Cumulative incidence:	6	5	6
<b>Sex ratio (m/f):</b>	0.9		

### Age-specific incidence rates per million:

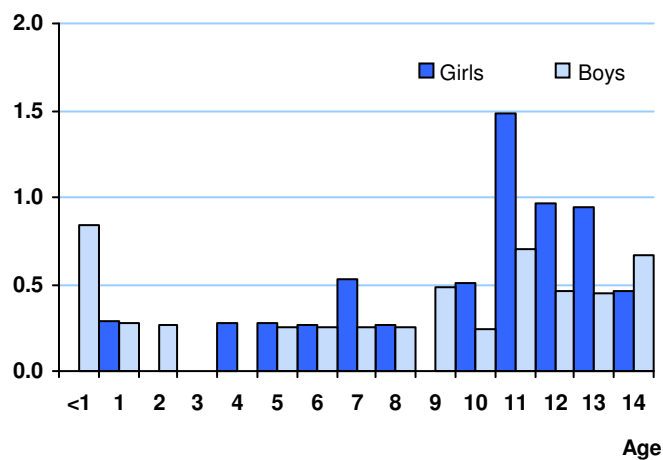
	<1	1-4	5-9	10-14
Number of cases:	3	4	11	29
Incidence rate:	0.4	0.1	0.3	0.7
<b>Median age at diagnosis:</b>	11 years 5 months			

\* Standard: Segi world standard population

### Age- and sex-specific incidence rates per million (Germany 2001-2010)



### Age- and sex-specific incidence rates per million (Germany 2001-2010)



Based on international comparisons, 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 (1980-2010): 802**

**Selected characteristics (Germany 2001-2010)**

<b>Relative frequency:</b>	302 / 17876 = 1.7 %		
<b>Relative frequency of trial patients:</b>	94.7 %		
<b>Incidence rates per million:</b>	<b>Girls</b>	<b>Boys</b>	<b>Total</b>
Number of cases:	137	165	302
Standardized rate*:	2.3	2.7	2.5
Cumulative incidence:	35	41	38
<b>Sex ratio (m/f):</b>	1.2		

**Age-specific incidence rates per million:**

	<b>&lt;1</b>	<b>1-4</b>	<b>5-9</b>	<b>10-14</b>
Number of cases :	37	45	69	151
Incidence rate:	5.3	1.5	1.8	3.6

**Median age at diagnosis:** 10 years 0 months

<b>Survival probabilities:</b>	<b>5-year</b>	<b>10-year</b>	<b>15-year</b>
	75 %	70 %	67 %

**Mortality per million within 10 yrs. of diagnosis (1991-2000):**

Number of deaths		Standardized*	Cumulative
N	% of all 4151 deaths	mortality rate	mortality
95	2.3 %	0.7	11

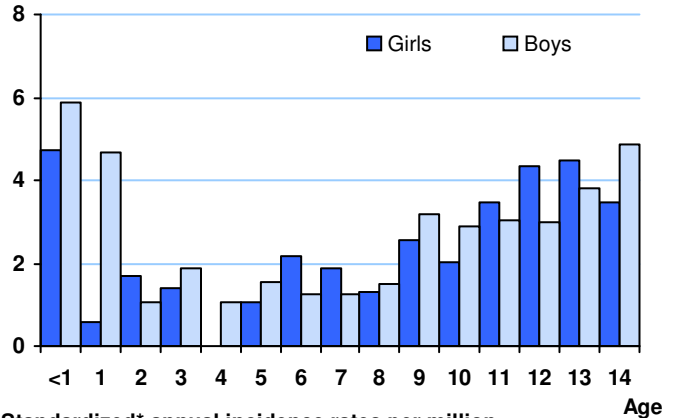
**Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2010):**

IX (d) Other specified soft tissue sarcomas

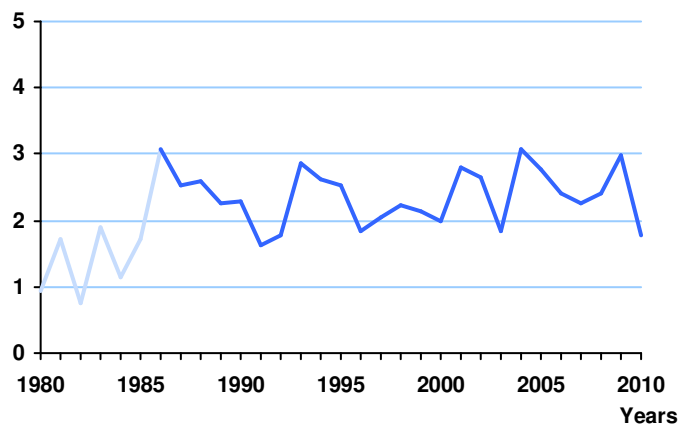
SN after IX (d)			IX (d) as SN after any primary		
N	% of all 775 SN	Cumulative incidence	N	% of all 775 SN	Cumulative incidence
9	1.2 %	1.8 %	23	3.0 %	0.1 %

\* Standard: Segi world standard population

**Age- and sex-specific incidence rates per million (Germany 2001-2010)**



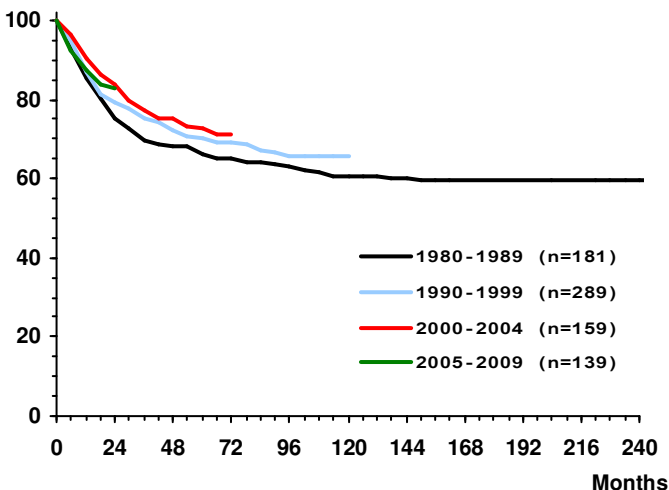
**Standardized\* annual incidence rates per million (Germany 1980-2010)**



**Standardized\* incidence rates per million by districts (Landkreise) (Germany 2001-2010)**

No map due to sparse data

**Survival probabilities by year of diagnosis (Germany 1980-2009)**



- (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 (1980-2010): 1521**

**Selected characteristics (Germany 2001-2010)**

<b>Relative frequency:</b>	531 / 17876 = 3.0 %		
<b>Relative frequency of trial patients:</b>	97.2 %		
<b>Incidence rates per million:</b>	<b>Girls</b>	<b>Boys</b>	<b>Total</b>
Number of cases:	300	231	531
Standardized rate*:	5.3	4.0	4.6
Cumulative incidence:	79	58	68
<b>Sex ratio (m/f):</b>	0.8		

<b>Age-specific incidence rates per million:</b>				
	<1	1-4	5-9	10-14
Number of cases :	119	89	90	233
Incidence rate:	17.0	3.1	2.3	5.5
<b>Median age at diagnosis:</b>	9 years 0 months			

<b>Survival probabilities:</b>	<b>5-year</b>	<b>10-year</b>	<b>15-year</b>
	95 %	94 %	93 %

**Mortality per million within 10 yrs. of diagnosis (1991-2000):**

<b>Number of deaths</b>		<b>Standardized* mortality rate</b>	<b>Cumulative mortality</b>
N	% of all 4151 deaths		
59	1.4 %	0.4	7

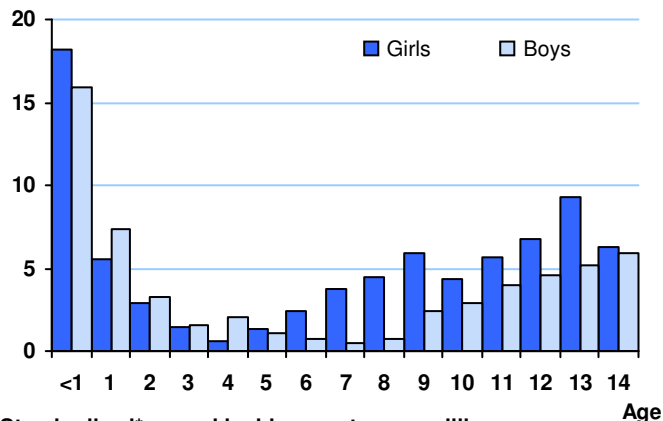
**Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2010):**

X Germ cell tumours, trophoblastic tumours and neoplasms of gonads

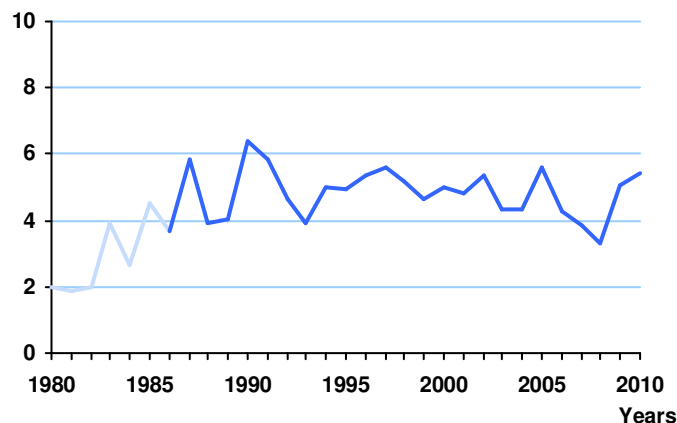
<b>SN after X</b>			<b>X as SN after any primary</b>		
	% of all	Cumulative incidence		% of all	Cumulative incidence
N	775 SN		N	775 SN	
14	1.8 %	1.6 %	6	0.8 %	0.0 %

\* Standard: Segi world standard population

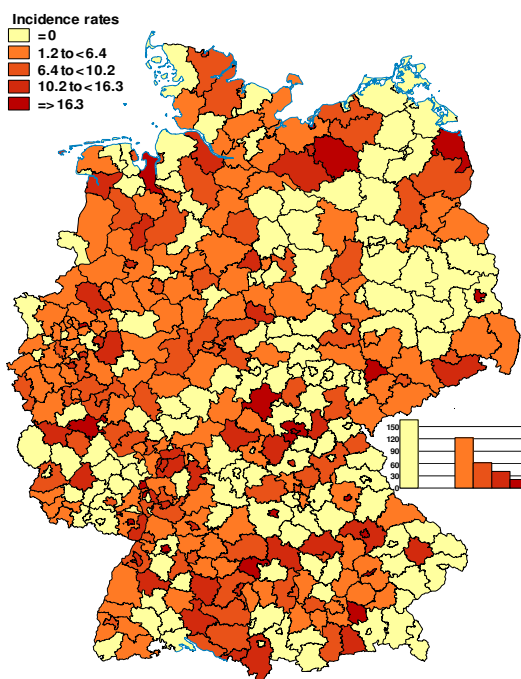
**Age- and sex-specific incidence rates per million (Germany 2001-2010)**



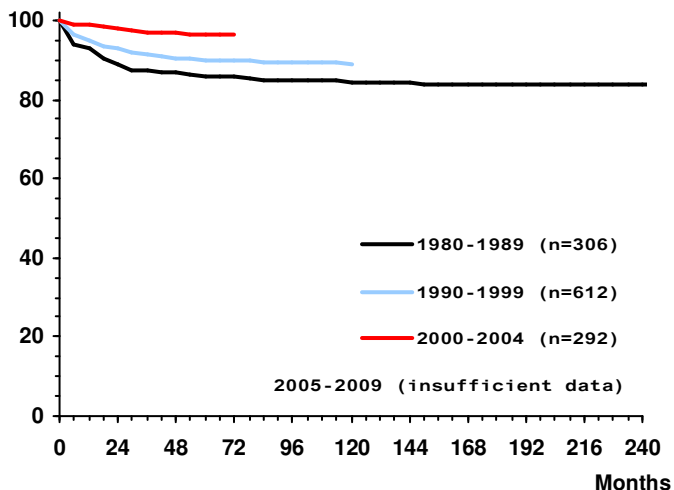
**Standardized\* annual incidence rates per million (Germany 1980-2010)**



**Standardized\* incidence rates per million by districts (Landkreise) (Germany 2001-2010)**



**Survival probabilities by year of diagnosis (Germany 1980-2009)**



Most frequent form is germinoma (malignant). Non-malignant forms constitute about 10%, early childhood cases are rare, some underreporting is likely. These tumours are very rare as second neoplasms.

### Cases in Germany aged under 15 years (1980-2010): 410

#### Selected characteristics (Germany 2001-2010)

<b>Relative frequency:</b>	156 / 17876 = 0.9 %		
<b>Relative frequency of trial patients:</b>	95.5 %		
<b>Incidence rates per million:</b>	<b>Girls</b>	<b>Boys</b>	<b>Total</b>
Number of cases:	61	95	156
Standardized rate *:	1.0	1.4	1.2
Cumulative incidence:	16	22	19
<b>Sex ratio (m/f):</b>	1.6		

#### Age-specific incidence rates per million:

	<1	1-4	5-9	10-14
Number of cases :	4	7	47	98
Incidence rate:	0.6	0.2	1.2	2.3

**Median age at diagnosis:** 11 years 1 month

<b>Survival probabilities:</b>	<b>5-year</b>	<b>10-year</b>	<b>15-year</b>
	90 %	87 %	86 %

#### Mortality per million within 10 yrs. of diagnosis (1991-2000):

Number of deaths		Standardized* mortality rate	Cumulative mortality
N	% of all 4151 deaths		
32	0.8 %	0.2	4

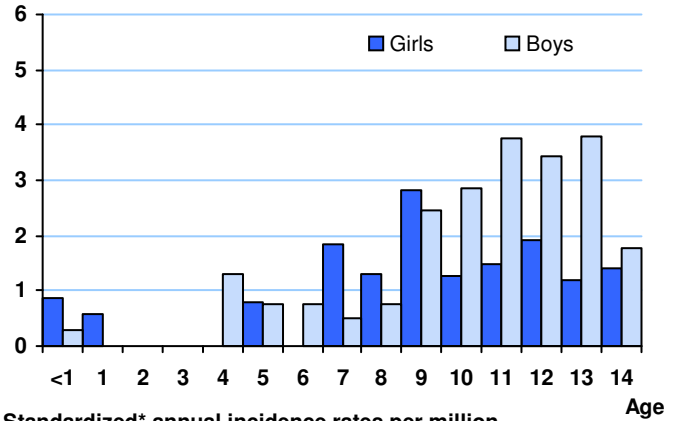
#### Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2010):

X (a) Intracranial and intraspinal germ cell tumours

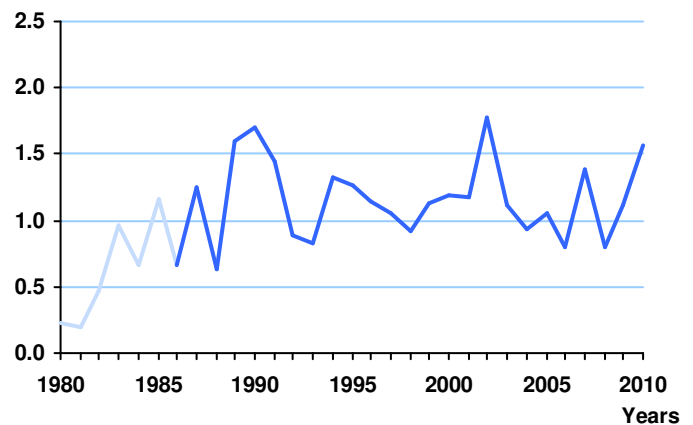
SN after X (a)			X (a) as SN after any primary		
N	% of all 775 SN	Cumulative incidence	N	% of all 775 SN	Cumulative incidence
5	0.6 %	2.0 %	1	0.1 %	0.0 %

\* Standard: Segi world standard population

#### Age- and sex-specific incidence rates per million (Germany 2001-2010)



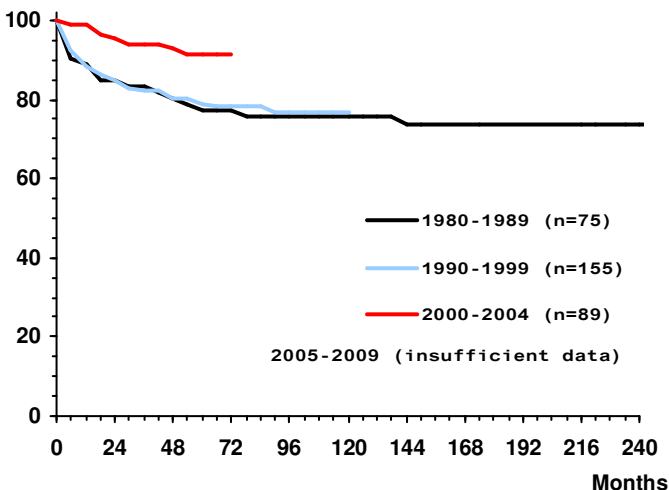
#### Standardized\* annual incidence rates per million (Germany 1980-2010)



#### Standardized\* incidence rates per million by districts (Landkreise) (Germany 2001-2010)

No map due to sparse data

#### Survival probabilities by year of diagnosis (Germany 1980-2009)



Based on international comparisons, 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 (1980-2010): 444

Selected characteristics (Germany 2001-2010)

Relative frequency:	146 / 17876 = 0.8 %		
Relative frequency of trial patients:	96.6 %		
<b>Incidence rates per million:</b>	<b>Girls</b>	<b>Boys</b>	<b>Total</b>
Number of cases:	95	51	146
Standardized rate*:	2.1	1.0	1.6
Cumulative incidence:	27	14	20
<b>Sex ratio (m/f):</b>	0.5		

<b>Age-specific incidence rates per million:</b>				
	<1	1-4	5-9	10-14
Number of cases :	86	42	4	14
Incidence rate:	12.3	1.4	0.1	0.3
<b>Median age at diagnosis:</b>	0 years 9 months			

<b>Survival probabilities:</b>	<b>5-year</b>	<b>10-year</b>	<b>15-year</b>
	96 %	95 %	95 %

Mortality per million within 10 yrs. of diagnosis (1991-2000):

<b>Number of deaths</b>		<b>Standardized* mortality rate</b>	<b>Cumulative mortality</b>
N	% of all 4151 deaths		
14	0.3 %	0.1	2

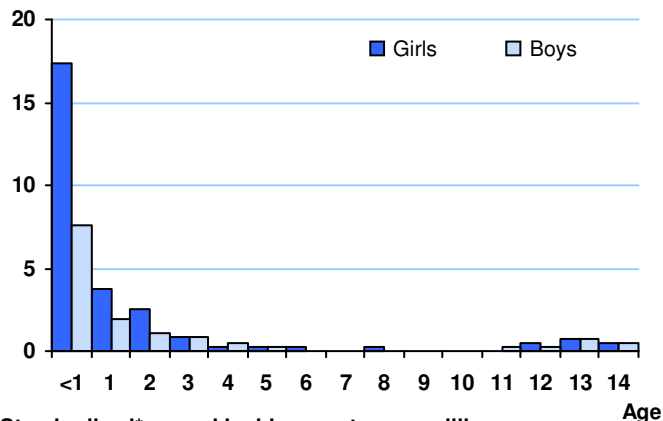
Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2010):

X (b) Malignant extracranial and extragonadal germ cell tumours

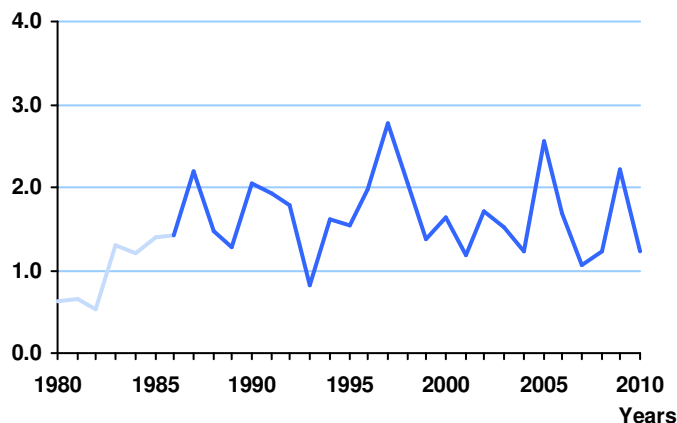
<b>SN after X (b)</b>			<b>X (b) as SN after any primary</b>		
	% of all 775 SN	Cumulative incidence		% of all 775 SN	Cumulative incidence
N			N		
4	0.5 %	1.5 %	1	0.1 %	0.0 %

\* Standard: Segi world standard population

Age- and sex-specific incidence rates per million (Germany 2001-2010)



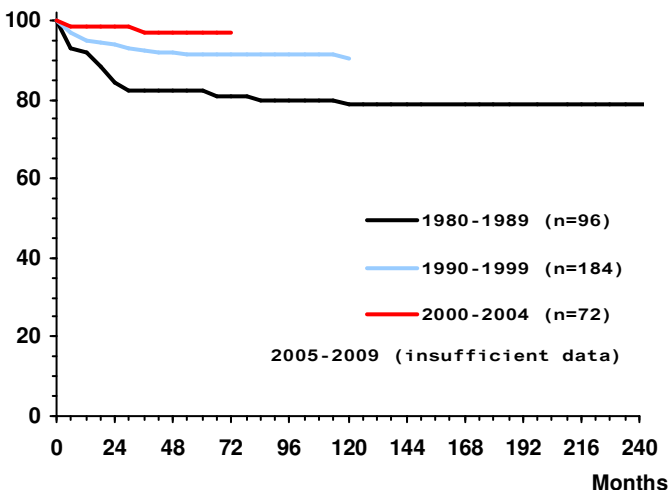
Standardized\* annual incidence rates per million (Germany 1980-2010)



Standardized\* incidence rates per million by districts (Landkreise) (Germany 2001-2010)

No map due to sparse data

Survival probabilities by year of diagnosis (Germany 1980-2009)





Girls are more and earlier affected than boys in puberty, boys are more likely to be affected in infancy. Age at diagnosis peaks at infancy and with puberty. Based on international comparisons, completeness of registration approaches 95%. These tumours are relatively rarely followed by a second neoplasm within 20 years of diagnosis. These tumours are rare as second neoplasms.

**Cases in Germany aged under 15 years (1980-2010): 627**

**Selected characteristics (Germany 2001-2010)**

<b>Relative frequency:</b>	224 / 17876 = 1.3 %		
<b>Relative frequency of trial patients:</b>	99.1 %		
<b>Incidence rates per million:</b>	<b>Girls</b>	<b>Boys</b>	<b>Total</b>
Number of cases:	139	85	224
Standardized rate*:	2.1	1.6	1.9
Cumulative incidence:	35	22	28
<b>Sex ratio (m/f):</b>	0.6		

<b>Age-specific incidence rates per million:</b>	<b>&lt;1</b>	<b>1-4</b>	<b>5-9</b>	<b>10-14</b>
Number of cases :	29	40	38	117
Incidence rate:	4.2	1.4	1.0	2.8
<b>Median age at diagnosis:</b>	10 years 7 months			

<b>Survival probabilities:</b>	<b>5-year</b>	<b>10-year</b>	<b>15-year</b>
	98 %	98 %	98 %

<b>Mortality per million within 10 yrs. of diagnosis (1991-2000):</b>			
<b>Number of deaths</b>		<b>Standardized*</b>	<b>Cumulative</b>
N	% of all 4151 deaths	<b>mortality rate</b>	<b>mortality</b>
9	0.2 %	0.1	1

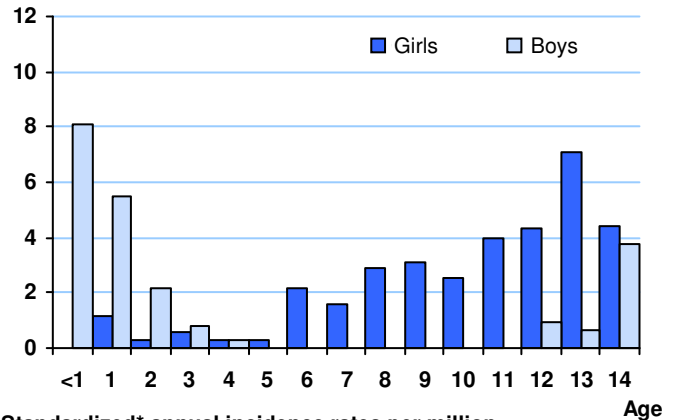
**Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2010):**

X (c) Malignant gonadal germ cell tumours

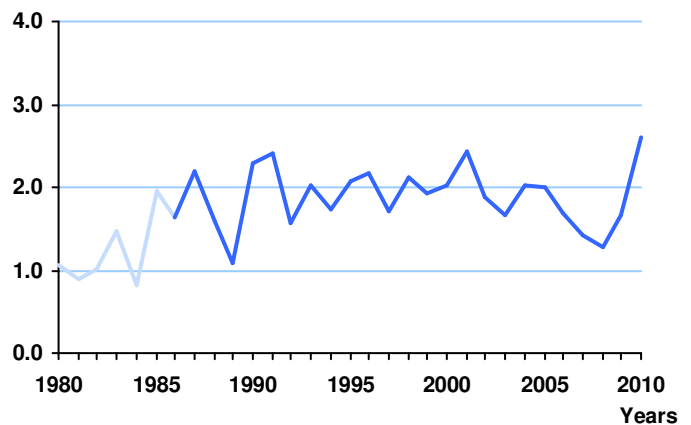
<b>SN after X (c)</b>			<b>X (c) as SN after any primary</b>		
	% of all	Cumulative		% of all	Cumulative
N	775 SN	incidence	N	775 SN	incidence
5	0.6 %	1.5 %	4	0.5 %	0.0 %

\* Standard: Segi world standard population

**Age- and sex-specific incidence rates per million (Germany 2001-2010)**



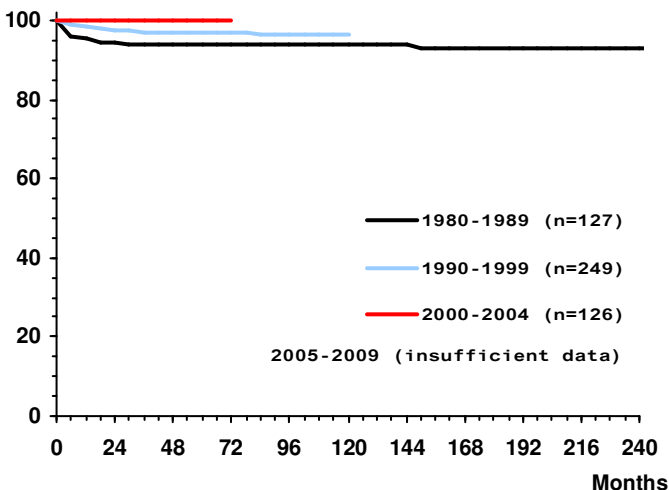
**Standardized\* annual incidence rates per million (Germany 1980-2010)**



**Standardized\* incidence rates per million by districts (Landkreise) (Germany 2001-2010)**

No map due to sparse data

**Survival probabilities by year of diagnosis (Germany 1980-2009)**



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 carcinomas have so far not been reported as second neoplasms.

**Cases in Germany aged under 15 years (1980-2010): 63**

**Selected characteristics (Germany 2001-2010)**

<b>Relative frequency:</b>	29 / 17876 = 0.2 %		
<b>Relative frequency of trial patients:</b>	96.6 %		
<b>Incidence rates per million:</b>	<b>Girls</b>	<b>Boys</b>	<b>Total</b>
Number of cases:	20	9	29
Standardized rate*:	0.4	0.2	0.3
Cumulative incidence:	5	2	4
<b>Sex ratio (m/f):</b>	0.5		

<b>Age-specific incidence rates per million:</b>	<b>&lt;1</b>	<b>1-4</b>	<b>5-9</b>	<b>10-14</b>
Number of cases :	3	12	8	6
Incidence rate:	0.4	0.4	0.2	0.1
<b>Median age at diagnosis:</b>	3 years 11 months			

<b>Survival probabilities:</b>	<b>5-year</b>	<b>10-year</b>	<b>15-year</b>
	-	-	-

**Mortality per million within 10 yrs. of diagnosis (1991-2000):**

<b>Number of deaths</b>		<b>Standardized* mortality rate</b>	<b>Cumulative mortality</b>
<b>N</b>	<b>% of all 4151 deaths</b>		
8	0.2 %	0.1	1

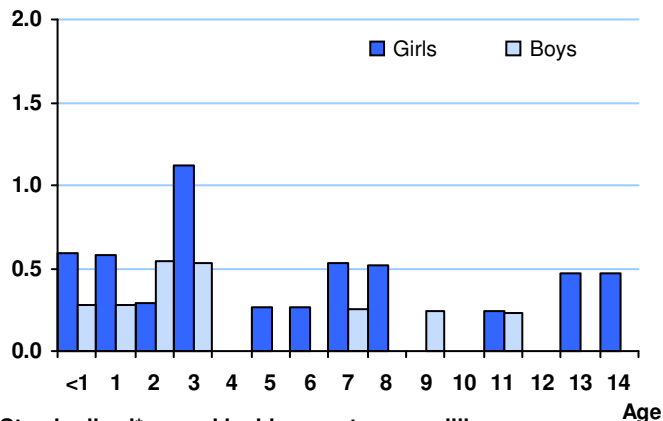
**Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2010):**

XI (a) Adrenocortical carcinomas

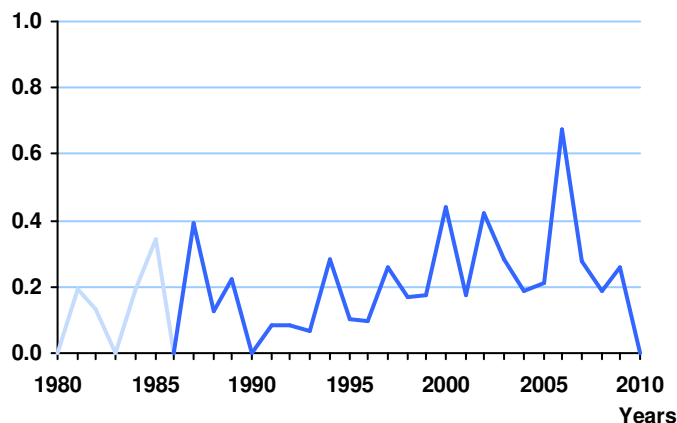
<b>SN after XI (a)</b>			<b>XI (a) as SN after any primary</b>		
	<b>% of all 775 SN</b>	<b>Cumulative incidence</b>		<b>% of all 775 SN</b>	<b>Cumulative incidence</b>
N			N		
4	0.5 %	8.0 %	0	0.0 %	0.0 %

\* Standard: Segi world standard population

**Age- and sex-specific incidence rates per million (Germany 2001-2010)**



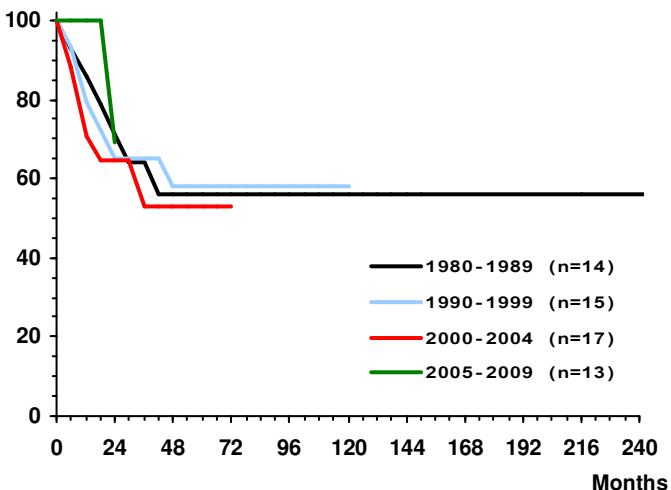
**Standardized\* annual incidence rates per million (Germany 1980-2010)**



**Standardized\* incidence rates per million by districts (Landkreise) (Germany 2001-2010)**

No map due to sparse data

**Survival probabilities by year of diagnosis (Germany 1980-2009)**



Thyroid carcinomas are rare in early childhood. Based on international comparisons, 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 (1980-2010): 262**

**Selected characteristics (Germany 2001-2010)**

<b>Relative frequency:</b>	131 / 17876 = 0.7 %		
<b>Relative frequency of trial patients:</b>	90.1 %		
<b>Incidence rates per million:</b>	<b>Girls</b>	<b>Boys</b>	<b>Total</b>
Number of cases:	80	51	131
Standardized rate*:	1.2	0.7	1.0
Cumulative incidence:	20	12	16
<b>Sex ratio (m/f):</b>	0.6		

**Age-specific incidence rates per million:**

	<1	1-4	5-9	10-14
Number of cases :	1	3	33	94
Incidence rate:	0.1	0.1	0.8	2.2

**Median age at diagnosis:** 12 years 6 months

<b>Survival probabilities:</b>	<b>5-year</b>	<b>10-year</b>	<b>15-year</b>
	96 %	92 %	87 %

**Mortality per million within 10 yrs. of diagnosis (1991-2000):**

Number of deaths		Standardized*	Cumulative
N	% of all 4151 deaths	mortality rate	mortality
6	0.1 %	0.0	1

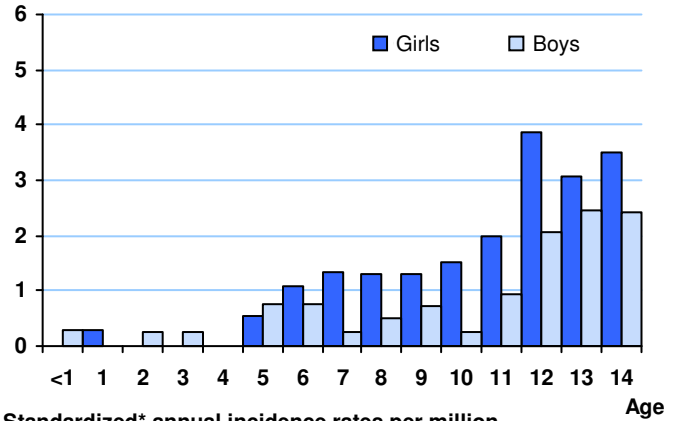
**Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2010):**

XI (b) Thyroid carcinomas

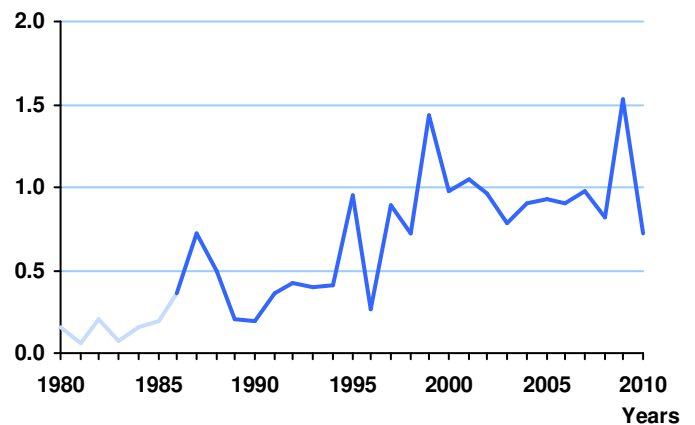
SN after XI (b)			XI (b) as SN after any primary		
N	% of all 775 SN	Cumulative incidence	N	% of all 775 SN	Cumulative incidence
1	0.1 %	0.6 %	71	9.2 %	0.4 %

\* Standard: Segi world standard population

**Age- and sex-specific incidence rates per million (Germany 2001-2010)**



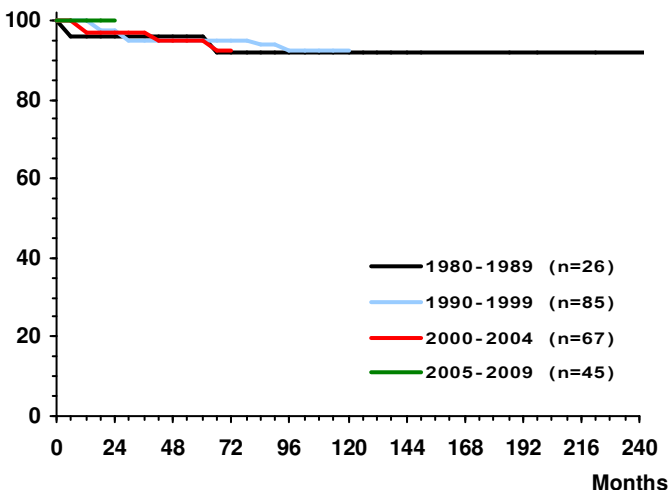
**Standardized\* annual incidence rates per million (Germany 1980-2010)**



**Standardized\* incidence rates per million by districts (Landkreise) (Germany 2001-2010)**

No map due to sparse data

**Survival probabilities by year of diagnosis (Germany 1980-2009)**



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 (1980-2010): 66**

**Selected characteristics (Germany 2001-2010)**

<b>Relative frequency:</b>	24 / 17876 = 0.1 %		
<b>Relative frequency of trial patients:</b>	100 %		
<b>Incidence rates per million:</b>	<b>Girls</b>	<b>Boys</b>	<b>Total</b>
Number of cases:	6	18	24
Standardized rate*:	0.1	0.2	0.2
Cumulative incidence:	1	4	3
<b>Sex ratio (m/f):</b>	3.0		

<b>Age-specific incidence rates per million:</b>	<b>&lt;1</b>	<b>1-4</b>	<b>5-9</b>	<b>10-14</b>
Number of cases :	0	1	0	23
Incidence rate:	0.0	0.0	0.0	0.5
<b>Median age at diagnosis:</b>	13 years 0 months			

<b>Survival probabilities:</b>	<b>5-year</b>	<b>10-year</b>	<b>15-year</b>
	100 %	-	-

**Mortality per million within 10 yrs. of diagnosis (1991-2000):**

<b>Number of deaths</b>		<b>Standardized*</b>	<b>Cumulative</b>
N	% of all 4151 deaths	<b>mortality rate</b>	<b>mortality</b>
6	0.1 %	0.0	1

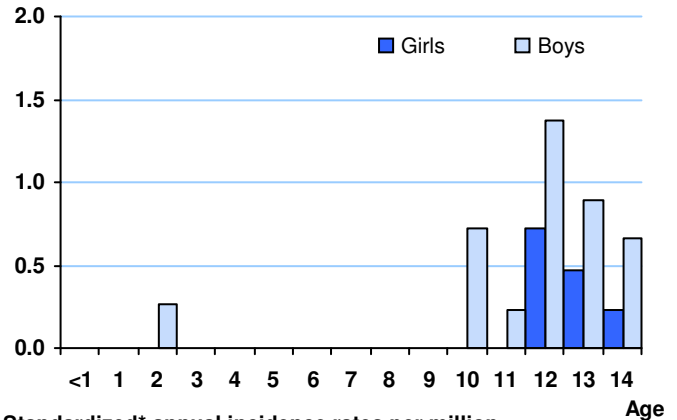
**Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2010):**

XI (c) Nasopharyngeal carcinomas

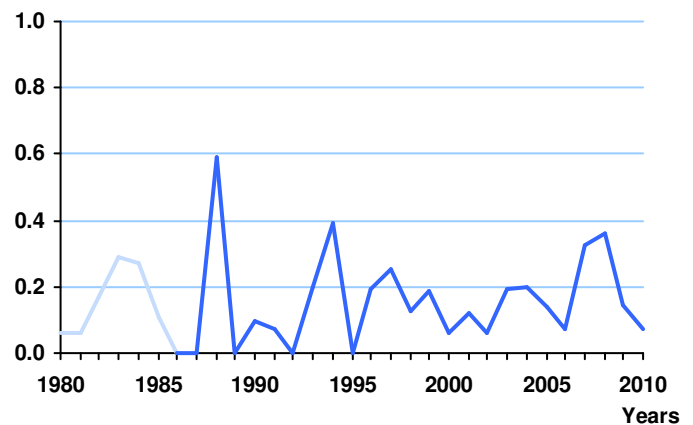
<b>SN after XI (c)</b>			<b>XI (c) as SN after any primary</b>		
N	% of all 775 SN	Cumulative incidence	N	% of all 775 SN	Cumulative incidence
0	0.0 %	0.0 %	3	0.4 %	0.0 %

\* Standard: Segi world standard population

**Age- and sex-specific incidence rates per million (Germany 2001-2010)**



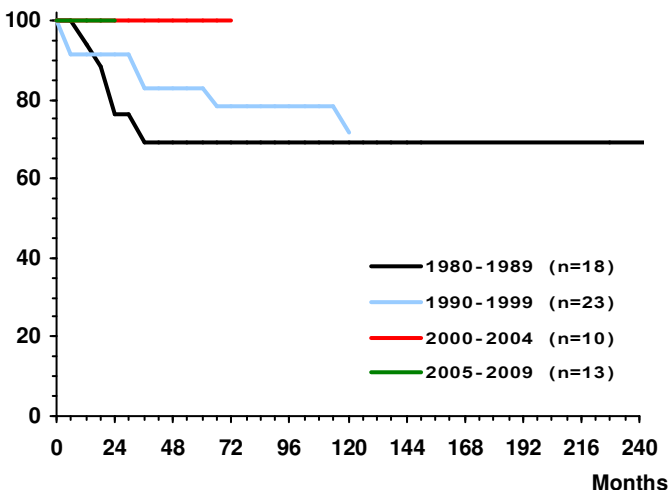
**Standardized\* annual incidence rates per million (Germany 1980-2010)**



**Standardized\* incidence rates per million by districts (Landkreise) (Germany 2001-2010)**

No map due to sparse data

**Survival probabilities by year of diagnosis (Germany 1980-2009)**



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 (1980-2010): 79

Selected characteristics (Germany 2001-2010)

Relative frequency:	46 / 17876 = 0.3 %		
Relative frequency of trial patients:	-		
<b>Incidence rates per million:</b>	<b>Girls</b>	<b>Boys</b>	<b>Total</b>
Number of cases:	23	23	46
Standardized rate*:	0.4	0.4	0.4
Cumulative incidence:	6	6	6
<b>Sex ratio (m/f):</b>	1.0		

Age-specific incidence rates per million:

	<1	1-4	5-9	10-14
Number of cases :	2	10	11	23
Incidence rate:	0.3	0.3	0.3	0.5

Median age at diagnosis: 9 years 11 months

<b>Survival probabilities:</b>	<b>5-year</b>	<b>10-year</b>	<b>15-year</b>
	82 %	-	-

Mortality per million within 10 yrs. of diagnosis (1991-2000):

Number of deaths		Standardized* mortality rate	Cumulative mortality
N	% of all 4151 deaths		
11	0.3 %	0.1	1

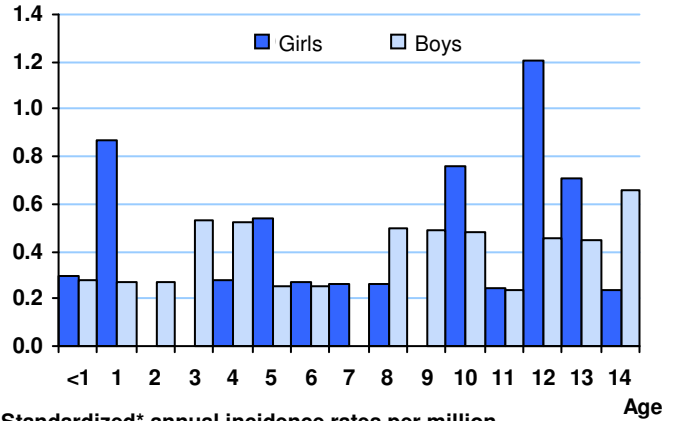
Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2010):

XI (d) Malignant melanomas

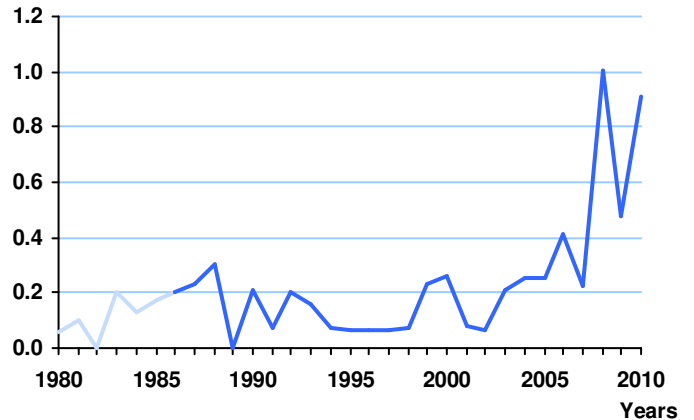
SN after XI (d)			XI (d) as SN after any primary		
N	% of all 775 SN	Cumulative incidence	N	% of all 775 SN	Cumulative incidence
0	0.0 %	0.0 %	16	2.1 %	0.1 %

\* Standard: Segi world standard population

Age- and sex-specific incidence rates per million (Germany 2001-2010)



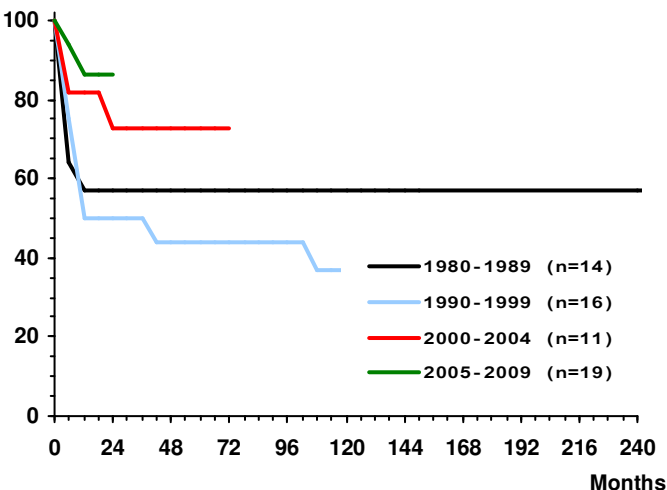
Standardized\* annual incidence rates per million (Germany 1980-2010)



Standardized\* incidence rates per million by districts (Landkreise) (Germany 2001-2010)

No map due to sparse data

Survival probabilities by year of diagnosis (Germany 1980-2009)



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 (1980-2010): 36

#### Selected characteristics (Germany 2001-2010)

Relative frequency:	15 / 17876 = 0.1 %		
Relative frequency of trial patients:	80 %		
<b>Incidence rates per million:</b>	<b>Girls</b>	<b>Boys</b>	<b>Total</b>
Number of cases:	7	8	15
Standardized rate*:	0.1	0.2	0.1
Cumulative incidence:	2	2	2
<b>Sex ratio (m/f):</b>	1.1		

#### Age-specific incidence rates per million:

	<1	1-4	5-9	10-14
Number of cases :	0	9	2	4
Incidence rate:	0.0	0.3	0.1	0.1

**Median age at diagnosis:** 3 years 5 months

<b>Survival probabilities:</b>	<b>5-year</b>	<b>10-year</b>	<b>15-year</b>
	-	-	-

#### Mortality per million within 10 yrs. of diagnosis (1991-2000):

Number of deaths		Standardized*	Cumulative
N	% of all 4151 deaths	mortality rate	mortality
7	0.2 %	0.1	1

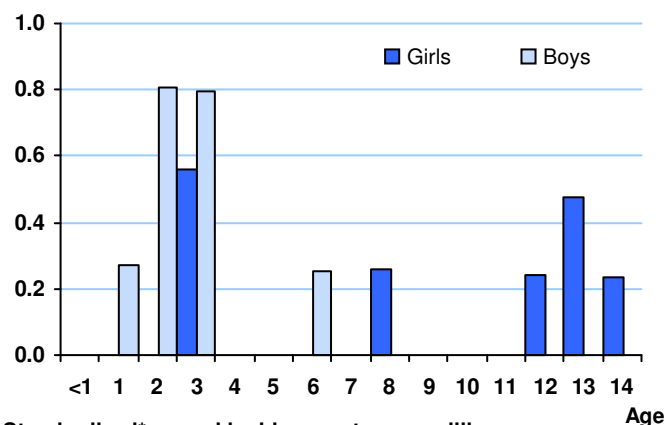
#### Second neoplasms (SN) within 20 yrs. of diagnosis (1980-2010):

XII (a) Other specified malignant tumours

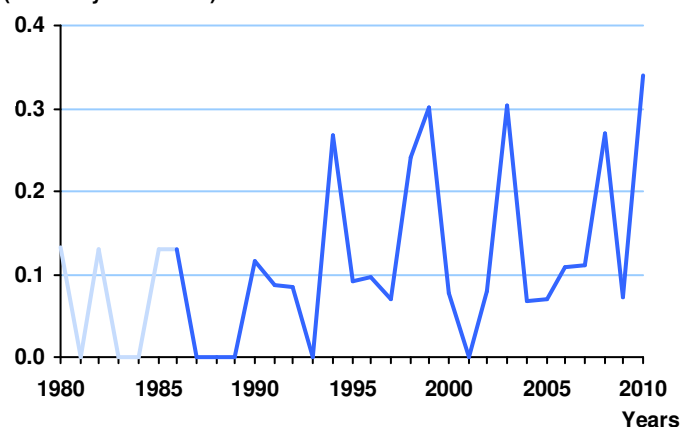
SN after XII (a)			XII (a) as SN after any primary		
N	% of all 775 SN	Cumulative incidence	N	% of all 775 SN	Cumulative incidence
1	0.1 %	3.5 %	0	0.0 %	0.0 %

\* Standard: Segi world standard population

#### Age- and sex-specific incidence rates per million (Germany 2001-2010)



#### Standardized\* annual incidence rates per million (Germany 1980-2010)



#### Standardized\* incidence rates per million by districts (Landkreise) (Germany 2001-2010)

No map due to sparse data

No figure due to sparse data