Epidemiologia del melanoma. "Registre hospitalari català"

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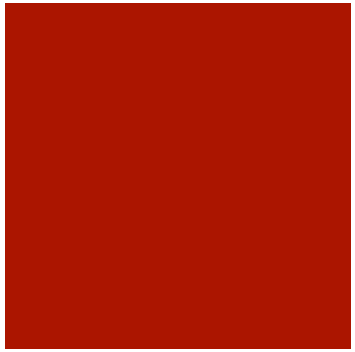
Melanoma
Supervivencia a los 15 años



MM in situ	100%
MM invasor < 1mm	86%
MM invasor >4 mm	30%

Balch et al. J Clin Oncol 19:3635, 2001

Tumores en humans
TNM en cm

MM
TNM en 0.01 mm

El MELANOMA es uno de los cánceres que más afecta en años de vida perdidos

Mediana de años de vida perdidos por cáncer a USA. 2008.

Site	AYLL (years)
Brain+CNS	20.1
Cervix	17.3
Ovary	16.3
Melanoma	**15.1**
Leukaemia	13.6
Breast	13.5
Pancreas	12.0
Lung	11.8
Stomach	11.1
Colon+rectum (+anus)	9.8
Prostate	6.1

Years of life lost (YLL) from cancer is an important measure of population burden — and should be considered when allocating research funds

STUDY

The Role of Circumstances of Diagnosis and Access to Dermatological Care in Early Diagnosis of Cutaneous Melanoma

A Population-Based Study in France

Frédérique Durbec, MD; Fabien Vitry, MD; Florence Granel-Brocard, MD; Dan Lipsker, MD, PhD; François Aubin, MD, PhD; Guy Hédelin, PhD; Sophie Dalac, MD; François Truchetet, MD; Catherine Michel, MD; Marie-Laure Batard, MD; Beatrice Domissy-Baury, PhD; Jean-Michel Halna, MD; Jean Luc Schmutz, MD; Christian Delvincourt, MD; Georges Reuter, MD; Stéphane Dalle, MD, PhD; Philippe Bernard, MD, PhD; Arlette Danzon, MD; Florent Grange, MD, PhD

Arch Dermatol. 2010;146(3):240-246

Those referred by general practitioners (26.1%) were the oldest and had the highest frequency of thick (>3 mm), nodular, and/or ulcerated CM.

In multivariate analysis high concentration of dermatologists in the region and detection by dermatologists were significantly associated with thinner CMs.

ONLINE FIRST

Melanomas Detected in a Follow-up Program Compared With Melanomas Referred to a Melanoma Unit

Gabriel Salerni, MD; Louise Lovatto, MD; Cristina Carrera, MD; Susana Puig, MD, PhD; Josep Malvehy, MD, PhD

Objective: To compare melanomas diagnosed in patients included in follow-up programs with melanomas diagnosed in patients referred to a melanoma unit.

Design: Retrospective analysis of 215 consecutive melanomas diagnosed between 2007 and 2008.

Setting: Melanoma Unit, Hospital Clinic of Barcelona, Barcelona, Spain.

Patients: The study included 201 patients (105 men and 96 women), 40 of whom were included in a follow-up program in our unit and 161 of whom were referred for evaluation.

Main Outcome Measures: Clinical (ABCD algorithm), dermoscopic (ABCD rule of dermoscopy), and main histologic characteristics were evaluated in both groups.

Results: Most melanomas diagnosed in follow-up did not fulfill some of the ABCD criteria, and only 12.0% fulfilled all 4 ABCD criteria, in contrast with 63.6% of the melanomas referred for evaluation ($P<.001$). The total dermoscopy score was lower in melanomas diagnosed in follow-up (5.04 vs. 6.39, $P<.01$), and 36% were misclassified as benign in this group according to the total dermoscopy score. Seventy percent of melanomas diagnosed in follow-up were in situ; among invasive melanomas, the Breslow index was significantly lower in the group of melanomas diagnosed in follow-up, with a mean (range) of 0.55 (0.25-0.90) mm vs 1.72 (0.25-13.00) mm ($P<.001$).

Conclusions: The inclusion of patients who are at high risk for melanoma in follow-up programs allows the detection of melanomas in early stages, with good prognosis, even in the absence of clinical and dermoscopic features of melanoma. In the general population without specific surveillance, melanoma continues to be diagnosed at more advanced stages

Arch Dermatol.
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doi:10.1001/archdermatol.2010.430

AJCC estadi	MM en seguiment	MM referits
0	35 (70%)	46 (27.9%)
IA	15 (30%)	62 (37.6%)
IB	0	21 (12.7%)
II	0	18 (10.9%)
III	0	14 (8.5%)
IV	0	4 (2.4%)

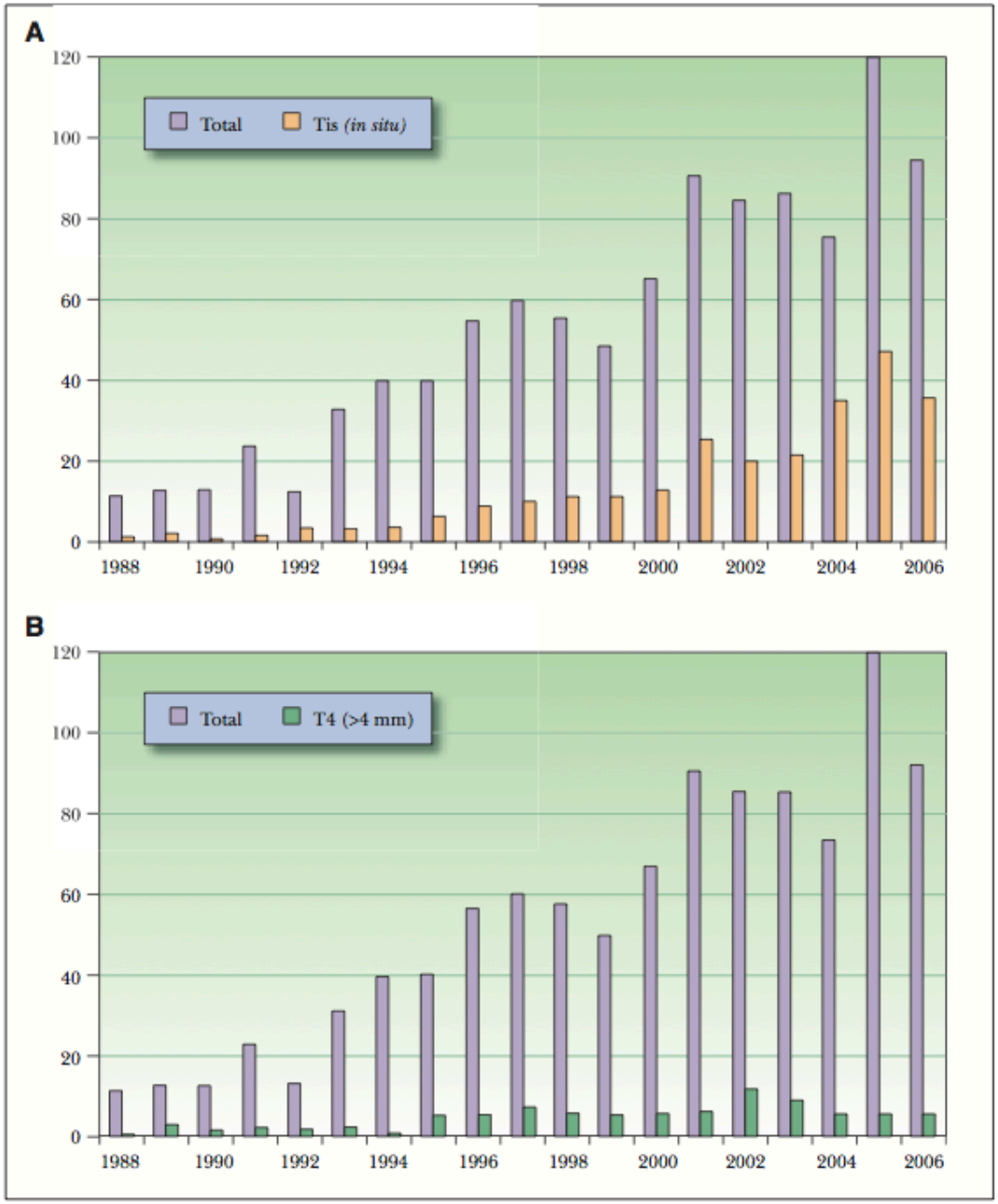
Actas Dermosifiliogr. 2008;99:464-8

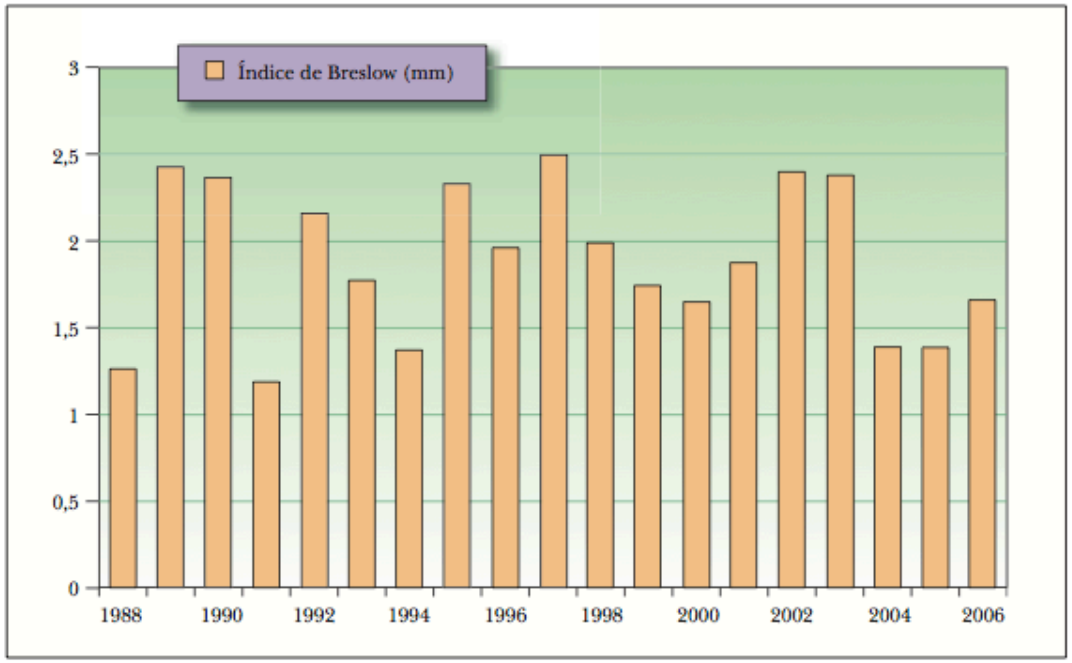
ORIGINALES

Evolución del melanoma maligno cutáneo en los últimos 19 años en un hospital terciario de la cuenca mediterránea

J. Marcoval[a], A. Moreno[b], A. Torras[a], E. Baumann[a], J. Graells[a] y M.I. Gallego[a]

[a]Servicio de Dermatología. [b]Servicio de Anatomía Patológica. Hospital Universitari de Bellvitge. IDIBELL. Barcelona. España.


A
120
100
80
60
40
20
0
Total
Tis (in situ)
1988
1990
1992
1994
1996
1998
2000
2002
2004
2006
B
120
100
80
60
40
20
0
Total
T4 (>4 mm)
1988
1990
1992
1994
1996
1998
2000
2002
2004
2006


Índice de Breslow (mm)
3
2,5
2
1,5
1
0,5
0
1988
1990
1992
1994
1996
1998
2000
2002
2004
2006

Estudio de derivación

- 104 pacientes diagnosticados de melanoma evaluados de forma consecutiva
  - 56 hombres y 48 mujeres
  - edad media 56,55 años DS= 17,374 (22-93),

Estudio derivación

Facultativo que realiza la 1ª visita	N (%)	Breslow medio (mm)	*p*
Médico de familia	35 (33,7)	3,78	
Dermatólogo	56 (53,8%)	1,56	**0,009**

Estudio derivación

PACIENTES	Tiempo entre 1ª visita y extirpación del tumor (días)	DS (IC)	Breslow medio(mm)	*p*
TOTAL 104 (100%)	Media 201,10	832,798 (0-7283)	2,56	
PERC. 25: 26 (25%)	<8		0,9	**0,017**
PERC.26-75: 52 (50%)	8-57 58-126		1,45	
PERC. >75: 26 (25%)	>126		3,39	

Estudio de derivación

- El tiempo transcurrido entre la primera visita y la extirpación del tumor y
- el facultativo que la realiza son factores que influyen en el Breslow.

Arch Dermatol. 2012 Feb;148(2):174-8.

Association of increased dermatologist density with lower melanoma mortality.

Aneja S, Aneja S, Bordeaux JS.

OBJECTIVE:

To determine whether there is an association between dermatologist density and melanoma mortality.

DESIGN:

A regression model was developed to test the association between melanoma mortality and dermatologist density.

RESULTS:

Geographic variation exists in the distribution of dermatologists across the United States. Multivariate analysis demonstrated that the presence of 0.001 to 1 dermatologist per 100 000 people was associated with a 35.0% reduction in the melanoma mortality rate (95% CI, 13.4%-56.6%) when compared with counties with no dermatologist. The presence of 1.001 to 2 dermatologists per 100 000 people was associated with a 53.0% reduction in the melanoma mortality rate (95% CI, 30.6%-75.4%).

Within a given county, a greater dermatologist density is associated with lower melanoma mortality rates compared with counties that lacked a dermatologist.

Systematic skin cancer screening in Northern Germany

Eckhard W. Breitbart, MD,[a,b] Annika Waldmann, PhD,[c] Sandra Nolte, PhD,[a,d] Marcus Capellaro, MA,[a] Ruediger Greinert, PhD,[a,b] Beate Volkmer, PhD,[a,b] and Alexander Katalinic, MD[a,c]
Hamburg, Buxtehude, and Luebeck, Germany; and Burwood, Australia

Methods: In 2003, the Association of Dermatological Prevention was contracted to implement the population-based SCREEN project (Skin Cancer Research to Provide Evidence for Effectiveness of Screening in Northern Germany) in the German state of Schleswig-Holstein. A two-step program addressing malignant melanoma and nonmelanocytic skin cancer was implemented. Citizens (aged ≥ 20 years) with statutory health insurance were eligible for a standardized whole-body examination during the 12-month study period. Cancer registry and mortality data were used to assess first effects.

Results: Of 1.88 million eligible citizens, 360,288 participated in SCREEN. The overall population-based participation rate was 19%. A total of 3103 malignant skin tumors were found. On the population level, invasive melanoma incidence increased by 34% during SCREEN. Five years after SCREEN a substantial decrease in melanoma mortality was seen (men: observed 0.79/100,000 and expected 2.00/100,000; women: observed 0.66/100,000 and expected 1.30/100,000).

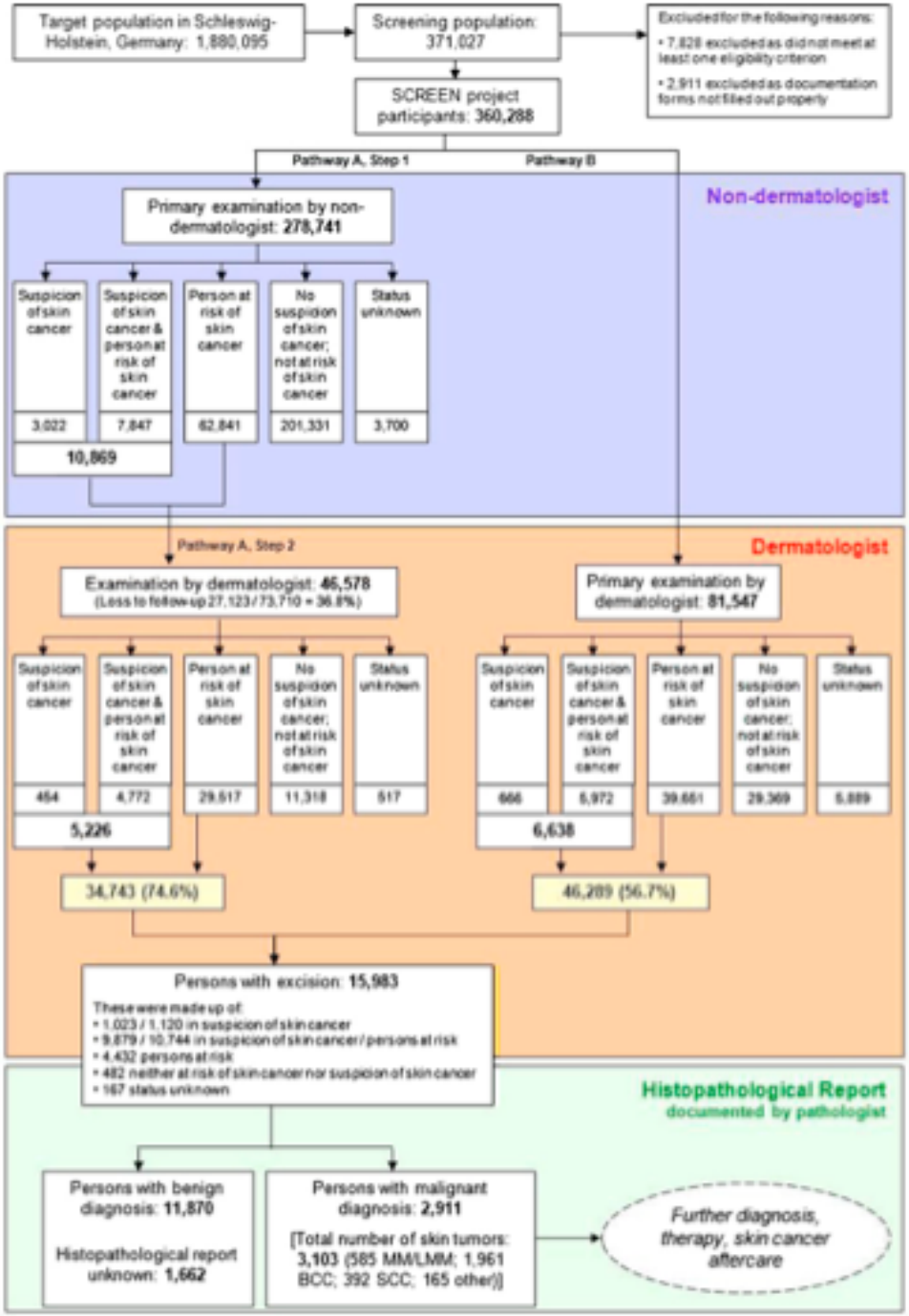
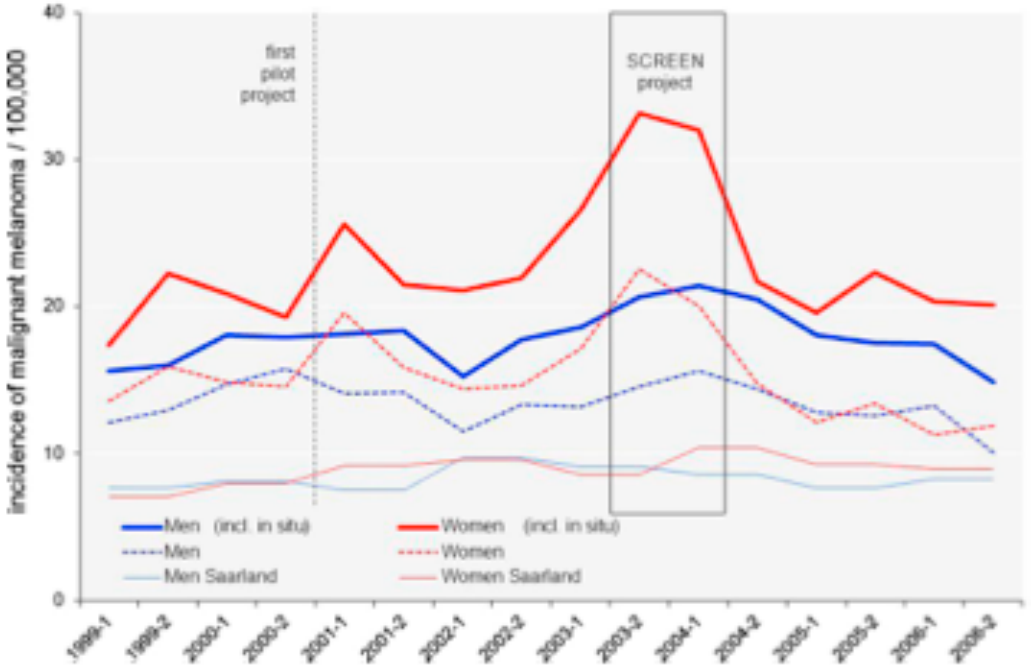
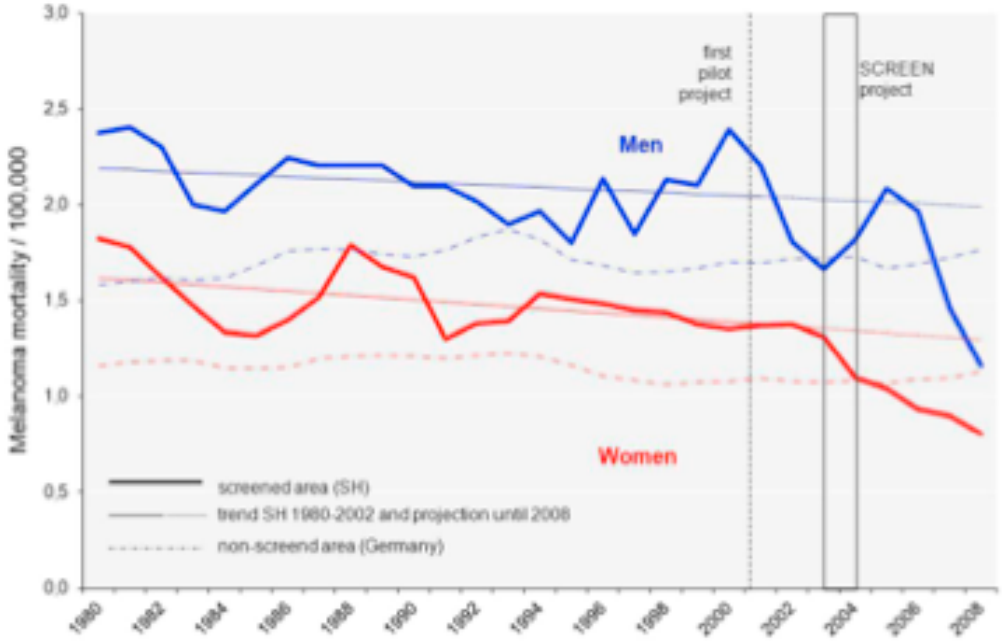

Target population in Schleswig-Holstein, Germany: 1,880,095
Screening population: 371,027
Excluded for the following reasons:
• 7,828 excluded as did not meet at least one eligibility criterion
• 2,911 excluded as documentation forms not filled out properly
SCREEN project participants: 360,288
Pathway A, Step 1
Pathway B
Non-dermatologist
Primary examination by non-dermatologist: 278,741
Suspicion of skin cancer
Suspicion of skin cancer & person at risk of skin cancer
Person at risk of skin cancer
No suspicion of skin cancer; not at risk of skin cancer
Status unknown
3,022
7,847
62,841
201,331
3,700
10,869
Pathway A, Step 2
Dermatologist
Examination by dermatologist: 46,578
(Loss to follow-up 27,123 / 73,710 = 36.8%)
Primary examination by dermatologist: 81,547
Suspicion of skin cancer
Suspicion of skin cancer & person at risk of skin cancer
Person at risk of skin cancer
No suspicion of skin cancer; not at risk of skin cancer
Status unknown
454
4,772
29,517
11,318
517
5,226
666
5,972
39,661
29,369
6,889
6,638
34,743 (74.6%)
46,289 (56.7%)
Persons with excision: 15,983
These were made up of:
• 1,023 / 1,120 in suspicion of skin cancer
• 9,879 / 10,744 in suspicion of skin cancer / persons at risk
• 4,432 persons at risk
• 482 neither at risk of skin cancer nor suspicion of skin cancer
• 167 status unknown
Histopathological Report
documented by pathologist
Persons with benign diagnosis: 11,870
Histopathological report unknown: 1,662
Persons with malignant diagnosis: 2,911
[Total number of skin tumors: 3,103 (585 MM/LMM; 1,961 BCC; 392 SCC; 165 other)]
Further diagnosis, therapy, skin cancer aftercare

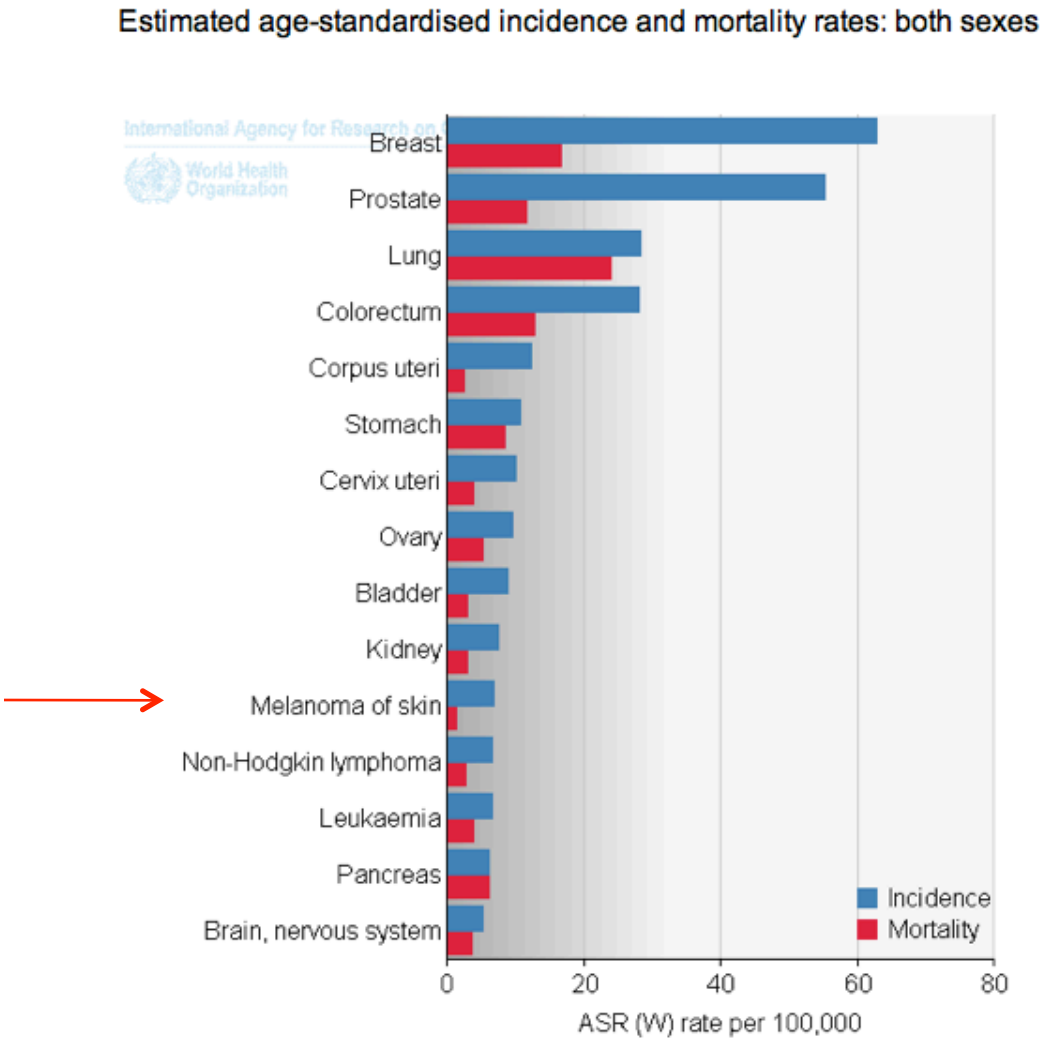
Table I. Description of SCREEN project participants (Skin Cancer Research to Provide Evidence for Effectiveness of Screening in Northern Germany), tentative and confirmed diagnoses of skin cancer in absolute (relative) frequencies

	Women, n = 265,306	Men, n = 94,982	Total, n = 360,288
Mean age, y (SD)	48.2 (16.2)	53.9 (15.7)	49.7 (16.2)
Age group, y			
20-34	59,513 (22.4)	12,043 (12.7)	71,556 (19.9)
35-49	86,375 (32.6)	25,133 (26.5)	111,508 (30.9)
50-69	92,130 (34.7)	42,738 (45.0)	134,868 (37.4)
≥ 70	27,288 (10.3)	15,068 (15.9)	42,356 (11.8)
Nondermatologist (pathway A, step 1)	214,688 (80.9)	64,053 (67.4)	278,741 (77.4)
Persons at risk for or with suspicion of skin cancer*	55,389 (25.8)	18,321 (28.6)	73,710 (26.4)
Saw dermatologist (pathway A, step 2)*	34,488 (16.1)	12,090 (18.9)	46,578 (16.7)
Dermatologist (pathway B)	50,618 (19.1)	30,929 (32.6)	81,547 (22.6)
At risk for MM (pathway A, step 2, and pathway B)†	43,399 (51.0)	19,156 (44.5)	62,555 (48.8)
Personal history of MM‡	1181 (2.7)	461 (2.4)	1642 (2.6)
Family history (first-degree) of MM‡	2995 (6.9)	836 (4.4)	3831 (6.1)
Multiple melanocytic nevi‡	23,834 (54.9)	11,326 (59.1)	35,160 (56.2)
Clinically atypical nevi‡	22,254 (51.3)	10,214 (53.3)	32,468 (51.9)
Congenital moles‡	9359 (21.6)	3712 (19.4)	13,071 (20.9)
At risk for NMSC†	13,832 (16.3)	10,203 (23.7)	24,035 (18.8)
Lasting UV-damaged skin‡	9708 (70.2)	7593 (74.4)	17,301 (72.0)
Actinic keratosis‡	3450 (24.9)	4040 (39.6)	7490 (31.2)
Personal history of NMSC‡	2443 (17.7)	1620 (15.9)	4063 (16.9)
Immunosuppression‡	473 (3.4)	185 (1.8)	658 (2.7)
X-ray–damaged skin‡	550 (4.0)	88 (0.8)	638 (2.6)
With suspicion of skin cancer†	7563 (8.9)	4301 (10.0)	11,864 (9.3)
MM/LMM‡	5459 (72.2)	2511 (58.4)	7970 (67.2)
NMSC‡	2052 (27.1)	1767 (41.1)	3819 (32.2)
Other/not specified‡	169 (2.2)	110 (2.6)	279 (2.4)
Excision	10,296 (3.9)	5687 (6.0)	15,983 (4.4)
Benign result§	7838 (76.1)	4032 (70.9)	11,870 (74.3)
Histopathologically confirmed malignant diagnosis§	1613 (15.7)	1298 (22.8)	2911 (18.2)
MM/LMM//	372 (23.1)	213 (16.4)	585 (20.1)
BCC//	1055 (65.4)	906 (69.8)	1961 (67.4)
SCC/Bowen carcinoma/morbus Bowen//	187 (11.6)	205 (15.8)	392 (13.5)
Other skin cancer//	95 (5.9)	70 (5.4)	165 (5.7)
Histopathological result unknown§	1087 (10.6)	575 (10.1)	1662 (10.4)


incidence of malignant melanoma / 100,000
first pilot project
SCREEN project
Men (incl. in situ)
Women (incl. in situ)
Men
Women
Men Saarland
Women Saarland


Melanoma mortality / 100,000
first pilot project
SCREEN project
Men
Women
screened area (SH)
trend SH 1980-2002 and projection until 2008
non-screend area (Germany)

Globocan 2008



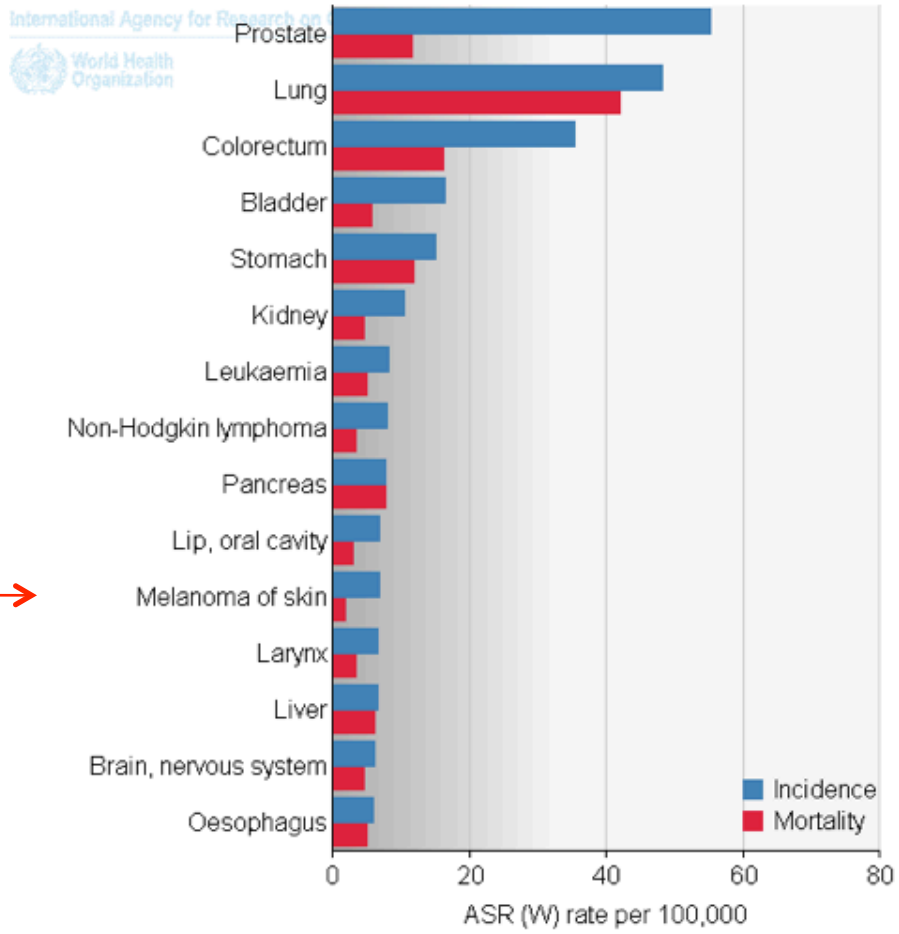
Estimated incidence, mortality and 5-year prevalence: both sexes

Cancer	Incidence			Mortality			5-year prevalence		
	Number	(%)	ASR (W)	Number	(%)	ASR (W)	Number	(%)	Prop.
Lip, oral cavity	60051	1.8	4.3	23918	1.3	1.7	154377	1.7	21.1
Nasopharynx	4969	0.1	0.4	2650	0.1	0.2	13428	0.2	1.8
Other pharynx	33372	1.0	2.6	18837	1.0	1.4	80589	0.9	11.0
Oesophagus	51939	1.5	3.5	45406	2.4	3.0	51978	0.6	7.1
Stomach	166190	4.9	10.7	134022	7.2	8.4	228172	2.6	31.1
Colorectum	450621	13.2	28.1	223268	12.0	12.8	1209532	13.6	165.0
Liver	65644	1.9	4.2	66319	3.6	4.1	58081	0.7	7.9
Gallbladder	30667	0.9	1.8	23871	1.3	1.3	28939	0.3	4.0
Pancreas	99901	2.9	6.3	101066	5.4	6.2	54953	0.6	7.5
Larynx	45433	1.3	3.4	23381	1.3	1.6	143748	1.6	19.6
Lung	417554	12.2	28.2	368715	19.8	24.1	441848	5.0	60.3
Melanoma of skin	88510	2.6	6.8	21002	1.1	1.4	341113	3.8	46.5
Breast	450322	13.2	62.8	139829	7.5	16.7	1770814	19.9	462.4
Cervix uteri	61397	1.8	10.1	28181	1.5	3.9	206110	2.3	53.8
Corpus uteri	93562	2.7	12.3	23528	1.3	2.5	353442	4.0	92.3
Ovary	69565	2.0	9.5	44280	2.4	5.3	166781	1.9	43.5
Prostate	379097	11.1	55.3	94080	5.1	11.7	1383018	15.5	395.0
Testis	19774	0.6	4.2	2175	0.1	0.4	84363	0.9	24.1
Kidney	106018	3.1	7.5	47419	2.5	3.0	303655	3.4	41.4
Bladder	143555	4.2	8.8	55589	3.0	3.0	463438	5.2	63.2
Brain, nervous system	61156	1.8	5.2	47451	2.5	3.7	69229	0.8	9.4
Thyroid	51621	1.5	4.5	7204	0.4	0.4	205342	2.3	28.0
Hodgkin lymphoma	19433	0.6	2.0	5628	0.3	0.5	65145	0.7	8.9
Non-Hodgkin lymphoma	93827	2.7	6.7	42003	2.3	2.6	243997	2.7	33.3
Multiple myeloma	38451	1.1	2.4	25659	1.4	1.5	86849	1.0	11.9
Leukaemia	85679	2.5	6.6	59179	3.2	4.0	175903	2.0	24.0
All cancers excl. non-melanoma skin cancer	3422811	100.0	236.7	1861096	100.0	116.7	8894500	100.0	1213.3

Incidence and mortality data for all ages. 5-year prevalence for adult population only.
ASR (W) and proportions per 100,000.

Globocan 2008

- men



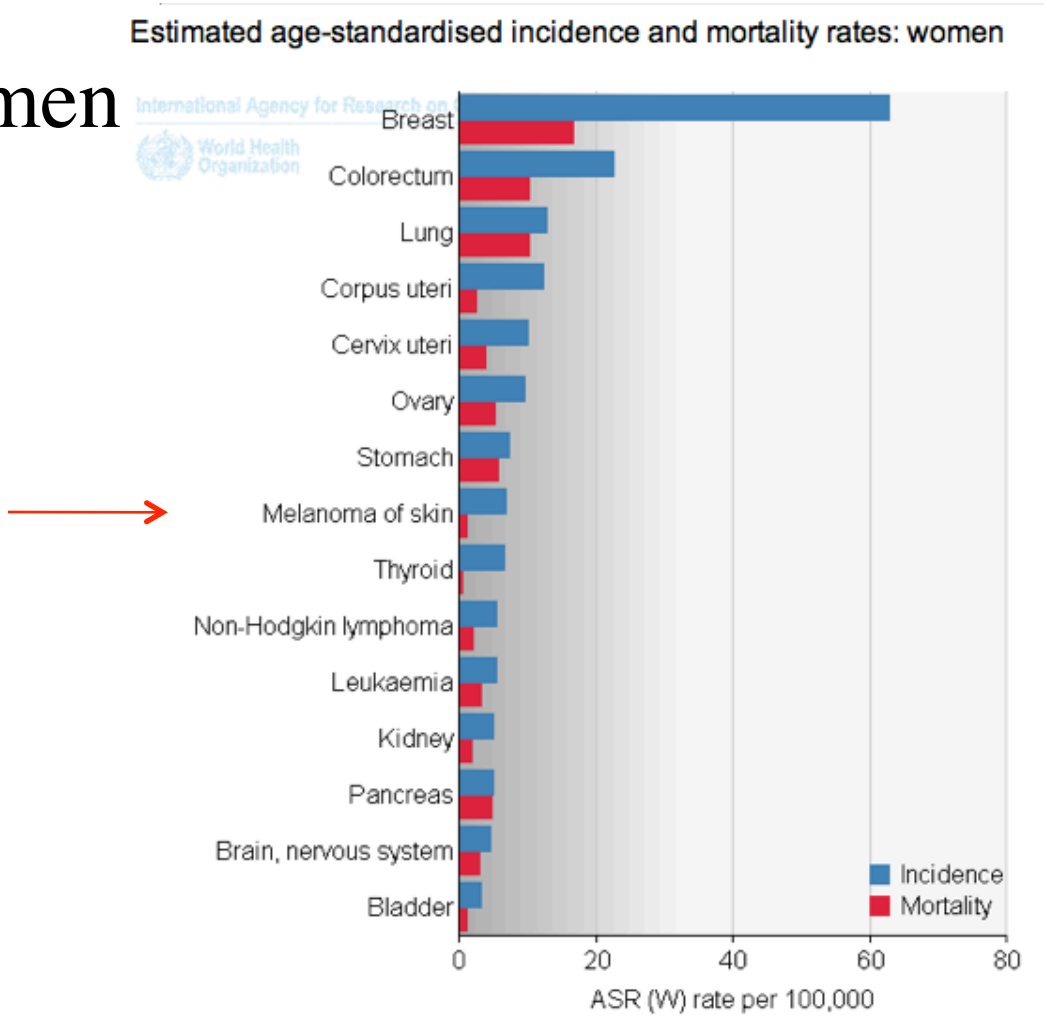
Estimated incidence, mortality and 5-year prevalence: men

Cancer	Incidence			Mortality			5-year prevalence		
	Number	(%)	ASR (W)	Number	(%)	ASR (W)	Number	(%)	Prop.
Lip, oral cavity	42108	2.3	6.9	17819	1.7	2.9	108621	2.5	31.0
Nasopharynx	3479	0.2	0.6	1840	0.2	0.3	9474	0.2	2.7
Other pharynx	27562	1.5	4.7	15916	1.5	2.7	66255	1.5	18.9
Oesophagus	37520	2.1	5.9	32995	3.2	5.1	38148	0.9	10.9
Stomach	99479	5.5	15.1	79531	7.7	11.9	138273	3.2	39.5
Colorectum	238349	13.2	35.3	115624	11.1	16.3	645072	14.7	184.2
Liver	43172	2.4	6.6	42074	4.1	6.3	39016	0.9	11.1
Gallbladder	11787	0.7	1.7	8747	0.8	1.2	11532	0.3	3.3
Pancreas	50796	2.8	7.8	51305	4.9	7.7	28963	0.7	8.3
Larynx	40767	2.2	6.7	21257	2.0	3.4	128913	2.9	36.8
Lung	310368	17.1	48.1	276796	26.7	42.0	329839	7.5	94.2
Melanoma of skin	40974	2.3	6.9	11160	1.1	1.8	159190	3.6	45.5
Prostate	379097	20.9	55.3	94080	9.1	11.7	1383018	31.6	395.0
Testis	19774	1.1	4.2	2175	0.2	0.4	84363	1.9	24.1
Kidney	65360	3.6	10.5	29680	2.9	4.5	189754	4.3	54.2
Bladder	112819	6.2	16.5	42323	4.1	5.7	364851	8.3	104.2
Brain, nervous system	32577	1.8	6.1	25869	2.5	4.5	38171	0.9	10.9
Thyroid	11524	0.6	2.1	2231	0.2	0.3	45451	1.0	13.0
Hodgkin lymphoma	10257	0.6	2.1	3191	0.3	0.6	35293	0.8	10.1
Non-Hodgkin lymphoma	49092	2.7	8.1	22308	2.1	3.4	129461	3.0	37.0
Multiple myeloma	19572	1.1	2.9	12791	1.2	1.8	44691	1.0	12.8
Leukaemia	47166	2.6	8.1	32287	3.1	5.0	97894	2.2	28.0
All cancers excl. non-melanoma skin cancer	1812128	100.0	281.6	1038333	100.0	153.9	4378202	100.0	1250.5

Incidence and mortality data for all ages. 5-year prevalence for adult population only.
ASR (W) and proportions per 100,000.

Globocan 2008

- women



Estimated incidence, mortality and 5-year prevalence: women

Cancer	Incidence			Mortality			5-year prevalence		
	Number	(%)	ASR (W)	Number	(%)	ASR (W)	Number	(%)	Prop.
Lip, oral cavity	17943	1.1	2.1	6099	0.7	0.7	45756	1.0	11.9
Nasopharynx	1490	0.1	0.2	810	0.1	0.1	3954	0.1	1.0
Other pharynx	5810	0.4	0.8	2921	0.4	0.4	14334	0.3	3.7
Oesophagus	14419	0.9	1.6	12411	1.5	1.3	13830	0.3	3.6
Stomach	66711	4.1	7.3	54491	6.6	5.7	89899	2.0	23.5
Colorectum	212272	13.2	22.7	107644	13.1	10.3	564460	12.5	147.4
Liver	22472	1.4	2.4	24245	2.9	2.4	19065	0.4	5.0
Gallbladder	18880	1.2	1.9	15124	1.8	1.4	17407	0.4	4.6
Pancreas	49105	3.0	5.0	49761	6.0	4.9	25990	0.6	6.8
Larynx	4666	0.3	0.6	2124	0.3	0.3	14835	0.3	3.9
Lung	107186	6.7	12.7	91919	11.2	10.3	112009	2.5	29.3
Melanoma of skin	47536	3.0	6.9	9842	1.2	1.2	181923	4.0	47.5
Breast	450322	28.0	62.8	139829	17.0	16.7	1770814	39.2	462.4
Cervix uteri	61397	3.8	10.1	28181	3.4	3.9	206110	4.6	53.8
Corpus uteri	93562	5.8	12.3	23528	2.9	2.5	353442	7.8	92.3
Ovary	69565	4.3	9.5	44280	5.4	5.3	166781	3.7	43.5
Kidney	40658	2.5	5.1	17739	2.2	1.8	113901	2.5	29.7
Bladder	30736	1.9	3.1	13266	1.6	1.1	98587	2.2	25.7
Brain, nervous system	28579	1.8	4.5	21582	2.6	3.1	31058	0.7	8.1
Thyroid	40097	2.5	6.7	4973	0.6	0.5	159891	3.5	41.8
Hodgkin lymphoma	9176	0.6	1.8	2437	0.3	0.4	29852	0.7	7.8
Non-Hodgkin lymphoma	44735	2.8	5.6	19695	2.4	2.0	114536	2.5	29.9
Multiple myeloma	18879	1.2	2.0	12868	1.6	1.2	42158	0.9	11.0
Leukaemia	38513	2.4	5.4	26892	3.3	3.2	78009	1.7	20.4
All cancers excl. non-melanoma skin cancer	1610683	100.0	207.3	822763	100.0	89.6	4516298	100.0	1179.3

Incidence and mortality data for all ages. 5-year prevalence for adult population only.
ASR (W) and proportions per 100,000.

SEER

SEER Incidence

From 2006-2010, the median age at diagnosis for melanoma of the skin was 61 years of age[3]. Approximately 0.6% were diagnosed under age 20; 6.5% between 20 and 34; 10.0% between 35 and 44; 17.8% between 45 and 54; 21.8% between 55 and 64; 19.6% between 65 and 74; 16.8% between 75 and 84; and 7.0% 85+ years of age.

The age-adjusted incidence rate was 21.1 per 100,000 men and women per year. These rates are based on cases diagnosed in 2006-2010 from 18 SEER geographic areas.

Incidence Rates by Race

Race/Ethnicity	Male	Female
All Races	27.4 per 100,000 men	16.7 per 100,000 women
White	31.9 per 100,000 men	20.0 per 100,000 women
Black	1.1 per 100,000 men	1.0 per 100,000 women
Asian/Pacific Islander	1.6 per 100,000 men	1.1 per 100,000 women
American Indian/Alaska Native [a]	4.1 per 100,000 men	3.5 per 100,000 women
Hispanic [b]	4.7 per 100,000 men	4.4 per 100,000 women

SEER

US Mortality

From 2006-2010, the median age at death for melanoma of the skin was 69 years of age[4]. Approximately 0.1% died under age 20; 2.5% between 20 and 34; 5.3% between 35 and 44; 13.1% between 45 and 54; 20.3% between 55 and 64; 21.5% between 65 and 74; 24.0% between 75 and 84; and 13.2% 85+ years of age.

The age-adjusted death rate was 2.7 per 100,000 men and women per year. These rates are based on patients who died in 2006-2010 in the US.

Death Rates by Race

Race/Ethnicity	Male	Female
All Races	4.1 per 100,000 men	1.7 per 100,000 women
White	4.6 per 100,000 men	2.0 per 100,000 women
Black	0.5 per 100,000 men	0.4 per 100,000 women
Asian/Pacific Islander	0.4 per 100,000 men	0.3 per 100,000 women
American Indian/Alaska Native [a]	1.7 per 100,000 men	0.8 per 100,000 women
Hispanic [b]	1.1 per 100,000 men	0.6 per 100,000 women

SEER

Lifetime Risk

Based on rates from 2008-2010, 2.03% of men and women born today will be diagnosed with melanoma of the skin at some time during their lifetime. This number can also be expressed as 1 in 49 men and women will be diagnosed with melanoma of the skin during their lifetime. These statistics are called the lifetime risk of developing cancer. Sometimes it is more useful to look at the probability of developing melanoma of the skin between two age groups. For example, 0.98% of men will develop melanoma of the skin between their 50th and 70th birthdays compared to 0.60% for women. (See Fast Stats for more detailed statistics, and Probability of Developing and Dying of Cancer for methodology)

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SEER

Survival & Stage

Survival can be calculated by different methods for different purposes. The survival statistics presented here are based on relative survival, which measures the survival of the cancer patients in comparison to the general population to estimate the effect of cancer. The overall 5-year relative survival for 2003-2009 from 18 SEER geographic areas was 91.3%. Five-year relative survival by race and sex was: 89.1% for white men; 93.5% for white women; 64.0% for black men; 79.1% for black women.

Stage Distribution and 5-year Relative Survival by Stage at Diagnosis for 2003-2009, All Races, Both Sexes

Stage at Diagnosis	Stage Distribution (%)	5-year Relative Survival (%)
Localized (confined to primary site)	84	98.3
Regional (spread to regional lymphnodes)	9	62.4
Distant (cancer has metastasized)	4	16.0
Unknown (unstaged)	4	76.5

The stage distribution is based on Summary Stage 2000. (See Fast Stats for more detailed statistics)

SEER

Prevalence

On January 1, 2010, in the United States there were approximately 921,780 men and women alive who had a history of melanoma of the skin -- 452,540 men and 469,240 women. This includes any person alive on January 1, 2010 who had been diagnosed with melanoma of the skin at any point prior to January 1, 2010 and includes persons with active disease and those who are cured of their disease. Prevalence can also be expressed as a percentage and it can also be calculated for a specific amount of time prior to January 1, 2010 such as diagnosed within 5 years of January 1, 2010. (See Fast Stats for more detailed statistics, and Overview of Prevalence Statistics for methodology)

SEER

Trends in Rates

Trends in rates can be described in many ways. Information for trends over a fixed period of time, for example 1996-2010, can be evaluated by the annual percentage change (APC) (See Fast Stats for trends over fixed time intervals) . If there is a negative sign before the number, the trend is a decrease; otherwise it is an increase. If there is an asterisk after the APC then the trend was significant, that is, one believes that it is beyond chance, i.e. 95% sure, that the increase or decrease is real over the period 1996-2010. If the trend is not significant, the trend is usually reported as stable or level. Joinpoint analyses can be used over a long period of time to evaluate when changes in the trend have occurred along with the APC which shows how much the trend has changed between each of the joinpoints.

The joinpoint trend in SEER cancer incidence with associated APC(%) for melanoma of the skin between 1975-2010, All Races

Male and Female		Male		Female	
Trend	Period	Trend	Period	Trend	Period
4.6*	1975-1985	5.6*	1975-1986	5.0*	1975-1981
2.6*	1985-2010	2.9*	1986-2010	2.3*	1981-2010

The joinpoint trend in US cancer mortality with associated APC(%) for melanoma of the skin between 1975-2010, All Races

Male and Female		Male		Female	
Trend	Period	Trend	Period	Trend	Period
1.5*	1975-1990	2.2*	1975-1989	0.8*	1975-1988
-0.3	1990-2002	0.3*	1989-2010	-0.5*	1988-2010
0.5	2002-2010				

Table 1.1: Malignant Melanoma (C43), Number of New Cases, Crude and European Age-Standardised (AS) Incidence Rates per 100,000 Population, UK, 2010

		England	Wales	Scotland	Northern Ireland	United Kingdom
Male	**Cases**	**5,151**	**410**	**524**	**116**	**6,201**
	Crude Rate	20.0	27.9	20.7	13.1	20.2
	AS Rate	**17.0**	**22.1**	**17.3**	**12.2**	**17.2**
	AS Rate - 95% LCL*	16.6	20.0	15.8	10.0	16.7
	AS Rate - 95% UCL*	17.5	24.3	18.7	14.4	17.6
Female	**Cases**	**5,505**	**330**	**617**	**165**	**6,617**
	Crude Rate	20.8	21.5	22.9	18.0	20.9
	AS Rate	**17.3**	**16.7**	**18.4**	**16.1**	**17.3**
	AS Rate - 95% LCL*	16.8	14.9	17.0	13.6	16.9
	AS Rate - 95% UCL*	17.7	18.5	19.9	18.5	17.7
Persons	**Cases**	**10,656**	**740**	**1,141**	**281**	**12,818**
	Crude Rate	20.4	24.6	21.8	15.6	20.6
	AS Rate	**17.0**	**19.2**	**17.7**	**14.0**	**17.1**
	AS Rate - 95% LCL*	16.7	17.8	16.6	12.3	16.8
	AS Rate - 95% UCL*	17.3	20.6	18.7	15.6	17.4

Figure 1.10: Malignant Melanoma (C43), European Age-Standardised Incidence Rates, EU-27 Countries, 2008 Estimates

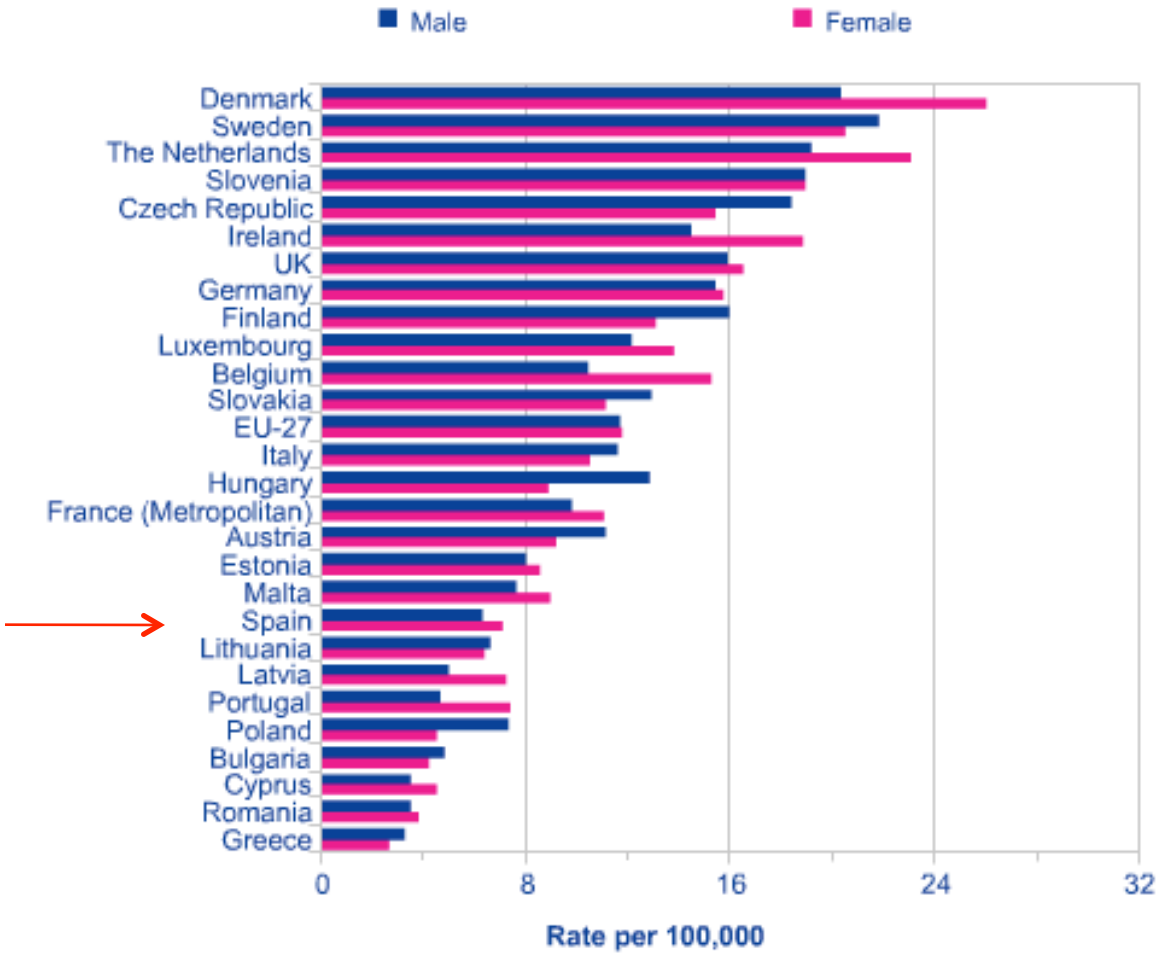


Figure 1.2: Malignant Melanoma (C43), Average Number of New Cases Per Year and Age-Specific Incidence Rates, UK, 2008-2010

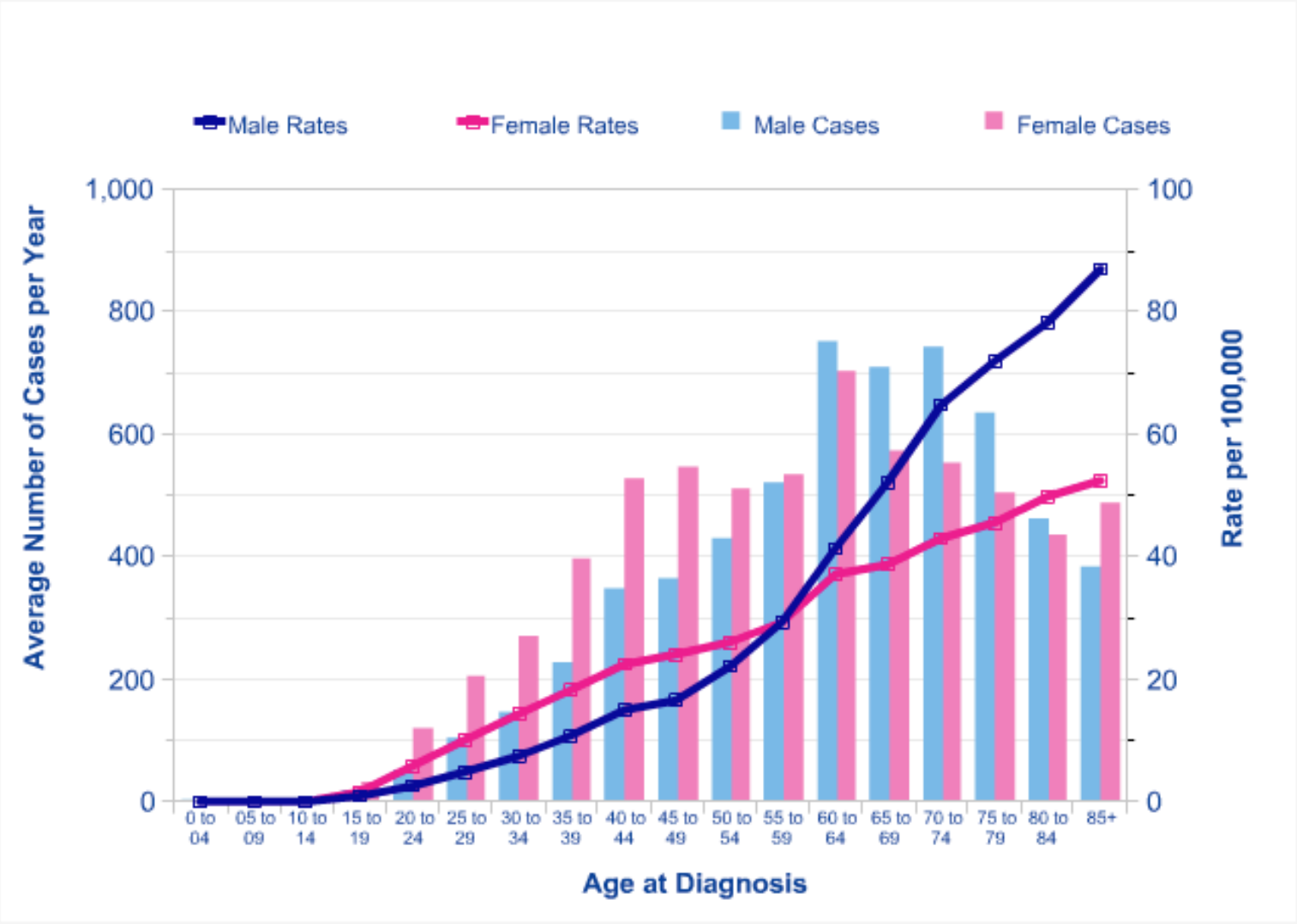


Figure 1.1: Malignant Melanoma (C43), Incidence by Health Authority, Males, UK and Ireland, 1991-1999

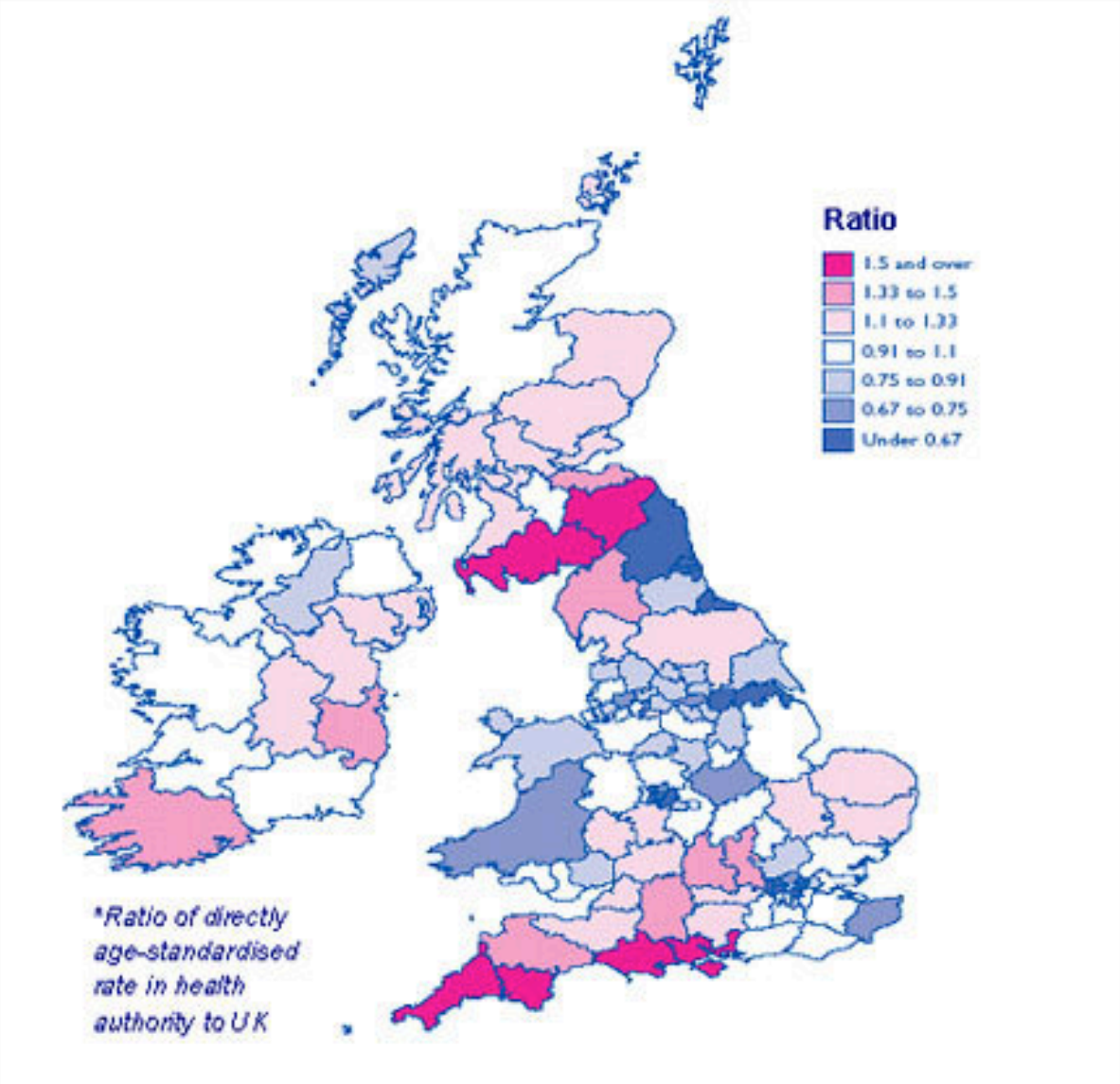
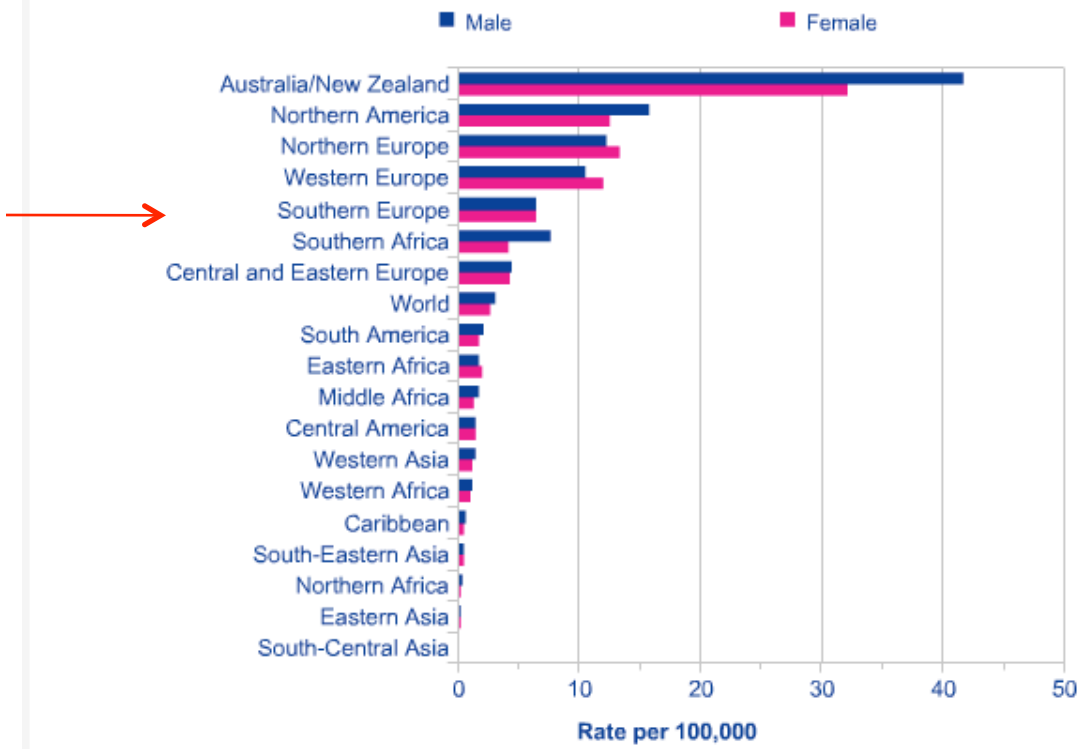


Figure 1.9: Malignant Melanoma (C43), World Age-Standardised Incidence Rates, World Regions, 2008 Estimates



ORIGINAL ARTICLE

Rising trends in incidence of cutaneous malignant melanoma and their future projections in Catalonia, Spain: increasing impact or future epidemic?

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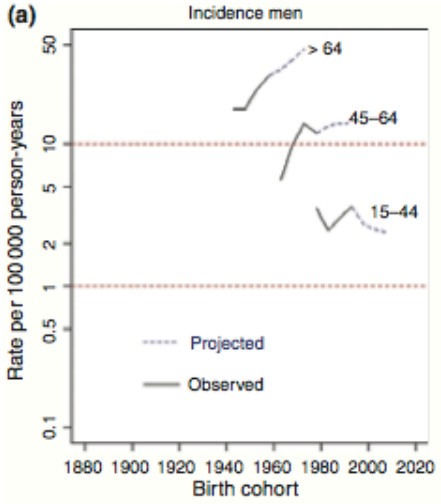
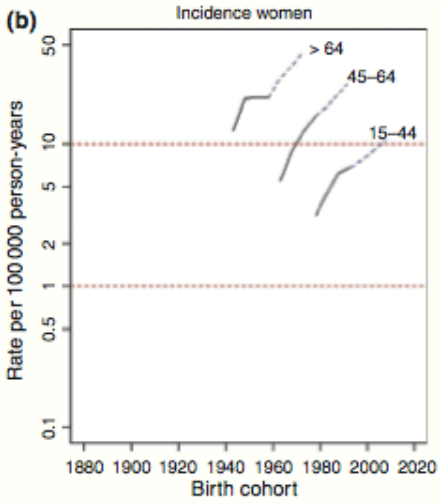
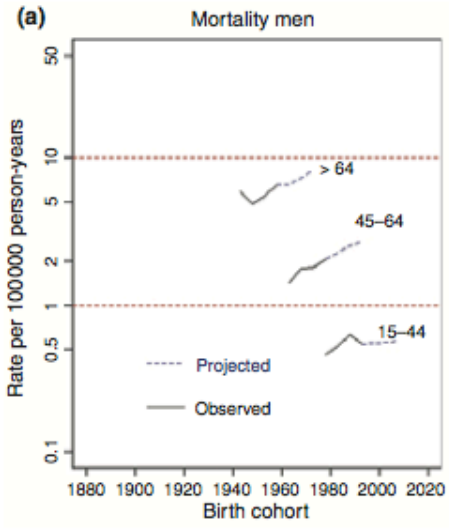
Table 1 Cutaneous malignant melanoma incidence and mortality in Catalonia: trends during 1985–2004 and projections for 2005–2019

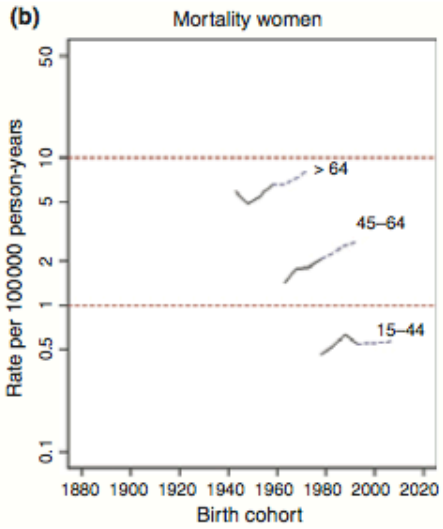
			1985–1989	1990–1994	1995–1999	2000–2002	2005–2009	2010–2014	2015–2019
Incidence	Men	N	149	173	222	237	307	369	441
		CR	5.57	7.08	9.35	9.53	10.43	12.04	13.87
		ASRw	4.78	5.84	7.63	7.97	8.31	9.89	11.01
		$EAPC_{1985–2002}$	3.52* (CI 95%: 0.91–7.65)				–	–	
	Women	N	137	221	309	354	478	624	815
		CR	5.18	8.46	11.02	12.86	15.67	19.72	24.95
		ASRw	4.15	6.68	9.09	10.48	13.21	17.05	22.51
		$EAPC_{1985–2002}$	6.46* (CI 95%: 4.41–8.55)				–	–	
			1985–1989	**1990–1994**	**1995–1999**	**2000–2004**	**2005–2009**	**2010–2014**	**2015–2019**
Mortality	Men	N	41	53	51	66	80	93	108
		CR	1.78	2.07	2.21	2.52	2.72	3.06	3.41
		ASRw	1.53	1.73	1.72	1.82	1.35	1.45	1.47
		$EAPC_{1985–2004}$	0.82 (CI 95%: −6.38; 7.54)				–	–	
	Women	N	35	39	46	55	67	81	97
		CR	1.42	1.49	1.73	2.11	2.28	2.58	2.99
		ASRw	0.97	1.05	1.13	1.27	1.33	1.56	1.68
		$EAPC_{1985–2004}$	2.05 (CI 95%: −8.41; 14.25)				–	–	

N, Average of the annual number of new cases; CR, Crude rate per 100 000 person-years; ASRw, World age-standardised rate per 100 000 person-years; EAPC, estimated annual percentage of change in the specified period and its 95% confidence interval.
*Statistically significant.


(a)
Incidence men
Rate per 100 000 person-years
50
10
5
2
1
0.5
0.1
> 64
45–64
15–44
Projected
Observed
1880 1900 1920 1940 1960 1980 2000 2020
Birth cohort


(b)
Incidence women
Rate per 100 000 person-years
50
10
5
2
1
0.5
0.1
> 64
45–64
15–44
1880 1900 1920 1940 1960 1980 2000 2020
Birth cohort


(a)
Mortality men
Rate per 100000 person-years
50
10
5
2
1
0.5
0.1
> 64
45–64
15–44
Projected
Observed
1880 1900 1920 1940 1960 1980 2000 2020
Birth cohort


(b)
Mortality women
Rate per 100000 person-years
50
10
5
2
1
0.5
0.1
> 64
45–64
15–44
1880 1900 1920 1940 1960 1980 2000 2020
Birth cohort

Registre Hospitalari Català

- Creado en el 2004:
  - Prospectivo a partir del 2000 en los 3 centros mayoritarios
  - Retrospectivo del 2000 al 2004 en el resto de centros
  - Prospectivo a partir del 2005 en todos los centros

Centros participantes

- 23 Hospitales de Cataluña
- 5 Hospitales terciarios:
  - Hospital Clinic Barcelona,
  - Hospital Bellvitge,
  - H Germans Trias I Pujol,
  - Hospital Vall d'Hebron
  - Hospital San Pau)
- 18 Hospitales cominitarios
  - Barcelona: Hospital del Mar, Hospital Sagrat Cor, Hospital dos de Maig, Hospital Plató
  - Provincia de Barcelona: Consorci Sanitari Terrassa, Hospital Universitari Mutua de Terrassa, Hospital Igualada, Hospital Mataró, Hospital Sabadell
  - Provincia de Girona: Hospital Figueras, Hospital Girona
  - Provincia de Lleida: Hospital Arnau Vilanova
  - Provincia de Tarragona: Hospital Joan XXIII, Hospital Sant Joan de Reus, Hospital de Mora, Hospital Santa Tecla, Hospital Amposta
  - Hospital Privado: Hospital General de Catalunya

Registre Hospitalari Català 2000-2007

- Total 5407 casos reportados en 8 años (2000-2007)
  - 408 casos reportados más de una vez
- 4999 melanomas incluidos:
  - 33%Hospital Clinic Barcelona
  - 26% Hospital de Bellvitge y Hospital Germans Trias I Pujol
- 3884 casos melanoma invasor y 1125 *in situ*.
- Mujeres (55%), Hombres (44.3%)

Registre Hospitalari Català 2000-2007

- Los casos incidentes aumentaron durante todo el estudio
  - 494 casos en 2000
  - 619 casos en 2001
  - 590 casos en 2002
  - 556 casos en 2003
  - 583 casos en 2004
  - 714 casos en 2005
  - 691 casos en 2006
  - 739 casos en 2007

Melanoma in situ e invasor

Year	Cases	Population in Catalonia	Crude Rate*	Age standardized rate*†	Truncate rate* (35-64)	Cumulative rate (0-74)
2000	481	6.213.904	7.74	6.74	9.94	0.517%
2001	610	6.305.080	9.67	8.39	12.79	0.694%
2002	581	6.442.797	9.02	7.87	12.70	0.631%
2003	541	6.590.233	8.21	7.02	10.34	0.564%
2004	551	6.727.680	8.19	7.03	10.87	0.555%
2005	692	6.873.649	10.07	8.66	12.93	0.723%
2006	668	7.020.207	9.52	8.17	11.44	0.684%
2007	726	7.168.354	10.13	8.64	13.41	0.709%

* rates reported per 100,000 subjects

† standardized using the European standard population. Source: 1991 World Health Annual of Statistics - based on J Waterhouse et al. Cancer Incidence in Five Continents, Lyon, IARC, 1976 (Vol. 3, page 456)

Registre Hospitalari Català 2000-2007

- Tasa cruda (incluyendo *in situ*) por 100,000 habitantes incrementó de 7.74 en 2000 a 10.13 in 2007

- Tasa estandarizada por edad según población europea aumentó de 6.74 en 2000 a 8.64 en 2007

Melanoma invasor

Year	Cases	Population in Catalonia	Crude Rate per 100,000	Age standardized rate*†	Truncate rate* (35-64)	Cumulative rate (0-74)
2000	337	6.213.904	5.42	4.79	7.29	0,369%
2001	421	6.305.080	6.68	5.85	9.08	0,488%
2002	391	6.442.797	6.07	5.33	8.85	0,426%
2003	341	6.590.233	5.17	4.43	6.57	0,353%
2004	371	6.726.395	5.52	4.77	7.32	0,382%
2005	461	6.873.649	6.71	5.80	8.63	0,487%
2006	443	7.020.207	6.31	5.40	7.82	0,445%
2007	485	7.168.354	6.77	5.80	9.06	0,473%

* rates reported per 100,000 subjects

† standardized using the European standard population. Source: 1991 World Health Annual of Statistics - based on J Waterhouse et al. Cancer Incidence in Five Continents, Lyon, IARC, 1976 (Vol. 3, page 456)

Registre Hospitalari Català 2000-2007

- Para Melanoma invasor la tasa cruda por 100,000 habitantes incrementó de 5.42 en 2000 a 6.77 en 2007
- Y la tasa estandarizada por edad en población europea incrementó de 4.79 en 2000 a 5.8 en 2007

Gender	year	cases	N Catalunya	Crude Rate*	Age standardized rate*†	Truncate rate* (35-64)	Cumulative rate (0-74)
Males	2000	175	3.037.429	5,76	5,10	7,22	0,399%
Males	2001	209	3.088.541	6,77	6,02	8,82	0,524%
Males	2002	215	3.164.113	6,79	6,10	9,15	0,484%
Males	2003	215	3.242.996	6,63	5,89	8,31	0,467%
Males	2004	190	3.316.066	5,73	5,04	7,48	0,399%
Males	2005	253	3.396.257	7,45	6,64	8,90	0,573%
Males	2006	241	3.473.240	6,94	5,98	7,56	0,497%
Males	2007	250	3.550.658	7,04	6,33	9,29	0,528%
Females	2000	220	3.176.475	6,93	6,14	9,41	0,465%
Females	2001	293	3.216.539	9,11	8,00	12,91	0,640%
Females	2002	243	3.278.684	7,41	6,44	10,97	0,526%
Females	2003	216	3.347.237	6,45	5,55	8,87	0,440%
Females	2004	244	3.410.329	7,15	6,09	9,59	0,487%
Females	2005	255	3.477.392	7,33	6,24	10,34	0,502%
Females	2006	265	3.546.967	7,47	6,47	10,29	0,523%
Females	2007	286	3.617.696	7,91	6,54	10,53	0,524%

* rates reported per 100,000 subjects

† standardized using the European standard population. Source: 1991 World Health Annual of Statistics - based on J Waterhouse et al. Cancer Incidence in Five Continents, Lyon, IARC, 1976 (Vol. 3, page 456)

Registre Hospitalari Català 2000-2007

- Las tasas crudas y ajustadas por edad en población europea se incrementaron en ambos sexos.
- Los casos incidentes aumentaron más que las tasas (incremento de 1.000.000 de habitantes durante el periodo del estudio)
- Edad 60-64 años:
  - Tasa cruda de incidencia melanoma en 2000 14.38
  - Tasa cruda de incidencia melanoma en 2007 23.64
- Edad 30-34 años:
  - Tasa cruda incidencia de melanoma en 2000 5.76
  - Tasa cruda incidencia de melanoma en 2007 5.57

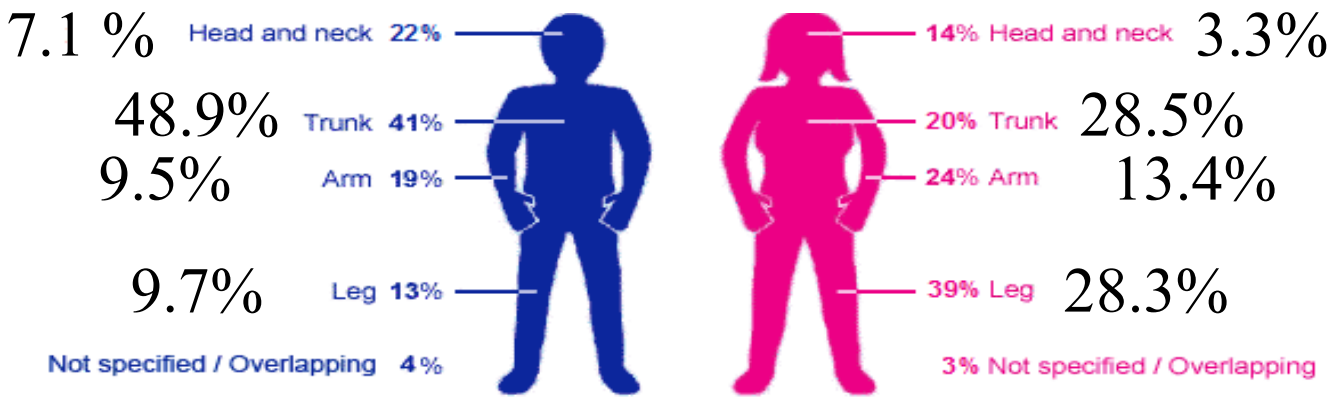
Evolución del Breslow y de la Edad

			Breslow	Age at diagnosis
	2000	Mean	1.8229	53.07
		N	371	481
		sd	2.76132	18.769
	2001	Mean	1.8875	53.98
		N	476	610
		sd	2.47813	16.994
	2002	Mean	2.0606	56.04
		N	443	581
		sd	3.23201	17.155
	2003	Mean	1.9878	55.12
		N	415	541
		sd	2.65989	17.853
	2004	Mean	2.133	55.32
		N	430	551
		sd	2.96113	17.511
	2005	Mean	1.8242	56.3
		N	485	692
		sd	2.23086	17.328
	2006	Mean	2.114	57.24
		N	483	668
		sd	3.01731	17.455
	2007	Mean	2.3162	58.27
		N	520	726
		sd	4.99593	16.935
Total		Mean	2.0242	55.84
		N	3629	4850
		sd	3.18929	17.512

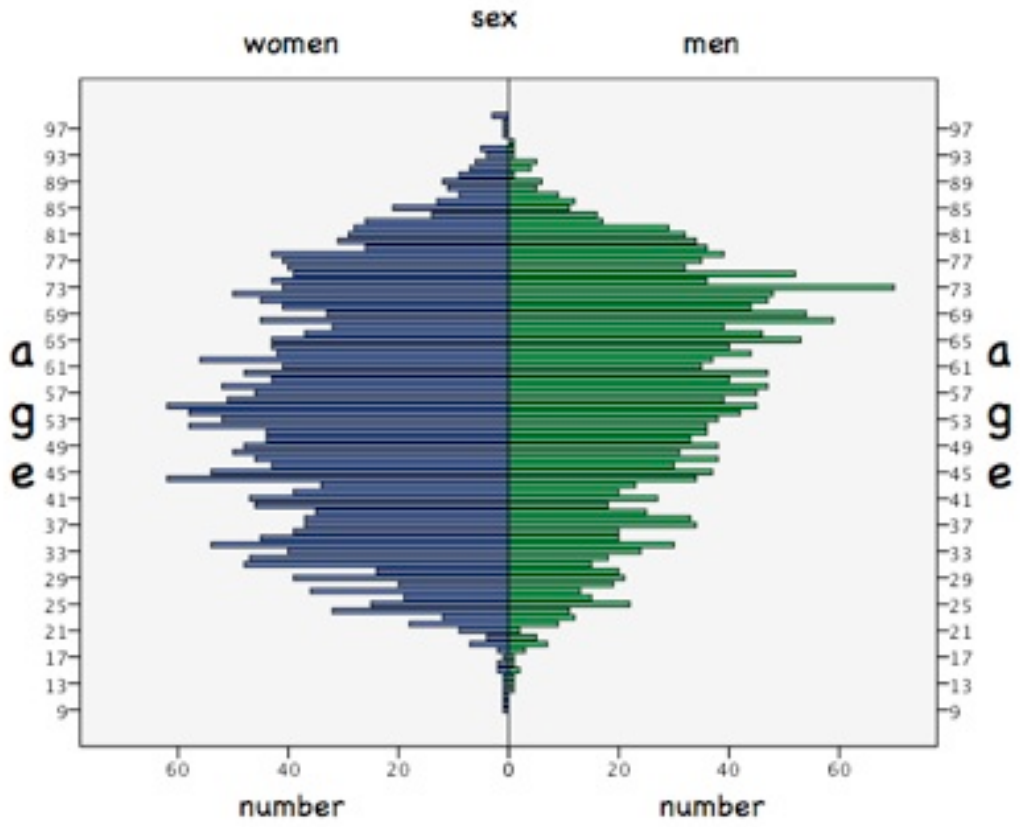
Breslow medio > 2mm!!

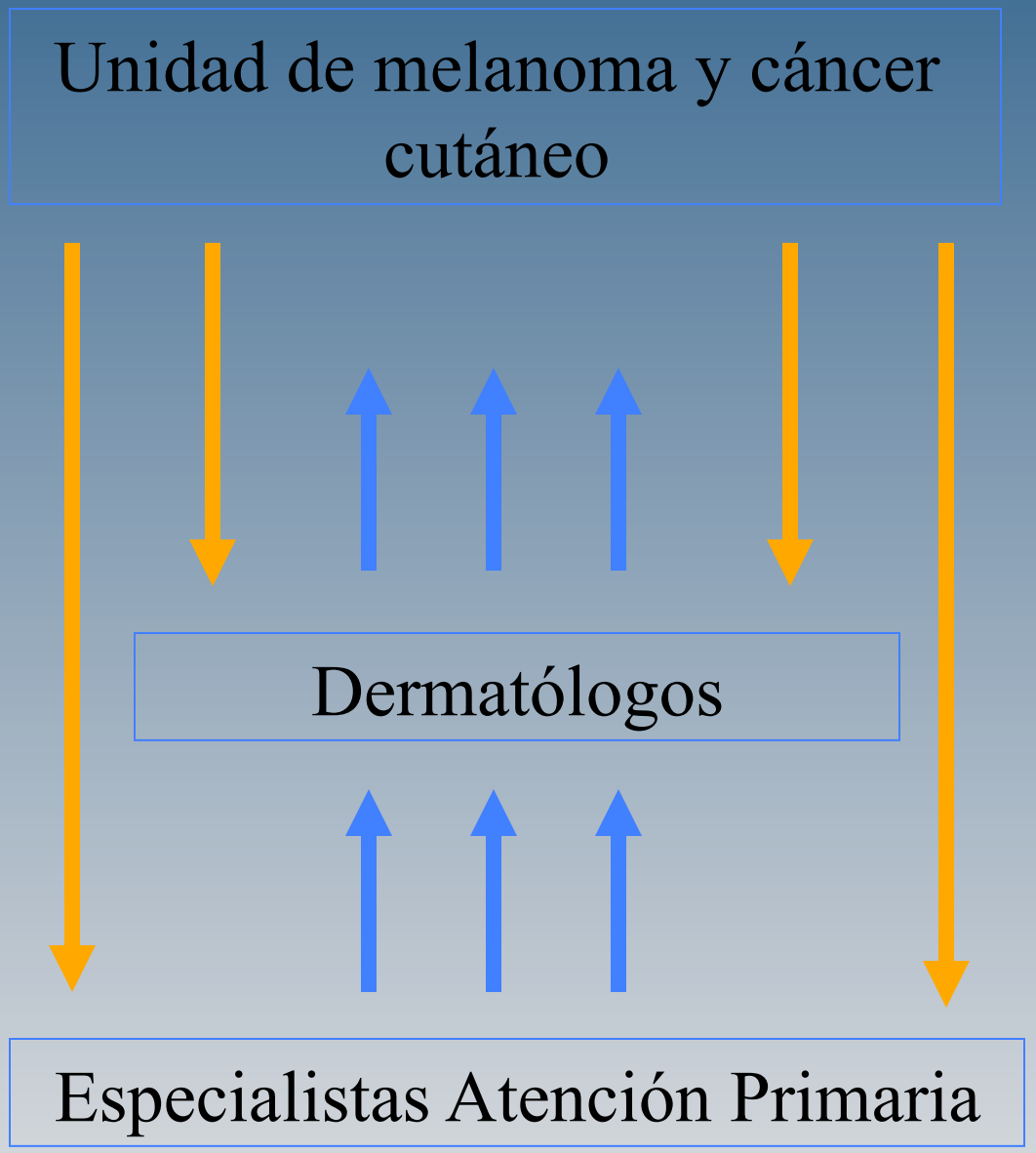
Distribución según sexo

	Total	**Men**	**Women**	**p**
	Mean (sd)	Mean (sd)	Mean (sd)	
Breslow	2.02 (3.18)	2.28 (3.29)	1.80 (3.09)	**0.000**
Age at diagnosis	55.84 (17.51)	57.70 (16.90)	54.29 (17.84)	**0.000**
Body site				
Acral	388 (7.8%)	140 (6.3%)	248 (9%)	**p<0.000**
Lower Ext.	1004 (20.1%)	216 (9.7%)	779 (28.3%)	
Upper Ext.	584 (11.7%)	210 (9.5%)	369 (13.4%)	
Head and Neck	253 (5.1%)	158 (7.1%)	91 (3.3%)	
Face	571 (11.4%)	269 (12.1%)	300 (10.9%)	
Trunk	1876 (37.5%)	1083 (48.9%)	783 (28.5%)	
Mucosal	49 (1%)	14 (0.6%)	34 (1.2%)	
Other	200 (4%)	89 (4%)	108 (3.9%)	


7.1 %
Head and neck 22%
48.9%
Trunk 41%
9.5%
Arm 19%
9.7%
Leg 13%
Not specified / Overlapping 4%
14% Head and neck 3.3%
20% Trunk 28.5%
24% Arm 13.4%
39% Leg 28.3%
3% Not specified / Overlapping

Distribución sexo y edad




Unidad de melanoma y cáncer cutáneo
Dermatólogos
Especialistas Atención Primaria

Total body skin examination for skin cancer screening in patients with focused symptoms

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Naples, Turin, Palermo, Rome, Modena, Genoa, San Giovanni Rotondo, and Ferrara, Italy; Graz and Vienna, Austria; Porto Alegre and São Paulo, Brazil; Leiden, The Netherlands; Konstanz, Germany; Buenos Aires, Argentina; Bornova Izmir, Turkey; South Perth, Western Australia; Nemours, France; and Barcelona, Spain

(J Am Acad Dermatol 2012;66:212-9.)

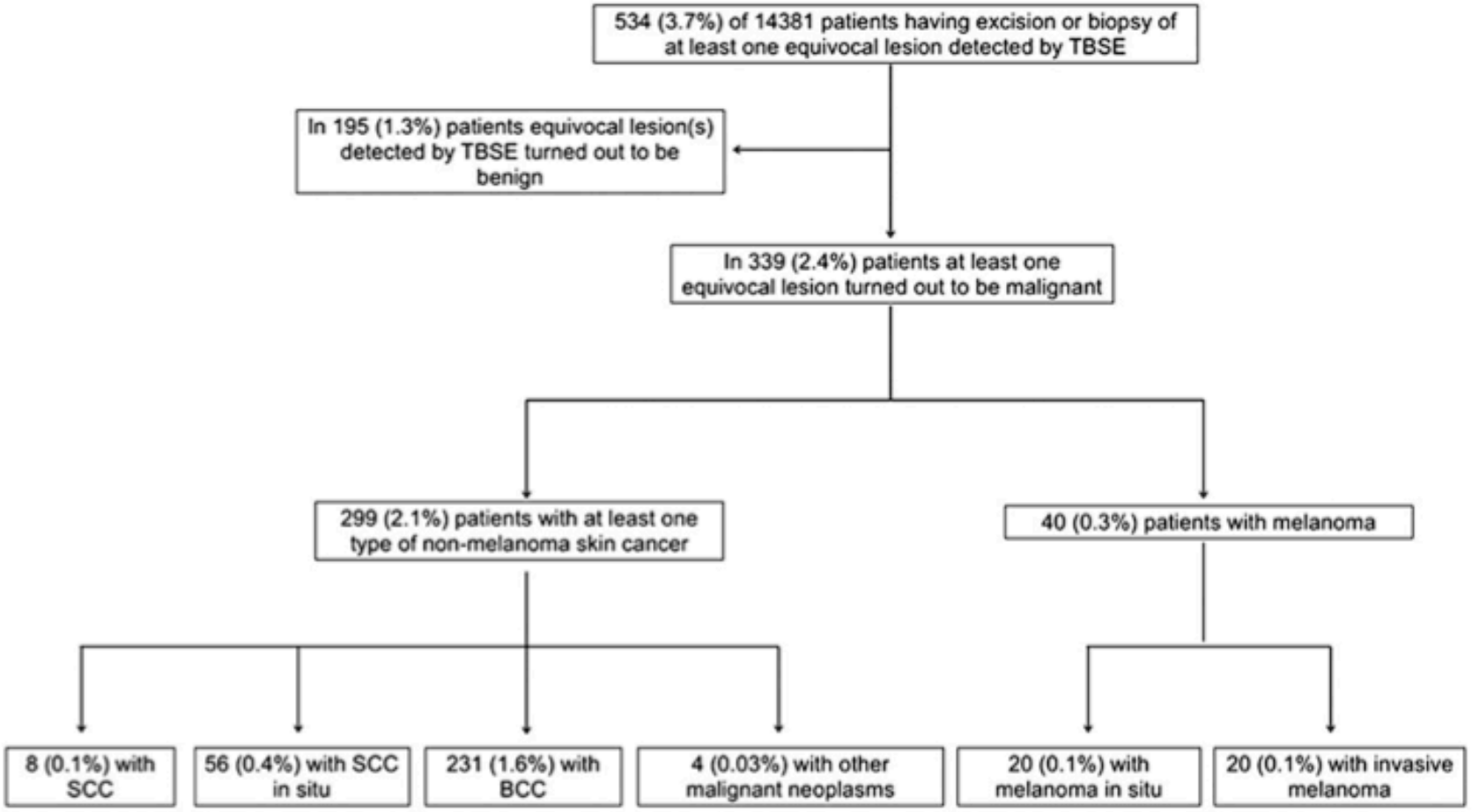

Table IV. Multivariate analysis with odds ratios for any malignant neoplasm

Characteristics	Odds ratio	Lower 95% CI	Upper 95% CI	*P* value
Age, y				<.01
<30	1.00			
30-39	11.52	1.49	89.41	.02
40-49	22.35	3.01	165.96	<.01
50-59	35.30	4.84	257.51	<.01
60-69	76.28	10.59	549.59	<.01
>69	93.20	12.95	670.59	<.01

Conclusiones

- Incremento mantenido de los casos incidentes de melanoma en los últimos años
- Breslow medio mantenido > 2mm
- Estabilización en jóvenes e incremento marcado en edades más avanzadas (efecto de la inmigración)
- Dilución de los casos de melanoma por población inmigrante procedente de países de baja incidencia de melanoma

Conclusiones

- Es necesario incidir en las medidas de prevención primaria
- Es importante incidir en diagnóstico precoz de las lesiones (media de Breslow más cercana a países del Este que a paises de nuestro entorno).
- Debemos mejorar el acceso de los pacientes al dermatólogo con lesiones sospechosas
- Si el paciente no tiene acceso directo, es imprescindible la utilización de la dermatoscopia como herramienta de despistage de melanoma y de cáncer cutáneo.