

Melanomi in Ticino

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Incidenza standardizzata per età

Melanoma, 2008

International Agency for Research on Cancer
 World Health Organization

Estimated age-standardised incidence rate per 100,000
 Melanoma of skin: both sexes, all ages



GLOBOCAN 2008 (IARC) - 27.3.2012

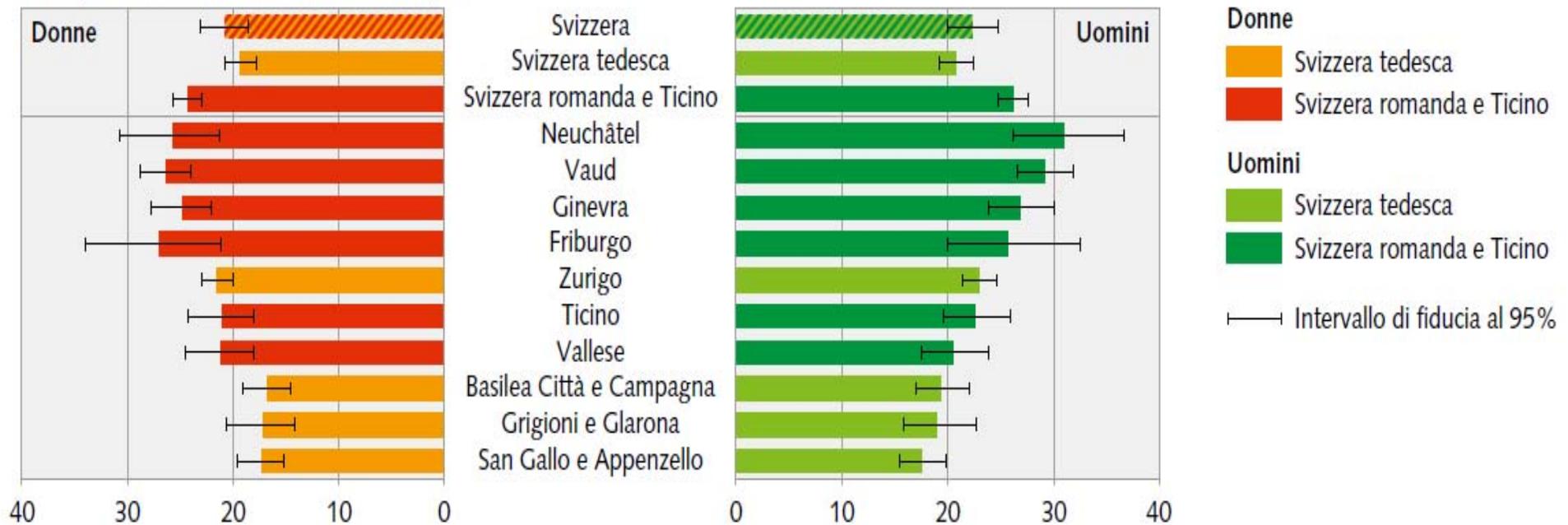
Incidenza standardizzata per età

Melanoma, 2003-2007

Melanoma: incidenza¹ nel raffronto regionale, 2003-2007

G 4.4.5

Tasso per 100'000 abitanti, standard europeo



¹ Incidenza stimata a partire dai dati dei registri. La Svizzera tedesca è composta dai Cantoni di AI, AR, BL, BS, GL, GR, SG, ZH e la Svizzera francese e italiana dai Cantoni di FR, GE, NE, TI, VS; cfr. 2.1.1 e 2.2.1

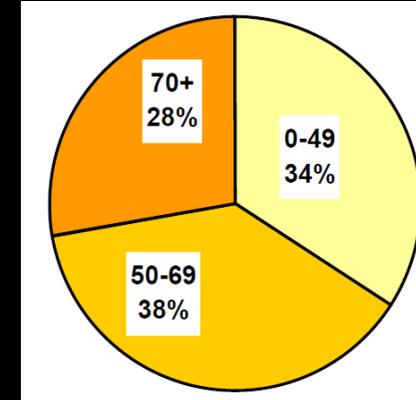
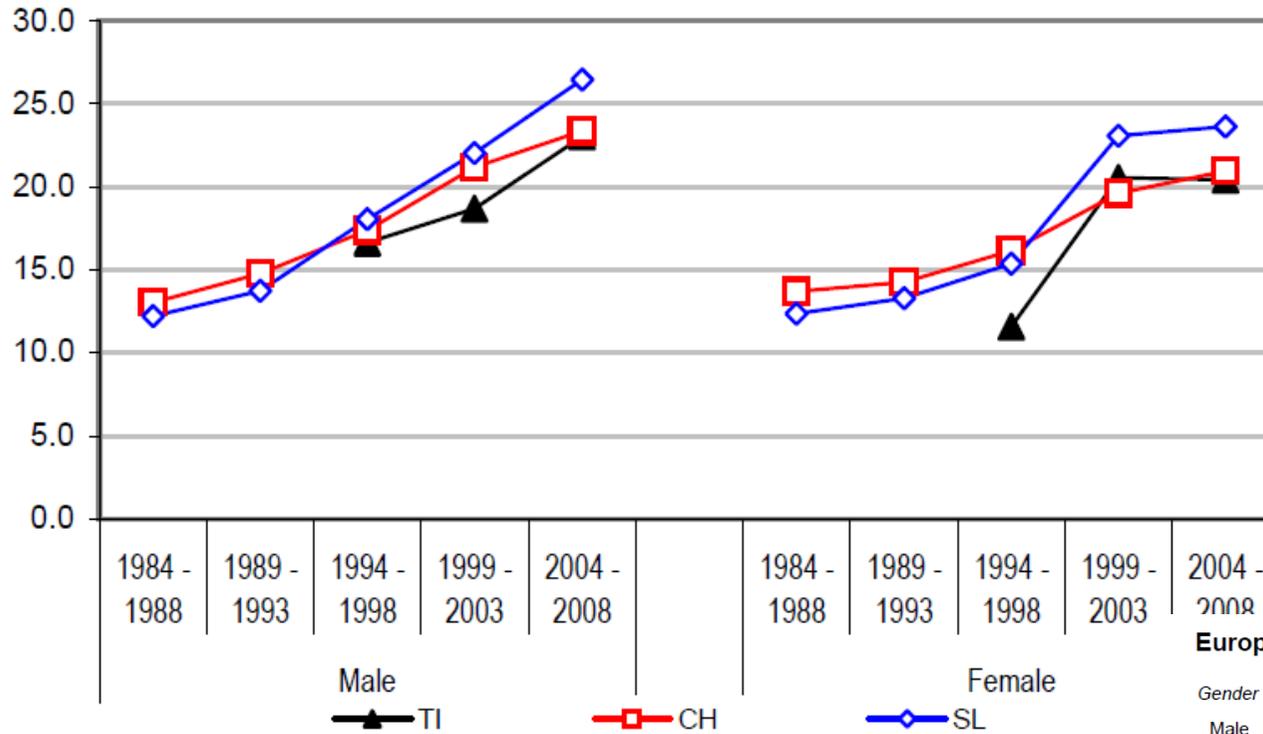
Fonte: NICER, RCT

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Incidenza standardizzata per età

Ticino e Svizzera, 1984-2008, Melanoma

Trends in Standardised Rates



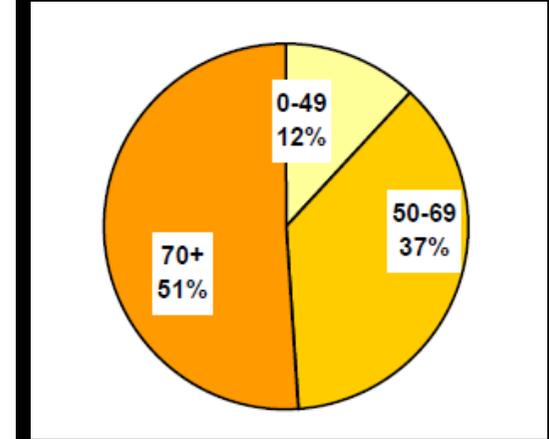
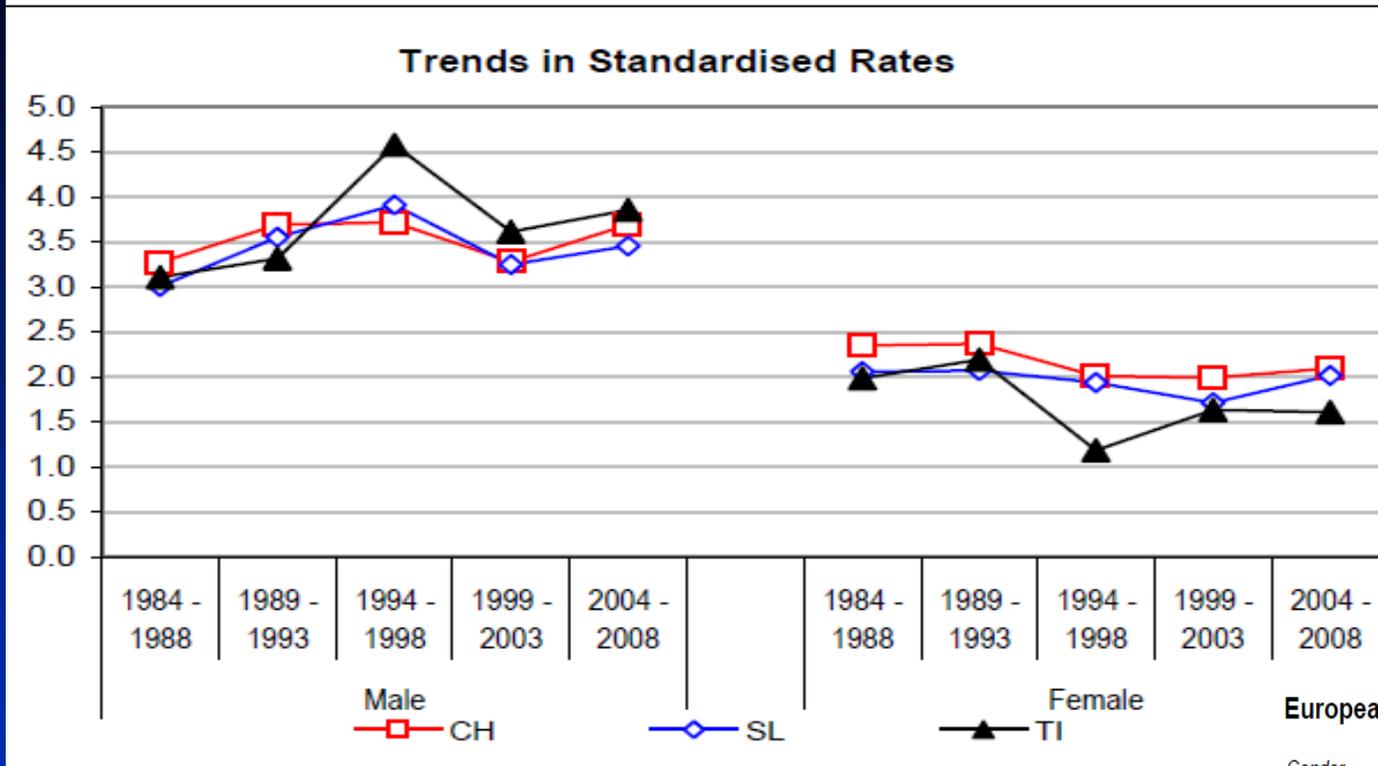
European standardized rate by period

Gender	Period	TI	CH	SL	C.I. 95% of TI	
Male	1984 - 1988		13.04	12.19		
	1989 - 1993		14.76	13.73		
	1994 - 1998	16.65	17.37	18.05	13.24	20.67
	1999 - 2003	18.70	21.18	22.02	15.92	21.82
	2004 - 2008	23.04	23.36	26.45	20.07	26.33
Female	1984 - 1988		13.69	12.35		
	1989 - 1993		14.24	13.27		
	1994 - 1998	11.59	16.15	15.36	8.85	14.89
	1999 - 2003	20.54	19.63	23.07	17.68	23.72
	2004 - 2008	20.42	20.97	23.64	17.64	23.50
Male	Annual trend	1.033	1.030	1.039		
Female	Annual trend (3 last periods)	1.058	1.026	1.044		

TI Ticino
CH Switzerland
SL Latin Switzerland

Mortalità

1984-2008, Uomini e donne, Melanoma, Ticino



European standardized rate by period

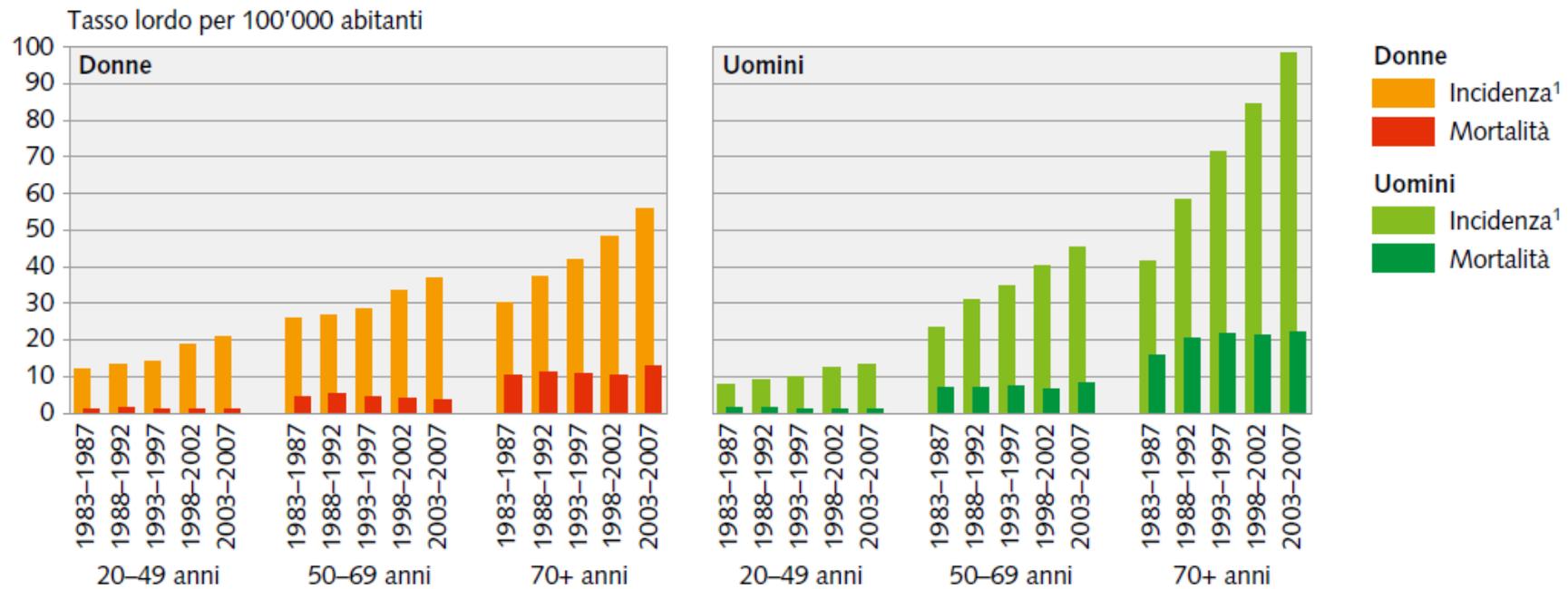
Gender	Period	TI	CH	SL	C.I. 95% of TI	
Male	1984 - 1988	3.11	3.27	3.01	1.93	4.75
	1989 - 1993	3.31	3.70	3.55	2.13	4.92
	1994 - 1998	4.58	3.72	3.91	3.26	6.27
	1999 - 2003	3.61	3.28	3.25	2.49	5.07
	2004 - 2008	3.86	3.70	3.45	2.71	5.32
Female	1984 - 1988	1.99	2.35	2.06	1.18	3.11
	1989 - 1993	2.19	2.37	2.07	1.33	3.39
	1994 - 1998	1.19	2.01	1.94	0.59	2.09
	1999 - 2003	1.64	1.99	1.71	0.94	2.59
	2004 - 2008	1.61	2.09	2.01	0.95	2.52
Male	Annual trend	0.983	0.999	0.988		
Female	Annual trend	1.031	1.004	1.004		
	(3 last periods)					
TI	Ticino					
CH	Switzerland					
SL	Latin Switzerland					

Mortalità

1984-2008, Uomini e donne, Melanoma, Svizzera

Melanoma: evoluzione dell'incidenza¹ e della mortalità secondo la classe di età

G 4.4.4



¹ Incidenza stimata in base ai dati dei registri dei tumori; cfr. 2.1.1 e 2.2.1

Fonte: UST: CM, NICER, RCT

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Incidenza e mortalità 1991-2004, Melanoma, UK

- Studio condotto nel regno unito dove incidenza elevata
- Quantificano un aumento solo degli stadi1 e sostanziale stabilità degli stadi piu avanzati (≥ 2)
- Aumento incidenza dovuto ad un shift di classificazione delle lesioni benigne in stage1
- Osservano un aumento della mortalità, ma non la considerano

Br J Dermatol. 2009 Sep;161(3):630-4. Epub 2009 Jun 9.

Melanoma epidemic: a midsummer night's dream?

Levell NJ, Beattie CC, Shuster S, Greenberg DC.

Dermatology Department, Norfolk and Norwich University Hospital, Norwich, UK. nick.levell@nnuh.nhs.uk

Erratum in

Br J Dermatol. 2009 Sep;161(3):720.

Abstract

BACKGROUND: The reported incidence of melanoma has greatly increased and this has been attributed to ultraviolet exposure.

OBJECTIVES: We considered the possibility that the increase was an artefact caused by diagnostic drift.

METHODS: We tested this by analysing the histological diagnosis, mortality and incidence of all lesions reported as melanomas in East Anglia between 1991 and 2004.

RESULTS: There were 3971 melanomas in all, and their annual incidence increased from 9.39 to 13.91 cases per 100,000 per year during the period studied. This increased incidence was almost entirely due to minimal, stage 1 disease. There was no change in the combined incidence of the other stages of the disease, and the overall mortality only increased from 2.16 to 2.54 cases per 100,000 per year.

CONCLUSIONS: We therefore conclude that the large increase in reported incidence is likely to be due to diagnostic drift which classifies benign lesions as stage 1 melanoma. This conclusion could be confirmed by direct histological comparison of contemporary and past histological samples. The distribution of the lesions reported did not correspond to the sites of lesions caused by solar exposure. These findings should lead to a reconsideration of the treatment of 'early' lesions, a search for better diagnostic methods to distinguish them from truly malignant melanomas, re-evaluation of the role of ultraviolet radiation and recommendations for protection from it, as well as the need for a new direction in the search for the cause of melanoma.

Incidenza e mortalità

1985-2004, Uomini e donne, Melanoma, Toscana

- Notano un incremento degli stadi1 (diminuisce anche il Breslow mediano) dove prevalgono i SSM
- Descrivono una stabilità/aumento degli stadi avanzati 2+ (nei quali non si ha nessun shift del Breslow mediano) dove prevalgono i MN
- Concludono che il secondo gruppo andrebbe ulteriormente studiato

Melanoma Res. 2010 Oct;20(5):422-6.

The thickness of melanomas has decreased in central Italy, but only for thin melanomas, while thick melanomas are as thick as in the past.

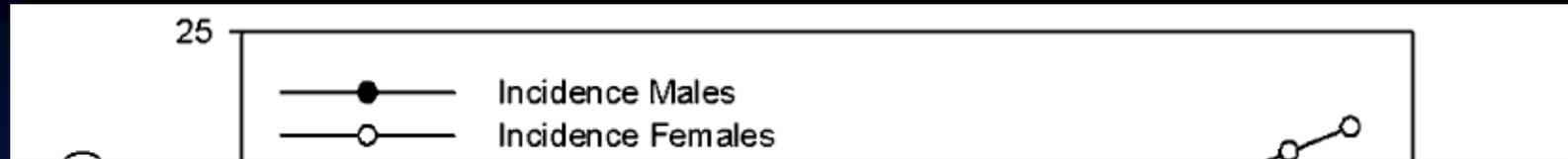
Crocetti E, Caldarella A, Chiarugi A, Nardini P, Zappa M.

Clinical and Descriptive Epidemiology Unit, Institute for Cancer Study and Prevention ISPO, Via di San Salvi 12, Florence, Italy. e.crocetti@ispo.toscana.it

Abstract

The objective of this study was to evaluate the time trend of melanoma thickness in a population-based case series. All invasive (n=2862) and in-situ (n=605) cutaneous melanoma incident cases diagnosed in 1985-2004 were retrieved from the Tuscany Cancer Registry, central Italy. Standardized (European population) incidence rates were computed for four periods: 1985-1989, 1990-1994, 1995-1999, 2000-2004, and for Breslow thickness classes (< or =1, 1.01-2.00, >2 mm). The annual percent change (APC) of the standardized rates was computed. Thickness was evaluated on the basis of sex, age, morphology type, site and period of time. Median thickness was evaluated by means of a nonparametric K-sample test. The incidence rate of melanoma rose significantly for both invasive (APC=+5.1%) and in-situ lesions (APC=+11.1). The sex distribution of patients with invasive melanoma did not change over time (mean male/female ratio 0.95). The mean age at diagnosis did not change (57.2 years; SD=17.2 years). From 1985-1989 to 2000-2004 the median value of thickness decreased from 1.68 to 0.8 mm (P<0.001). Within the Breslow categories the median value of thickness decreased significantly for thin melanomas (< or =1 mm) but not for intermediate (1.01-2.00) or for thick melanomas (>2 mm). Among the most common melanoma types, the median thickness decreased for superficial spreading melanomas but not for nodular melanomas. Over time, the incidence of melanoma has increased notably and the median thickness has decreased. However, median thickness has decreased only among thin melanomas, whereas it has not changed for thick melanomas, most of which are of the nodular type.

Incidenza e mortalità 1984-2008, Uomini e donne, Melanoma, Olanda



Zoom avanti (Ctrl+0)

original articles

Annals of Oncology

Annals of Oncology 23: 524–530, 2012
 doi:10.1093/annonc/mdr128
 Published online 4 May 2011

Trends of cutaneous melanoma in The Netherlands: increasing incidence rates among all Breslow thickness categories and rising mortality rates since 1989

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Departments of ¹Dermatology; ²Public Health, Erasmus Medical Center, Rotterdam; ³Netherlands Cancer Registry, The Netherlands

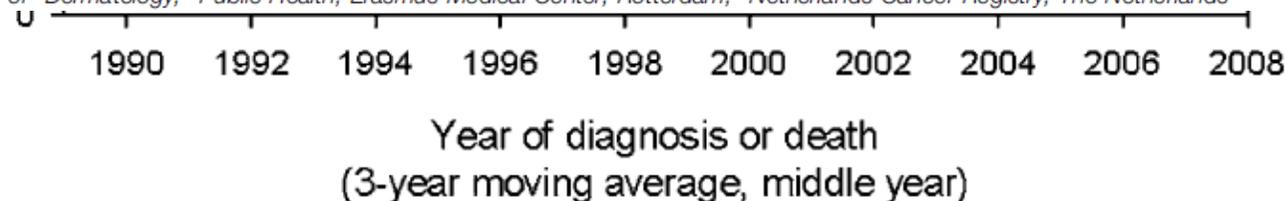
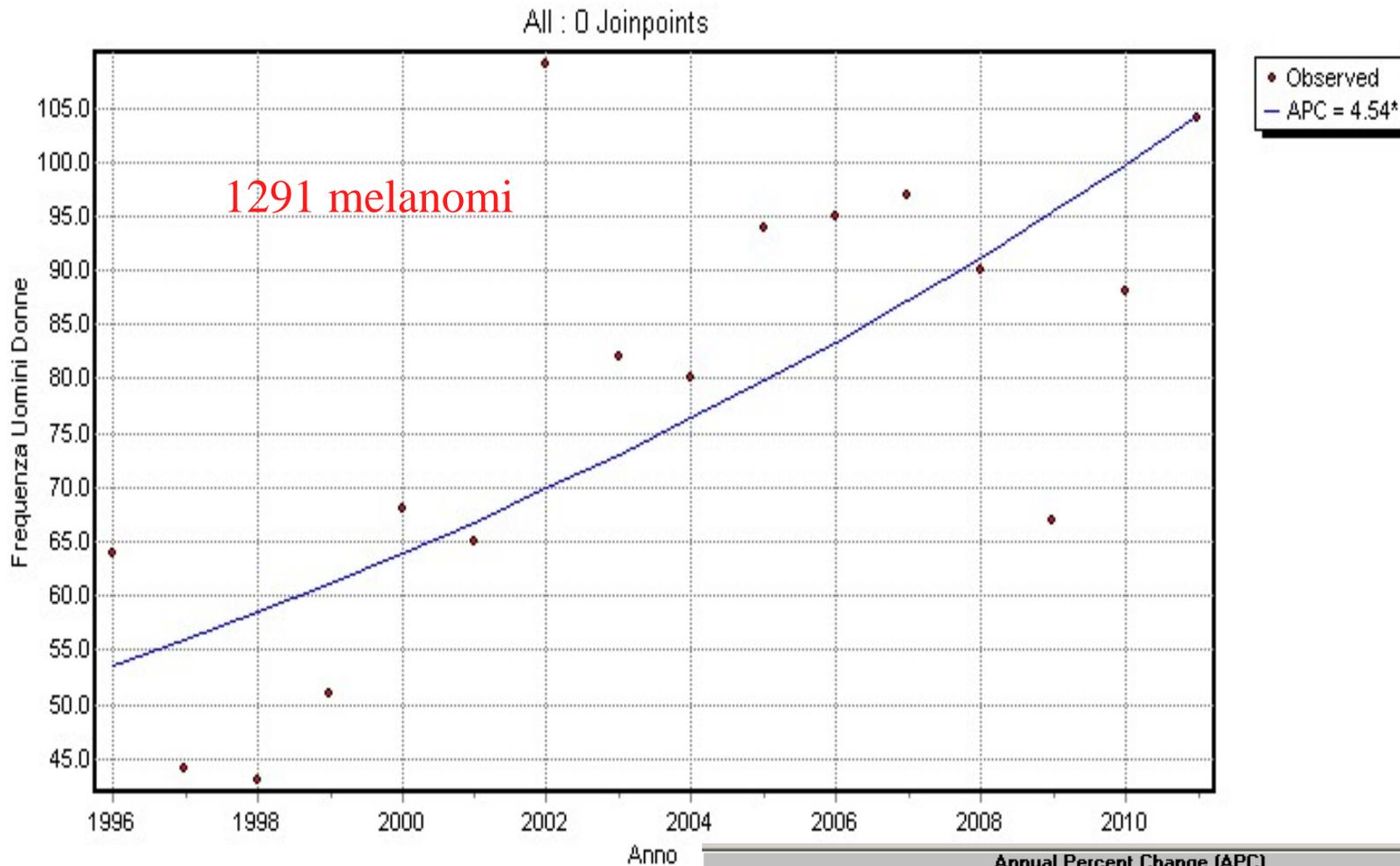


Figure 1. Three-year moving averages of age-standardized incidence rates and mortality rates (European Standardized Rates) of melanoma in The Netherlands, 1989–2008.

Frequenza assoluta

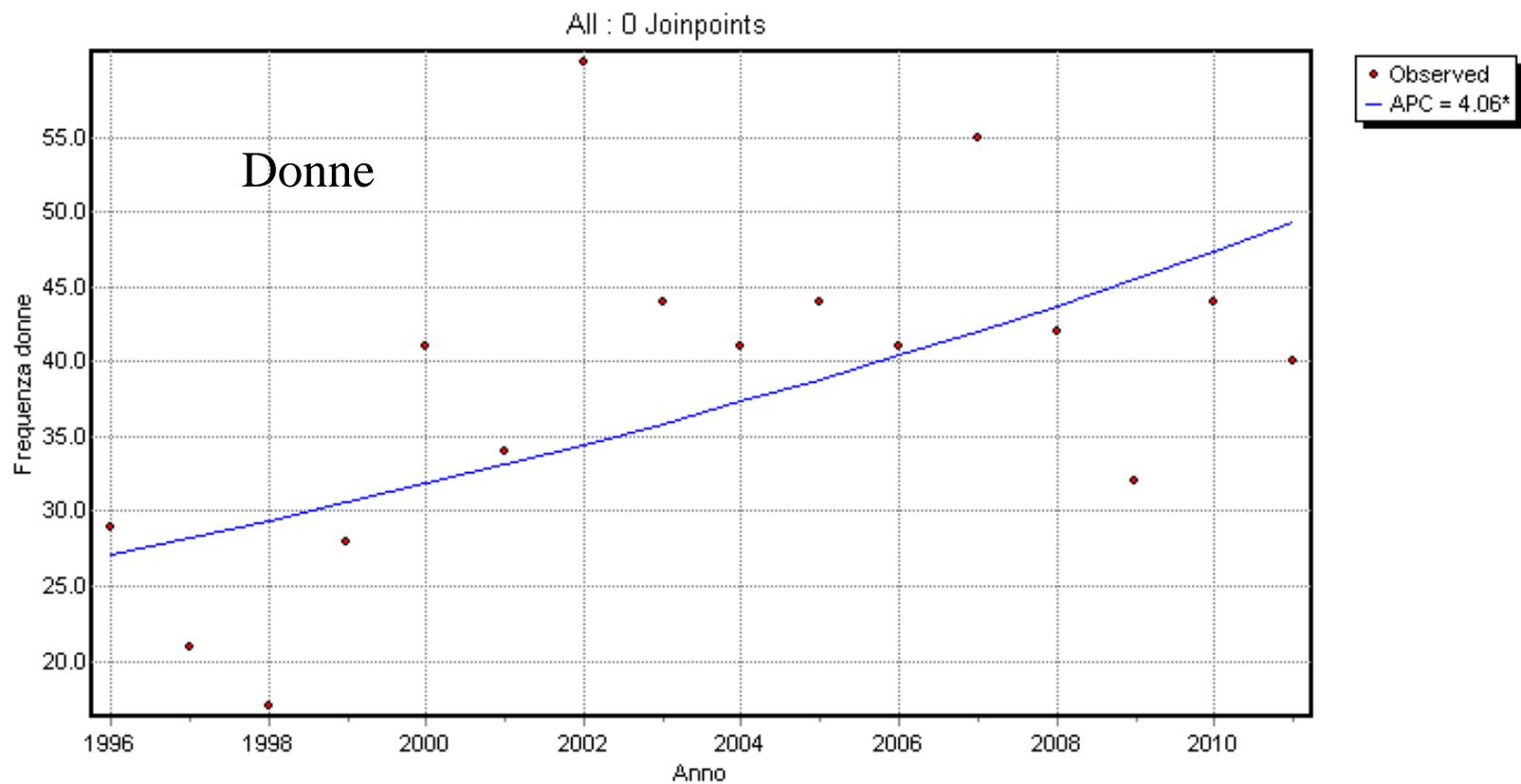
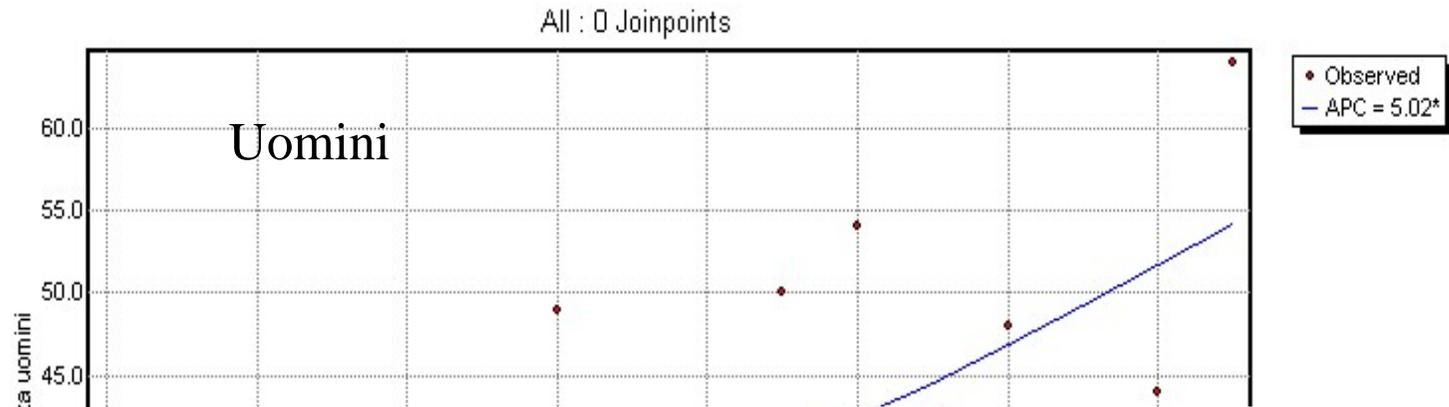
Uomini e donne, 1996-2011, Ticino, Melanomi



Annual Percent Change (APC)						
Cohort	Segment	Lower Endpoint	Upper Endpoint	APC	Lower CI	Upper CI
	1	1996	2011	4.5*	2.0	7.2
* The Annual Percent Change (APC) is significantly different from zero at alpha = 0.05						
Average Annual Percent Change (AAPC)						
Cohort	Range	Lower Endpoint	Upper Endpoint	AAPC	Lower CI	Upper CI
	Last 5 Obs.	2007	2011	4.5*	2.0	7.2
	Last 10 Obs.	2002	2011	4.5*	2.0	7.2
* The Average Annual Percent Change (AAPC) is significantly different from zero at alpha= 0.05						

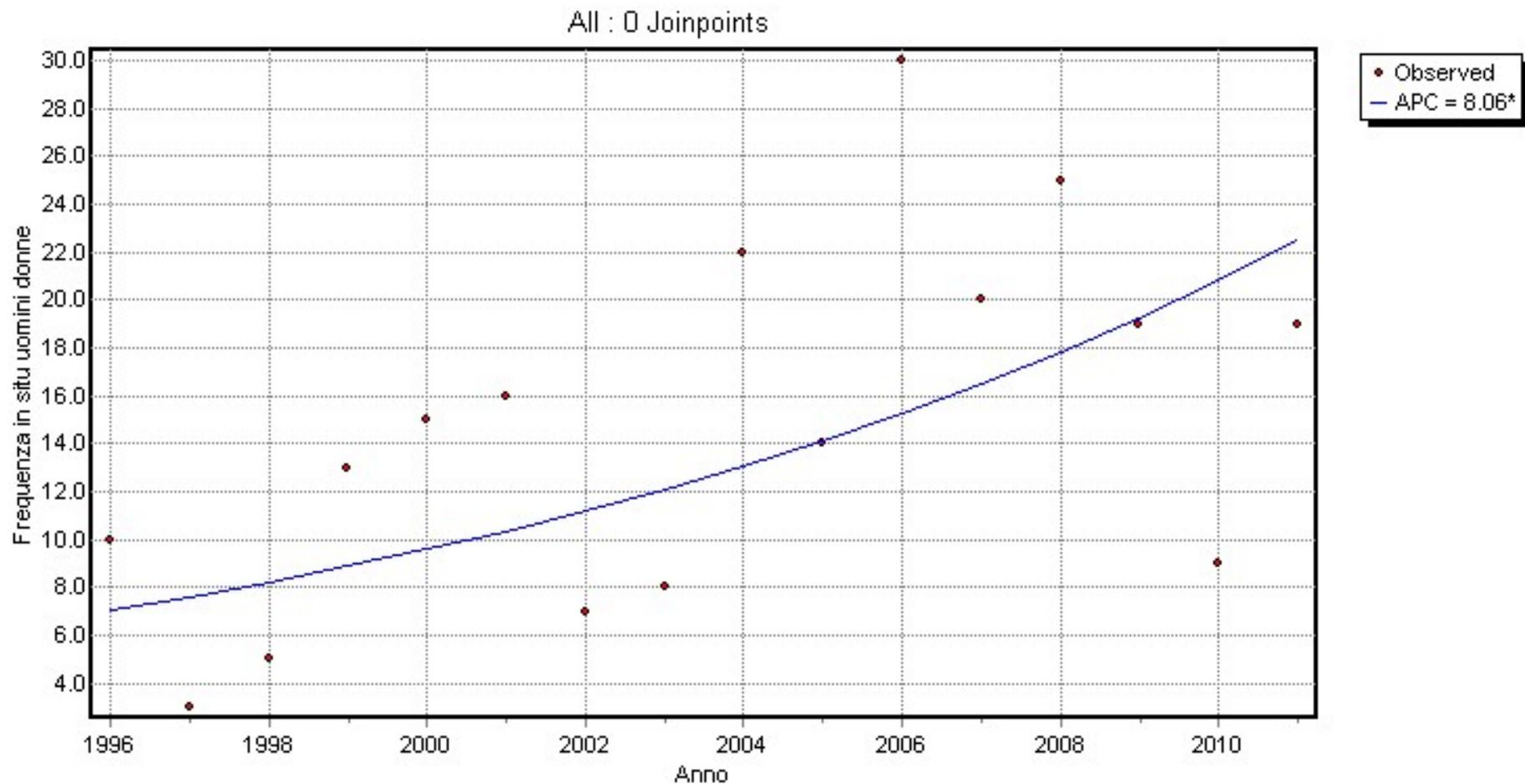
Frequenza assoluta

Uomini e donne, 1996-2011, Ticino, Melanomi



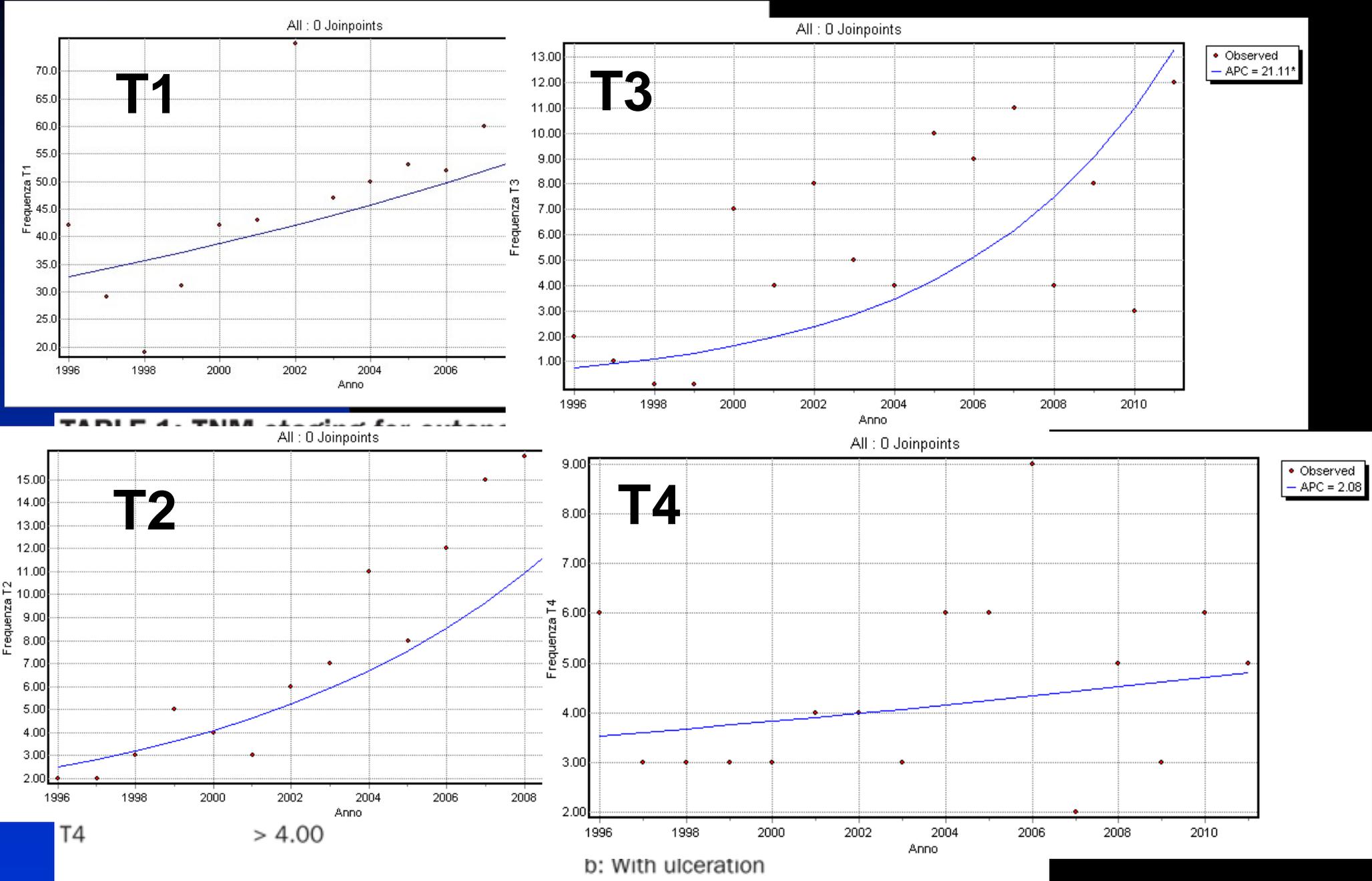
Frequenza assoluta

Uomini e donne, 1996-2011, Ticino, Melanomi insitu



Breslow alla diagnosi

Uomini e donne, Ticino, 1996-2011, melanoma

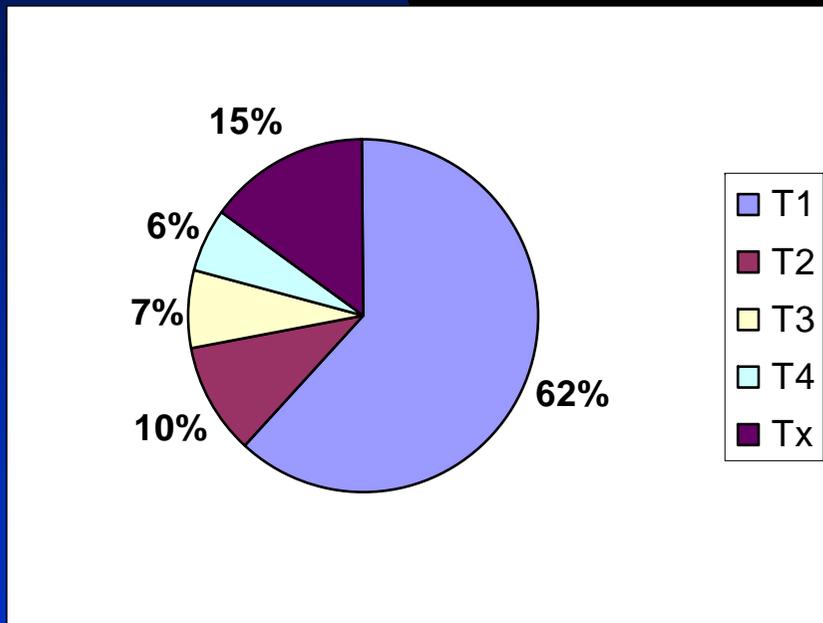


Distribuzione Stadio

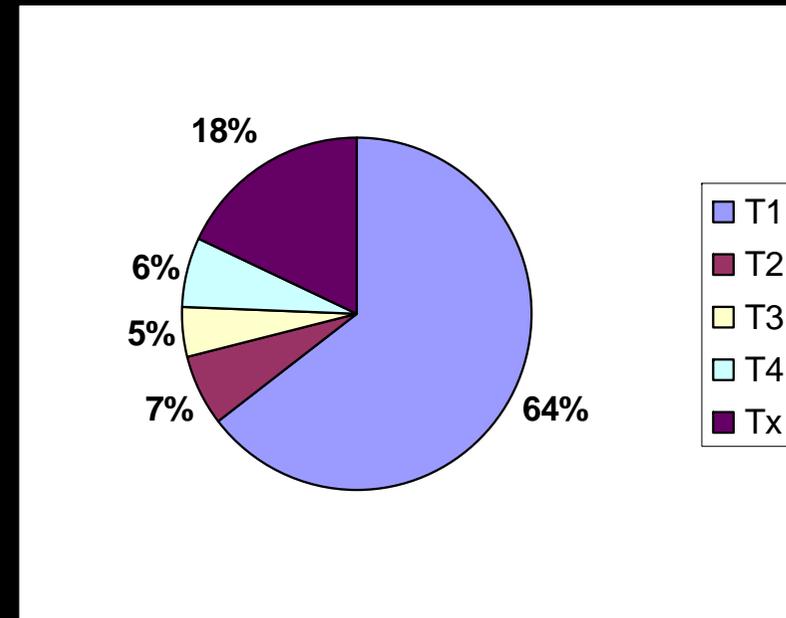
Uomini e donne, Ticino, 1996-2011, melanoma



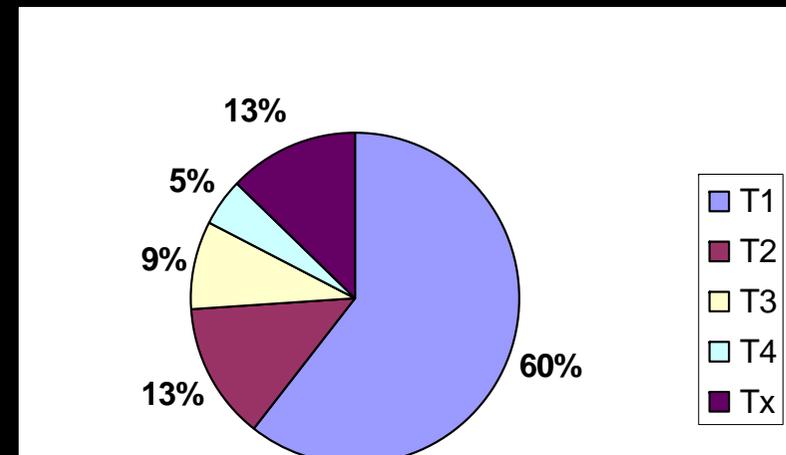
1996-2011



1997-2001



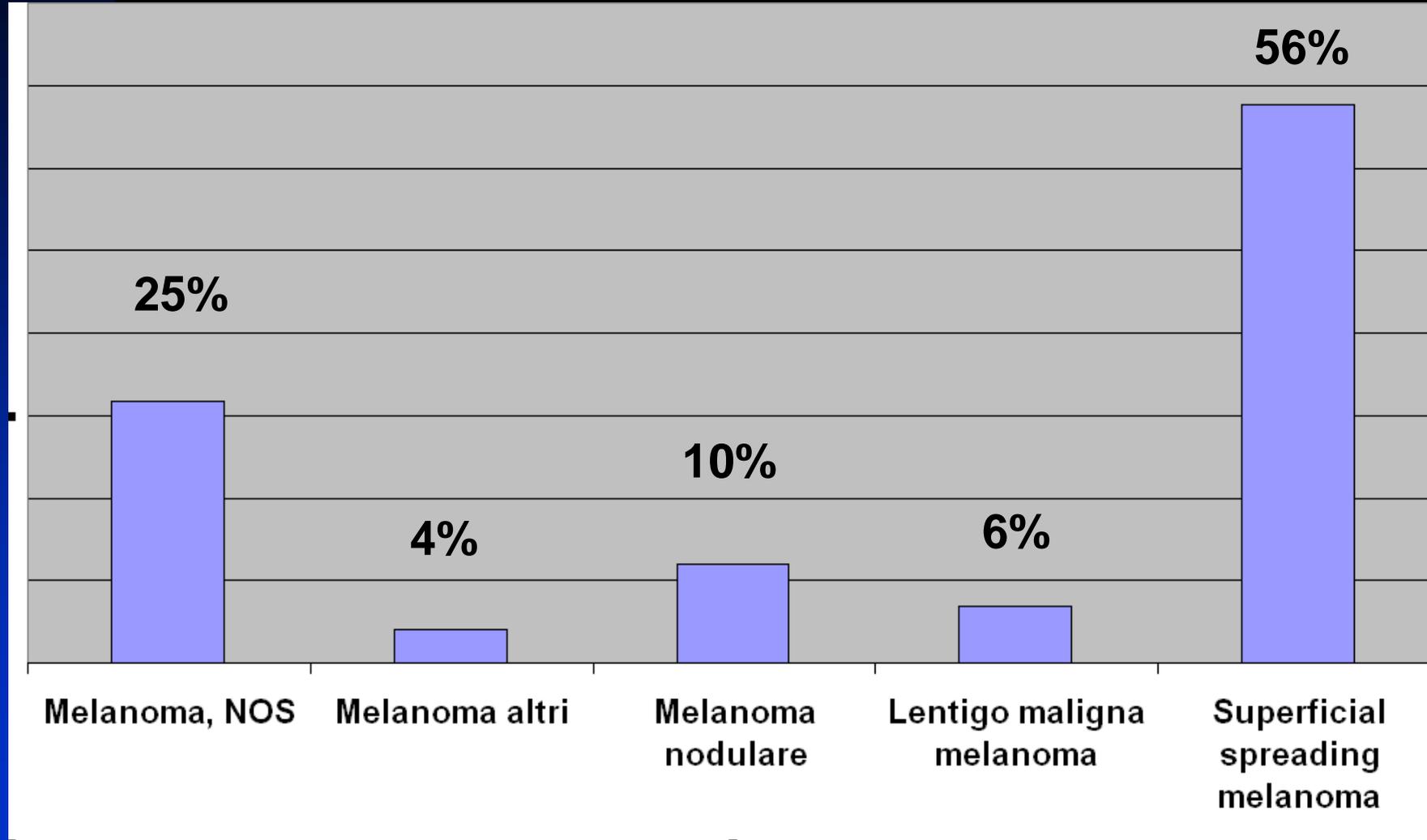
2007-2011



Aumento reale dell'incidenza?

Distribuzione per istotipo

Ticino, 1996-2011, Melanomi



Distribution of Ticino and



Table 2a Chamales

Registry	Histology				
	NM n (%)	SSM n (%)	LMM n (%)	Other n (%)	Nos n (%)

Table 2a Characteristics

Registry	Period
Canary Islands	1995-1997
Malta	2000-2002
Navarra	1997-1999
Rioja	1995-1997
Tuscany	1997-1999
Turin	1996-1998
Slovenia	1998-2000
Ticino	2000-2002
St Gall-Appenzell	1997-1999
Saarland	1998-2000
Cracow	1997-1999
Czech Republic	1998-2000
Flanders	1997-1999
East Anglia	1998-2000
Netherlands	1996-1998
Münster	1999-2001
Bremen	1999-2000
Northern Ireland	1999-2001
Latvia	2000-2002
Stockholm	2000-2002
Thames	1998-2000

Registry	NM n (%)	SSM n (%)	LMM n (%)	Other n (%)	Nos n (%)
Malta	9 (18)	26 (51)	2 (4)	3 (6)	11 (22)
Navarra	19 (25)	30 (39)	6 (8)	9 (12)	12 (16)
Tuscany	22 (9)	130 (56)	7 (3)	24 (10)	49 (21)
Turin	10 (5)	140 (77)	7 (4)	1 (1)	24 (13)
Ticino	12 (13)	48 (55)	2 (2)	6 (7)	20 (23)
St Gall-Appenzell	25 (16)	90 (56)	14 (9)	5 (3)	26 (16)
Netherlands	484 (17)	1305 (46)	199 (7)	132 (5)	695 (25)
Bremen	22 (31)	24 (34)	4 (6)	6 (9)	14 (20)
Stockholm	32 (10)	213 (66)	23 (7)	8 (2)	46 (14)

Histology		
IM n (%)	Other n (%)	Nos n (%)
(3)	10 (11)	40 (46)
(4)	3 (6)	11 (22)
(8)	9 (12)	12 (16)
(7)	1 (3)	22 (76)
(3)	24 (10)	49 (21)
(4)	1 (1)	24 (13)
(4)	26 (8)	180 (54)
(2)	6 (7)	20 (23)
(9)	5 (3)	26 (16)
(3)	11 (6)	66 (37)
(2)		58 (97)
	849 (44) ^d	42 (2)
(3)	18 (4)	297 (58)
		406 (100)
(7)	132 (5)	695 (25)
(11)	10 (3)	139 (35)
(6)	6 (9)	14 (20)
(12)	9 (4)	62 (28)
		127 (100)
(7)	8 (2)	46 (14)
(3)	49 (3)	1127 (68)

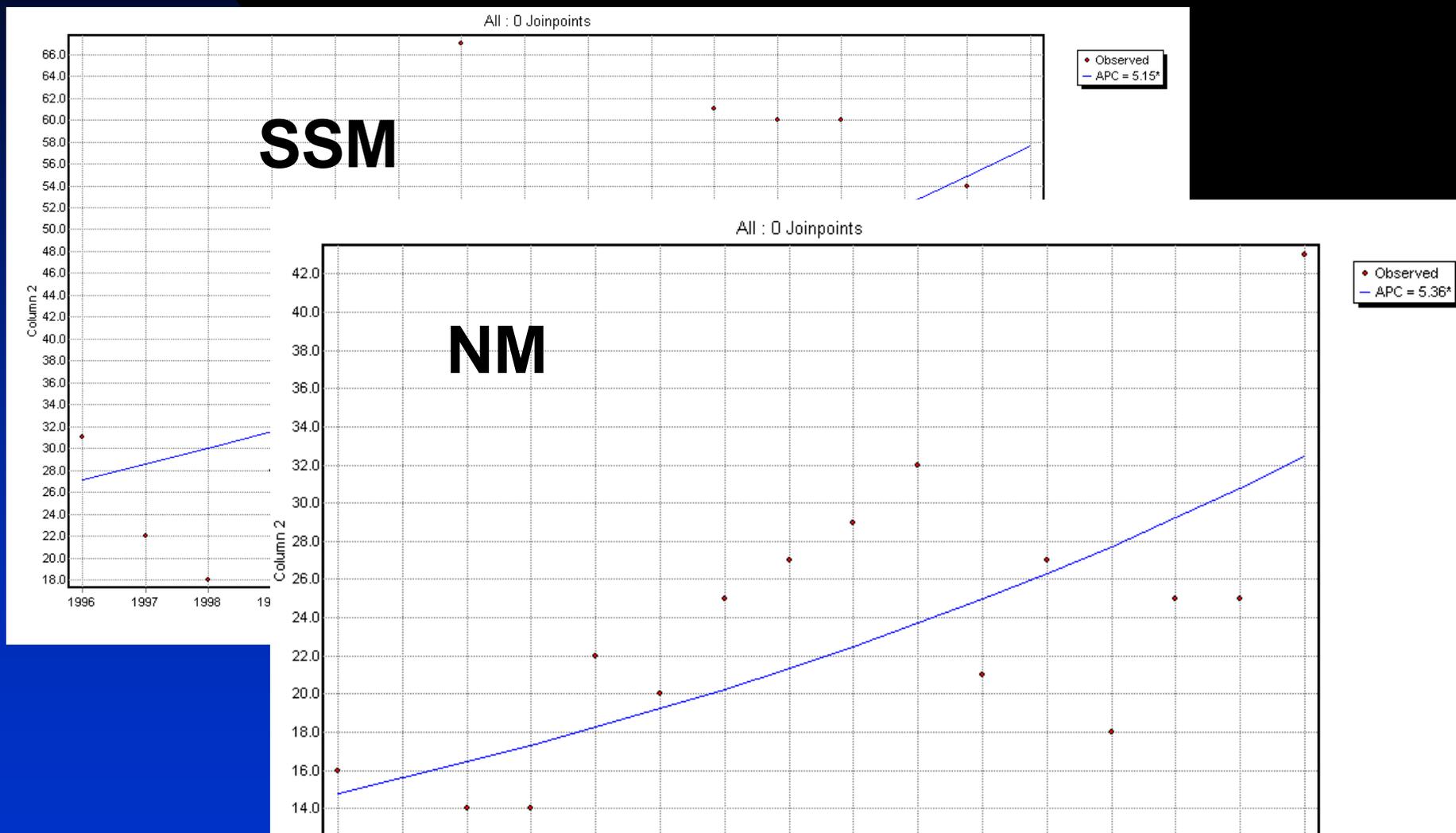
^aExcept Bremen: only 2 years
^bRange = interquartile range
^cRelative survival: national
^dIncluding LMM, not separate
^eHead and neck.

^aExcept Bremen
^bRange = interquartile range
^cRelative survival given (Berrino *et al.*, 2003), except for Northern Ireland
^dIncluding LMM, H&N, head and neck.
^eHead and neck

(3), except for Northern Ireland

Trend

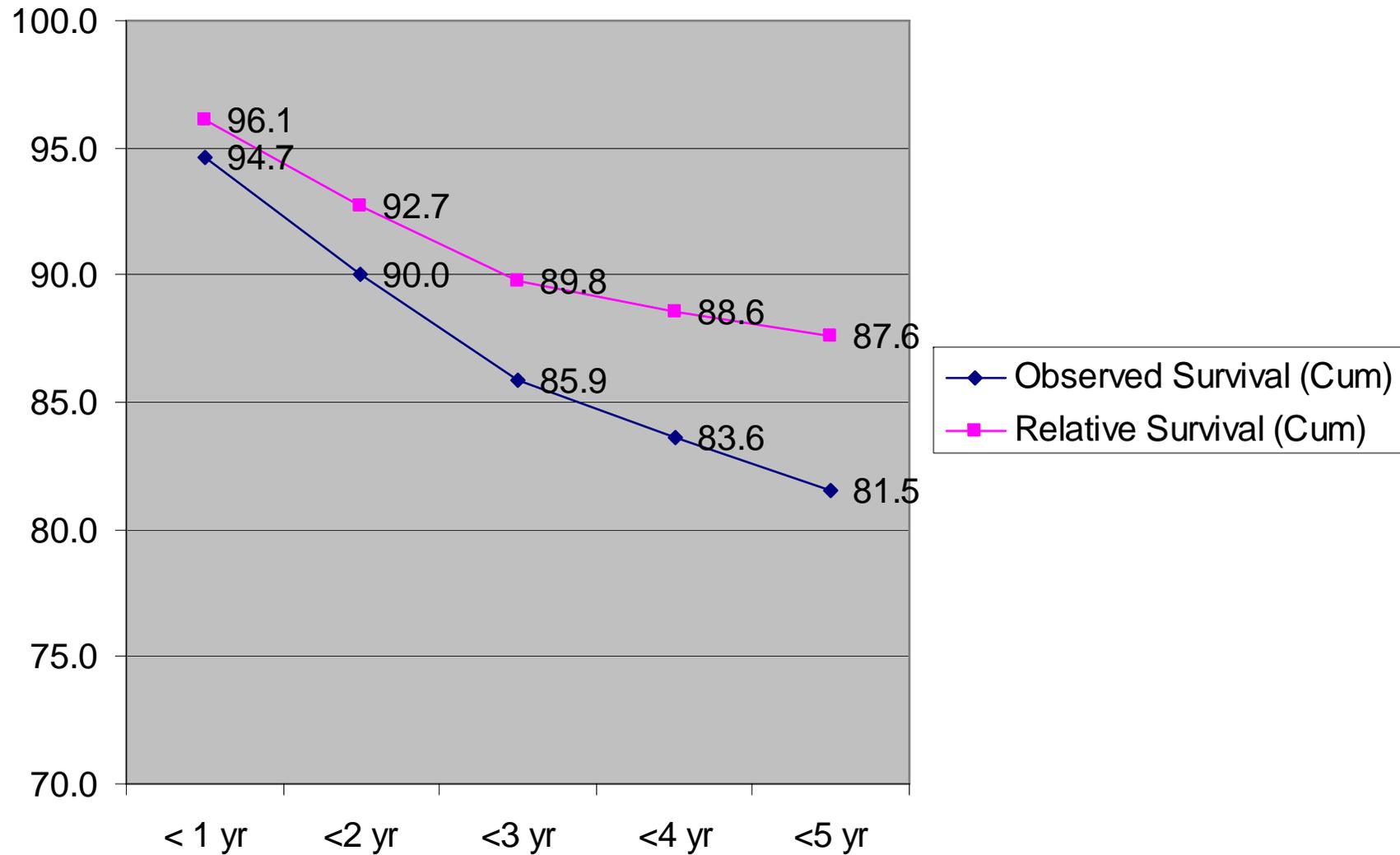
Melanomi ad estensione superficiale e nodulari Ticino, 1996-2011, Melanomi



Aumento reale dell'incidenza?

Survival Ticino Eurocare 5

2000-2007, Follow up 2008, Uomini e donne, Melanoma, Ticino



Survival

Ticino a confronto, 1996-2002, Melanomi, uomini



Table 2a Characteristics by registry in the last 3 years of the respective registration

Registry	Period	EASR ^a	n	Median age + range ^b	5-year relative survival ^c	Stage				
						T0 n (%)	T1 n (%)	T2 n (%)	T3 n (%)	T4 n (%)
Canary Islands	1995-1997	5.1	87	62 47;72		0	6 (7)	16 (18)	25 (29)	15 (17)
Malta	2000-2002	8.8	51	60 50;71		0	11 (22)	7 (13)	10 (20)	2 (4)
Navarra	1997-1999	8.5	76	60 47.5;73	73.4	0	9 (12)	20 (26)	24 (32)	6 (8)
Rioja	1995-1997	4.8	29	62.5 36;74	73.4	0	7 (24)	8 (28)	11 (38)	2 (7)
Tuscany	1997-1999	11.1	232	56 42;71	71.7	0	78 (34)	26 (11)	49 (21)	16 (7)
Turin	1996-1998	11.1	182	59 48;70	71.7	0	45 (25)	79 (43)	20 (11)	6 (3)
Slovenia	1998-2000	11.1	336	59 45;71	60.6	0	62 (18)	119 (35)	90 (27)	32 (9)
Ticino	2000-2002	21.8	88	63 52.5;74.5	83.0	0	18 (21)	27 (31)	27 (31)	8 (9)
St Gall-Appenzell	1997-1999	20.9	160	60 50;70	83.0	0	25 (16)	48 (30)	41 (26)	17 (11)
Saarland	1998-2000	9.8	177	60 46;69	77.4	0	57 (32)	28 (16)	27 (15)	15 (8)
Cracow	1997-1999	5.8	62	65 54;69	55.8	0	12 (19)	16 (26)	15 (24)	16 (26)
Czech Republic	1998-2000	13.0	1937	62 50;71	60.3	7 (0.4)	726 (37)	380 (20)	410 (21)	237 (12)
Flanders	1997-1999	5.3	508	59 46;70		0	69 (14)	79 (16)	103 (20)	50 (10)
East Anglia	1998-2000	9.1	406	60 50;70	74.0	0	210 (52)	109 (27)	63 (16)	12 (3)
Netherlands	1996-1998	12.0	2815	54 42;67	79.2	0	450 (16)	424 (15)	595 (21)	321 (11)
Münster	1999-2001	9.5	398	61 45;70	77.4	0	87 (22)	109 (27)	106 (27)	25 (6)
Bremen	1999-2000	8.8	70	63 55;74	77.4	0	22 (31)	6 (9)	12 (17)	6 (8)
Northern Ireland	1999-2001	9.4	221	60 44;72	53.5	0	36 (16)	45 (20)	83 (38)	15 (7)
Latvia	2000-2002	3.9	127	62 48;72		0	41 (32)	53 (42)	19 (15)	7 (5)
Stockholm	2000-2002	10.8	322	57 44;73	84.6	0	137 (43)	104 (32)	61 (19)	20 (6)
Thames	1998-2000	7.9	1651	62 48;74	74.0	0	250 (15)	312 (19)	389 (24)	265 (16)

^aExcept Bremen: only 2 years of observation.

^bRange = interquartile range.

^cRelative survival: national (not regional) data based on Eurocare III (cases diagnosed between 1990-2000).

^dIncluding LMM, not separately registered. EASR: European Age Standardised Rates per 100 000 per year.

^eHead and neck.

Table 2a Chast 3 y

Registry	5-year relative survival ^c	Other n (%)	Nos n (%)
Canary Islands			
Malta			
Navarra	73.4		
Rioja	73.4		
Tuscany	71.7		
Turin	71.7	10 (11)	40 (46)
Slovenia	60.6	3 (6)	11 (22)
Ticino	83.0	9 (12)	12 (16)
St Gall-Appenzell	83.0	1 (3)	22 (76)
Saarland	77.4	24 (10)	49 (21)
Cracow	55.8	1 (1)	24 (13)
Czech Republic	60.3	26 (8)	180 (54)
Flanders		6 (7)	20 (23)
East Anglia	74.0	5 (3)	26 (16)
Netherlands	79.2	11 (6)	66 (37)
Münster	77.4		58 (97)
Bremen	77.4	19 (44) ^d	42 (2)
Northern Ireland	53.5	18 (4)	297 (58)
Latvia			406 (100)
Stockholm	84.6	32 (5)	695 (25)
Thames	74.0	10 (3)	139 (35)

^aExcept Bremen

^bRange = interqu

^cRelative survival on Euroc

^dIncluding LMMiuropean

^eHead and neck

Survival Ticino Eurocare 4 e 5

1996-2007, Follow up 2008, Uomini e donne, Melanoma, Ticino

	1996-2002	2000-2007
Relative survival at 5 years	83%	87.6%

Conclusione

- In Ticino ogni anno 100 melanomi, incidenza elevata, uguale alla media svizzera
- Trend al rialzo della frequenza in termini assoluti e relativi alla popolazione
- Aumento significativo dei T1, T2 e T3, proporzionalmente costanti nel tempo (segno di aumento reale incidenza? Necessità di nuovi impulsi di prevenzione secondaria?)
- Alta % di SSM, indicatore di diagnosi precoce
- Trend all'aumento di tutti gli istotipi, sia SSM che NM
- Survival a 5 anni pari al 87%, tra le piu' alte in europa, indicatore di buona qualità delle cure
- Mortalità stabile, 8-10 decessi anno (effetto competitivo tra miglioramento delle cure e aumento dell'incidenza di casi a prognosi meno favorevole?)

BUONA CONTINUAZIONE DI SERATA E GRAZIE ALLE COLLABORATRICI

- ALESSANDRA SPITALE
- PAOLA MAZZOLA
- SIMONA PEVERELLI

Letteratura

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