La ricerca su base di popolazione in Ticino

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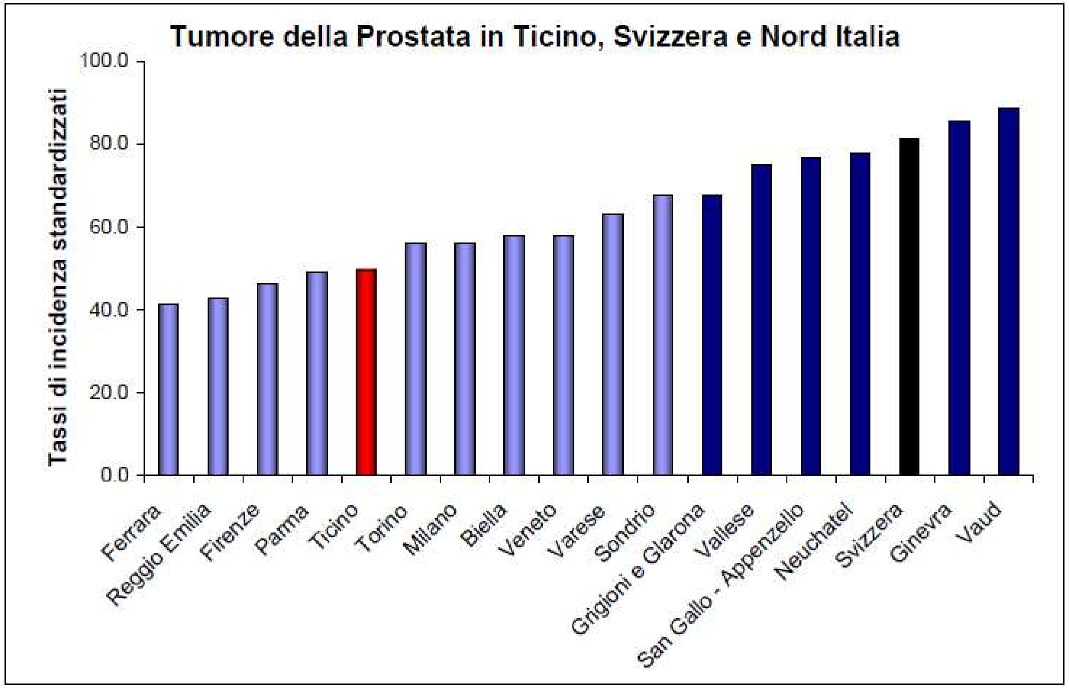
Istituto Cantonale di Patologia, Locarno

Fondazione ticinese ricerca cancro
IOSI, Bellinzona
21.03.2012

Incidenza in Ticino e zone limitrofe

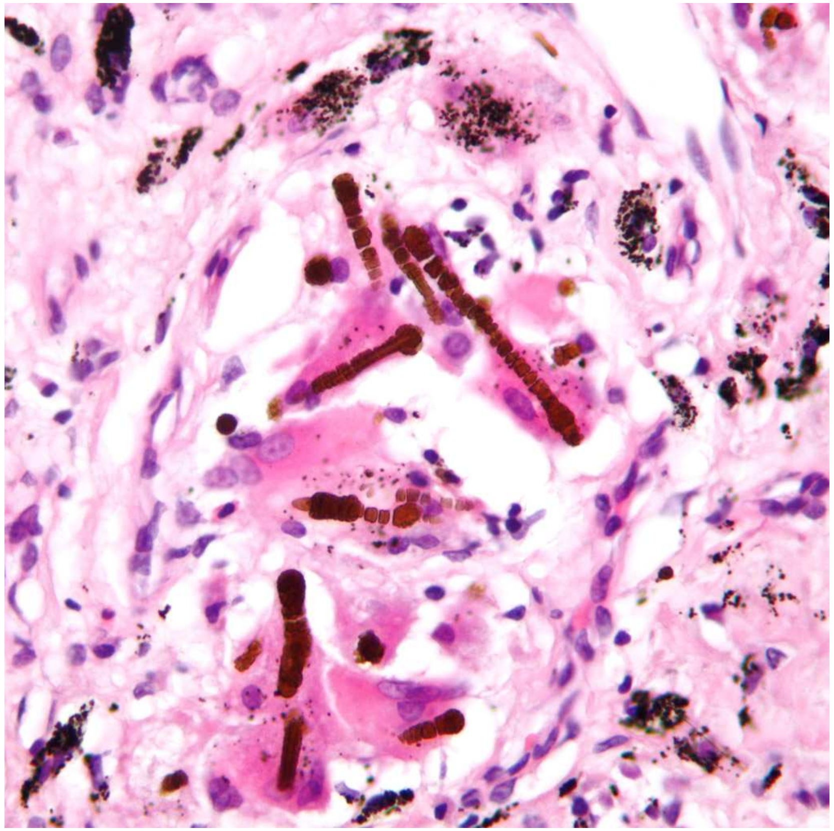
Confronti di incidenza dei tumori della prostata. Tassi standardizzati sulla popolazione Mondiale (per 100.000 abitanti)
Fonte: Cancer incidence in Five Continents, volume IX (1998-2002)

Regione	Tasso
Ferrara	41.5
Reggio Emilia	42.7
Firenze	46.1
Parma	49.1
Ticino	49.6
Torino	56.1
Milano	56.2
Biella	57.7
Veneto	57.9
Varese	63.0
Sondrio	67.6
Grigioni e Glarona	67.6
Vallese	75.1
San Gallo - Appenzello	76.9
Neuchatel	77.7
Svizzera	81.2
Ginevra	85.4
Vaud	88.7



I dati presentati indicano che l'incidenza nel nostro Cantone è relativamente bassa rispetto a quanto osservato nel resto della Svizzera e tende ad assomiglia ai dati osservati nel nord Italia

Asbesto e Mesotelioma



- •Difficile da curare
- •Diagnosi precoce ha poco senso
- •Malattia debellabile mediante la prevenzione primaria, unica misura sicura

Mesotelioma

Incidenza in Ticino

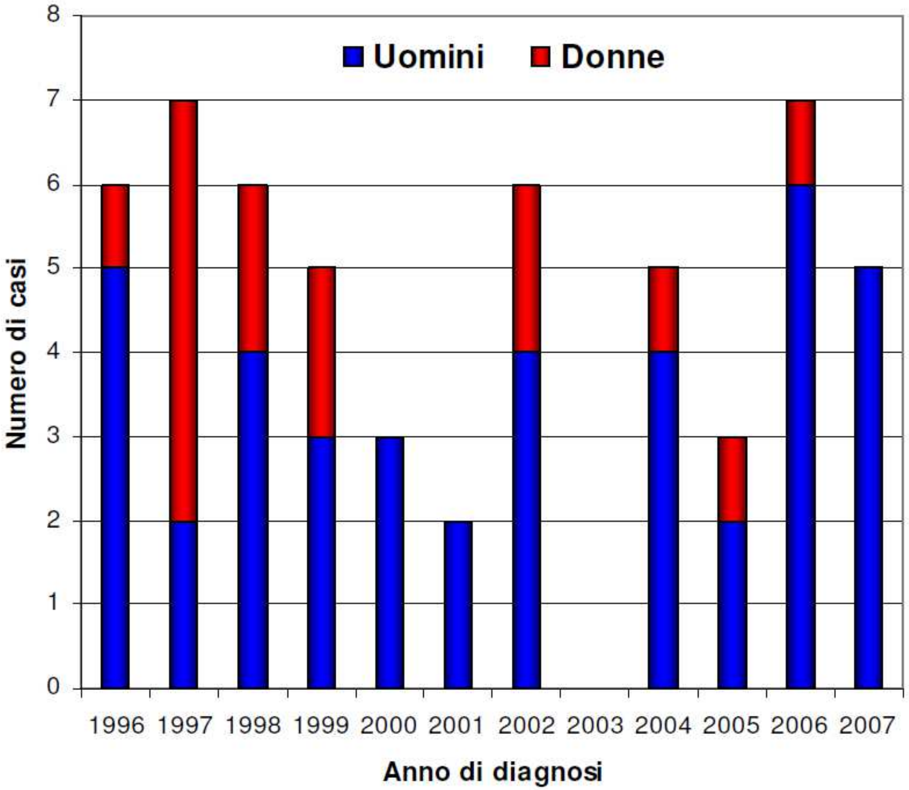


Figura 1. Distribuzione delle diagnosi di mesotelioma secondo l'anno di incidenza e il sesso. Ticino, 1996-2007.

Mesotelioma

Incidenza Ticino a confronto

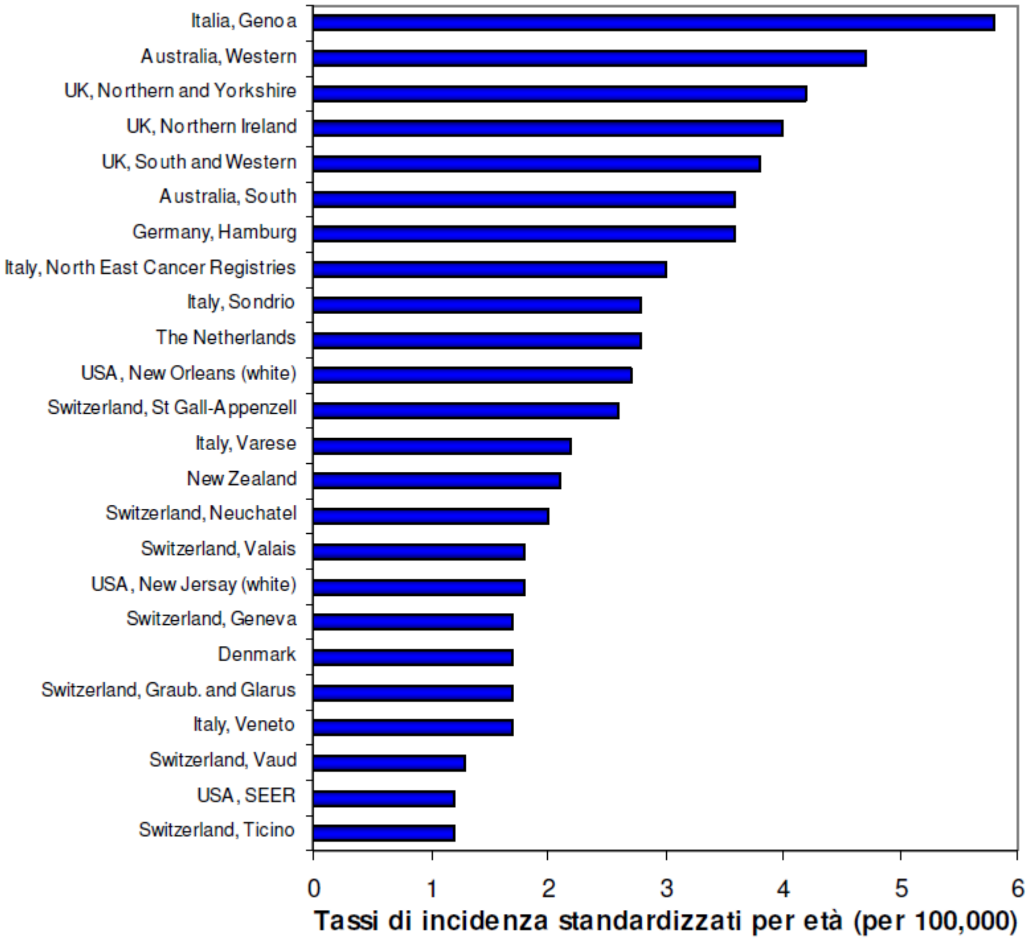
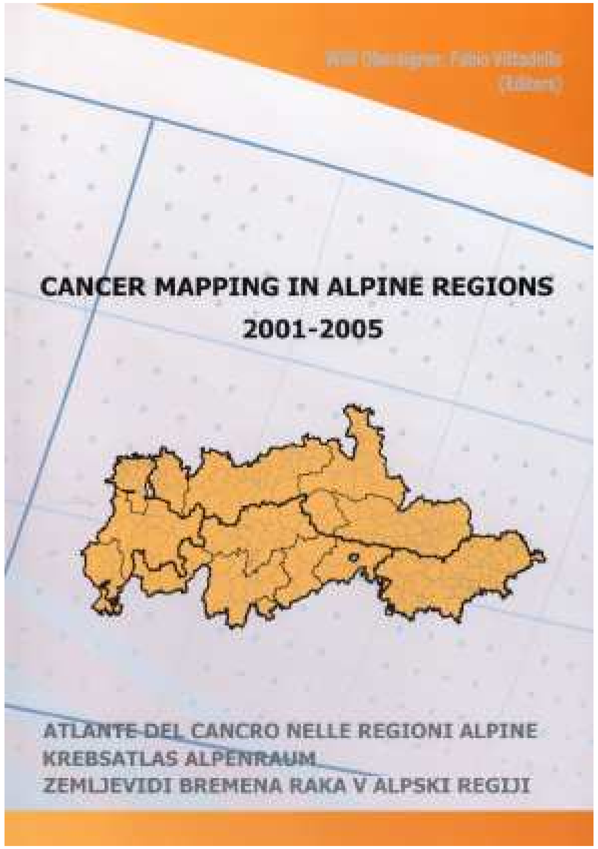


Figura 2. Confronti internazionali dei tassi di incidenza standardizzati per età sulla popolazione mondiale (per 100,000), uomini. Fonte: Cancer Incidence in Five Continents, vol IX.

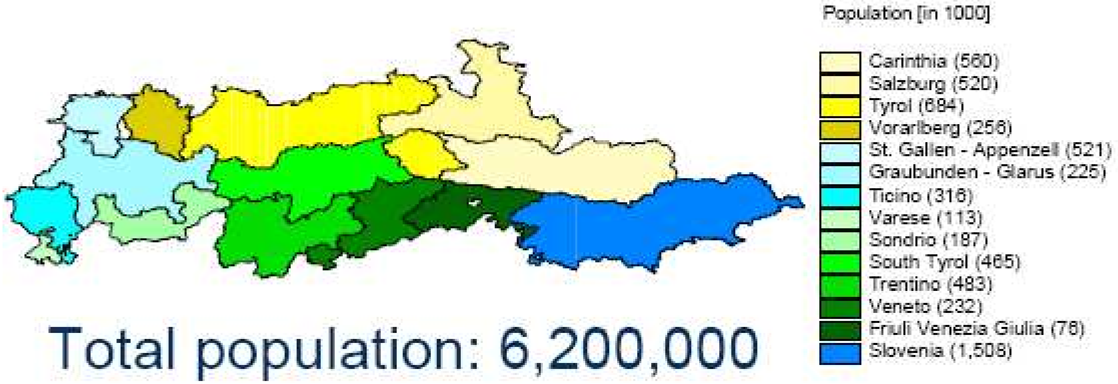
Incidenza in Ticino e zone limitrofe



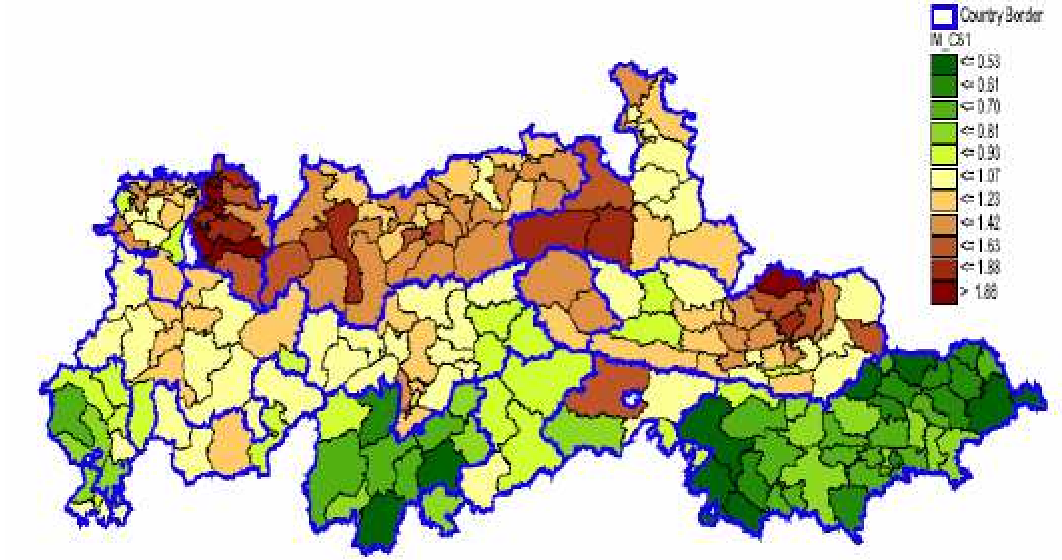
Willi Oberaigner, Fabio Vittadello
(Editors)

CANCER MAPPING IN ALPINE REGIONS
2001-2005

ATLANTE DEL CANCRO NELLE REGIONI ALPINE
KREBSATLAS ALPENRAUM
ZEMLJEVIDI BREMENA RAKA V ALPSKI REGIJI

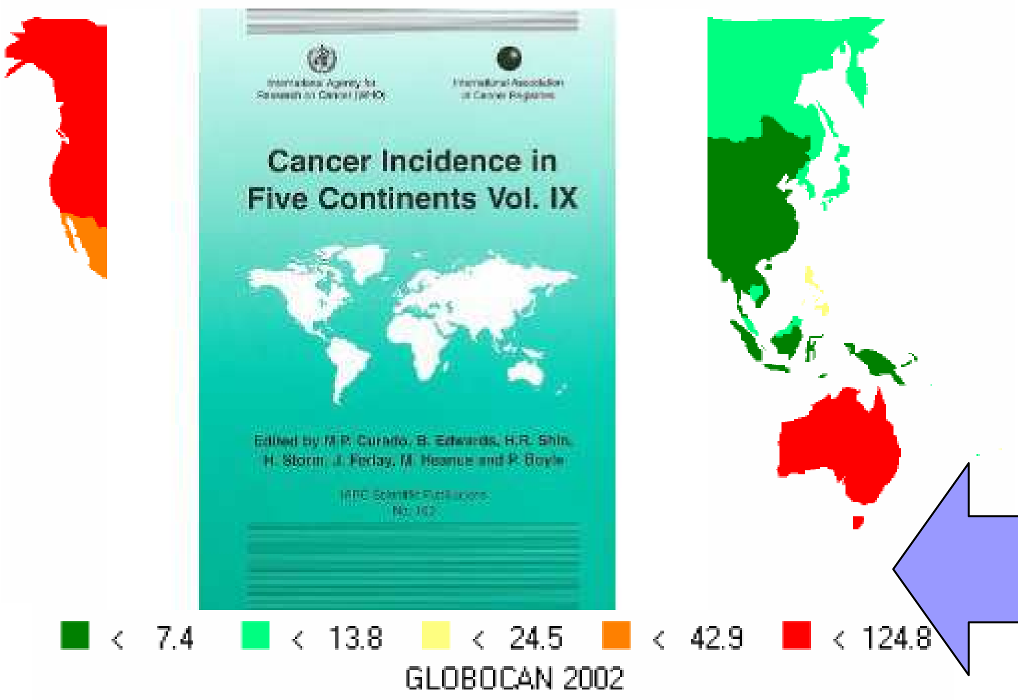

Population [in 1000]
Carinthia (560)
Salzburg (520)
Tyrol (684)
Vorarlberg (256)
St. Gallen - Appenzell (521)
Graubunden - Glarus (225)
Ticino (316)
Varese (113)
Sondrio (187)
South Tyrol (465)
Trentino (483)
Veneto (232)
Friuli Venezia Giulia (76)
Slovenia (1,508)

Total population: 6,200,000


Country Border
M_C61
<= 0.53
<= 0.61
<= 0.70
<= 0.81
<= 0.90
<= 1.07
<= 1.23
<= 1.42
<= 1.63
<= 1.88
> 1.88

Incidenza nel mondo L'Agenzia Internazionale di Ricerca sul Cancro (IARC) di Lione (WHO),

Tassi di incidenza standardizzati sulla popolazione mondiale (per 100.000)
TUMORI DELLA PROSTATA - Uomini



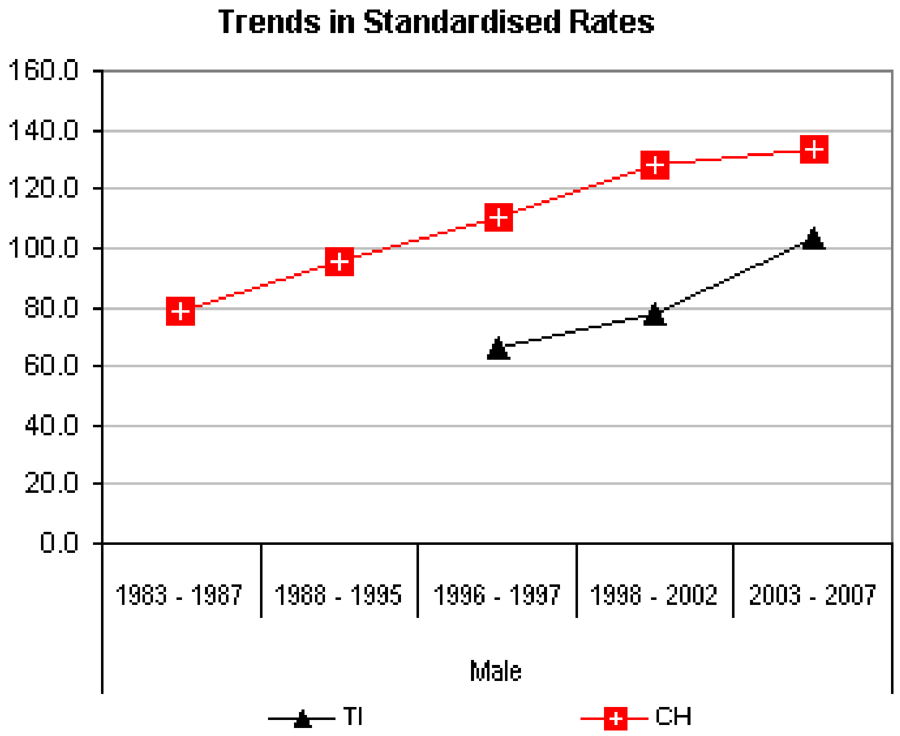
International Agency for Research on Cancer (WHO)
International Association of Cancer Registries

Cancer Incidence in
Five Continents Vol. IX

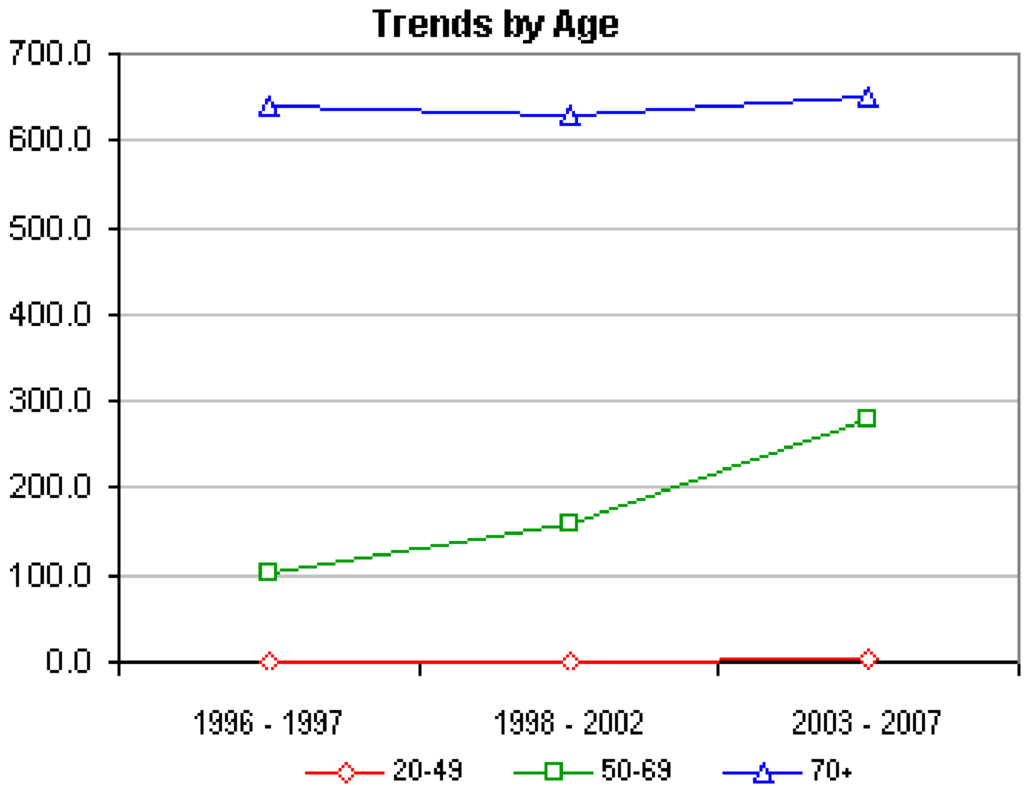
Edited by M.P. Curado, B. Edwards, H.R. Shin,
H. Storm, J. Ferlay, M. Heanue and P. Boyle

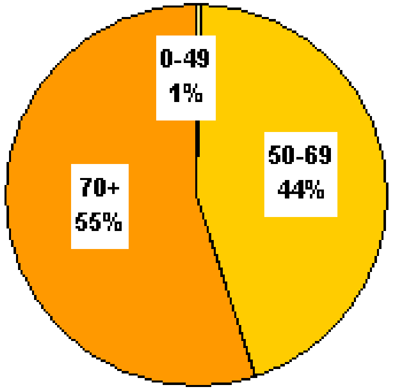
IARC Scientific Publications
No. 160

Trend di incidenza in Ticino e Svizzera, Prostata

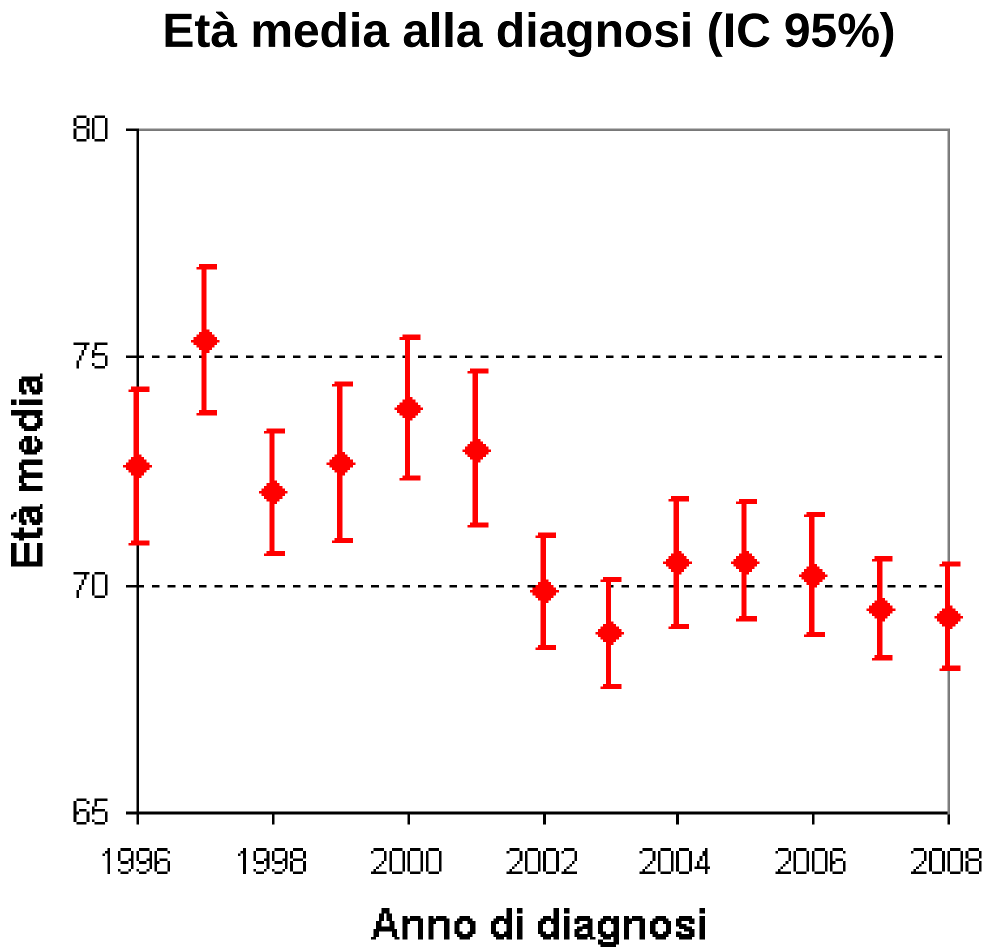


Trend di incidenza per classi di età
Ticino, 1996-2007, Prostata

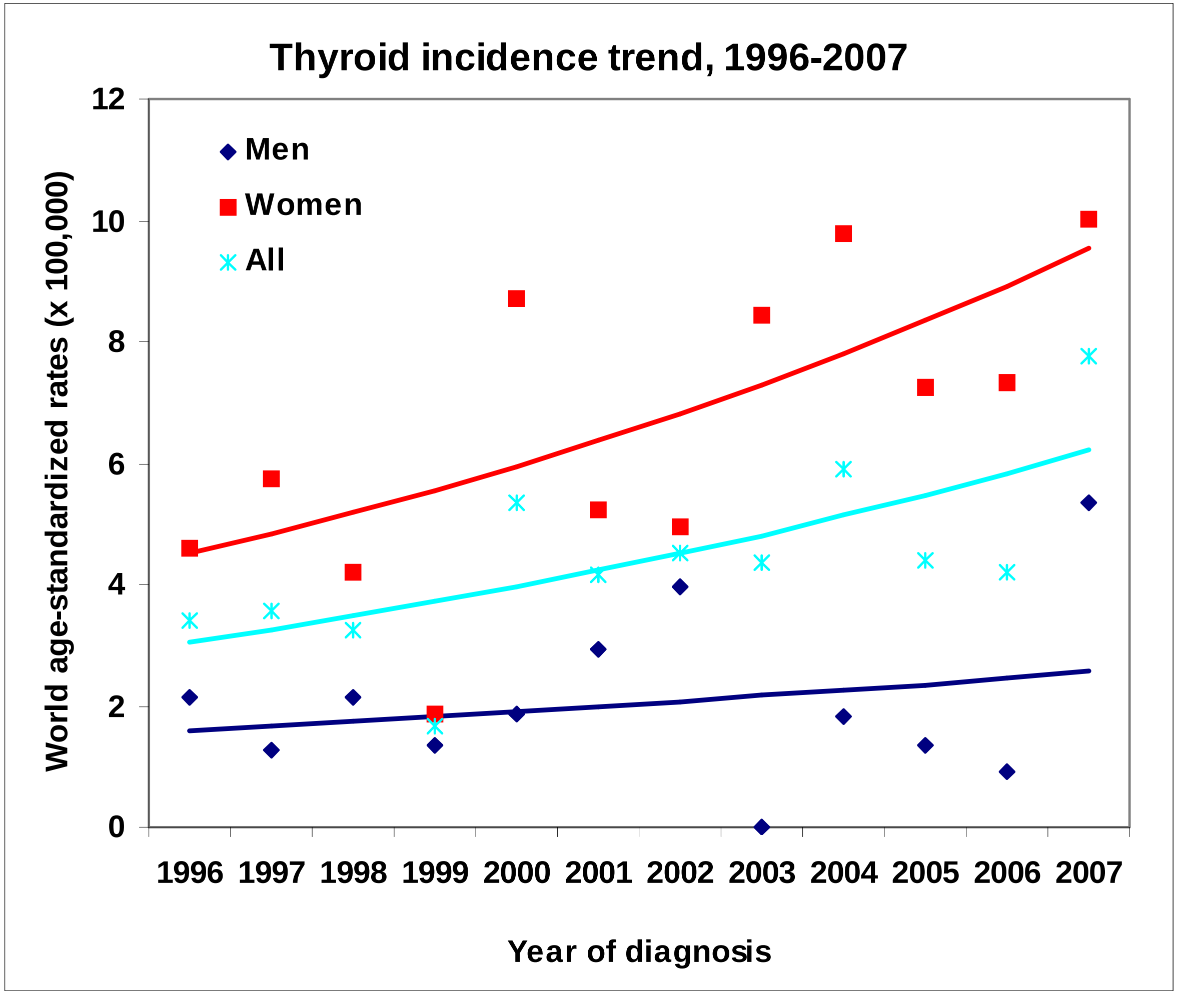




Numero di pazienti e età media Ticino, 1996-2008, Prostata

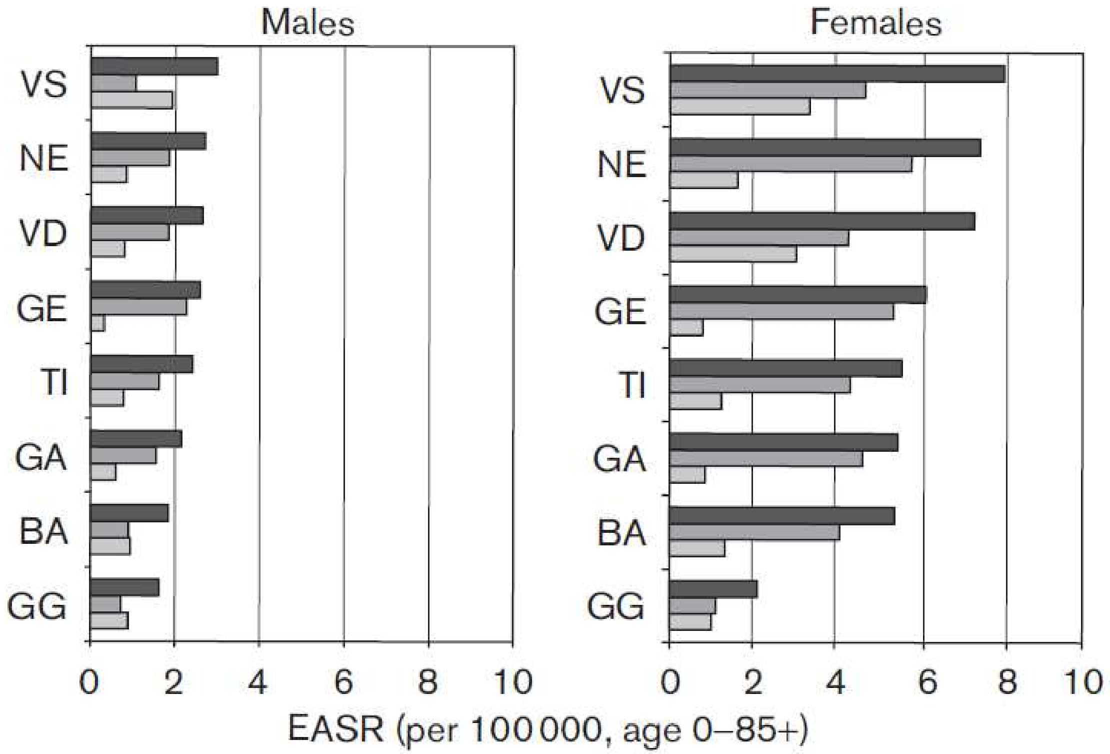


Chernobyl



Thyroid incidence trend, 1996-2007
World age-standardized rates (x 100,000)
12
10
8
6
4
2
0
◆ Men
■ Women
✳ All
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
Year of diagnosis

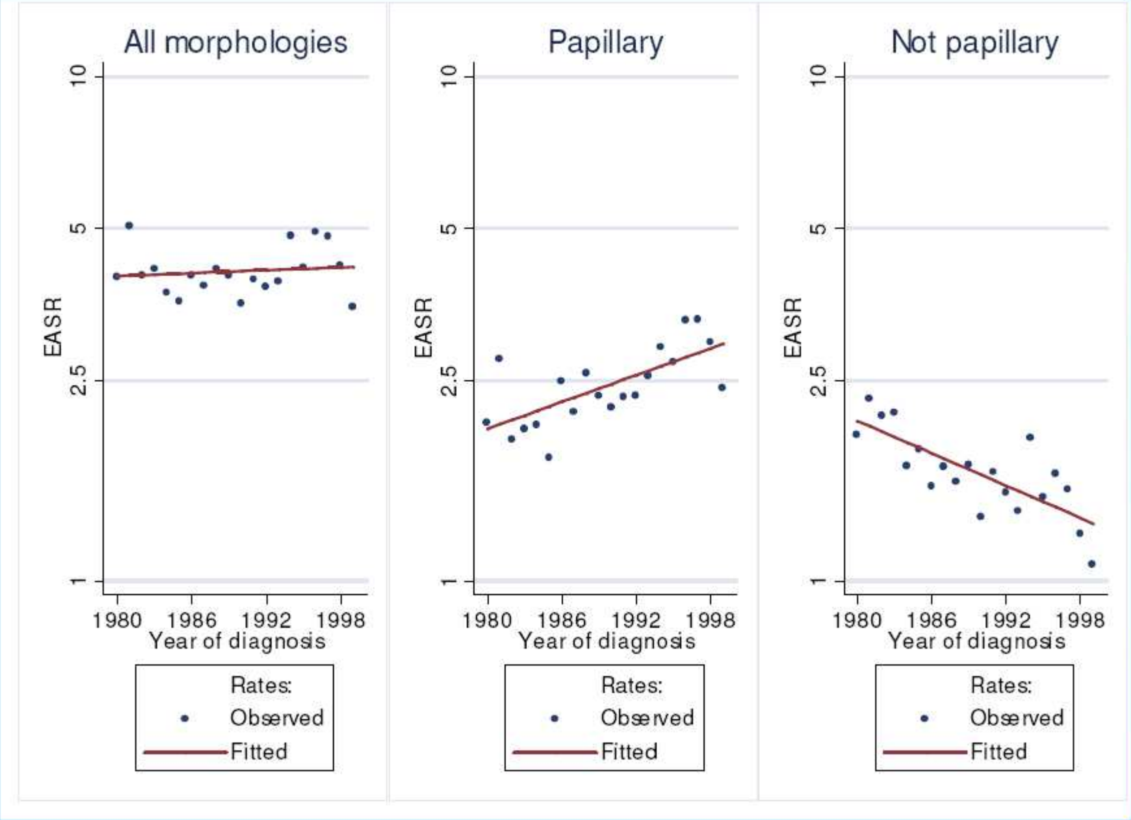
Chernobyl



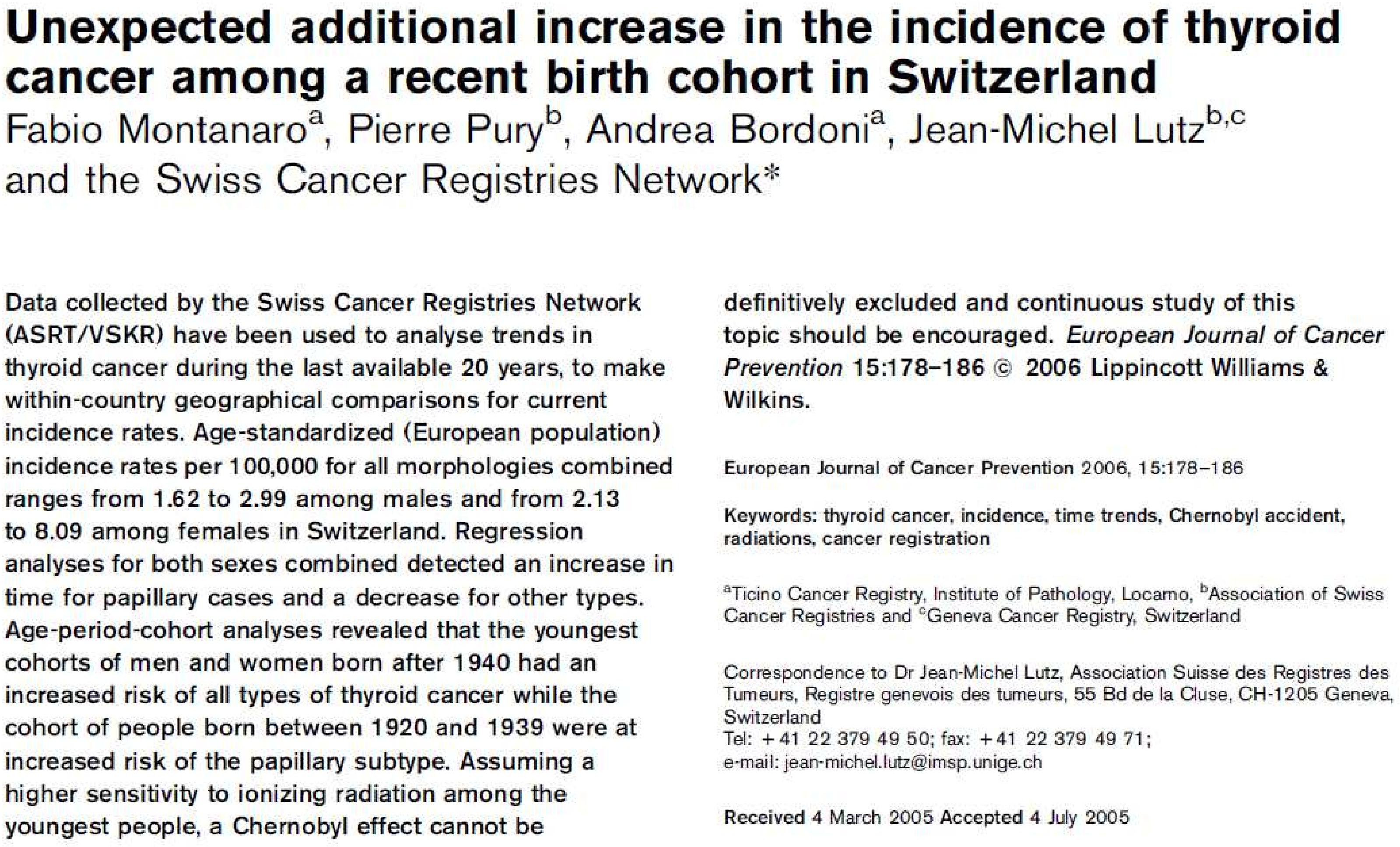
European age-standardized incidence rates (EASR) for thyroid cancer observed by Swiss cancer registries during the period 1996–1998. GE, Geneva; NE, Neuohatel; VD, Vaud; GA, St. Gall-Appenzell; BA, Basel; GG, Graubünden-Glarus; VS, Valais; TI, Ticino. Incidence of Total/papillary/other thyroid cancer by region.

Chernobyl

Observed and fitted European age-standardized incidence rates (EASR, per 100,000, age 0-85+) of thyroid cancer in pooled Swiss cancer registries (1980-1999), linear regression modelling



Chernobyl



Unexpected additional increase in the incidence of thyroid cancer among a recent birth cohort in Switzerland

Fabio Montanaro[a], Pierre Pury[b], Andrea Bordoni[a], Jean-Michel Lutz[b,c]
and the Swiss Cancer Registries Network*

Data collected by the Swiss Cancer Registries Network (ASRT/VSKR) have been used to analyse trends in thyroid cancer during the last available 20 years, to make within-country geographical comparisons for current incidence rates. Age-standardized (European population) incidence rates per 100,000 for all morphologies combined ranges from 1.62 to 2.99 among males and from 2.13 to 8.09 among females in Switzerland. Regression analyses for both sexes combined detected an increase in time for papillary cases and a decrease for other types. Age-period-cohort analyses revealed that the youngest cohorts of men and women born after 1940 had an increased risk of all types of thyroid cancer while the cohort of people born between 1920 and 1939 were at increased risk of the papillary subtype. Assuming a higher sensitivity to ionizing radiation among the youngest people, a Chernobyl effect cannot be definitively excluded and continuous study of this topic should be encouraged. *European Journal of Cancer Prevention* 15:178–186 © 2006 Lippincott Williams & Wilkins.

European Journal of Cancer Prevention 2006, 15:178–186

Keywords: thyroid cancer, incidence, time trends, Chernobyl accident, radiations, cancer registration

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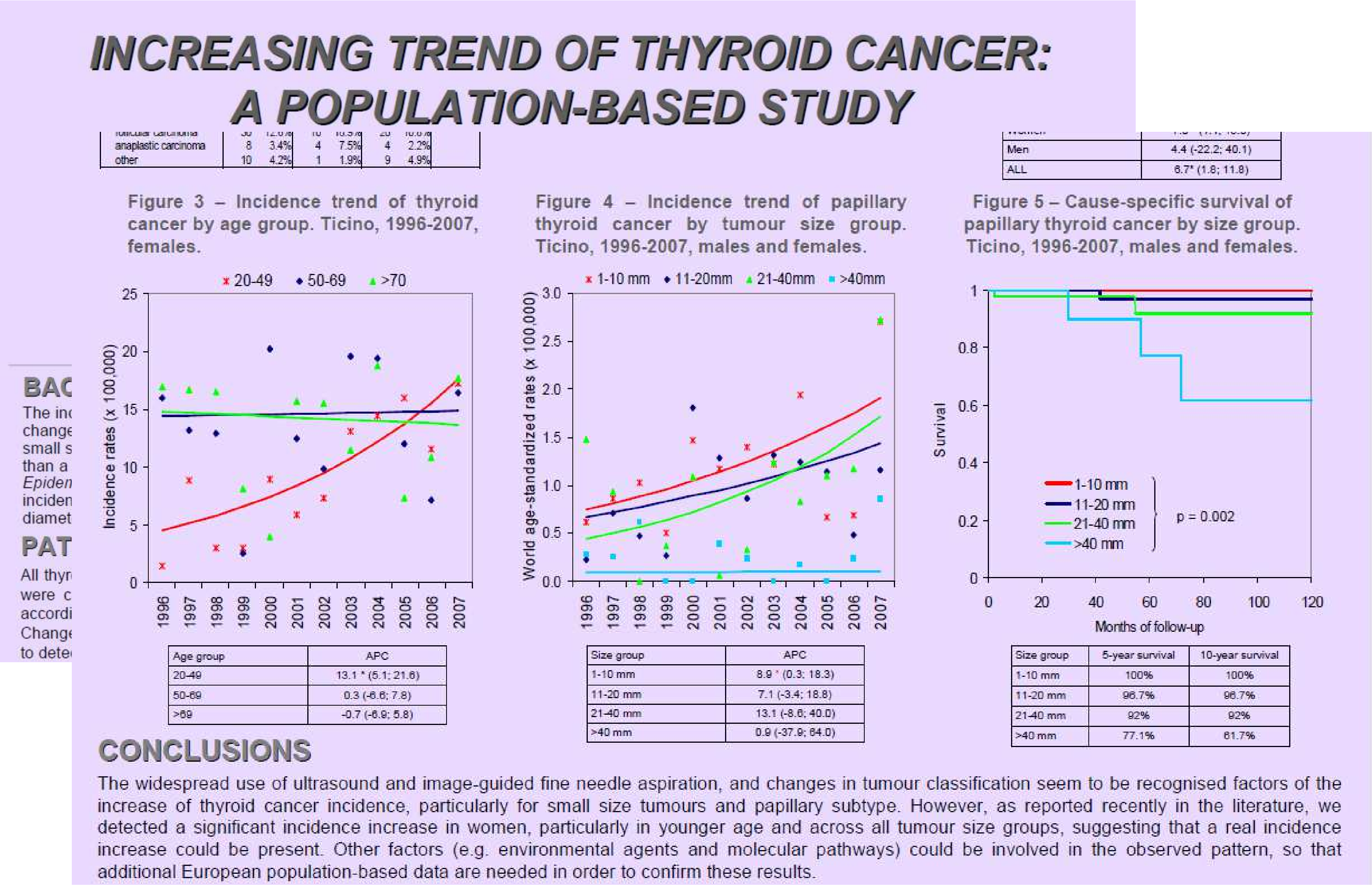
e-mail: jean-michel.lutz@imsp.unige.ch

Received 4 March 2005 Accepted 4 July 2005

Chernobyl o altro?



INCREASING TREND OF THYROID CANCER: A POPULATION-BASED STUDY

anaplastic carcinoma	8	3.4%	4	7.5%	4	2.2%
other	10	4.2%	1	1.9%	9	4.9%

Men	4.4 (-22.2; 40.1)
ALL	6.7* (1.8; 11.8)

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Figure 3 – Incidence trend of thyroid cancer by age group. Ticino, 1996-2007, females.

Age group	APC
20-49	13.1 * (5.1; 21.6)
50-69	0.3 (-6.6; 7.8)
>69	-0.7 (-6.9; 5.8)

Figure 4 – Incidence trend of papillary thyroid cancer by tumour size group. Ticino, 1996-2007, males and females.

1-10 mm
11-20mm
21-40mm
>40mm
World age-standardized rates (x 100,000)
3.0
2.5
2.0
1.5
1.0
0.5
0.0
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007

Size group	APC
1-10 mm	8.9 * (0.3; 18.3)
11-20 mm	7.1 (-3.4; 18.8)
21-40 mm	13.1 (-8.6; 40.0)
>40 mm	0.9 (-37.9; 64.0)

Figure 5 – Cause-specific survival of papillary thyroid cancer by size group. Ticino, 1996-2007, males and females.

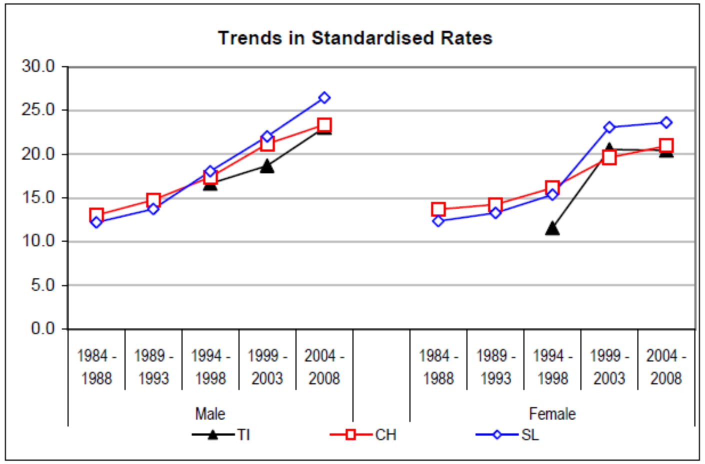
Survival
1
0.8
0.6
0.4
0.2
0
1-10 mm
11-20 mm
21-40 mm
>40 mm
p = 0.002
0
20
40
60
80
100
120
Months of follow-up

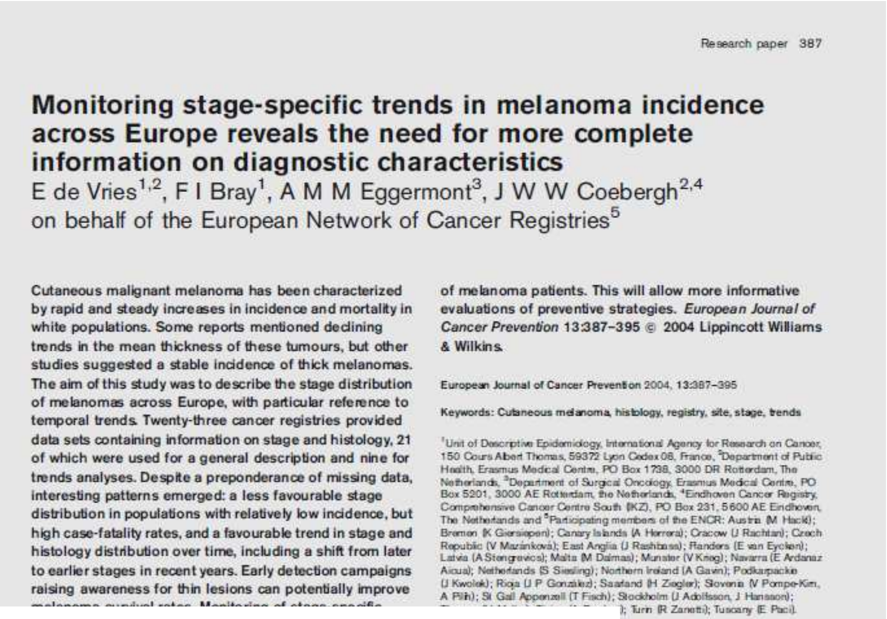
Size group	5-year survival	10-year survival
1-10 mm	100%	100%
11-20 mm	96.7%	96.7%
21-40 mm	92%	92%
>40 mm	77.1%	61.7%

CONCLUSIONS

The widespread use of ultrasound and image-guided fine needle aspiration, and changes in tumour classification seem to be recognised factors of the increase of thyroid cancer incidence, particularly for small size tumours and papillary subtype. However, as reported recently in the literature, we detected a significant incidence increase in women, particularly in younger age and across all tumour size groups, suggesting that a real incidence increase could be present. Other factors (e.g. environmental agents and molecular pathways) could be involved in the observed pattern, so that additional European population-based data are needed in order to confirm these results.

Radiazioni solari
tumori cutanei





Monitoring stage-specific trends in melanoma incidence across Europe reveals the need for more complete information on diagnostic characteristics

E de Vries[1,2], F I Bray[1], A M M Eggermont[3], J W W Coebergh[2,4]
on behalf of the European Network of Cancer Registries[5]

Cutaneous malignant melanoma has been characterized by rapid and steady increases in incidence and mortality in white populations. Some reports mentioned declining trends in the mean thickness of these tumours, but other studies suggested a stable incidence of thick melanomas. The aim of this study was to describe the stage distribution of melanomas across Europe, with particular reference to temporal trends. Twenty-three cancer registries provided data sets containing information on stage and histology, 21 of which were used for a general description and nine for trends analyses. Despite a preponderance of missing data, interesting patterns emerged: a less favourable stage distribution in populations with relatively low incidence, but high case-fatality rates, and a favourable trend in stage and histology distribution over time, including a shift from later to earlier stages in recent years. Early detection campaigns raising awareness for thin lesions can potentially improve of melanoma patients. This will allow more informative evaluations of preventive strategies. *European Journal of Cancer Prevention* 13:387–395 © 2004 Lippincott Williams & Wilkins.

European Journal of Cancer Prevention 2004, 13:387–395

Keywords: Cutaneous melanoma, histology, registry, site, stage, trends

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); Turin (R Zanetti); Tuscany (E Paci).

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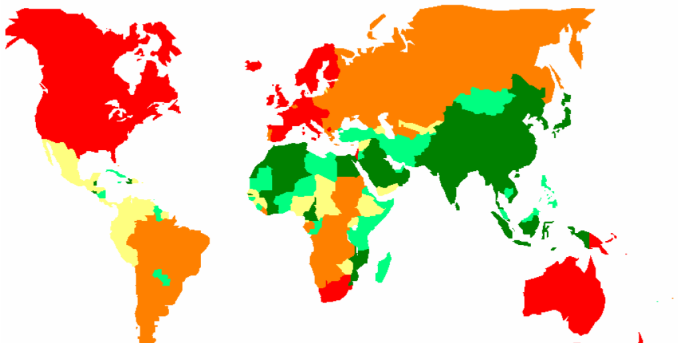
26 April 2004

bably resulted in higher rates
s at earlier stages and trends
ve been observed in European
et al., 1999; Holme et al., 2001;
al., 2002; MacKie et al., 2002;

Tassi di incidenza standardizzati sulla popolazione mondiale (per 100.000)
MELANOMA DELLA PELLE - Uomini



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- -Studio NICER UFS
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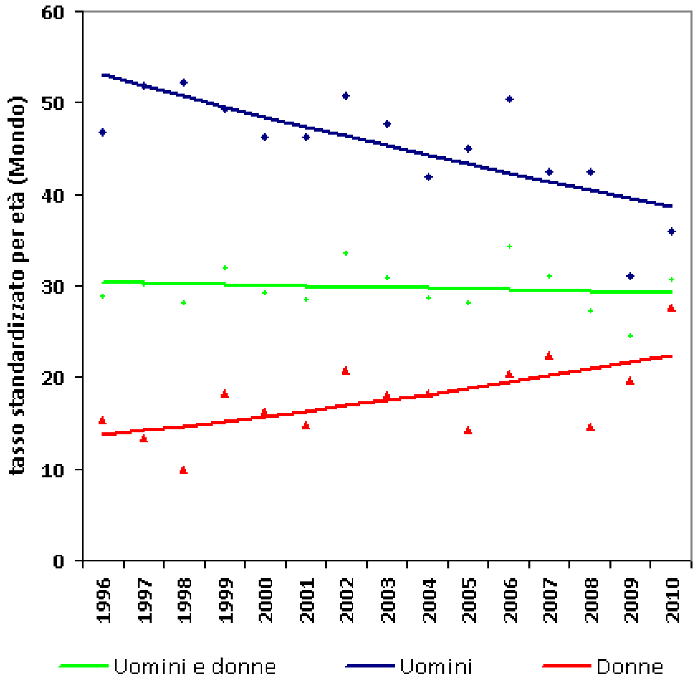
Tumori polmonari

Inquinamento atmosferico, radon, tabagismo

Trend di incidenza dei tumori polmonari in Canton Ticino.
Tassi standardizzati per età sulla popolazione mondiale (per 100’000 abitanti).
Uomini, donne, uomini e donne, 1996-2010.



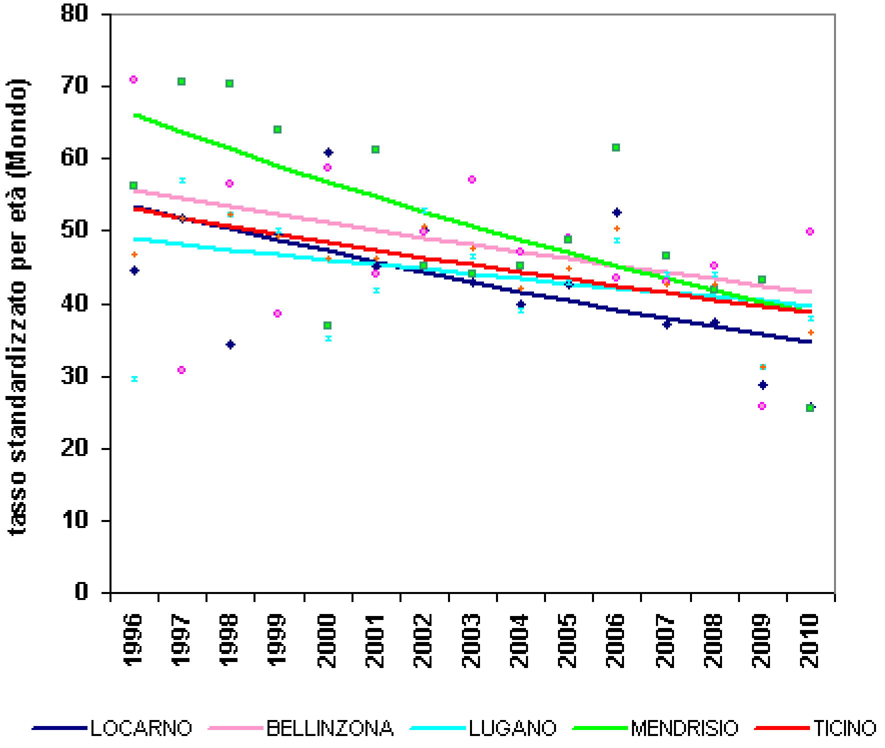
APC: -2.2 (IC95%: -3.5; -0.9)

APC: -0.3 (IC95%: -1.4; 0.9)

APC: 3.6 (IC95%: 1.1; 6.2)

Tumori polmonari

Trend di incidenza dei tumori polmonari in Canton Ticino, per distretto.
Tassi standardizzati per età sulla popolazione mondiale (per 100'000 abitanti).
Uomini, 1996-2010.

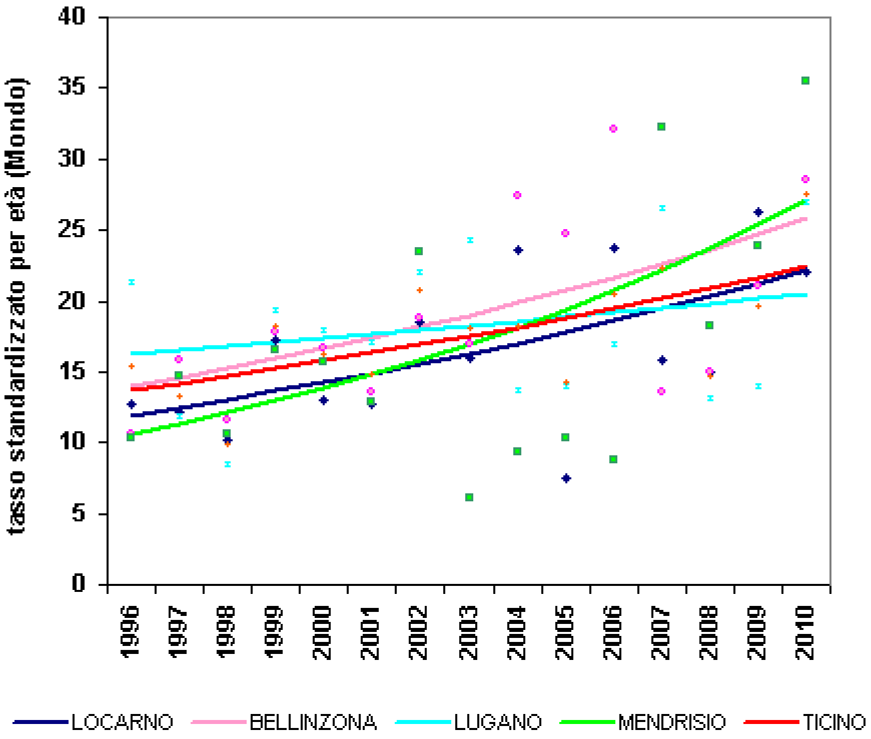


DISTRETTO di DOMICILIO	**APC annual percentage change**
LOCARNO	-3.1 * (IC95%: -5.5; -0.6)
BELLINZONA	-2.1 (IC95%: -4.8; 0.8)
LUGANO	-1.5 (IC95%: -3.7; 0.8)
MENDRISIO	-3.8 * (IC95%: -6.2; -1.3)
TICINO	-2.2 * (IC95%: -3.5; -0.9)

* statisticamente significativo

Tumori polmonari

Trend di incidenza dei tumori polmonari in Canton Ticino, per distretto.
Tassi standardizzati per età sulla popolazione mondiale (per 100'000 abitanti).
Donne, 1996-2010.



DISTRETTO di DOMICILIO	**APC annual percentage change**
LOCARNO	4.5 * (IC95%: 0.8; 8.4)
BELLINZONA	4.5 * (IC95%: 0.4; 8.7)
LUGANO	1.6 (IC95%: -2.4; 5.8)
MENDRISIO	6.9 * (IC95%: 1.6; 12.6)
TICINO	3.6 * (IC95%: 1.1; 6.2)

* statisticamente significativo

* statisticamente significativo

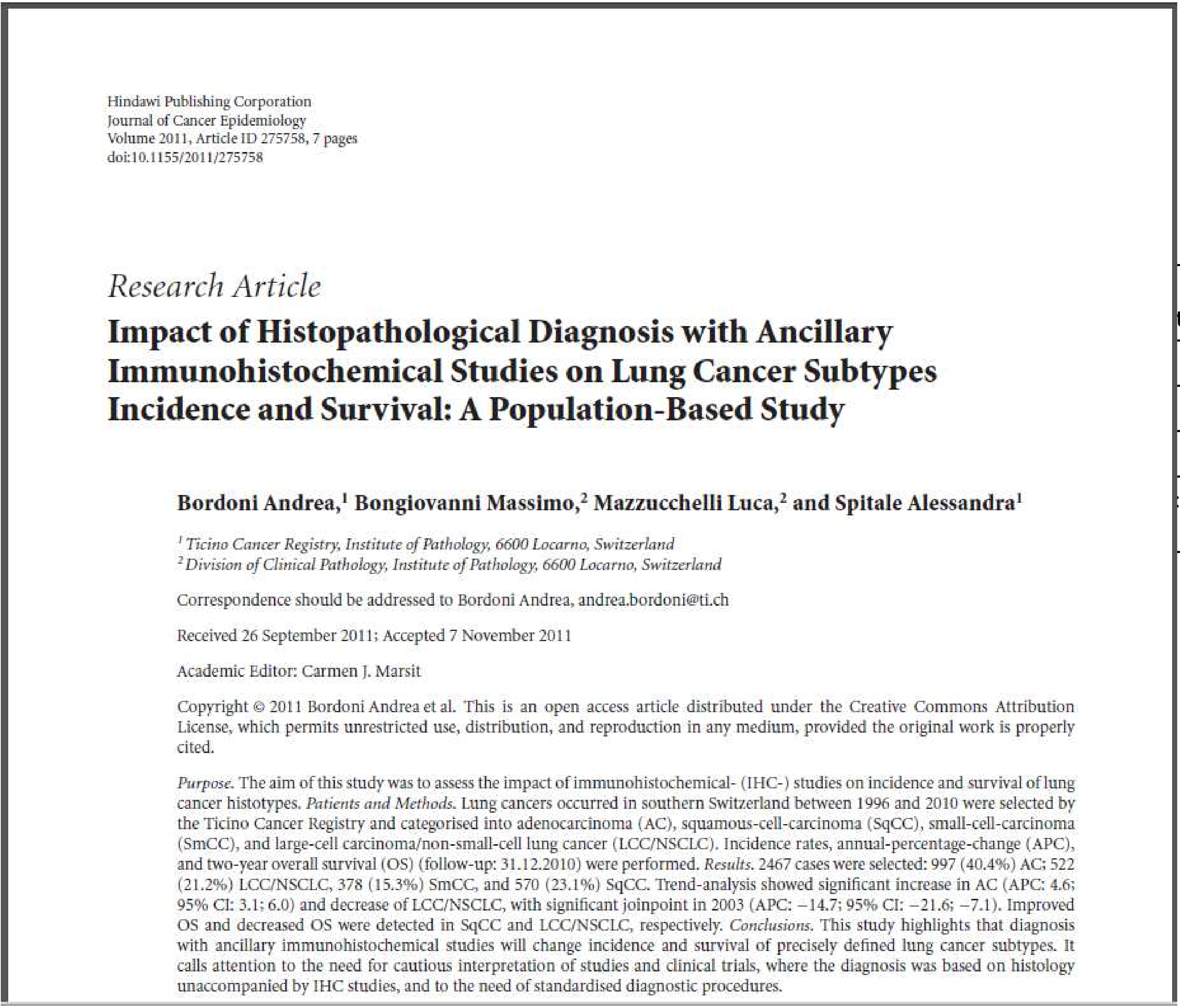
Donne, 1996-2010.

tasso standardizzato per età (Mondo)

2

1

1



Hindawi Publishing Corporation
Journal of Cancer Epidemiology
Volume 2011, Article ID 275758, 7 pages
doi:10.1155/2011/275758

Research Article

Impact of Histopathological Diagnosis with Ancillary Immunohistochemical Studies on Lung Cancer Subtypes Incidence and Survival: A Population-Based Study

Bordoni Andrea,[1] Bongiovanni Massimo,[2] Mazzucchelli Luca,[2] and Spitale Alessandra[1]

[1] *Ticino Cancer Registry, Institute of Pathology, 6600 Locarno, Switzerland*
[2] *Division of Clinical Pathology, Institute of Pathology, 6600 Locarno, Switzerland*

Correspondence should be addressed to Bordoni Andrea, andrea.bordoni@ti.ch

Received 26 September 2011; Accepted 7 November 2011

Academic Editor: Carmen J. Marsit

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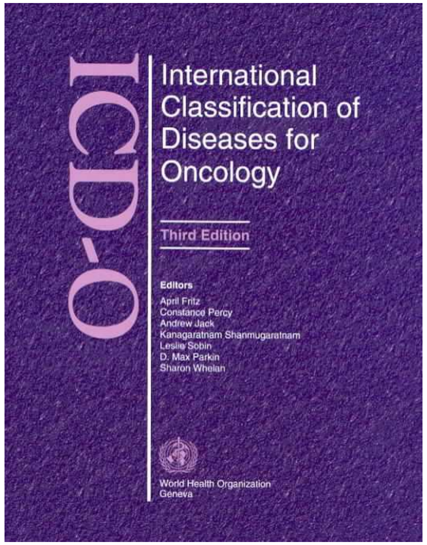
Purpose. The aim of this study was to assess the impact of immunohistochemical- (IHC-) studies on incidence and survival of lung cancer histotypes. *Patients and Methods.* Lung cancers occurred in southern Switzerland between 1996 and 2010 were selected by the Ticino Cancer Registry and categorised into adenocarcinoma (AC), squamous-cell-carcinoma (SqCC), small-cell-carcinoma (SmCC), and large-cell carcinoma/non-small-cell lung cancer (LCC/NSCLC). Incidence rates, annual-percentage-change (APC), and two-year overall survival (OS) (follow-up: 31.12.2010) were performed. *Results.* 2467 cases were selected: 997 (40.4%) AC; 522 (21.2%) LCC/NSCLC, 378 (15.3%) SmCC, and 570 (23.1%) SqCC. Trend-analysis showed significant increase in AC (APC: 4.6; 95% CI: 3.1; 6.0) and decrease of LCC/NSCLC, with significant joinpoint in 2003 (APC: −14.7; 95% CI: −21.6; −7.1). Improved OS and decreased OS were detected in SqCC and LCC/NSCLC, respectively. *Conclusions.* This study highlights that diagnosis with ancillary immunohistochemical studies will change incidence and survival of precisely defined lung cancer subtypes. It calls attention to the need for cautious interpretation of studies and clinical trials, where the diagnosis was based on histology unaccompanied by IHC studies, and to the need of standardised diagnostic procedures.

tage change
6.2; 14.8)
0.9; 9.6)
-5.9; 4.9)
: -26.6; -3.3)

* statisticamente significativo

Come sono raccolti i dati in un Registro Tumori e con quali standard?



ICD-O

International Classification of Diseases for Oncology

Third Edition

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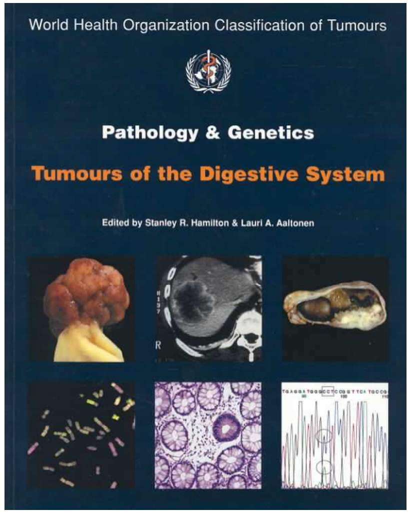


World Health Organization Classification of Tumours

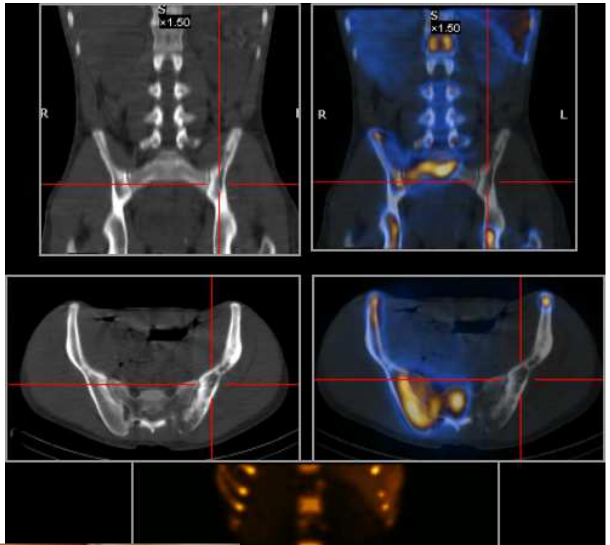
Pathology & Genetics

Tumours of the Digestive System

Edited by Stanley R. Hamilton & Lauri A. Aaltonen

- **Un Registro Tumori è un servizio pubblico adibito alla raccolta e archiviazione, analisi e interpretazione dei dati biologici tumorali dei pazienti**
- **Un Registro Tumori di popolazione raccoglie informazioni complete su tutti i nuovi casi che insorgono in una popolazione definita (es. Ticino)**
- **Garantire qualità e confrontabilità nel tempo e comparabilità internazionale**

Come sono raccolti i dati in un Registro Tumori e con quali standard?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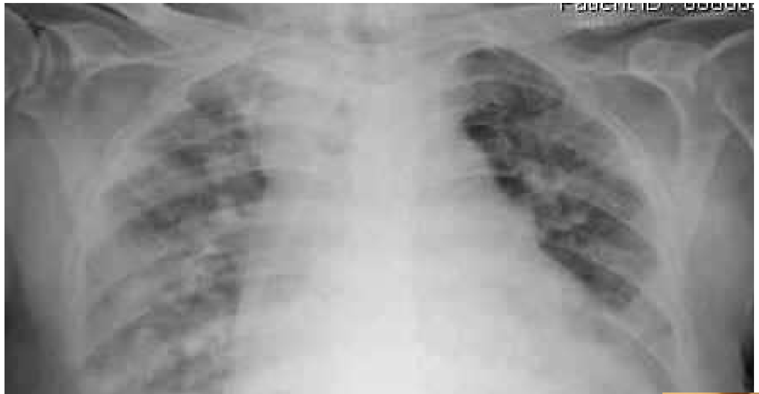
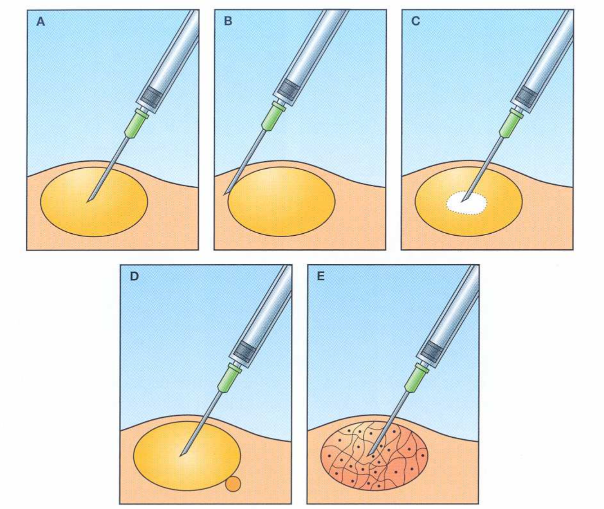
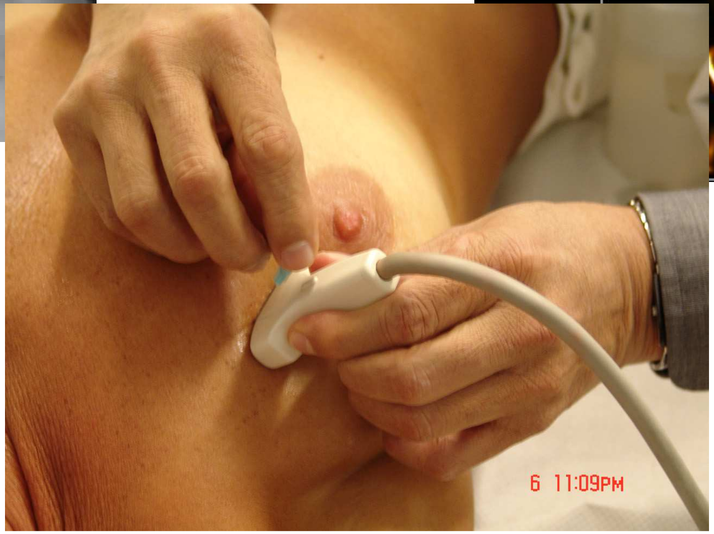


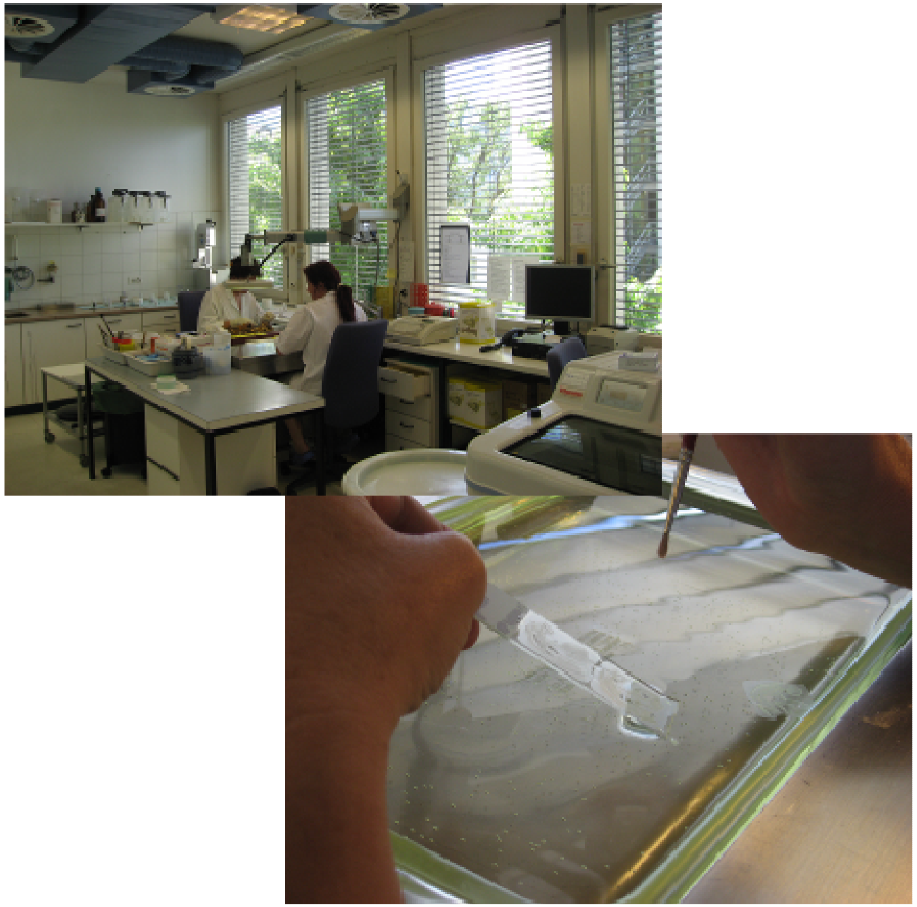


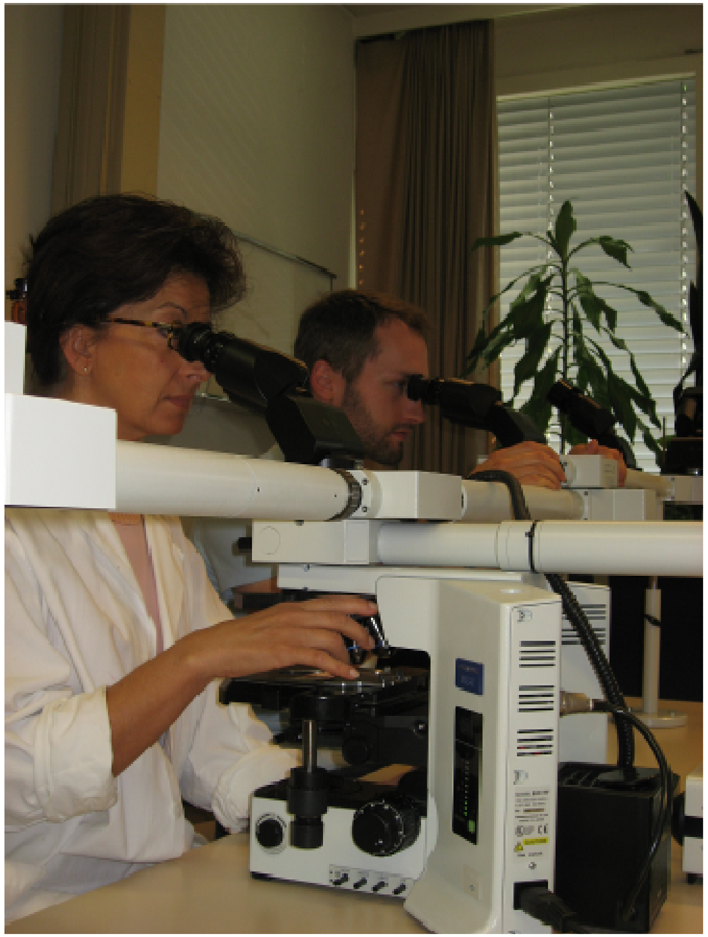


Come sono raccolti i dati in un Registro Tumori e con quali standard?

CROCE VERDE LUGANO

Come sono raccolti i dati in un registro tumori e con quali standard?





Come sono raccolti i dati in un registro tumori e con quali standard?

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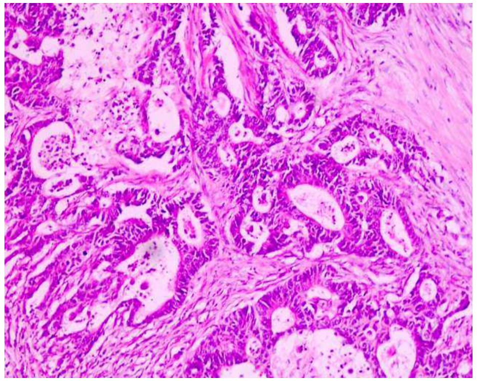

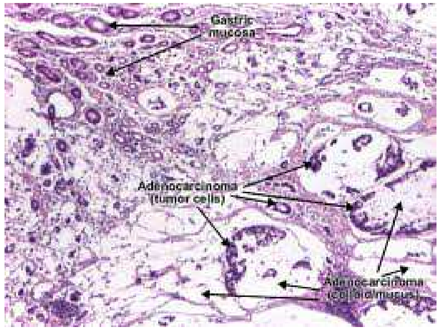

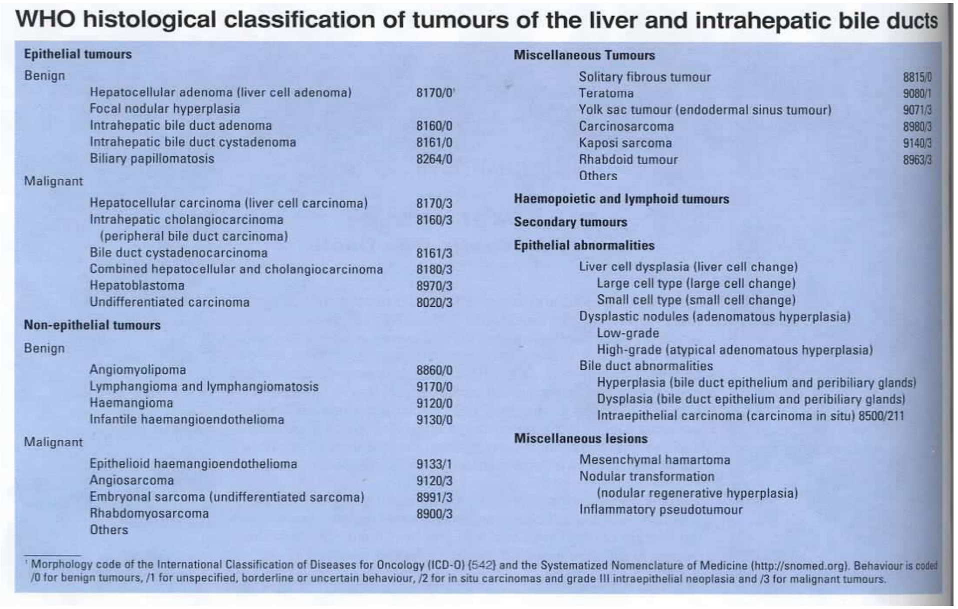

WHO histological classification of tumours of the liver and intrahepatic bile ducts

Epithelial tumours	
Benign	
Hepatocellular adenoma (liver cell adenoma)	8170/0[1]
Focal nodular hyperplasia	
Intrahepatic bile duct adenoma	8160/0
Intrahepatic bile duct cystadenoma	8161/0
Biliary papillomatosis	8264/0
Malignant	
Hepatocellular carcinoma (liver cell carcinoma)	8170/3
Intrahepatic cholangiocarcinoma (peripheral bile duct carcinoma)	8160/3
Bile duct cystadenocarcinoma	8161/3
Combined hepatocellular and cholangiocarcinoma	8180/3
Hepatoblastoma	8970/3
Undifferentiated carcinoma	8020/3
Non-epithelial tumours	
Benign	
Angiomyolipoma	8860/0
Lymphangioma and lymphangiomatosis	9170/0
Haemangioma	9120/0
Infantile haemangioendothelioma	9130/0
Malignant	
Epithelioid haemangioendothelioma	9133/1
Angiosarcoma	9120/3
Embryonal sarcoma (undifferentiated sarcoma)	8991/3
Rhabdomyosarcoma	8900/3
Others	
Miscellaneous Tumours	
Solitary fibrous tumour	8815/0
Teratoma	9080/1
Yolk sac tumour (endodermal sinus tumour)	9071/3
Carcinosarcoma	8980/3
Kaposi sarcoma	9140/3
Rhabdoid tumour	8963/3
Others	
Haemopoietic and lymphoid tumours	
Secondary tumours	
Epithelial abnormalities	
Liver cell dysplasia (liver cell change)	
Large cell type (large cell change)	
Small cell type (small cell change)	
Dysplastic nodules (adenomatous hyperplasia)	
Low-grade	
High-grade (atypical adenomatous hyperplasia)	
Bile duct abnormalities	
Hyperplasia (bile duct epithelium and peribiliary glands)	
Dysplasia (bile duct epithelium and peribiliary glands)	
Intraepithelial carcinoma (carcinoma in situ)	8500/2
Miscellaneous lesions	
Mesenchymal hamartoma	
Nodular transformation (nodular regenerative hyperplasia)	
Inflammatory pseudotumour	

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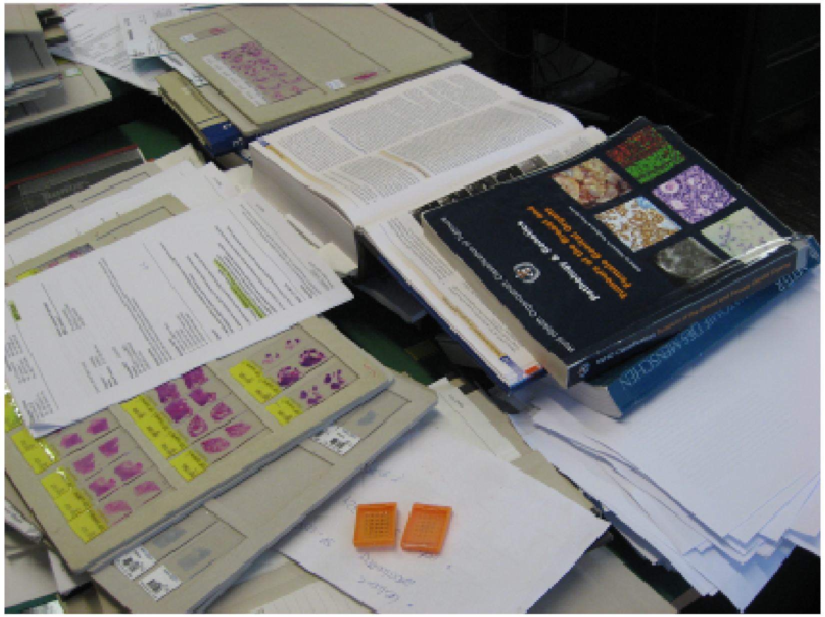
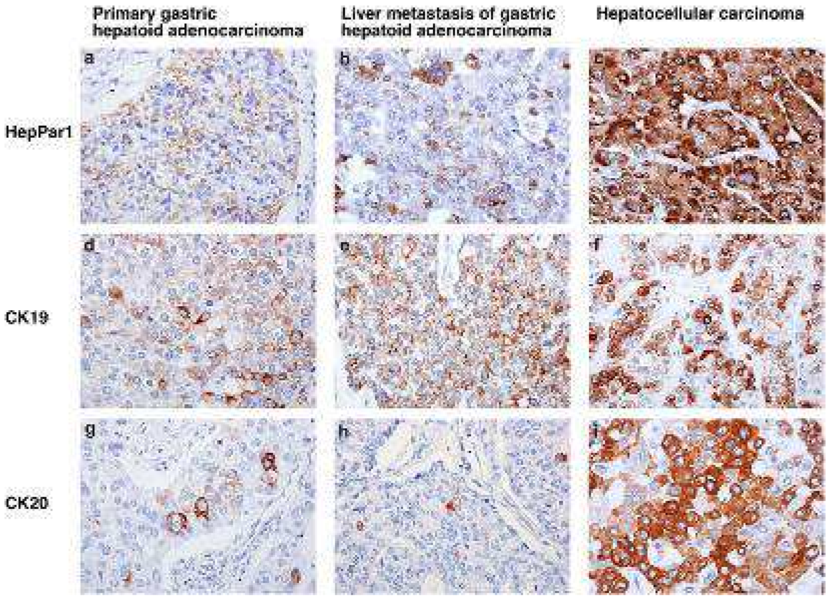
[1] Morphology code of the International Classification of Diseases for Oncology (ICD-O) {542} and the Systematized Nomenclature of Medicine (http://snomed.org). Behaviour is coded /0 for benign tumours, /1 for unspecified, borderline or uncertain behaviour, /2 for in situ carcinomas and grade III intraepithelial neoplasia and /3 for malignant tumours.

Come sono raccolti i dati
in un registro tumori e con quali standard?

Es. del Ticino




Primary gastric hepatoid adenocarcinoma
Liver metastasis of gastric hepatoid adenocarcinoma
Hepatocellular carcinoma
HepPar1
CK19
CK20
a
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c
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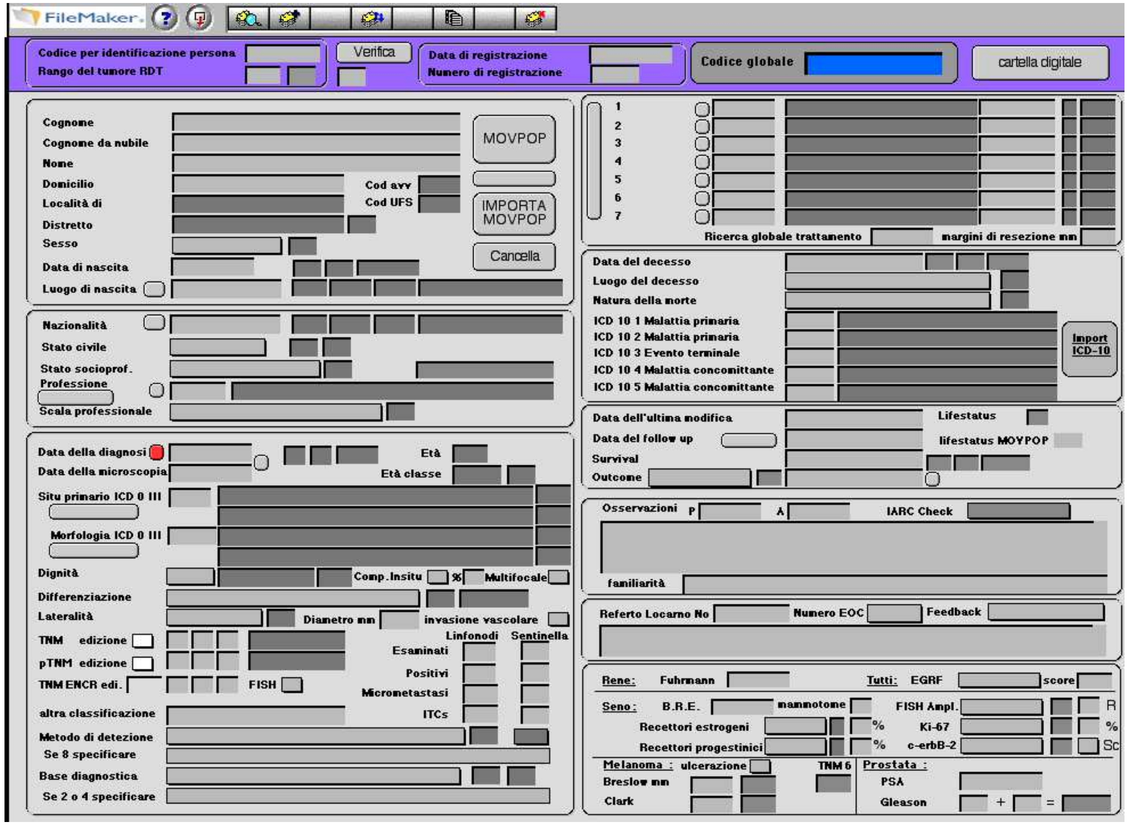
Come sono raccolti i dati in un registro tumori e con quali standard?

Es. del Ticino


FileMaker
Codice per identificazione persona
Rango del tumore RDT
Verifica
Data di registrazione
Numero di registrazione
Codice globale
cartella digitale
Cognome
Cognome da nubile
Nome
Domicilio
Cod avv
Località di
Cod UFS
Distretto
Sesso
Data di nascita
Luogo di nascita
MOVPOP
IMPORTA MOVPOP
Cancella
1
2
3
4
5
6
7
Ricerca globale trattamento
margini di resezione mm
Nazionalità
Stato civile
Stato socioprof.
Professione
Scala professionale
Data del decesso
Luogo del decesso
Natura della morte
ICD 10 1 Malattia primaria
ICD 10 2 Malattia primaria
ICD 10 3 Evento terminale
ICD 10 4 Malattia concomittante
ICD 10 5 Malattia concomittante
Import ICD-10
Data della diagnosi
Data della microscopia
Età
Età classe
Situ primario ICD 0 III
Morfologia ICD 0 III
Dignità
Comp.Insitu
%
Multifocale
Differenziazione
Lateralità
Diametro mm
invasione vascolare
TNM edizione
pTNM edizione
TNM ENCR edi.
FISH
Linfonodi
Sentinella
Esaminati
Positivi
Micrometastasi
ITCs
altra classificazione
Metodo di detezione
Se 8 specificare
Base diagnostica
Se 2 o 4 specificare
Data dell'ultima modifica
Data del follow up
Survival
Outcome
Lifestatus
lifestatus MOVPOP
Osservazioni
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Referto Locarno No
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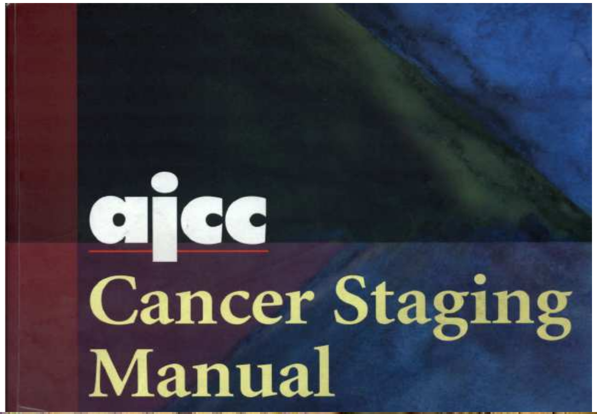
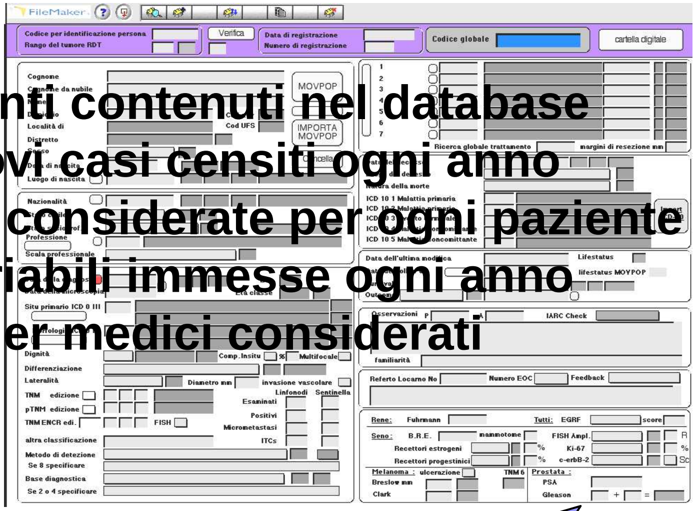

ajcc
Cancer Staging
Manual

Perché servono i dati nominativi del paziente?


FileMaker
Codice per identificazione persona
Rango del tumore RDT
Verifica
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Codice globale
cartella digitale
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Cognome da nubile
Località di
Distretto
Luogo di nascita
Cod UFS
MOVPOP
IMPORTA MOVPOP
Ricerca globale trattamento
margini di resezione mm
ICD 10 1 Malattia primaria
ICD 10 5 Malattia concomittante
Nazionalità
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Data dell'ultima modifica
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lifestatus MOVPOP
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Situ primario ICD 0 III
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Linfonodi
Sentinella
Esaminati
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Micrometastasi
ITCs
TNM edizione
pTNM edizione
TNM ENCR edi.
FISH
altra classificazione
Metodo di detezione
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Base diagnostica
Se 2 o 4 specificare
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PSA
Clark
Gleason

10 il numero medio che un dossier viene aggiornato

38’000 i pazienti contenuti nel database
2’400 ca i nuovi casi censiti ogni anno
40 le variabili considerate per ogni paziente
100’000 le variabili immesse ogni anno
70’000 i dossier medici considerati

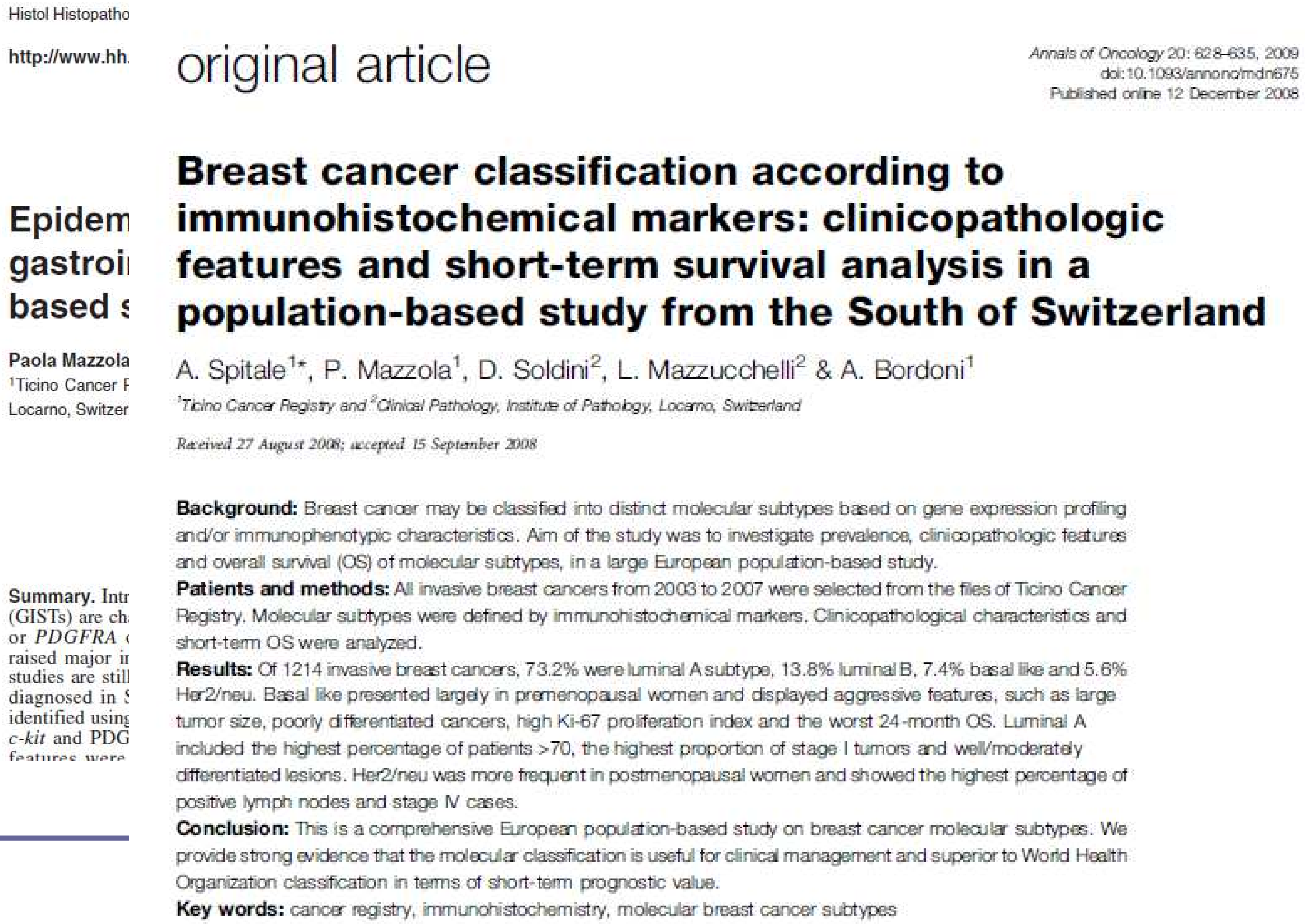
Patologia

IOSI

Cliniche (Moncucco, St.Anna)

Oncologi sul territorio

La vicinanza alla **patologia** ci ha permesso di sviluppare sinergie



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Paola Mazzola
[1]Ticino Cancer R
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Summary. Intr
(GISTs) are ch
or *PDGFRA*
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original article

Annals of Oncology 20: 628–635, 2009
doi:10.1093/annonc/mdn675
Published online 12 December 2008

Breast cancer classification according to immunohistochemical markers: clinicopathologic features and short-term survival analysis in a population-based study from the South of Switzerland

A. Spitale[1]*, P. Mazzola[1], D. Soldini[2], L. Mazzucchelli[2] & A. Bordoni[1]

[1]Ticino Cancer Registry and [2]Clinical Pathology, Institute of Pathology, Locarno, Switzerland

Received 27 August 2008; accepted 15 September 2008

Background: Breast cancer may be classified into distinct molecular subtypes based on gene expression profiling and/or immunophenotypic characteristics. Aim of the study was to investigate prevalence, clinicopathologic features and overall survival (OS) of molecular subtypes, in a large European population-based study.

Patients and methods: All invasive breast cancers from 2003 to 2007 were selected from the files of Ticino Cancer Registry. Molecular subtypes were defined by immunohistochemical markers. Clinicopathological characteristics and short-term OS were analyzed.

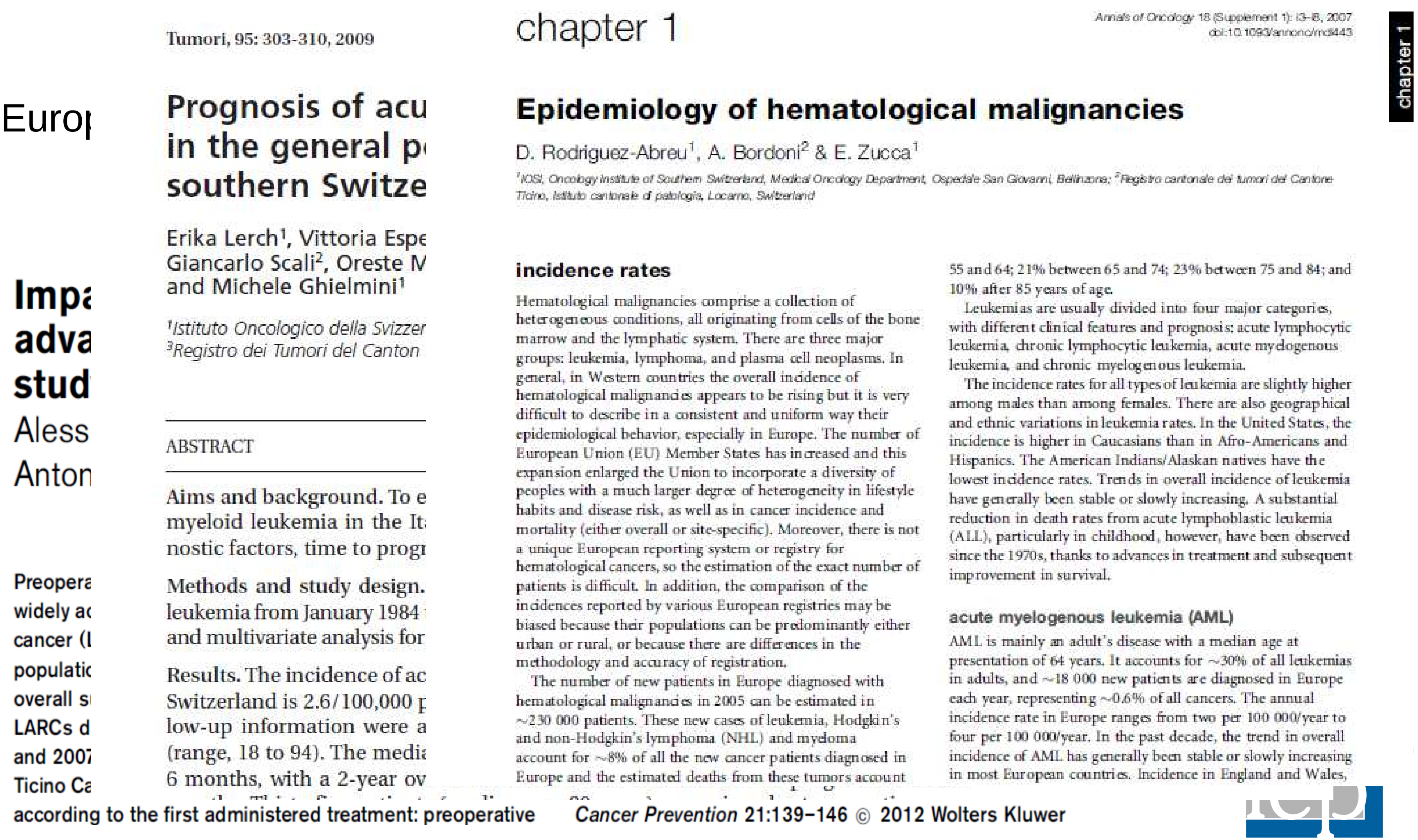
Results: Of 1214 invasive breast cancers, 73.2% were luminal A subtype, 13.8% luminal B, 7.4% basal like and 5.6% Her2/neu. Basal like presented largely in premenopausal women and displayed aggressive features, such as large tumor size, poorly differentiated cancers, high Ki-67 proliferation index and the worst 24-month OS. Luminal A included the highest percentage of patients >70, the highest proportion of stage I tumors and well/moderately differentiated lesions. Her2/neu was more frequent in postmenopausal women and showed the highest percentage of positive lymph nodes and stage IV cases.

Conclusion: This is a comprehensive European population-based study on breast cancer molecular subtypes. We provide strong evidence that the molecular classification is useful for clinical management and superior to World Health Organization classification in terms of short-term prognostic value.

Key words: cancer registry, immunohistochemistry, molecular breast cancer subtypes

La vicinanza alla **clinica** ci ha permesso di sviluppare sinergie

Europ



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Cancer Prevention 21:139–146 © 2012 Wolters Kluwer

Tumori, 95: 303-310, 2009

Prognosis of acu
in the general p
southern Switze

Erika Lerch[1], Vittoria Espe
Giancarlo Scali[2], Oreste M
and Michele Ghielmini[1]

[1]Istituto Oncologico della Svizzer
[3]Registro dei Tumori del Canton

ABSTRACT

Aims and background. To e
myeloid leukemia in the It
nostic factors, time to progr

Methods and study design.
leukemia from January 1984
and multivariate analysis for

Results. The incidence of ac
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6 months, with a 2-year ov

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chapter 1

Annals of Oncology 18 (Supplement 1): i3–i8, 2007
doi:10.1093/annonc/mdl443

Epidemiology of hematological malignancies

D. Rodriguez-Abreu[1], A. Bordoni[2] & E. Zucca[1]

[1]IOSI, Oncology Institute of Southern Switzerland, Medical Oncology Department, Ospedale San Giovanni, Bellinzona; [2]Registro cantonale dei tumori del Cantone Ticino, Istituto cantonale di patologia, Locarno, Switzerland

incidence rates

Hematological malignancies comprise a collection of heterogeneous conditions, all originating from cells of the bone marrow and the lymphatic system. There are three major groups: leukemia, lymphoma, and plasma cell neoplasms. In general, in Western countries the overall incidence of hematological malignancies appears to be rising but it is very difficult to describe in a consistent and uniform way their epidemiological behavior, especially in Europe. The number of European Union (EU) Member States has increased and this expansion enlarged the Union to incorporate a diversity of peoples with a much larger degree of heterogeneity in lifestyle habits and disease risk, as well as in cancer incidence and mortality (either overall or site-specific). Moreover, there is not a unique European reporting system or registry for hematological cancers, so the estimation of the exact number of patients is difficult. In addition, the comparison of the incidences reported by various European registries may be biased because their populations can be predominantly either urban or rural, or because there are differences in the methodology and accuracy of registration.

The number of new patients in Europe diagnosed with hematological malignancies in 2005 can be estimated in ~230 000 patients. These new cases of leukemia, Hodgkin's and non-Hodgkin's lymphoma (NHL) and myeloma account for ~8% of all the new cancer patients diagnosed in Europe and the estimated deaths from these tumors account

55 and 64; 21% between 65 and 74; 23% between 75 and 84; and 10% after 85 years of age.

Leukemias are usually divided into four major categories, with different clinical features and prognosis: acute lymphocytic leukemia, chronic lymphocytic leukemia, acute myelogenous leukemia, and chronic myelogenous leukemia.

The incidence rates for all types of leukemia are slightly higher among males than among females. There are also geographical and ethnic variations in leukemia rates. In the United States, the incidence is higher in Caucasians than in Afro-Americans and Hispanics. The American Indians/Alaskan natives have the lowest incidence rates. Trends in overall incidence of leukemia have generally been stable or slowly increasing. A substantial reduction in death rates from acute lymphoblastic leukemia (ALL), particularly in childhood, however, have been observed since the 1970s, thanks to advances in treatment and subsequent improvement in survival.

acute myelogenous leukemia (AML)

AML is mainly an adult's disease with a median age at presentation of 64 years. It accounts for ~30% of all leukemias in adults, and ~18 000 new patients are diagnosed in Europe each year, representing ~0.6% of all cancers. The annual incidence rate in Europe ranges from two per 100 000/year to four per 100 000/year. In the past decade, the trend in overall incidence of AML has generally been stable or slowly increasing in most European countries. Incidence in England and Wales,

Contributi tribuna medica

SEZIONE SCIENTIFICA - *JOURNAL CLUB*

Il Journal Club
to curato dal
Canton Ticino

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Riassunto/Adatta
Dr.med. Andrea Bo
Dr.stat. Alessandra
Registro Tumori Ca
Istituto Cantonale

SEZIONE SCIENTIFICA

LA DIAGNOSI DEL CARCINOMA DELLA PROSTATA
È REALMENTE IN AUMENTO IN TICINO?

A. Bordoni, A. Spitale

Il carcinoma della prostata è uno
tumori più frequenti del maschio.
so viene considerato come un tum
essenzialmente imprevedibile,
quanto può sviluppare metastasi i
pendentemente dall'accrescime
del tumore, come pure mostrare
gressione simultanea del tumor

SEZIONE SCIENTIFICA

INDICATO
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PER LA V
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OPPORTU
IN CANTO

A. Bordoni, L. M

Introduzione
Il dibattito sui

SEZIONE SCIENTIFICA

INDICATO
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DEL CARC
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A. Spitale, L. Mazz

Introduzione
Il carcinoma col
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registrano 70 d

SEZIONE SCIENTIFICA

NUOVE ACQUISIZIONI NEL TRATTAMENTO DELLE NEOPLASIE INTRACRANICHE:
GLI ASTROCITOMI.
COSA RESTA DA FARE?

G. Pesce, D. Boscherini, V. Martin, A. Salatino, S. Mauri, A. Spitale, A. Bordoni, A. Richetti, S. Tschuor, R. Wyttenbach, L. Mazzucchelli, R. Renella

Riassunto
I tumori primitivi del sistema nervoso centrale (SNC) sono relativamente rari,

e di garantire ai pazienti migliori risultati terapeutici.
Come si vedrà, per garantire un adeguato approccio nel processo decisionale diagnostico e terapeutico, in neuro-oncologia più che in altre branche della medicina, risulta determinante il coordinamento degli sforzi di diversi servizi specialistici.
Le teconologie e gli specialisti operanti in Ticino, coadiuvati dalle relazioni con altri centri di ricerca a livello nazionale ed internazionale, permettono ai pazienti di questo Cantone l'accesso ai migliori standard terapeutici oggi esistenti.

1. Introduzione
Negli ultimi dieci anni l'interesse per la neuro-oncologia è andato crescendo, in parte perché le neoplasie cerebrali più frequenti, vale a dire i astrocitomi

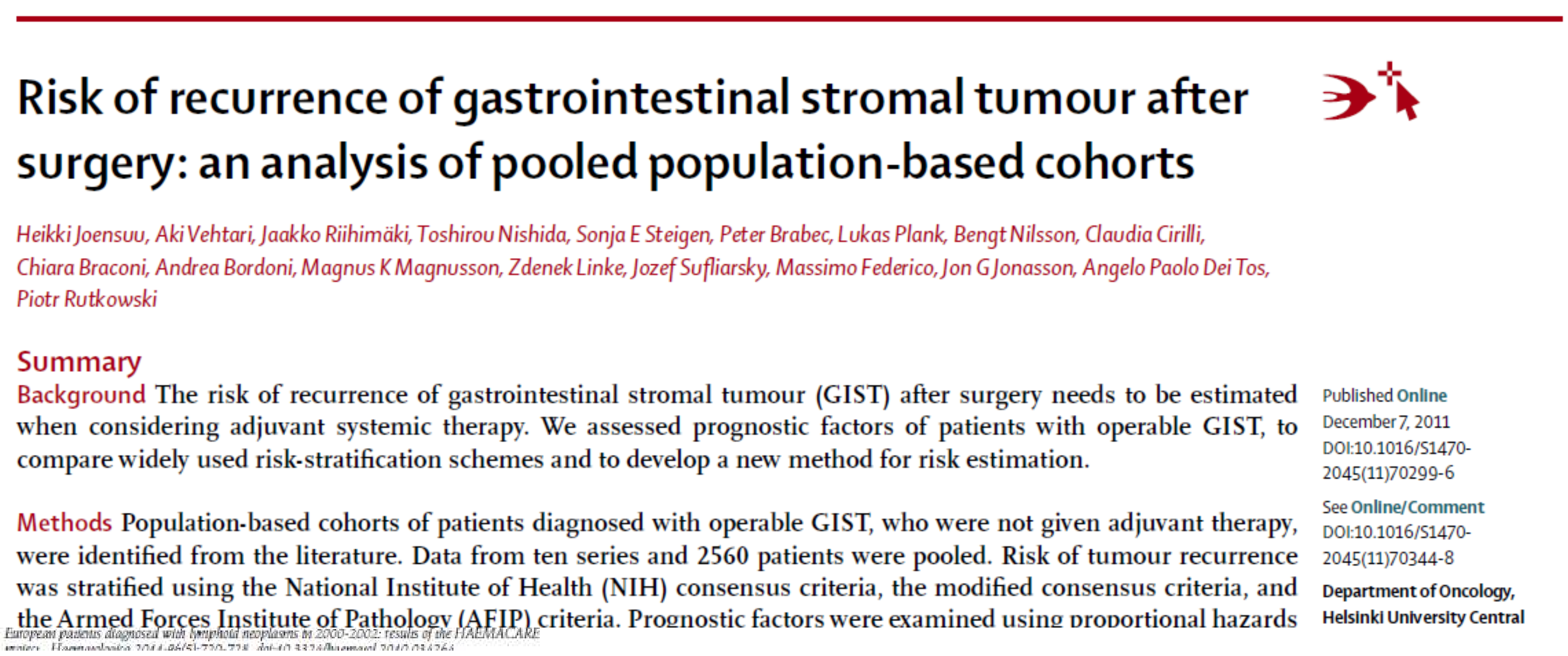
nate, individuazione di nuovi approcci metodologici in ricerca clinica). Ad esempio, nel caso del glioblastoma, grazie alla cooperazione internazionale nell'ambito del protocollo EORTC 22981, è stato possibile ottenere finalmente un miglioramento della prognosi, con una nuova combinazione di chemio-radioterapia, portando la sopravvivenza a 2 anni dal 10 al 27%. È stato inoltre dimostrato che la presenza di una peculiare alterazione genica porta la percentuale a oltre il 40%. Quindi, pur essendo rari, i tumori cerebrali sono una parte importantissima della attività clinica e della ricerca di punta nella medicina moderna.

Per un trattamento ottimale è necessaria la collaborazione di diversi specialisti, dal neurochirurgo, al patologo,

Studi nazionali ed internazionali

Lancet Oncology, 2012

Articles



Risk of recurrence of gastrointestinal stromal tumour after surgery: an analysis of pooled population-based cohorts

Heikki Joensuu, Aki Vehtari, Jaakko Riihimäki, Toshirou Nishida, Sonja E Steigen, Peter Brabec, Lukas Plank, Bengt Nilsson, Claudia Cirilli, Chiara Braconi, Andrea Bordoni, Magnus K Magnusson, Zdenek Linke, Jozef Sufliarsky, Massimo Federico, Jon G Jonasson, Angelo Paolo Dei Tos, Piotr Rutkowski

Summary

Background The risk of recurrence of gastrointestinal stromal tumour (GIST) after surgery needs to be estimated when considering adjuvant systemic therapy. We assessed prognostic factors of patients with operable GIST, to compare widely used risk-stratification schemes and to develop a new method for risk estimation.

Methods Population-based cohorts of patients diagnosed with operable GIST, who were not given adjuvant therapy, were identified from the literature. Data from ten series and 2560 patients were pooled. Risk of tumour recurrence was stratified using the National Institute of Health (NIH) consensus criteria, the modified consensus criteria, and the Armed Forces Institute of Pathology (AFIP) criteria. Prognostic factors were examined using proportional hazards

Published Online
December 7, 2011
DOI:10.1016/S1470-2045(11)70299-6

See Online/Comment
DOI:10.1016/S1470-2045(11)70344-8

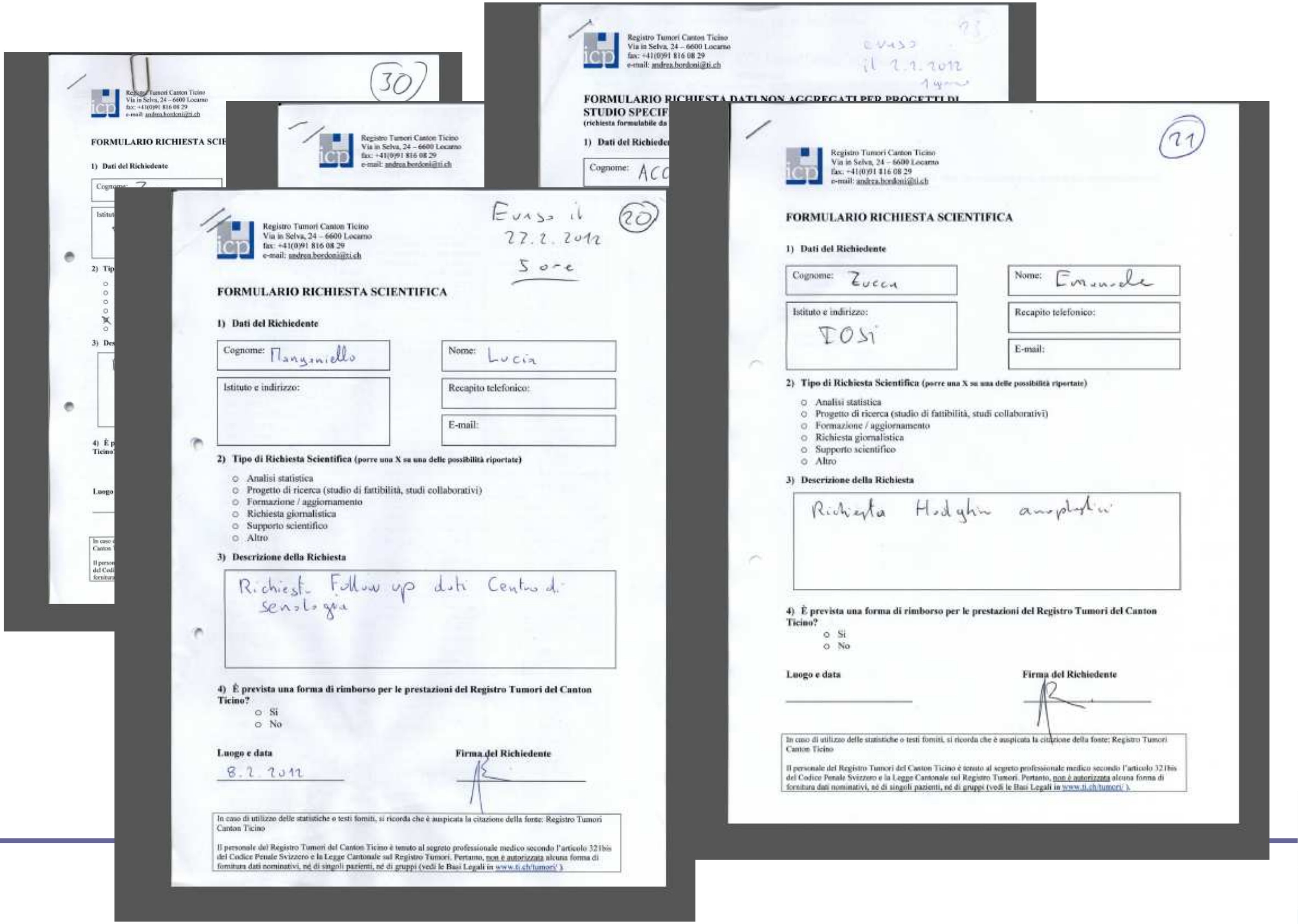
Department of Oncology,
Helsinki University Central

European patients diagnosed with lymphoid neoplasms in 2000-2002: results of the HAEMACARE

Assume responsabilità e compiti nazionali ed internazionali

- Membro gruppo di lavoro EUROCARE
- Eurocourse
- Find and code
- Commissione scientifica NICER
- Executive board IARC (processo valutativo per accreditamento registri)
- European partnership against cancer

Richieste di consulenza e di dati



(30)

Registro Tumori Canton Ticino
Via in Selva, 24 – 6600 Locarno
fax: +41(0)91 816 08 29
e-mail: andrea.bordoni@ti.ch

FORMULARIO RICHIESTA SCIE

1) Dati del Richiedente

Cognome: Z

Registro Tumori Canton Ticino
Via in Selva, 24 – 6600 Locarno
fax: +41(0)91 816 08 29
e-mail: andrea.bordoni@ti.ch

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evaso
il 2.1.2012
1 giorno

Registro Tumori Canton Ticino
Via in Selva, 24 – 6600 Locarno
fax: +41(0)91 816 08 29
e-mail: andrea.bordoni@ti.ch

FORMULARIO RICHIESTA DATI NON AGGREGATI PER PROGETTI DI STUDIO SPECIF
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Cognome: ACC

Evaso il
27.2.2012
5 ore

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Registro Tumori Canton Ticino
Via in Selva, 24 – 6600 Locarno
fax: +41(0)91 816 08 29
e-mail: andrea.bordoni@ti.ch

FORMULARIO RICHIESTA SCIENTIFICA

1) Dati del Richiedente

Cognome: Manginiello
Nome: Lucia
Istituto e indirizzo:
Recapito telefonico:
E-mail:

2) Tipo di Richiesta Scientifica (porre una X su una delle possibilità riportate)

- ○ Analisi statistica
- ○ Progetto di ricerca (studio di fattibilità, studi collaborativi)
- ○ Formazione / aggiornamento
- ○ Richiesta giornalistica
- ○ Supporto scientifico
- ○ Altro

3) Descrizione della Richiesta

Richiesta Follow up dati Centro di senologia

4) È prevista una forma di rimborso per le prestazioni del Registro Tumori del Canton Ticino?

- ○ Sì
- ○ No

Luogo e data 8.2.2012

Firma del Richiedente

In caso di utilizzo delle statistiche o testi forniti, si ricorda che è auspicata la citazione della fonte: Registro Tumori Canton Ticino

Il personale del Registro Tumori del Canton Ticino è tenuto al segreto professionale medico secondo l'articolo 321bis del Codice Penale Svizzero e la Legge Cantonale sul Registro Tumori. Pertanto, non è autorizzata alcuna forma di fornitura dati nominativi, né di singoli pazienti, né di gruppi (vedi le Basi Legali in www.ti.ch/tumori/).

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(21)

Registro Tumori Canton Ticino
Via in Selva, 24 – 6600 Locarno
fax: +41(0)91 816 08 29
e-mail: andrea.bordoni@ti.ch

FORMULARIO RICHIESTA SCIENTIFICA

1) Dati del Richiedente

Cognome: Zucca
Nome: Emanuele
Istituto e indirizzo: IOSI
Recapito telefonico:
E-mail:

2) Tipo di Richiesta Scientifica (porre una X su una delle possibilità riportate)

- ○ Analisi statistica
- ○ Progetto di ricerca (studio di fattibilità, studi collaborativi)
- ○ Formazione / aggiornamento
- ○ Richiesta giornalistica
- ○ Supporto scientifico
- ○ Altro

3) Descrizione della Richiesta

Richiesta Hodgkin anaplastici

4) È prevista una forma di rimborso per le prestazioni del Registro Tumori del Canton Ticino?

- ○ Sì
- ○ No

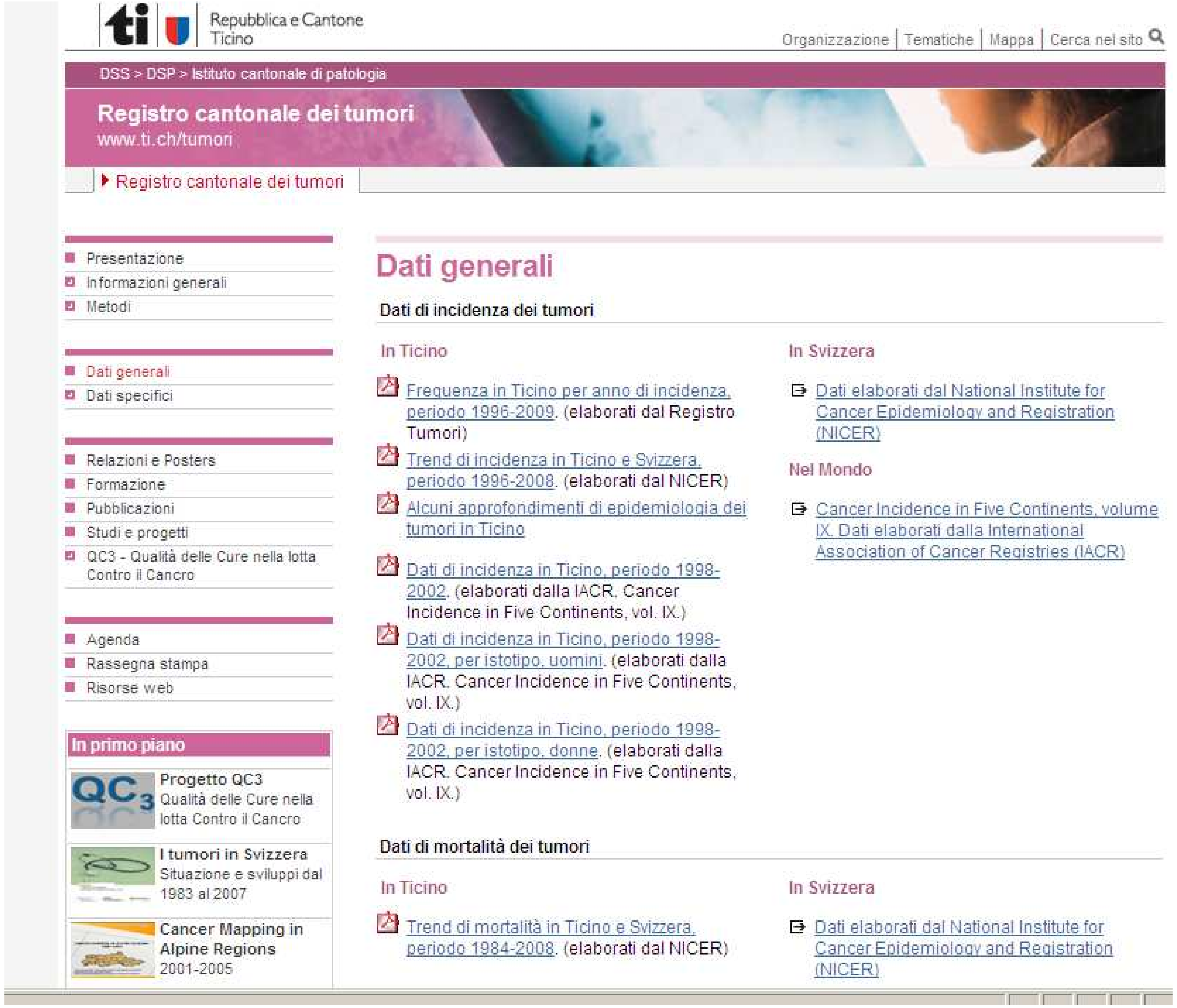
Luogo e data

Firma del Richiedente

In caso di utilizzo delle statistiche o testi forniti, si ricorda che è auspicata la citazione della fonte: Registro Tumori Canton Ticino

Il personale del Registro Tumori del Canton Ticino è tenuto al segreto professionale medico secondo l'articolo 321bis del Codice Penale Svizzero e la Legge Cantonale sul Registro Tumori. Pertanto, non è autorizzata alcuna forma di fornitura dati nominativi, né di singoli pazienti, né di gruppi (vedi le Basi Legali in www.ti.ch/tumori/).

Divulgazione dati: webpage


Repubblica e Cantone Ticino
Organizzazione | Tematiche | Mappa | Cerca nel sito
DSS > DSP > Istituto cantonale di patologia

Registro cantonale dei tumori
www.ti.ch/tumori

Registro cantonale dei tumori

- Presentazione
- Informazioni generali
- Metodi

- Dati generali
- Dati specifici

- Relazioni e Posters
- Formazione
- Pubblicazioni
- Studi e progetti
- QC3 - Qualità delle Cure nella lotta Contro il Cancro

- Agenda
- Rassegna stampa
- Risorse web

In primo piano

Progetto QC3
Qualità delle Cure nella lotta Contro il Cancro

I tumori in Svizzera
Situazione e sviluppi dal 1983 al 2007

Cancer Mapping in Alpine Regions
2001-2005

Dati generali

Dati di incidenza dei tumori

In Ticino

- Frequenza in Ticino per anno di incidenza, periodo 1996-2009. (elaborati dal Registro Tumori)
- Trend di incidenza in Ticino e Svizzera, periodo 1996-2008. (elaborati dal NICER)
- Alcuni approfondimenti di epidemiologia dei tumori in Ticino
- Dati di incidenza in Ticino, periodo 1998-2002. (elaborati dalla IACR. Cancer Incidence in Five Continents, vol. IX.)
- Dati di incidenza in Ticino, periodo 1998-2002, per istotipo, uomini. (elaborati dalla IACR. Cancer Incidence in Five Continents, vol. IX.)
- Dati di incidenza in Ticino, periodo 1998-2002, per istotipo, donne. (elaborati dalla IACR. Cancer Incidence in Five Continents, vol. IX.)

In Svizzera

- Dati elaborati dal National Institute for Cancer Epidemiology and Registration (NICER)

Nel Mondo

- Cancer Incidence in Five Continents, volume IX. Dati elaborati dalla International Association of Cancer Registries (IACR)

Dati di mortalità dei tumori

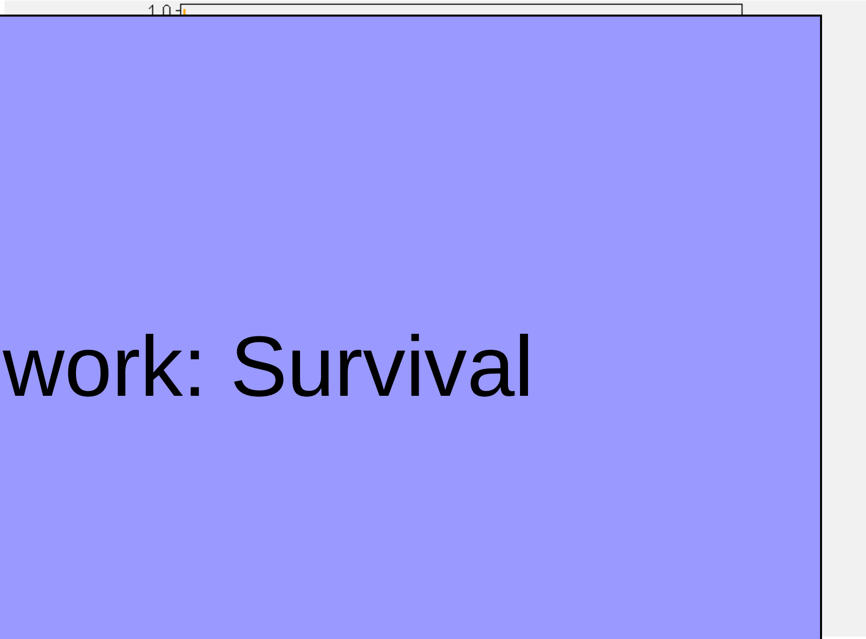
In Ticino

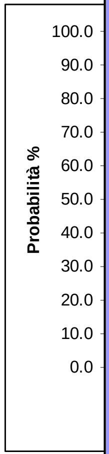
- Trend di mortalità in Ticino e Svizzera, periodo 1984-2008. (elaborati dal NICER)

In Svizzera

- Dati elaborati dal National Institute for Cancer Epidemiology and Registration (NICER)

Dati di Sopravvivenza dei pazienti ticinesi per tipologia tumorale





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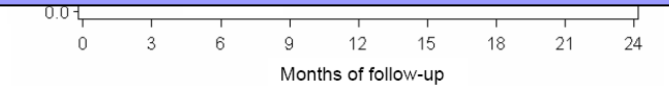
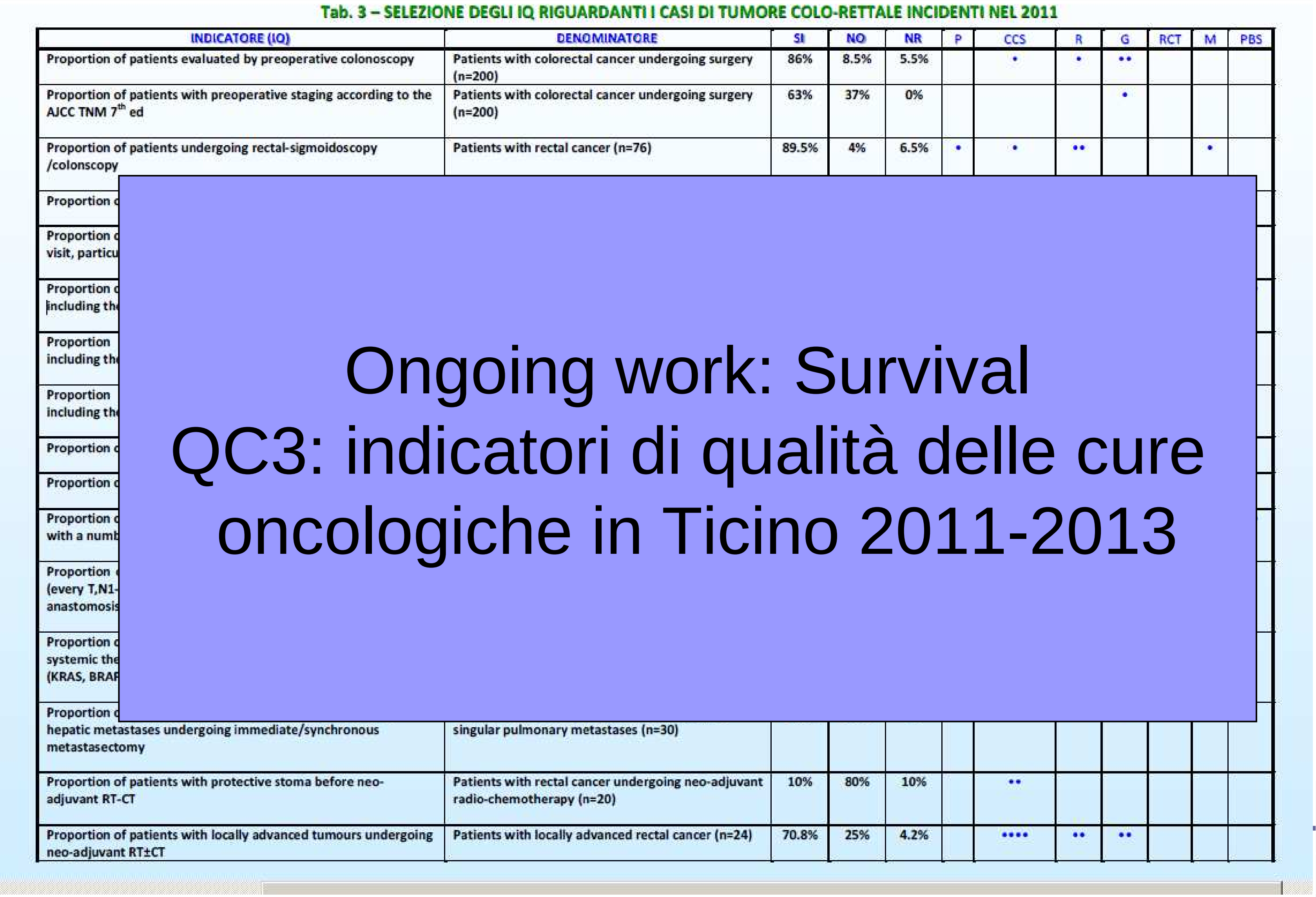
Ongoing work: Survival



AC: adenocarcinoma; LLC: large cell carcinoma; SmCC: small cell carcinoma;

SqCC: squamous cell carcinoma

QC3 project



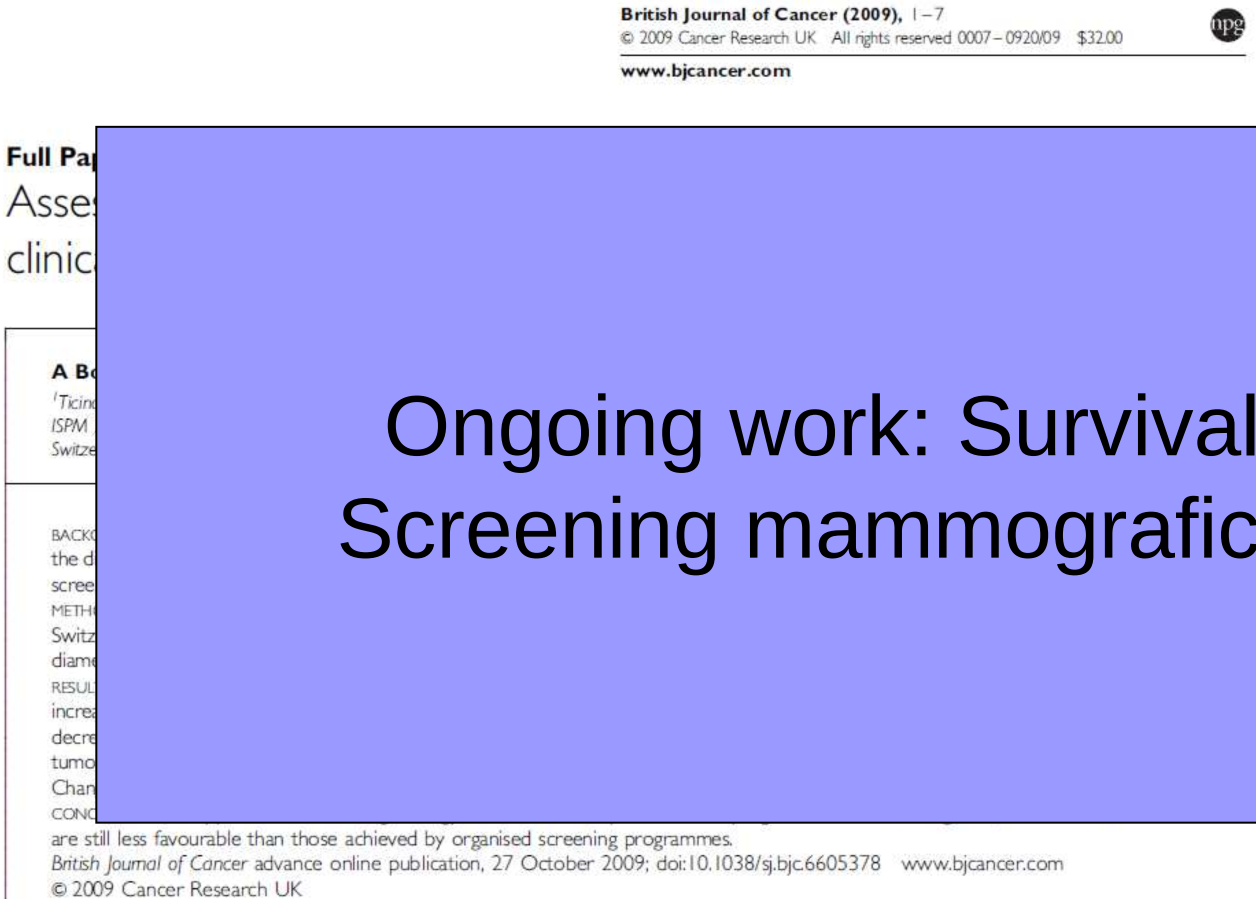
Tab. 3 – SELEZIONE DEGLI IQ RIGUARDANTI I CASI DI TUMORE COLO-RETTALE INCIDENTI NEL 2011

INDICATORE (IQ)	DENOMINATORE	SI	NO	NR	P	CCS	R	G	RCT	M	PBS
Proportion of patients evaluated by preoperative colonoscopy	Patients with colorectal cancer undergoing surgery (n=200)	86%	8.5%	5.5%		•	•	••			
Proportion of patients with preoperative staging according to the AJCC TNM 7th ed	Patients with colorectal cancer undergoing surgery (n=200)	63%	37%	0%				•			
Proportion of patients undergoing rectal-sigmoidoscopy /colonscopy	Patients with rectal cancer (n=76)	89.5%	4%	6.5%	•	•	••			•	
Proportion											
Proportion visit, particu											
Proportion including th											
Proportion including th											
Proportion including th											
Proportion											
Proportion											
Proportion with a numb											
Proportion (every T,N1- anastomosis											
Proportion systemic the (KRAS, BRA											
Proportion hepatic metastases undergoing immediate/synchronous metastasectomy	singular pulmonary metastases (n=30)										
Proportion of patients with protective stoma before neo-adjuvant RT-CT	Patients with rectal cancer undergoing neo-adjuvant radio-chemotherapy (n=20)	10%	80%	10%		••					
Proportion of patients with locally advanced tumours undergoing neo-adjuvant RT±CT	Patients with locally advanced rectal cancer (n=24)	70.8%	25%	4.2%		••••	••	••			

Ongoing work: Survival

QC3: indicatori di qualità delle cure oncologiche in Ticino 2011-2013

Screening mammografico



British Journal of Cancer (2009), 1–7
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are still less favourable than those achieved by organised screening programmes.
British Journal of Cancer advance online publication, 27 October 2009; doi:10.1038/sj.bjc.6605378 www.bjcancer.com
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Ongoing work: Survival
Screening mammografico