

*Department of Medical Statistics,
Informatics and Health Economics
Innsbruck Medical University*

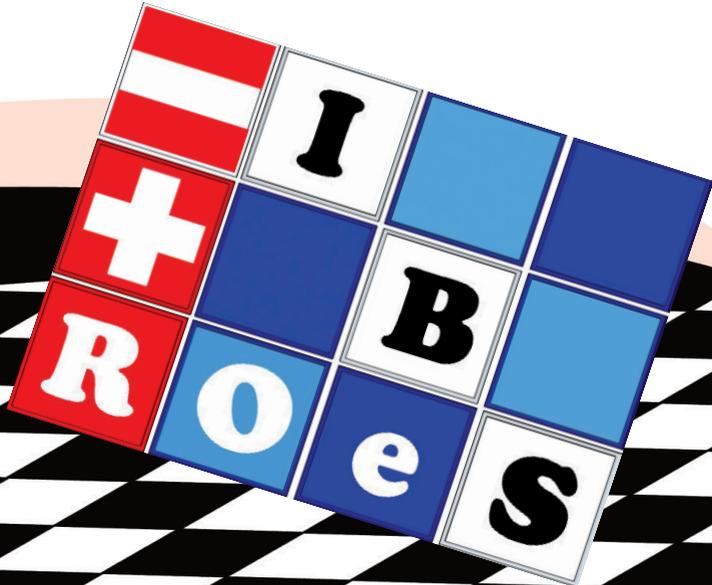


**Sabrina B. Neururer
Hanno Ulmer
(editors)**

ROeS 2013

9th - 12th September 2013. Dornbirn, Austria

Conference Program Conference Proceedings



Sabrina Barbara Neururer
Hanno Ulmer
(editors)

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organized by

*Department of Medical Statistics,
Informatics and Health Economics*

Innsbruck Medical University

Dear Participant,

It is our great pleasure to welcome you to Dornbirn for this conference organized by the Department of Medical Statistics, Informatics and Health Economics of Innsbruck Medical University. The conference has brought together leading scientists from academia and industry across the disciplines of biostatistics, mathematical statistics, epidemiology, as well as clinical trials and promises to be a highly interactive event.

This conference features an exceptional program that includes the latest developments. It offers excellent networking and collaboration opportunities for scientists from a variety of research fields.

The conference venue, Dornbirn, the largest town in the Austrian state of Vorarlberg, benefits from its favorable location in a diverse cultural and natural setting, close to Liechtenstein, Switzerland, and Germany. It is a friendly, lively small city which has been able to keep its cozy traditional rustic character. This location comprises a perfect combination of a picturesque town in an impressive landscape.

On behalf of all of who contributed to the organization of this conference we would like to thank all our speakers, financial supporters, reviewers, and attendees, and extend a warm welcome to you in Dornbirn.

We hope you will enjoy your stay.

With best wishes,



Sabrina B. Neururer
Conference Director



Hanno Ulmer
ROeS President

THE APPLICABILITY OF SITE-SPECIFIC PROPORTION CURED MODELS IN THE SMALL CANCER REGISTRY OF TYROL

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On data of the relatively small cancer registry of Tyrol, proportion cured models were applied to evaluate their applicability with limited numbers. The main focus was on the assessment of the up-to-date survival level of 25 major cancer types. For this purpose, mixture cure model estimates were calculated with the period approach to attain proportions cured and, of the so called uncured, median survival times. For some cancer sites the model could not be applied, because it did not converge and therefore no estimates were obtained. Among the sites for which estimates were available, the proportion cured levels ranged from 4.6% (95% CI 0.2% to 9.0%) for male pancreas cancer to 74.0% (95% CI 64.4% to 83.6%) for cervix cancer. For the fatal cases, the lowest median survival amounted to 0.3 years (95% CI 0.1 to 0.6) with male acute myeloblastic leukaemia (AML) and the highest to 2.7 years (95% CI 1.2 to 6.0) with male larynx cancer. Altogether, estimates were achieved for 14 sites among females and 15 among males. Of these, the results seem reliable among women for stomach, colon, rectum, pancreas, lung, cervix, ovary, central nervous system/brain and AML cancer and among men for head/neck, oesophagus, stomach, colon, rectum, liver, pancreas, lung, kidney, central nervous system/brain and AML cancer. In conclusion, it is shown that even data from a cancer registry covering a rather small region can be utilised to derive up-to-date survival estimates of various cancer types. With some restrictions these models seem to be usable in circumstances where there are limited numbers of cancer cases, such as in a population-based cancer survival study or when a relatively small cancer group of a national registry is investigated. Because the estimates are up to date, they could also be advantageously applied for monitoring temporal site-specific survival trends.