

The NCR SR web portal – a widely available information service about cancer epidemiology in Slovakia

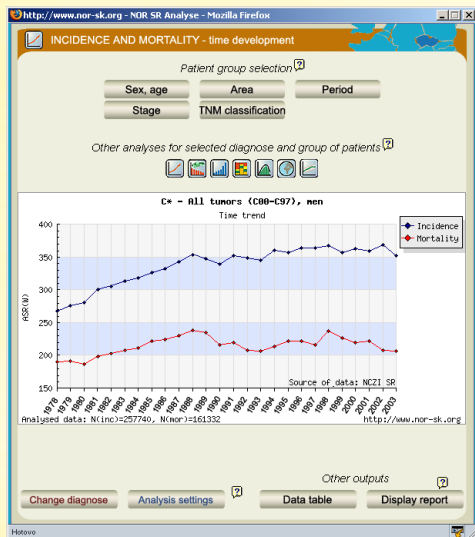
The creation of the NCR SR web portal has been stimulated by the effort to make the representative data on cancer epidemiology available to a broad spectrum of users in Slovakia and abroad. In early 2005, the Slovak Oncological Society came up with the idea to create such portal, addressed the sponsors to ensure financial support, and selected the technical administrator to process the data (IBA).

The launch of the NCR SR web portal has provided free access to all standard data on cancer epidemiology registered in the NCR SR / NHIC, thus ensuring that both professional and lay public in Slovakia and abroad can get relevant information about cancer incidence and diagnosis.

Information service of the NCR SR web portal:

- 1 **News:** regularly updated information on recent developments in population risk assessment and cancer epidemiology.
- 2 **Interactive analyses:** freely available software tools, allowing a direct examination of trends in cancer epidemiology.
- 3 **Reporting:** commented outputs and presentations, prepared by leading experts in the field.

All services mentioned above are freely available.

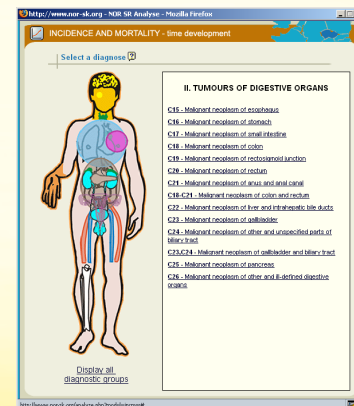


The information service of the NCR SR web portal will be further improved, taking into consideration the users' remarks, too. The main objective is to extend the information service over the area of population risk assessment, in relation to available data on environmental conditions in Slovakia. The presented version of the NCR SR web portal makes available standard epidemiological data from the NCR SR / NHIC, which can be only used in conformity with the Copyright Act. Any reproduction, copying, editing, publication or further distribution is strictly forbidden without the appropriate citation of the source.



In addition, the NCR SR / NHIC database allows the user to analyse diagnoses, treatment and survival of registered cancer patients. These analyses are prepared in order to be communicated within the expert societies of the Slovak Medical Association, and will be presented in scientific publications.

Based on the SVOD (System for Visualization of Oncology Data), the NCR SR web portal makes available aggregated data from the NCR SR database, containing records on cancer cases registered since 1978 to the present day. The analyzed dataset involves almost 500.000 cases (diagnosed in 1978-2003) of all tumours which have to be reported on an obligatory basis. The data can be analysed according to basic demographic characteristics and diagnostic information, as well as sorted by region or by time. The system is ready for automatic updates of epidemiological data once a year at minimum, as soon as the data are validated within the NCR SR / NHIC.



National Portal of Cancer Epidemiology in Slovakia

<http://www.nor-sk.org/>

Basic information:

The main objective of the project „National Portal of Cancer Epidemiology in Slovakia“ (hereinafter referred to as „the NCR SR web portal“) is to develop an information system to support scientific analyses from cancer data which are registered in the National Cancer Registry (NCR) at the National Health Information Centre (NHIC) of the Slovak Republic (hereinafter referred to as „the NCR SR / NHIC“). The system has been prepared to aggregate, to analyse and to present epidemiological, clinical and demographic data from the NCR SR / NHIC, which have been so far regularly published in special monographs or in scientific reports. The project initiation has been driven by the effort to make these representative and valuable data available to a broad spectrum of interested persons. The project is based on the presumption that general information about cancer epidemiology and related population risks should be freely available to all citizens of the Slovak Republic. In this way, the user gets a direct and unique access to complex information from available resources, which can be further used to subsequent analyses and interpretations.

The NCR SR web portal processes mainly epidemiological data on patients registered in the NCR SR Department, which is run by the National Health Information Centre of the Slovak Republic (NHIC). Anonymized and validated data from 1978 to the present day are available in the registry, which is a uniquely representative dataset, at European level at least (the database currently contains nearly 500.000 records from the period 1978-2003). Data administrator, the NCR SR / NHIC, must be therefore cited in all outputs of the portal, and is included among the expert guarantors of the project, too. The epidemiological trends could not be processed without relevant demographic data about the population of interest. These data have been provided by the Slovak Statistical Office for the purposes of this project.

The NCR SR web portal has been developed in a close cooperation with the Slovak Oncological Society and the Slovak Society of Pathologists. Among others, the Head of the Scientific Council of the Slovak Ministry of Health, the main expert in oncology from the Slovak Ministry of Health, and the Head of the Slovak Oncological Society have been involved in the preparation of this portal.

The NCR SR web portal has been created by a team of authors from the Institute of Biostatistics and Analyses, Masaryk University

Legal duty to report cancer incidence in Slovakia

The NCR SR web portal contains anonymized data on all tumours diagnosed in Slovak citizens and registered in the NCR SR / NHIC database. There is a legal duty to report cancer incidence. All malignant tumours, carcinomas in situ, neoplasms of uncertain or unknown behaviour and benign neoplasms of nervous systems and of endocrine glands are subject to the obligatory reporting. The number of cancer cases within the NCR SR / NHIC database is regularly checked and updated from the Death Certificates, from the Follow-up Reports on Malignant Neoplasm, and compared with the national database of hospitalized patients in Slovakia. An independent collection of positive results of microscopic examination from pathological and cytological departments/laboratories in Slovakia is used to check the accuracy of reporting on malignant tumours. Missing cancer cases are supplemented using a special reporting form. Breach of obligation to report malignant tumour is qualified as breaking the law.

EPIDEMIOLOGY OF MALIGNANT TUMOURS IN THE SLOVAK REPUBLIC

ABOUT PROJECT

NEWS

SOFTWARE SVOD

EPIDEMIOLOGICAL ANALYSES

ANALYSES WIZARD

How to cite

Publications

Legislation

Contacts

Financial support of the project

Other projects

Národné centrum zdravotníckych informácií, www.nczisk.sk

Legain user

Legislation

Conditions and methods to collect and process the data of cancer patients (diagnoses C00-D48 according to ICD-10) are stipulated by:

- Act No. 576/2004 Coll., on health care, on services related to health care provision, and on amendment of some acts, as subsequently amended by Act No. 82/2005 Coll.,
- Methodical Guidelines of the Slovak Ministry of Health, the "Obligatory Reporting of Malignant Tumours in Slovakia", published in the Bulletin of the Slovak Ministry of Health, Chapter 10-12
- Health Care Conception of the Slovak Ministry of Health in the field of radiation oncology.

As given by § 79 par 1 letter q) of Act No. 579/2004 Coll. on health care providers, each provider is obliged to process and submit data to the Slovak Ministry of Health - in the extent as stipulated by a specific directive (§ 44 par. 7, letter q) of Act No. 579/2004 Coll.). For the purposes of collection of these data into an information system, the Slovak Ministry of Health has established the National Health Information Centre, which operates the National Cancer Registry of the Slovak Republic (NCR SR).

According to the Methodical Guidelines of the Slovak Ministry of Health, every cancer-diagnosing physician is obliged to report the malignant tumour via regional medical oncologists. In this sense, the cancer-diagnosing physician is the person who has obtained the positive result of histological/cytological examination, in the case of microscopically non-verified but clinically clearly malignant findings, the diagnosing physician is due to report the disease in compliance with the Methodical Guidelines of the Slovak Ministry of Health.

Breach of obligation to provide data into the information systems of national medical registries is qualified as breaking the law. Such breaching of law can result into the sanctions against the statutory representative of the health care provider, as given by the § 82 par. 1 and par. 2 of Act No. 579/2004 Coll.; depending on the seriousness, extent of culpability and type of failure, the penalty can be imposed separately, simultaneously with another sanction and repeatedly.

About Project News Software SVOD Epidemiological analyses Analyses wizard

Developed by Institute of Biostatistics and Analyzes Faculty of Medicine and Faculty of Science

Citation of the content of the portal and of the outputs of analyses: Ondrusova, M., Piesko, I., Sateňová, Ch., Ostrňanová, A., Štefančíková, D., Ondrus, D. Comprehensive analysis of incidence and

What are the main benefits of the NCR SR web portal?

The NCR SR web portal spares your time

The web portal NCR SR makes available standard data from the NCR SR database in an aggregated form, providing end results of analyses and graphical outputs.

The NCR SR web portal is fully automated

The software enables to perform automatic analyses even to users without mathematical background, as the communication tools offer a simple selection of analyzed items.

The NCR SR web portal is a comprehensible and graphically-oriented tool

The web portal contains an independent graphic module with more than 30 types of graphic outputs. All results of analyses are directly visualized in the form of a graph.

The NCR SR web portal is a full-fledged information source

The system provides to its users all data inputs needed to a comprehensive analysis of population risks related to cancer formation, i.e. aggregated epidemiological data, as well as demographic population data.

EPIDEMIOLOGY OF MALIGNANT TUMOURS - ANALYSES

INCIDENCE AND MORTALITY

Time trends of incidence and mortality of malignant tumours in the Slovak Republic.

REGIONAL OVERVIEWS

Comparison of malignant tumours incidence and mortality in regions of the Slovak Republic.

TIME TRENDS

Changes in trends of incidence and mortality of malignant tumours in time (growth index and annual changes).

CLINICAL STAGES

Time trends of clinical stages distribution.

AGE OF PATIENTS

Age structure of patients and deaths on malignant tumours.

COMPARISON WITH FOREIGN COUNTRIES

Comparison of epidemiology of malignant tumours in the Slovak Republic and abroad (source: IARC - GLOBOCAN 2002).

COMPARATIVE ANALYSES

Time trends of epidemiological parameters in comparison with reference standards.

SUMMARY PRESENTATION

Comprehensive presentation of basic analyses of each diagnose.

About Project News Software SVOD Epidemiological analyses Analyses wizard

Developed by Institute of Biostatistics and Analyzes Faculty of Medicine and Faculty of Science

Citation of the content of the portal and of the outputs of analyses: Ondrusova, M., Piesko, I., Sateňová, Ch., Ostrňanová, A., Štefančíková, D., Ondrus, D. Comprehensive analysis of incidence and mortality of malignant tumours in the Slovak Republic, 1975-2003 [online]. Bratislava: National Health Information Centre of the Slovak Republic, 2003. 56 s. URL: www.nczisk.sk

The following analytical tools are available:

-  **INCIDENCE AND MORTALITY** – Time trends in cancer incidence and mortality in Slovakia.
-  **TIME TRENDS** – Changes in trends in cancer incidence and mortality over time (growth index and year-on-year changes).
-  **AGE OF PATIENTS** – Age structure of living and deceased cancer patients.
-  **REGIONAL OVERVIEWS** – Comparison of cancer incidence and mortality in individual regions of Slovakia.
-  **COMPARATIVE ANALYSES** – Time trends in epidemiological parameters in individual regions of Slovakia in comparison to reference standards.
-  **CLINICAL STAGES** – Time trends in distribution of clinical stages.
-  **COMPARISON WITH FOREIGN COUNTRIES** – Comparison of cancer epidemiology in Slovakia and worldwide (source: IARC - GLOBOCAN 2002).
-  **SUMMARY PRESENTATION** – Comprehensive presentations of basic analyses for individual diagnoses.

The NCR SR web portal has been developed thanks to the financial support of these companies:

-  Roche Slovensko, Ltd.
www.roche.sk
-  Bayer Schering Pharma – Schering Slovakia, Ltd.
www.schering.sk
-  Novartis Slovakia, Ltd.
www.novartis.sk
-  Sanofi Aventis Pharma Slovakia, Ltd.
www.sanofi-aventis.sk
-  Amgen Switzerland AG Slovakia
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