

SVOD - online analysis of cancer epidemiology in the Czech Republic

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IBA

Institute of Biostatistics and Analyses at the Faculty of Medicine and the Faculty of Science of the Masaryk University, Brno, Czech Republic (IBA MU) is a research institute oriented to the solution of scientific projects and providing related services, especially in the field of biological and clinical data analysis, organization and management of clinical trials, software development and ICT applications.

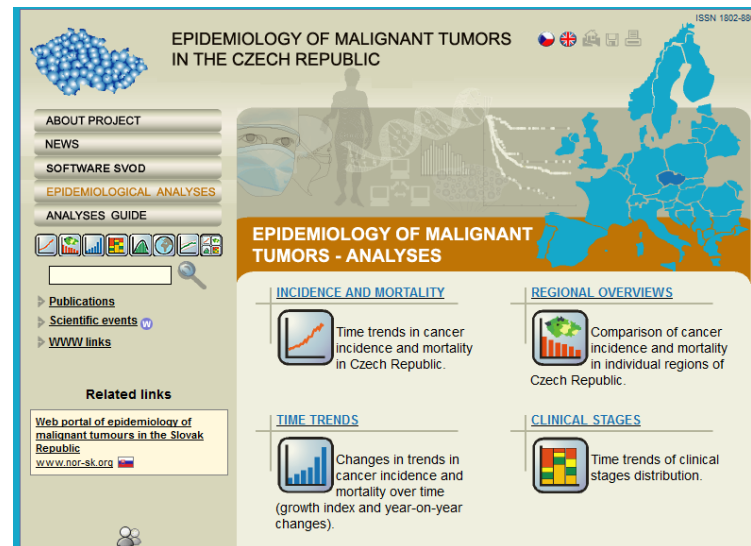
IBA MU activities are primarily focused on organizational and expert services for large scientific projects and clinical research projects.



Web portal SVOD

IBA created the System for Visualizing of Oncological Data (SVOD) – web portal of epidemiology of malignant tumours in the Czech Republic, which is based on the data from the Czech National Oncology Register.

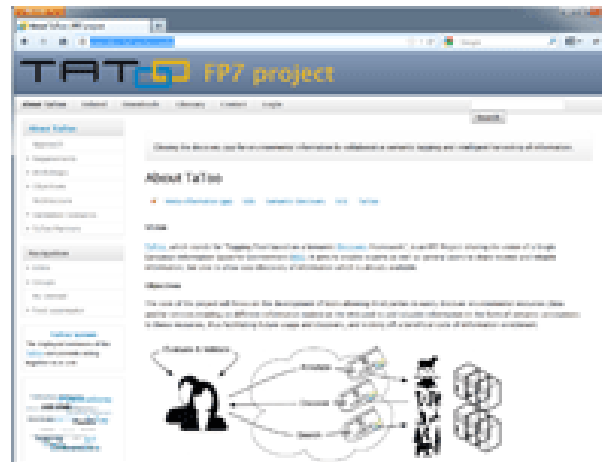
<http://www.svod.cz>



TaToo project

TaToo, which stands for “Tagging Tool based on a Semantic Discovery Framework”, is an FP7 Project sharing the vision of a Single European Information Space for Environment (SISE).

The project aims to set up a semantic web solution in order to close the discovery gap that prevents full and easy access to environmental resources on the web.



TaToo Framework

The main entry point of the TaToo Framework Architecture for accessing tags and annotations of environmental resources is the TaToo Web Portal and TaToo Web Services, which both provide access to the TaToo repository.

The TaToo Web Portal is built on Liferay Portal which is an implementation of JSR-286 enterprise portal.

TaToo Web Services include a set of services based on the SOAP and WSDL standards.

TaToo repository is build on Sesame framework - a de-facto standard framework for processing RDF data which fully supports the SPARQL query language for expressive querying.

TaToo – Validation Scenario

GENASIS and SVOD are part of the validation scenario “Anthropogenic impact and global climate change” (abbreviated “MU Scenario”) of the FP7 project TaToo.

The validation scenario is led by MU and focused on the correlation of environmental pollutants (POPs) and their impact on health of human population and also included an impact of global climate change on an atmospheric transport of POPs.

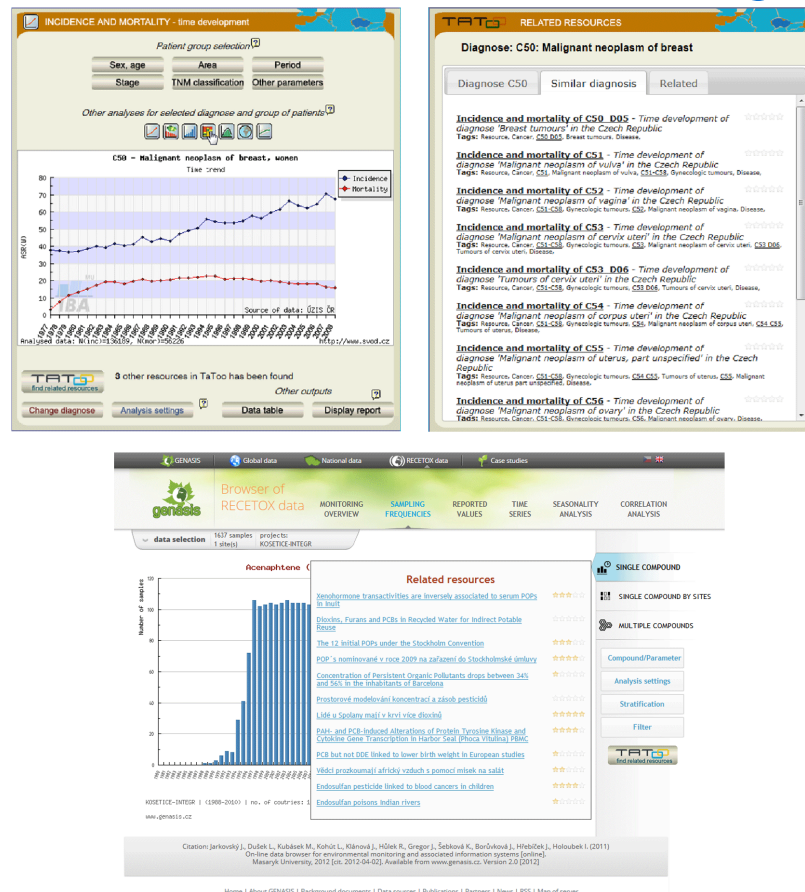
The development of a set of TaToo tools will provide a preliminary semantic analysis of the content of web resources for the MU Scenario, with the ability to access different published ontologies that describe the available knowledge basis.

The aim of MU Scenario is to create a central place for researchers, domain experts and decision makers to discover and access interdisciplinary knowledge in a more efficient and usable way that is the current state of the art

Validation Case Study – Discover resources with existing tools

Purpose of this case study is to provide the users of SVOD and GENASIS portals with the possibility to indirectly use the TaToo functionality for the discovery of similar resources based on analysed objects.

In this case study we implemented simply "TaToo button" into SVOD and GENASIS analyse tools and applied TaToo Discovery Service to retrieve a list of related data resources from TaToo



Implementation of Use Case “Discover resources with existing tools”

- Use Case 1 “Discover resources with existing tools”:
 - User of SVOD or GENASIS portals have the possibility to indirectly use the TaToo functionality for the discovery of similar resources based on analysed objects
 - TaToo returns links to the relevant data resources (in the same domain, time range, region...)

Integration of TaToo public services into SVOD portal

EPIDEMIOLOGY OF MALIGNANT TUMORS
IN THE CZECH REPUBLIC

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28.09.2011 Database update: data for year 2008 added
The epidemiological analyses now contain data from the period 1977-2008 (data source: National Cancer Registry).

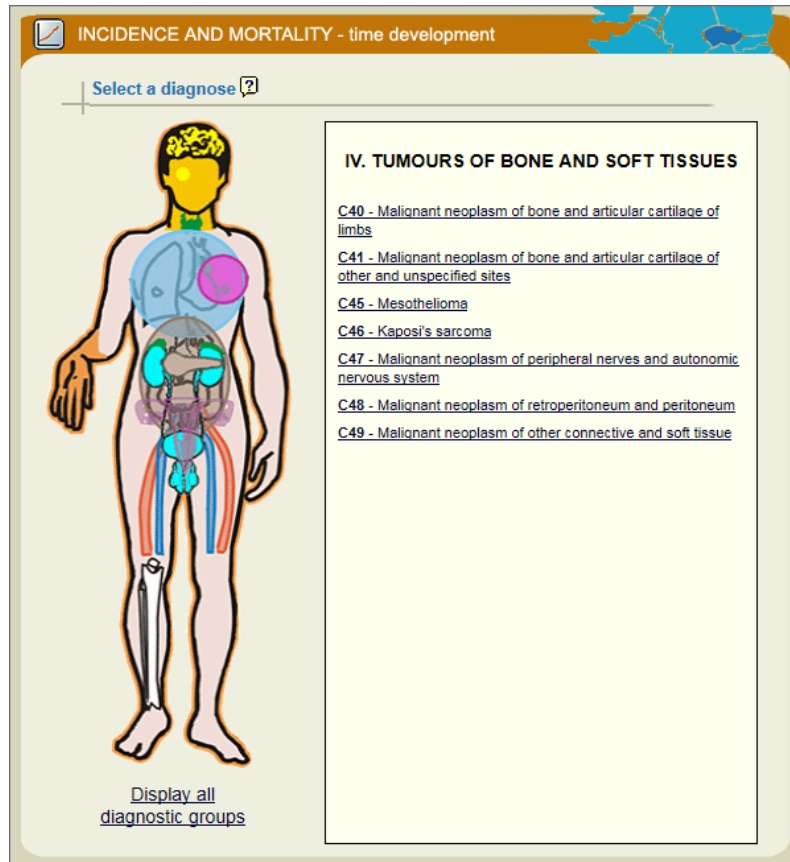
News from portal

English version of mamo.cz has been launched
21.04.2008 - April 2008 has seen the launch of the English version of www.mamo.cz, the official website of the project entitled Breast Screening Programme in the Czech Republic.

New web portal on cancer epidemiology in Slovakia
05.10.2007 - The launch of a new web portal on cancer epidemiology in Slovakia has been officially announced on the "Bratislavské onkologické dni", an oncology conference in Bratislava (October 3-5, 2007). The portal can be found on <http://www.nor-sk.org>.

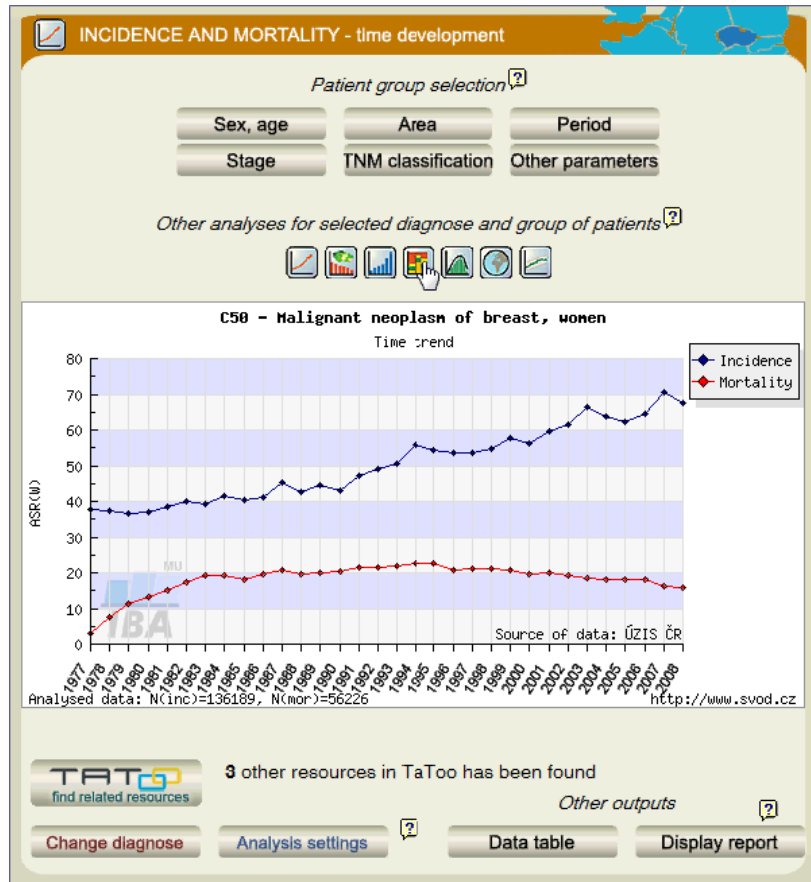
Open www.svod.cz portal
and click on „Incidence
and Mortality“ button
for start the analyses

Integration of TaToo public services into SVOD portal



In "Incidence and mortality analysis tool,, click on desired diagnose group and also on specific diagnose for start the analyses.

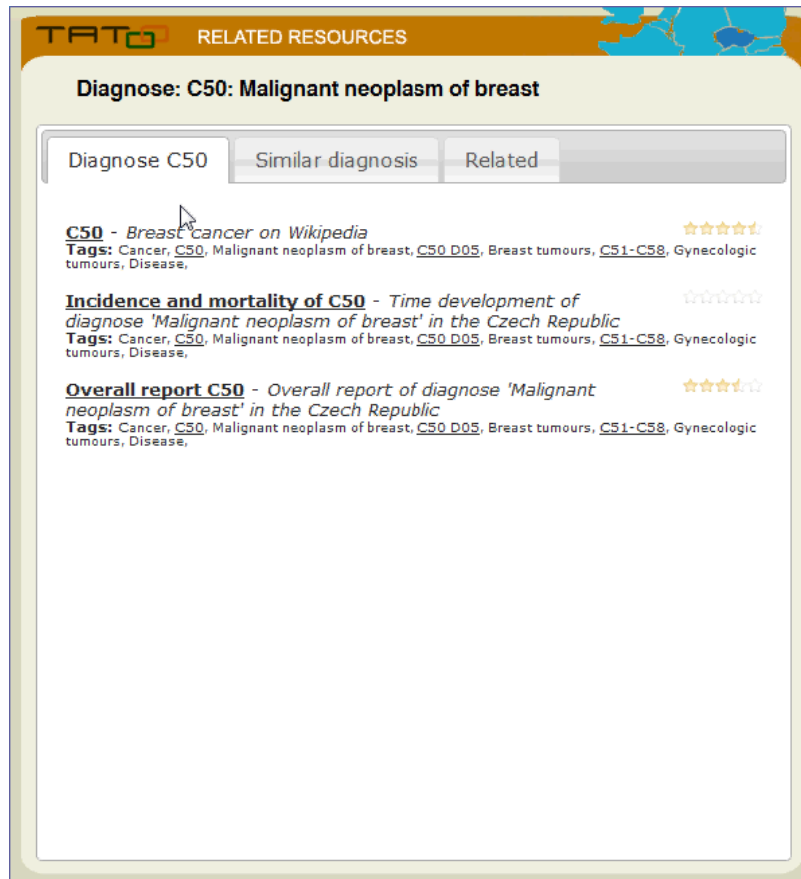
Integration of TaToo public services into SVOD portal



In analytic tool you can
edit analyse results and
interact with
TaToo framework

To see all related resources
press button „TaToo – find
related resources“

Integration of TaToo public services into SVOD portal



In TaToo result browser
you can see lists of resources
with the same diagnose,
similar diagnoses
and related resources

Upcoming challenges – Validation Scenario 3

- Enable multilingual and taxonomy approach for searching of resources
- Enable user friendly comparing of discovered data resources
- Identification and tagging of cross-domain resources

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