Technology support:
CANREG 5
GLOBOCAN
Training:
IARC course on cancer registers:
Training for trainers on Cancer Registration and data evaluation.

International Agency for Research on Cancer
Lyon, France

Technological support http://www.iarc.fr/en/education-training/training-courses.php

- **Education and Training-1**
- **Training Courses**

Summer School in Cancer Epidemiology

- The aim of the IARC Summer School is to stimulate research in cancer epidemiology, by improving scientific knowledge and developing skills among researchers worldwide.
- Special attention is given to countries where resources for the control of chronic diseases in general and cancer in particular are limited.
- By helping to develop local expertise in cancer epidemiology and by strengthening research institutions through international collaborations, IARC aims to enhance cancer prevention.
- Target participants The programme aims to provide training for both senior and junior personnel, leaders in research as well as supporting workers.
- Participants will be accepted from any institution or group involved in cancer monitoring, in the evaluation of care practices and preventive interventions as well as in etiological research
- .

Technological support http://www.iarc.fr/en/education-training/training-courses.php

- **Education and Training-2**
- **Training Courses**

Summer School in Cancer Epidemiology

- **15 June to 3 July 2009**

- Equipment and material Participants will be provided with manuals and textbooks, personal computers and software as required during the course.
- Practical sessions and demonstration exercises will make use of widely available software. IARC is committed to assisting participants with obtaining such software for use in their home institute.
- Programme In order to meet different needs, the Summer School is organized in modules.
- All lectures are complemented with practical sessions and group work.
- Two **regular modules** will be held from **15 June to 3 July**, the first module lasts one week and the second module two weeks.

Technological support
http://www.iarc.fr/en/education-training/training-courses.php

- **Education and Training**
- **Training Courses**
  Summer School in Cancer Epidemiology
- **15 June to 3 July 2009**

- Participation requirements
- The regular modules are open to cancer registry staff, health workers, health-related professionals and post-graduate students interested in initiating or pursuing work on cancer epidemiology and related disciplines. Priority is given to applicants from countries in greatest need to develop human resources in the area of cancer epidemiology. There is no registration fee for these modules. All participants must be fluent in English, the working language of the course. Participants may take one or two modules and may return in different years to take different modules. Finance
- Participants are responsible for the cost of travel and accommodation. Financial support is available for a limited number of participants. Priority is given to applicants from low- and medium-resource countries.
- Faculty Lecturers will be a combination of external invited specialists and IARC staff.
- Visa and accommodation Participants are responsible for obtaining a visa to France, if required. IARC will provide them with an invitation letter to facilitate this process. IARC will assist participants in arranging accommodation in Lyon.

Technological support
http://www.iarc.fr/en/education-training/training-courses.php

- **Education and Training**
- **Training Courses**
  Summer School in Cancer Epidemiology
- **15 June to 3 July 2009 Lyon.**

- **The application form can be downloaded: The application form can be downloaded in either PDF (requires the free Acrobat Reader Plug-in) or Word6 Format.**

- **Applications PDFApplications Word**

- **Deadline for applications is: 12 January 2009 (DEADLINE NOW CLOSED)**
  FOR FURTHER INFORMATION, PLEASE CONTACT:
- **IARC Courses Programme**
  International Agency for Research on Cancer
  150 cours Albert Thomas
  F-69008 Lyon
  France
  Tel: +33 4 72 73 80 72
  Fax: +33 4 72 73 83 02
  E-mail: cor@iarc.fr
  Website: www.iarc.fr

International Agency for Research on Cancer

World Health Organization

Technological support
http://www.iarc.fr/en/education-training/training-courses.php

- Module 1

- **CANCER REGIISTRATIION**
- **15--19 June 2009**

GLOBOCAN project.

- This project presents **estimates** of the incidence and prevalence of, and mortality from 27 cancers for **all** countries in the world in **2002**.
- This Internet application has limited tabulation and graphic facilities.
- The complete facilities such as grouping of cancer sites and populations, predictions of cancer burden, are available using the **GLOBOCAN 2002** software on CD-Rom (see the *Downloads* menu option).
-

GLOBOCAN project.

- **The GLOBOCAN** 2002
- This database has been built up using the huge amount of data available in the Descriptive Epidemiology Group of IARC.
- Incidence data are available from cancer registries.
- They cover entire national populations, or samples of such populations from selected regions.
- Cancer registries also provide statistics on cancer survival.
- With data on incidence, and on survival, we can estimate the prevalence of cancer (persons who are alive with cancer diagnosed within a given number of years of diagnosis).

GLOBOCAN project.

- **The GLOBOCAN 2002 database**
- Mortality data by cause are available for many countries through the registration of vital events, although the degree of detail and quality of the data vary considerably.
- With such data, it is possible to prepare estimates of the numbers of new and prevalent cancer cases and deaths by site, sex and age group.
- These are more or less accurate, for different countries, depending on the extent and accuracy of locally available data.
- Cancer data are always collected and compiled sometime after the events to which they relate, so that the most recent statistics available are always "late".
- The degree of lateness varies, but if we want to make comprehensive (worldwide) estimates of burden, we are always obliged to use incidence, survival, and mortality data that are several years old.

GLOBOCAN project.

- **The GLOBOCAN 2002 database**

- The GLOBOCAN 2002 GLOBOCAN 2002 presents estimates for the year **2002**.
- However, although the populations of the different countries are those estimated for the middle of 2002, **the disease rates are not those for the year 2002, but from the most recent data available, generally 2-5 years earlier**.
- Incidence and mortality rates by age group (0-14,15-44,45-54,55-64,65+), cancer and sex were estimated for as many countries as possible. The numbers of cases, deaths and cancer survivors are computed by multiplying the estimated rates by the year 2002 population estimates for the corresponding country.

GLOBOCAN project.

- **The GLOBOCAN 2002 database**

- It should be emphasized that:
- These estimates are based on the **most recent** incidence, mortality and survival data available at IARC, but more recent figures may be available directly from local sources.

- Because the sources of data are continuously improving in quality and extent, estimates may not be truly comparable overtime and **care should be taken when comparing these estimates with those published earlier**.

- The observed differences may be the result of a change in the methodology and should not be interpreted as a time trend effect.

GLOBOCAN project.

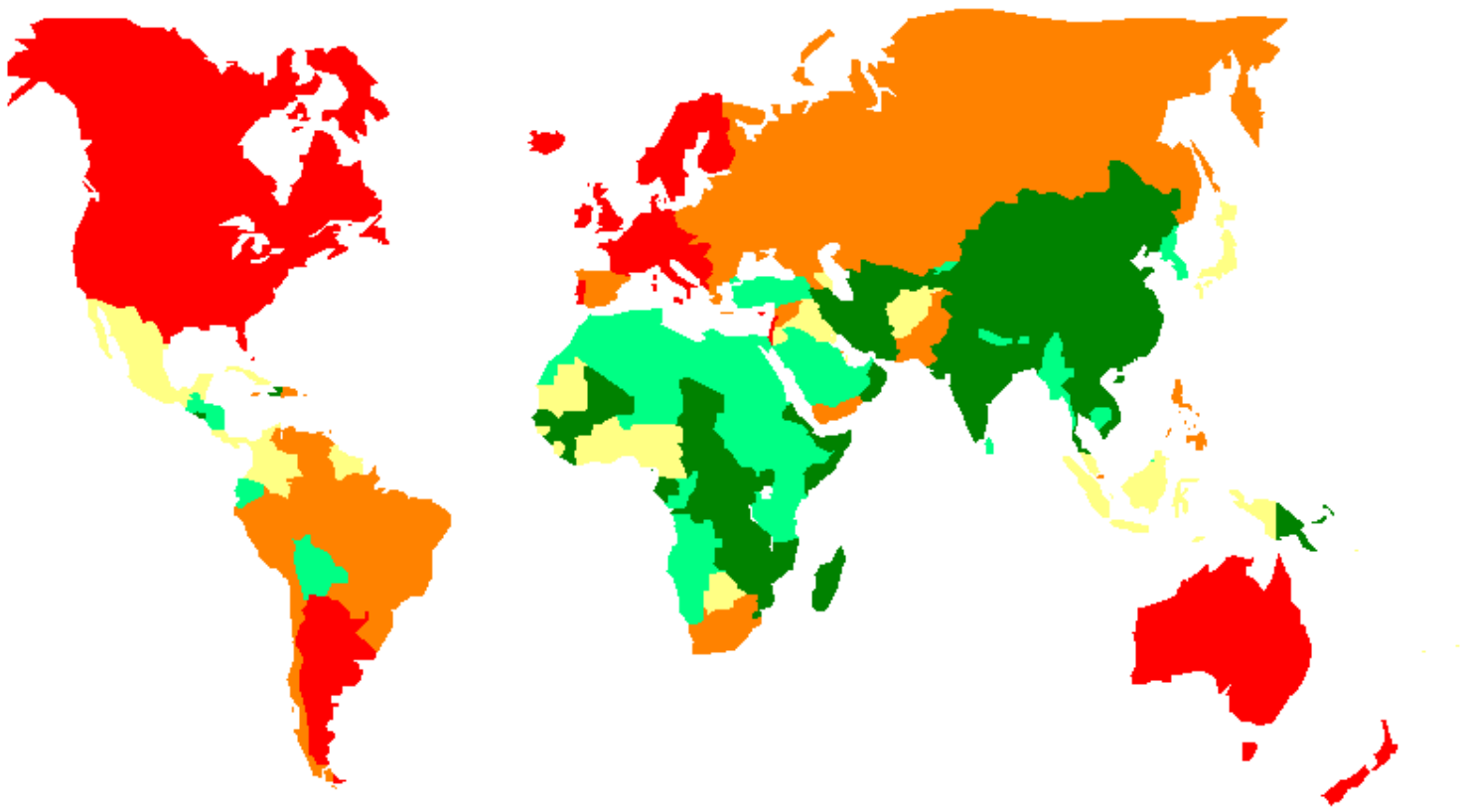
- **The GLOBOCAN 2002 database**

- The observed differences may be the result of a change in the methodology and should not be interpreted as a time trend effect.
- The Age-Standardized Rate (ASR, world standard) is calculated using the 5 age-groups 0-14,15-44,45-54,55-64,65+. The result may be slightly different from that computed using the same data categorised using the traditional 5 year age bands.
-

Related topics:

- Incidence
- Incidence of Kaposi sarcoma (KS) in Africa
- Mortality from Kaposi sarcoma (KS) in Africa
- Mortality
- Population
- Prevalence
- References

Breast
Age-Standardized incidence rate per 100,000



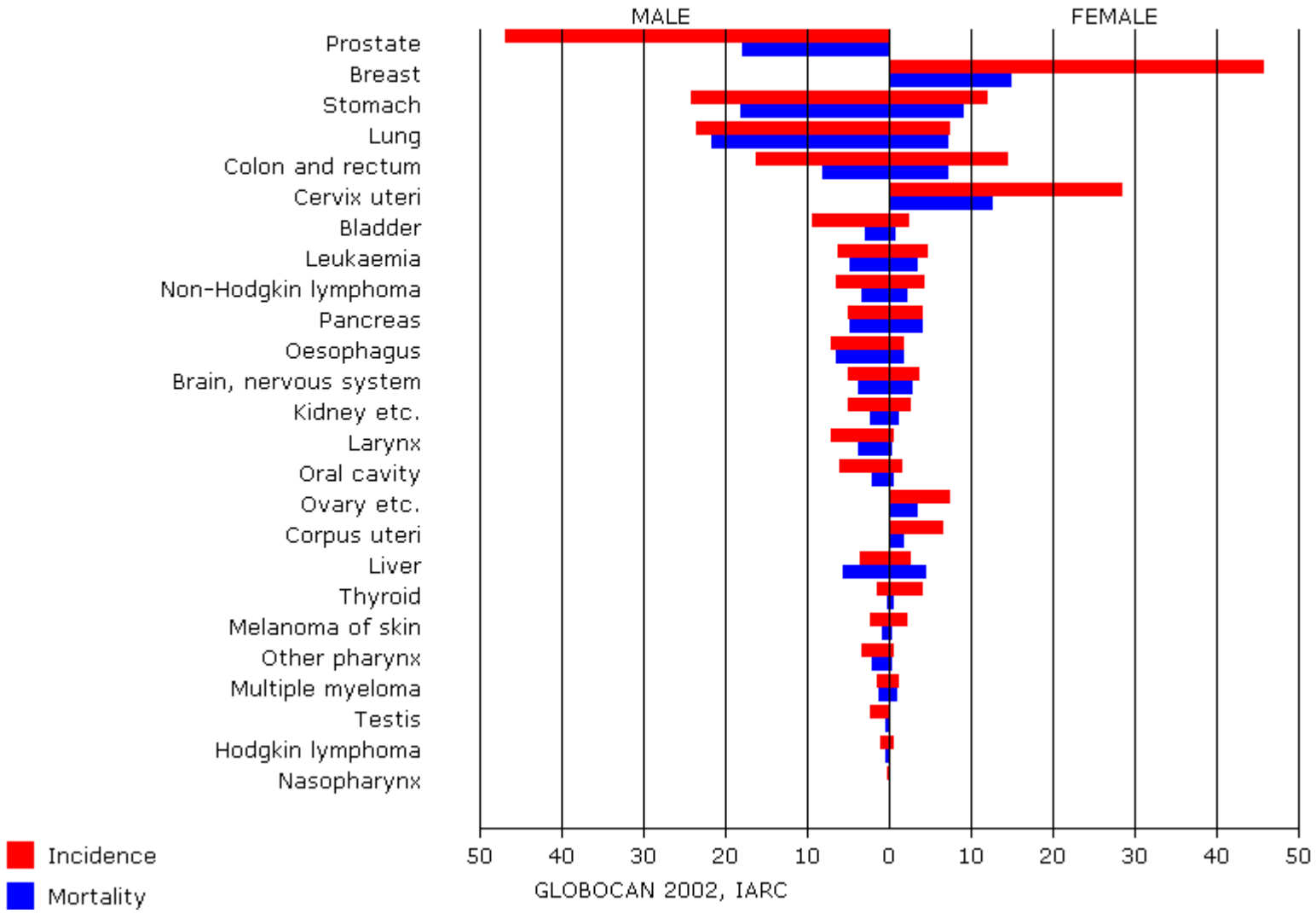
< 19.5 < 25.9 < 34.2 < 52.2 < 101.1

GLOBOCAN 2002, IARC

International Agency for Research on Cancer

World Health Organization

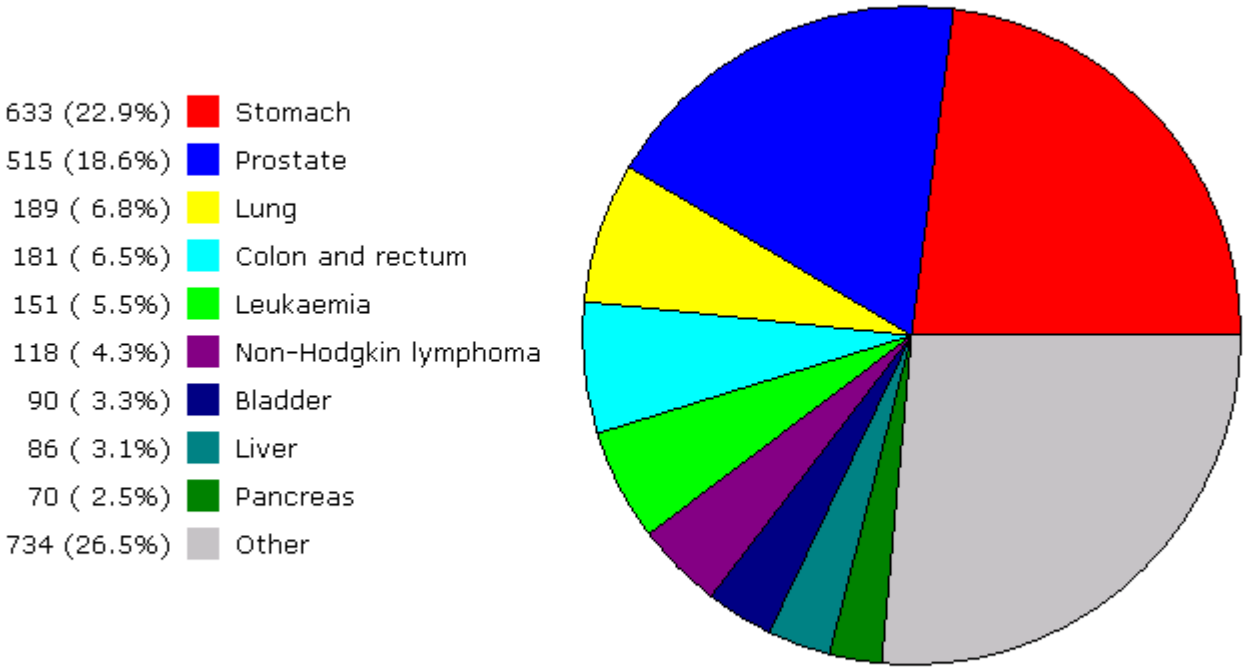
South America
Age-Standardized rate per 100,000 (all ages)



International Agency for Research on Cancer

World Health Organization

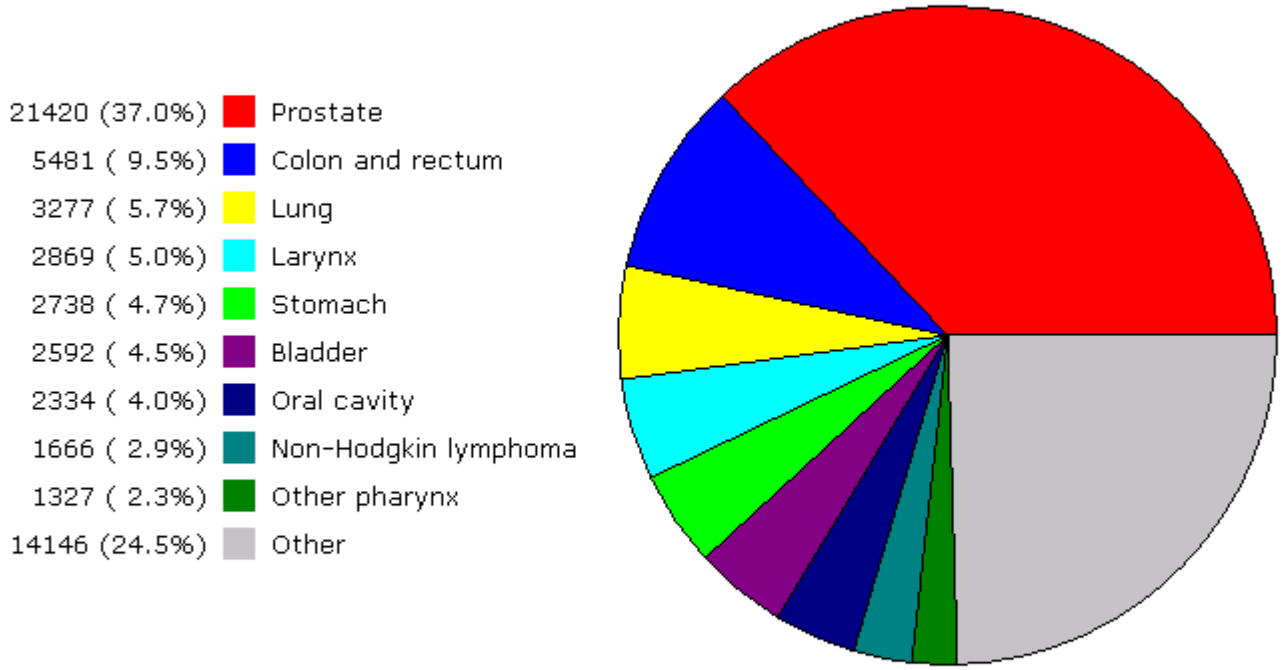
Costa Rica
New cancer cases (all ages), Males
Total: 2767



GLOBOCAN 2002, IARC

International Agency for Research on Cancer
World Health Organization

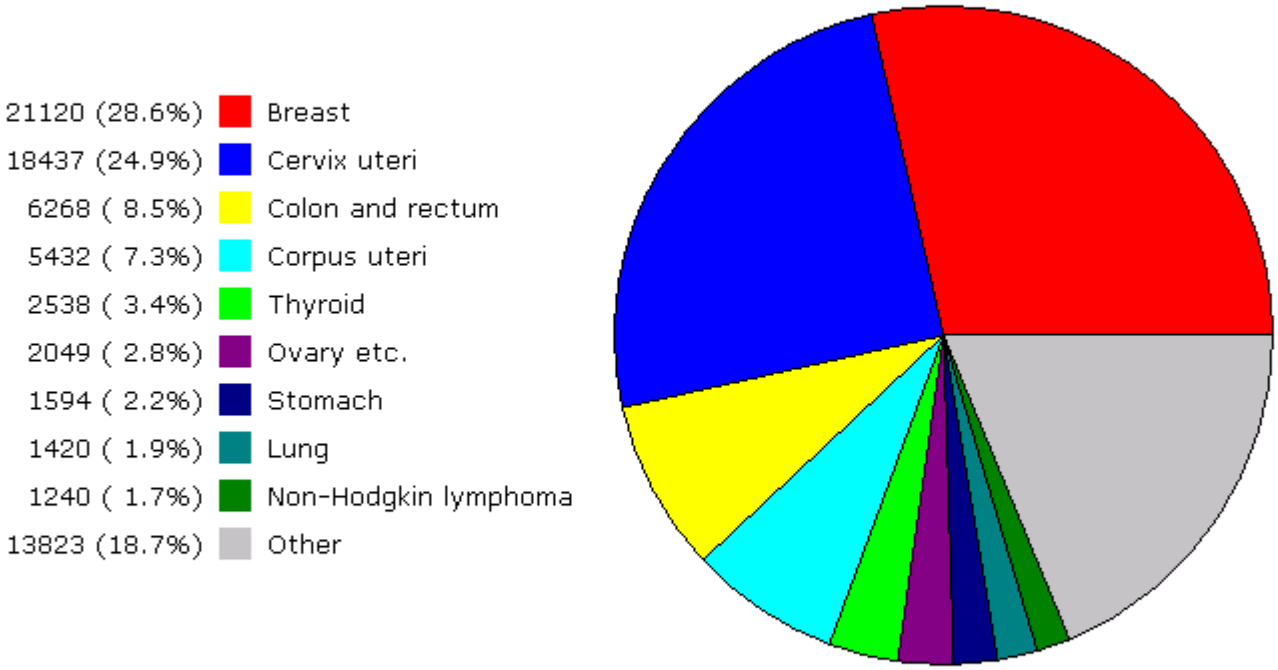
Caribbean
5-year prevalent cases (age 15+), Males
Total: 57850



GLOBOCAN 2002, IARC

International Agency for Research on Cancer
World Health Organization

Caribbean
5-year prevalent cases (age 15+), Females
Total: 73921



GLOBOCAN 2002, IARC

International Agency for Research on Cancer
World Health Organization

GLOBOCAN project.

- **The GLOBOCAN 2002 database**

- GLOBOCAN2002_September_2005.ZIP 3,259KB

  - Download the GLOBOCAN2002_September_2005.ZIP file to a temporary directory.
  - Double click on the file GLOBOCAN2002_September_2005.ZIP to extract the necessary files. To do this you must have a program like WinZip® or someother unzipping program installed on your computer.
  - After unzipping GLOBOCAN2002_September_2005.ZIP double click on Setup.exe program file to begin the installation process.

GLOBOCAN project.

- Database management, design and programming:
- J. Ferlay
  Data Analysis and Interpretation Group, Cancer Information Section International Agency for Research on Cancer, Lyon, France

  Any problems using this application should be reported to ferlay@iarc.fr.

International Agency for Research on Cancer

World Health Organization

The International Association of Cancer Registries (IACR)

- **History and aims of the association**
- The International Association of Cancer Registries (IACR) was founded in 1966, as a professional society dedicated to fostering the aims and activities of cancer registries worldwide. It is primarily for population-based registries, which collect information on the occurrence and outcome of cancer in defined population groups (usually the inhabitants of a city, region, or country).

- For each new cancer case, registries record details of the individual affected, the nature of the cancer, information on treatment, and on follow-up specially with respect to survival from the disease.

- Registries play an important role in research into the cause of cancer, both by providing data on patterns and trends, and in different types of epidemiological study (in particular, in their ability to follow up groups of persons exposed to potential hazard).

The International Association of Cancer Registries (IACR)

- **History and aims of the association**
- They comprise an essential element in the planning and monitoring of cancer control strategies, and for identifying priorities in public health.
- To ensure that cases are properly recorded, and that the statistical data gathered are complete and can be used to make valid comparisons, cancer registries must conform to accepted working practices and standards.
- The Association was created to foster the exchange of information between cancer registries internationally, so improving quality of data and comparability between registries.
- The Association is a non-governmental organization which has been in official relations with the World Health Organization since January 1979.

The International Association of Cancer Registries (IACR)

- **IACR Meetings IACR Annual Meeting**

- Is a scientific meeting lasting two to three Usually, at least a part of the scientific programme reflects the major concerns of the world region surrounding the Annual Meeting location. At the occasion of the Annual Meeting, two other meetings also take place:

- **Meeting of IACR Executive Board**, at which its members evaluate the past and plan future activities of the Association. At the **Business Meeting**, the activities for the past year and the plans for the next one are presented to the membership.
- This is the occasion for all IACR members to voice their views on the life of the organization.

IACR Annual meeting: 12-14 October 2010, Japan

The International Association of Cancer Registries (IACR)

- **Join IACR-http://www.iacr.com.fr/**
- The members of the Association are cancer registries, or individuals and organisations with an interest in cancer registration.Becoming a member of the Association allows those working in the field to share experience with other cancer registries, and to benefit from a range of joint activities.
- You will be kept updated with news from all active registries throughout the world. You will automatically receive an invitation to participate in the Annual Scientific Meeting, and other meetings organised by the Association.
- Many members can benefit from financial assistance with travel and accommodation to facilitate their attendance.
- There are also travel fellowships available to members for study in overseas institutes (or on courses) concerned with cancer registration.
- As the member of the Association, you will have preferential access to associated journals, to certain reference publications and you will benefit from reduced rates on WHO publications.
-

The International Association of Cancer Registries (IACR)

- **Join IACR - http://www.iacr.com.fr/**

- The Association may help you overcoming obstacles to cancer registration in your country or region. Above all, you will become a member of a community devoted to the cause of cancer registration.
- Application forms may be obtained directly from this site.
- Once your application (with other requested documents) is received at the IACR Secretariat, it will be evaluated by the IACR Executive Board, who will decide on which type of membership may be awarded.
- Full voting membership is accorded to well established population-based registries or associations of such registries which collect data on all sites of cancer, have good coverage of an accurately enumerated defined population and can provide valid incidence rates. Non-voting membership is given to organisations, cancer registries or individuals concerned with cancer registration.
- Non-voting members can have “Associated”, “Individual”, “Honorary” and “Corporate” membership.
- See Constitution and By-laws for further information. As soon as the decision is taken, you will be informed and you can start enjoying the privileges of your membership.

International Association of Cancer Registries - IACR
www.iacr.fr

Numero total = 76 registros

Quantos ativos ?

Argentina (17)	17
Barbados (1) Bermuda (1),Bolivia (1)	3
BRASIL (13)	13 (23)
Chile (2)	2
Colombia (4)	4
Costa Rica (1) Nacional	1
Cuba (1) Nacional	1
Equador (2)	2(3)
Guatemala (1)	1
Guyana (1)	1
Honduras (3)	3
Jamaica (1)	1
Martinica (1)	1
Mexico (1)	1
Nicaragua (2)	2
Panama (1)	1
Paraguay (1)	1
Peru (5)	5
Puerto Rico (1)	1
Surinam (1)	1
Trinidad Tobago (1)	1
Uruguay (1)	1
Venezuela (1)	1

The CanReg project

- Run by the department of Descriptive Epidemiology of IARC.
- Advice and assistance is given to Cancer Registries.
- A series of training courses for users have been held in different countries all over the world.
  - Part of the IARC Summer School program since 1996.

Background

- In 1982 IARC began work on a collection of programs for microcomputers which would provide a complete and easy-to-use system for a population-based cancer registry, and required no previous programming skills.
- The resulting software, CanReg, became a major collaborative activity between IARC and IACR.

Installations

- By July 1987, it had been installed in 3 cancer registries in Africa and 3 in Asia, as well as in one or two European registries.
- 1988/1989: 19 installations
- 1990/1991: 30 installations.
- 1992/1993: 45 installations.

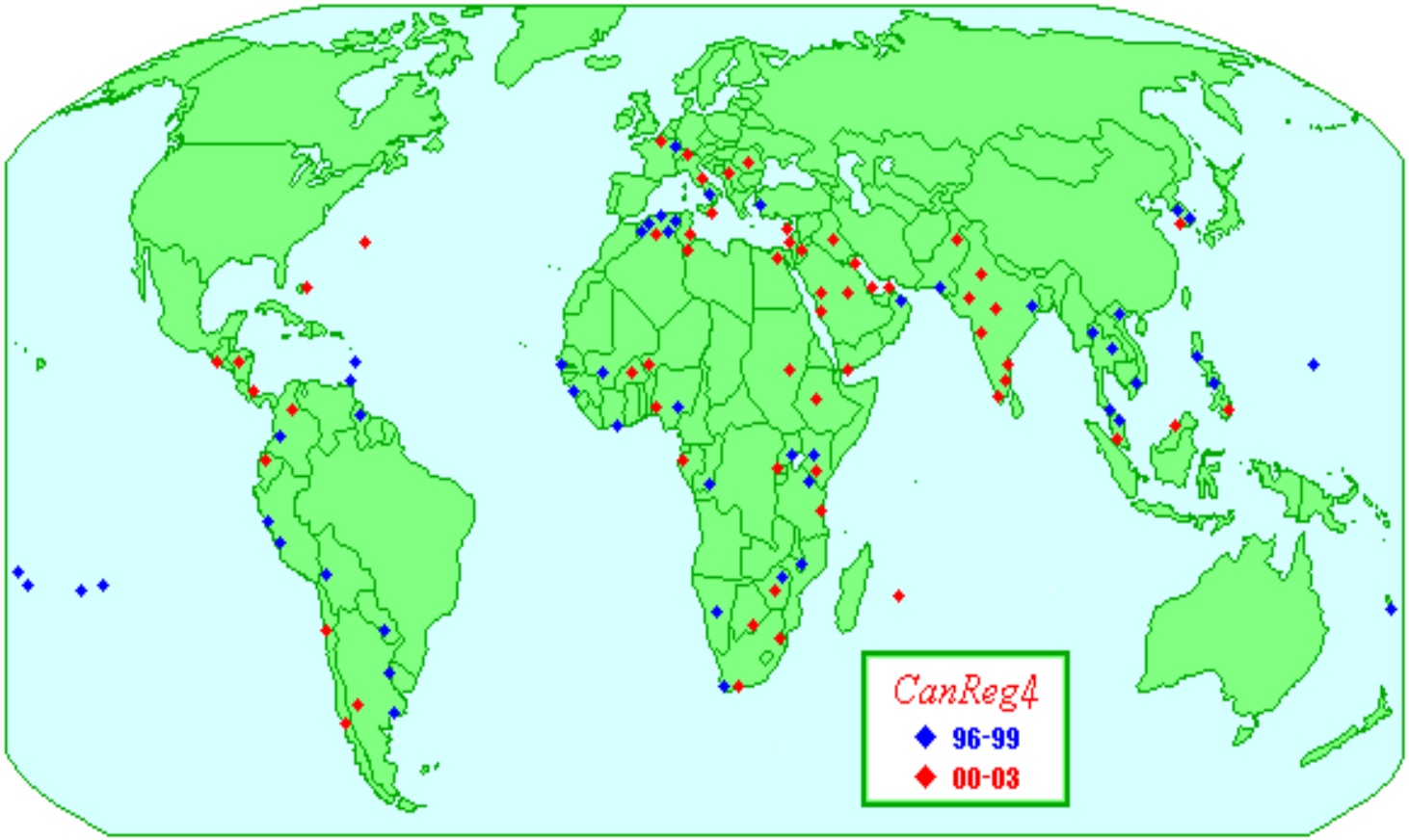
Functionality

- Main changes:
  - The GUI, now running under Windows thus allowing for non-latin character sets and multiple windows open at the same time.
  - Basic network support.
  - Program running on top of a real database engine.

All over the world

- Freely available to members of IACR.
- Versions exist in 10 languages.
- By 2002, most users of version 3 had been upgraded to the Windows version, CanReg4 and in total installed in over 120 registries, distributed over more than 60 countries.
- In 2008 140 registries in some 75 countries were using the program.

All over the world

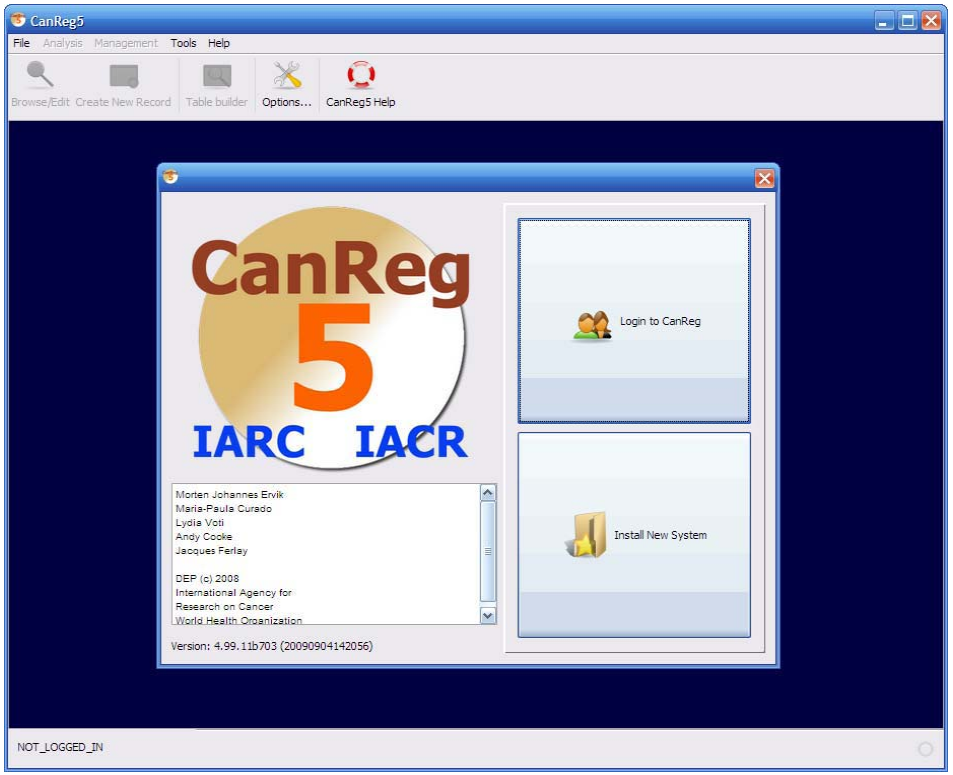


International Agency for Research on Cancer

World Health Organization

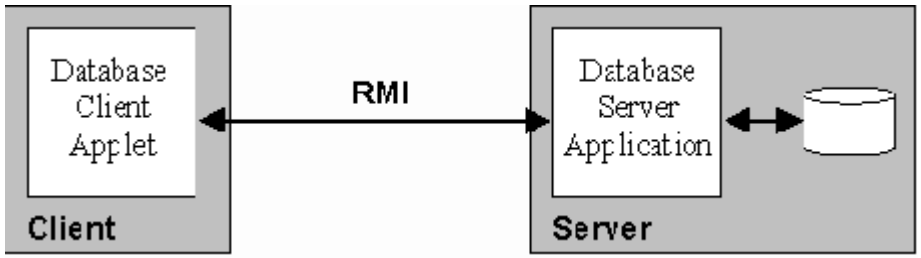
Version 5 – Open Sourced

- Lead developer: Morten Ervik
- Database: Apache DerbyDB (by default)
- Computer environment: Windows (2000, XP, Vista, 7), Mac OSX (10.4, 10.5, 10.6), Linux (all major distributions), FreeBSD etc.
- Development time: 2007 – 2009
- Latest update: ongoing



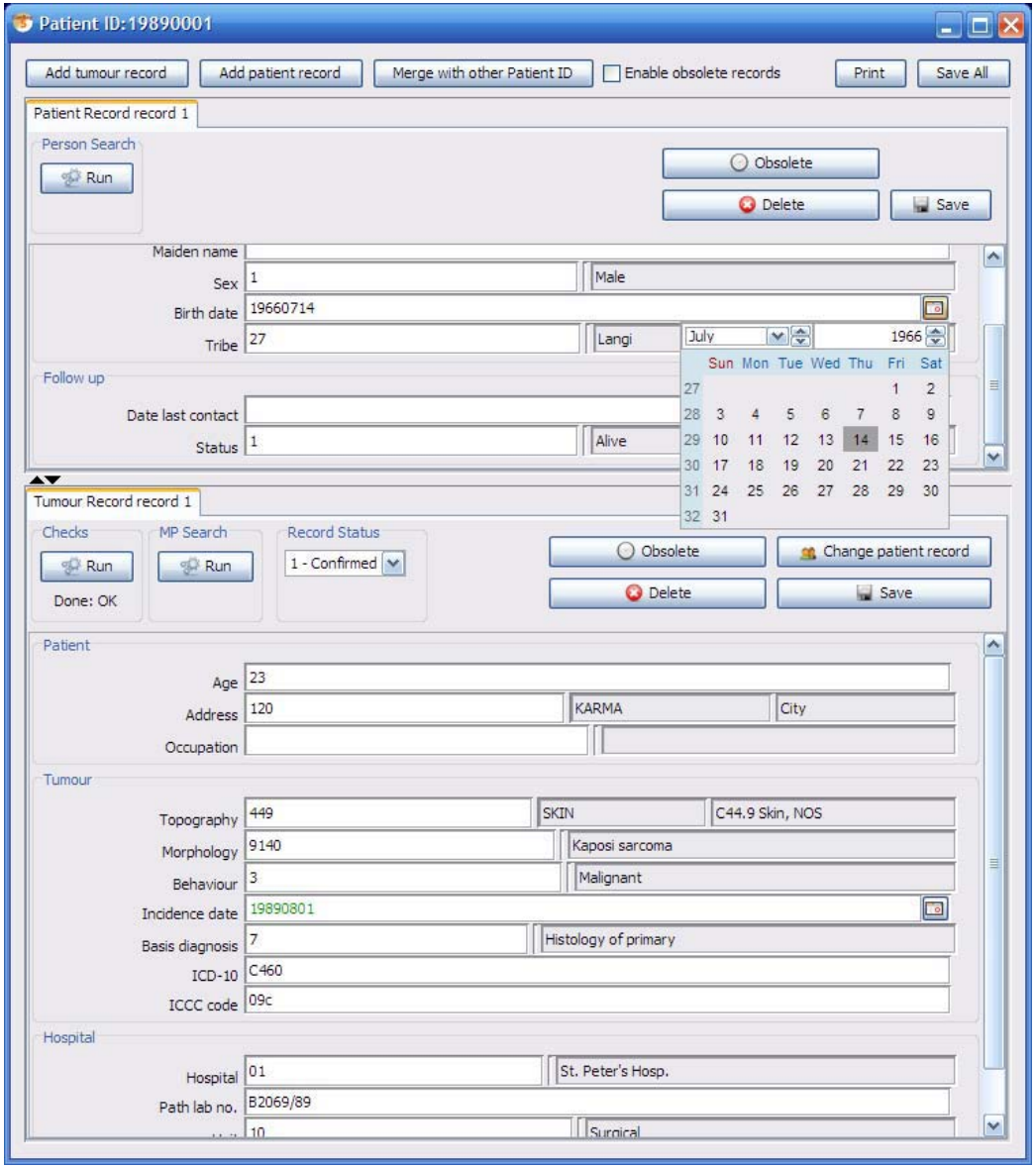
Multi-user/network

- Robust networked multi-user support was implemented by wrapping the database in a server application, easy to set up and run.
- Standard multi-tier design, using Java/RMI



User friendliness

- CanReg5 was designed with an emphasis on user friendliness
  - Has a modern user interface
  - Easy to navigate
- Will be available in several languages.



International Agency for Research on Cancer

World Health Organization

Quality control standards

- Built into CanReg5 are several quality control mechanisms, such as:
  - Interactive code validation
  - Consistency checks for the most standard variables
  - Quality control reporting tools

Multi-platform support

- CanReg5 was designed to run on all major operating systems (i.e. Microsoft Windows, Apple's OS X, Linux etc.)