



JRC-ENCR training course on "Statistical methods for the analysis of cancer registry data"

The JRC and the ENCR are organising a training on basic statistical analysis of cancer registry data.

The aim of this course is to support the analysis of cancer registry data by describing the appropriate statistical methods to generate informative statistics on cancer incidence and survival. The course will include guided and interactive exercise sessions, and will also demonstrate the utility of the [European Cancer Information System](#) to visualise and compare Europe-wide data from registries. At the end of the course, participants should be:

- a. Familiar with commonly used concepts and statistical methods for the analysis of cancer registry data;
- b. Able to run cancer incidence and survival analyses autonomously;
- c. Aware of the specific strengths and limitations of different methods.

The course is intended for new cancer registry staff or professionals linked to cancer registration who wish to expand their understanding of the concepts in cancer registry data analysis, interpretation and dissemination. No previous statistical knowledge is required. Familiarity with basic principles for cancer registration will be beneficial.

Faculty

1. Mario ŠEKERIJA – ENCR Steering Committee
2. Maria Jose SANCHEZ-PEREZ – ENCR Steering Committee
3. Ana MIRANDA– ENCR Steering Committee
4. Roberta De Angelis – EURO CARE
5. Francesco GIUSTI – JRC
6. Tadek DYBA– JRC
7. Luciana Neamtii– JRC
8. Nadya Dimitrova– JRC



Day 1. Tuesday June 5, 2018

9.30-17.30

Session 1. 9.30-9.45. **Welcome and introduction to the course** (*incl. quick tour de table among participants*).

Session 2. 9.45-10.45. **Fundamental statistical indicators for incidence and mortality:** how to compute them from cancer-registry data. (*introduction to disease frequency measures and rates, age- and time-specific, cumulative rates, cumulative risk*) - Francesco

10.45-11.00 Break.

Session 3. 11.00-12.30. **Guided exercise 1** - Francesco

12.30-13.30 Lunch Break.

Session 4. 13.30-14.30. **Rates and rate standardization.** (*age- and calendar period-specific rates, standardized rates, standard populations*) - Mario

Session 5. 14.30-15.30. **Guided exercise 2** - Mario

15.30-15.45 Break

Session 6. 15.30-16.00. **Introduction to analysis of time trends and predictions** (*annual percentage change, prediction interval*) - Tadek

Session 7. 16.00-16.30. **Guided exercise 3** - Tadek

Session 8. 16.30-17.00 **Visualising incidence/mortality indicators and time trends in ECIS** - Luciana

Session 9. 17.00-17.30. **Wrap-up and comments** from participants



Day 2. Wednesday June 6, 2018

9.00-17.00

Session 1. 9.00-10.45. **Basic concepts for survival analysis - 1** (*crude survival, expected survival, net survival, survival comparisons, cause-specific vs. net survival*) – Roberta

10:45-11:00 Break

Session 2. 11.00-12.30. **Guided exercise 4** – Roberta and Francesco

12.30-13.30 Lunch Break

Session 3. 13:30-15.00. **Basic concepts for survival analysis – 2** (*cohort vs period estimates, survival data quality, adjustment by age or case mix, available software to compute survival statistics, international benchmarking studies*) - Roberta

15.00-15.15 Break

Session 4. 15.15-15.45. **Interpretation of results from survival analysis** (*comparative cancer outcome studies, time trends and geographical differences in Europe*) - Roberta

Session 5. 15.45-16.15. **Visualising survival indicators in ECIS** - Luciana

Session 6. 16.15: 16.30. **Interactive exercise 5** – Roberta and Luciana

Session 7. 16.30-17.00. **Wrap-up and comments** from participants