Cancer Care and Cancer Control in the Czech Republic

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Cancer Care in the Czech Republic

10-million population (less than half of Shanghai)
Incidence: 70,000 new cancer cases reported every year
Mortality: 28,000 deaths from cancer every year
Fatality rate (MI index): 40% (average)

Prevalence – burden of cancer (oncology) in health system:
450,000 citizens living with treated cancer or without cancer after successful therapy
- need for systematic follow up
Inspirations from the past?

Traditional medicine was

almost always personalized
respectful to individual and context
more holistic

However,

not statistical evidence based
probably less effective
probably less efficient
less expensive

and

inspirative for functional disorders and early stages of chronic diseases
less approved in western countries
Principal **pentagram of clinical oncology** – main oncology pillars:

- **Diagnostic oncology** – **imaging methods**
- **Diagnostic oncology** – **laboratory methods**
- **Surgical oncology** (incl. all cancer operating disciplines)
- **Radiation oncology**
- **Medical oncology**

**Clinical oncology network**

160 university, regional, district, municipal and private hospitals

13 **cancer centers for solid tumors of adults**
  - 6 **haemato-oncology centers**
  - 2 **pediatric oncology centers**
    - in university and regional hospitals

1 **specialized cancer institute** (MMCI in Brno, South Moravia)
  - (member of European Organisation of Cancer Institutes – OECI)
Radiation oncology
based on
43 linear accelerators - photon radiotherapy
brachytherapy units
1 proton therapy center

Medical oncology
chemotherapy & oncological pharmacy
hormonotherapy
biological & targeted therapy & predictive testing
immunotherapy

supportive treatment & rehabilitation methods
Cancer Control in the Czech Republic

Cancer prevention & early detection of tumors

Preventive oncology examinations available in GP (fixed in legislation)
Breast cancer screening program – 60% participation
Colorectal cancer screening program
Cervical cancer screening program

Cancer epidemiology and statistics

National cancer registry since 1977 (fixed in legislation)
- countrywide standardized data collection and reporting
System for visualisation of oncology data – www.svod.cz (also in English)
Collaboration in IARC (International Agency for Research on Cancer)
Member of CanCon (Cancer Control Program of the EC)
Cancer rises and declines

Still rising incidence of prostatic, renal and pancreatic cancers

Stabilisation of lung cancer

Reduction of mortality in breast and colorectal cancer

Remarkable decline in gastric cancer
Education in oncology in the Czech Republic

Pregradual
clinical oncology at 8 medical faculties in 4 universities (5th grade)

Primary postgradual specialisation
clinical (medical) oncology
radiation oncology
paediatric oncology
haematologic oncology

Secondary specialisation for surgeons, urologists, gynecologists:
surgical oncology
(3 operation skill modules – abdominal, thoracis, mammocutaneous)
urologic oncology
gynaecologic oncology

+ university PhD programs in oncology
Research Infrastructures for Oncology

European Strategy Forum on Research Infrastructures (ESFRI)

TRANSLATION MEDICINE

EATRIS
Czech Republic is a partner of EATRIS consortium
Palacky University - participant organisation

BIO BANKING & MOLECULAR RESOURCES

Czech Republic is a participating country
MMCI is a participant organisation = National Node

CLINICAL RESEARCH

ECRIN - IA (Integrating Activity)
Masaryk University - participant organisation

ECRIN
European Clinical Research Infrastructures Network

TRANSLATION MEDICINE