

Meeting concerning the implementation of
Directive 2005/36/EC on the recognition
of professional qualifications

MEDICAL ONCOLOGY

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Brussels, 29th June, 2007

AIM of my presentation:

- To explain what the speciality of MEDICAL ONCOLOGY involves and how it differs from other medical specialities involved in cancer treatment

Estimates of the cancer incidence and mortality in Europe in 2006.
[Ferlay J](#), [Autier P](#), [Boniol M](#), [Heanue M](#), [Colombet M](#), [Boyle P](#).

Ann Oncol. 2007 Mar;18(3):581-92. Epub 2007 Feb 7.

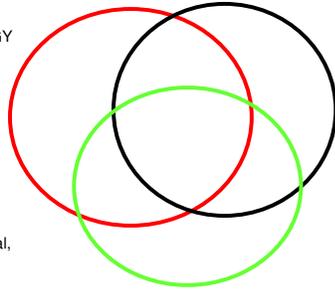
- **“Conclusion:** The total number of new cases of cancer in Europe appears to have increased by 300,000 since 2004. With an estimated 3.2 million new cases (53% occurring in men, 47% in women) and 1.7 million deaths (56% in men, 44% in women) each year, cancer remains an important public health problem in Europe and the ageing of the European population will cause these numbers to continue to increase.”

Strategies to manage the epidemics of cancer

- Primary prevention (tobacco, alcohol, diet, physical activity, environment)
- Screening programs (cervix, breast, colorectum)
- **Treatment**
 - Surgery (local treatment)
 - Radiotherapy (local treatment)
 - **Medical oncology** (systemic treatment: chemotherapy, hormonal therapy, immunotherapy, targeted therapy, supportive therapy)
- Palliative care

Cancer treatment is multidisciplinary*!

- SURGERY
- RADIOTHERAPY
- MEDICAL ONCOLOGY



*Treatment planning in a multidisciplinary team (surgical, radiation and medical oncologist) yields best treatment outcomes

MEDICAL ONCOLOGY

- Professional qualification with a basic training in internal medicine followed by a training programme in medical oncology that involves the medical management of malignant diseases and clinical cancer research (clinical trials).

4.1 Basic scientific principles

- 4.1.1 Cancer biology
- 4.1.2 Tumor immunology
- 4.1.3 Etiology, epidemiology, screening, and prevention
- 4.1.4 Clinical research including statistics

4.2 Basic principles in the management and treatment of malignant diseases

- 4.2.1 Pathology/laboratory/medicine/molecular biology medicine
- 4.2.2 Staging procedures
- 4.2.3 Therapy
 - 4.2.3.1 Surgery
 - 4.2.3.2 Radiation oncology
 - 4.2.3.3 Anticancer agents
 - 4.2.3.4 Biologic therapy

<http://www.esmo.org/resources/policies/gcc/>

- 4.2.3.5 Supportive measures
 - Nausea and vomiting
 - Infections and neutropenia
 - Anemia
 - Thrombocytopenia
 - Marrow and peripheral-blood progenitor cells
 - Organ protection
 - Mucositis
 - Malignant effusions
 - Extravasation
 - Oncologic emergencies
 - Paraneoplastic syndromes
 - Nutritional support
 - 4.2.3.6. Palliative care and end-of-life care
 - Pain
 - Other symptoms
 - Communication
 - 4.2.3.7. Rehabilitation

4.3 Management and treatment of individual cancers

Medical management of malignant diseases I

- With new advances in molecular biology and a lot of new drugs in the market has become extremely complex (and expensive!)
- Treatments (chemotherapy, hormonal therapy, immunotherapy, targeted therapy) are usually combined as well as side effects, and a basic knowledge of internal medicine is essential to prevent, recognize and successfully treat these toxicities

Medical management of malignant diseases II

- Incidence of cancer is growing mainly on the account of aging of the population
- Older patients have many concomitant chronic conditions (cardiovascular, diabetes, impaired kidney and liver function, ...)
- A basic knowledge of internal medicine and therefore treatment of these diseases is essential in the management of these patients

Treating patients in clinical trials is essential for reaching the final goal to cure cancer

- Enormous load of new drugs are coming from basic research into clinic that must be offered to patients in clinical trials
- To safely conduct clinical trials (with drugs) a basic knowledge of internal medicine and training in clinical trial methodology is essential.
- In the new era of targeted therapy these trials as well as treatments will no longer be organ oriented but target oriented (drugs directed to certain profile of targets expressed in different kinds of tumors)

Conclusion

- Cancer load is growing (aging of the population)
- Treatments are becoming complex, more effective and very expensive
- Best outcome is expected when treatment is planned in a multidisciplinary team (surgical, radiation and medical oncologist)
- Basic knowledge of internal medicine is essential for best use of systemic treatments (old people, concomitant diseases, toxicity)