ESGO Exam Curriculum

ESGO Exam Curriculum Committee

The ESGO Exam Curriculum Vitae has been developed and approved by the ESGO Committee with contributions from expert advisors from within the European Society of Gynaecological Oncology (ESGO), the European Society for Medical Oncology (ESMO), the European Society for Radiotherapy and Oncology (ESTRO) and the European Board & College of Obstetrics and Gynaecology (EBCOG).

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Curriculum

1. Definitions:
   - Basic Knowledge: basic understanding of the topics related to the gynaecological cancers.
   - Detailed knowledge: a deep understanding and knowledge of all the topics which are important in the development, diagnosis, prevention and management of gynaecological cancers.

2. Basic sciences

   2.1 Anatomy and Histology
   - Detailed knowledge of the regional anatomy and histology of the pelvis, abdomen (including relevant bones, joints, muscles, blood vessels, lymphatics and nerve supply), thorax, particularly in relation to surgical procedures undertaken by the gynaecological oncologist.

   2.2 Oncology
   - Detailed knowledge of carcinogenesis, progression, invasion and metastasis.
   - Detailed knowledge of cellular and molecular biology.

   2.3 Genetics
   - Detailed knowledge of cancer genetics including hereditary risk factors.
   - Detailed knowledge of genetic changes in tumors and their consequence for surgical and non-surgical treatment.

   2.4 Pathology
   - Detailed knowledge of the cytology and histology of gynaecological cancers and precursors.
2.5 Statistics and epidemiology

- Detailed knowledge of collection, management, and statistical analysis and the collection of data and samples in patients with gynecological cancers.
- Detailed knowledge of setting up and interpreting clinical trials.
- Detailed knowledge of environmental factors in relation to gynaecological cancers.
- Detailed knowledge of principles and strategies in cancer prevention.
- Detailed knowledge of the principles of patient data protection.

2.6 Microbiology

- Detailed knowledge of the role of infective agents on perioperative care and management during systemic treatment.
- Detailed knowledge of the role of infective agents in carcinogenesis, their impact on perioperative care and management with systemic treatment.

2.7 Biochemistry

- Basic knowledge of nutrition and metabolism in relation to gynaecological oncological surgery and the systemic treatment of gynaecological cancers.
- Detailed knowledge of hemostasis, and (patho-)physiology of blood variables changes during the development and management of gynaecological cancers, including tumor markers.

2.8 Biophysics

- Detailed knowledge of the physical principles and biological effects of imaging and interventional techniques involving e.g. heat, light, sound, electromagnetism and radioactivity.

2.9 Immunology

- Detailed knowledge of immune mechanisms involved in host defense in cancer and rationals for immunotherapy (tumor immunology).

2.10 Pharmacology

- Basic knowledge of the pharmacology of drugs used in the management of gynaecological cancers.
- Detailed knowledge of the properties, pharmacodynamics, actions, interactions and hazards of pharmacological agents which are used in the management of gynaecological cancers.
- Basic knowledge of the short term and long term effects of therapy, including development of secondary malignancies.
- General knowledge of the pharmacokinetic concepts and parameters where we can include also locoregional treatments (IP and IA).

3. Clinical sciences
3.1 Gynaecological Cancers

- Detailed knowledge of epidemiology, aetiology, prevention, screening, diagnostic techniques, prognostic factors and staging of gynaecological tumors and their management including primary and secondary prevention.

3.2 Breast cancer

- Basic knowledge of epidemiology, aetiology, prevention and management of breast cancer.

3.3 Imaging

- Detailed knowledge of imaging techniques, including ultrasound, computer assisted tomography (CT), nuclear imaging (planar scintigraphy, positron emission tomography (PET-PET/CT) and single photon emission computed tomography (SPECT)), and magnetic resonance imaging (MRI) used in the management of gynaecological cancers, including indications and interpretation
- Detailed knowledge of image-guided procedures

3.4 Surgical management

- Detailed knowledge of all relevant surgical procedures used in the management of gynaecological cancers including reconstructive surgical procedures used in in the management of gynaecological cancers.
- Detailed knowledge and experience in preoperative assessment and preparation for surgery (antibiotic prophylaxis, antithrombotic prophylaxis, bowel prep, surgical site infection prevention) and detailed knowledge in postoperative management.
- Detailed knowledge of the complications of surgery in gynaecological oncology (classification) and of peri-operative care (including principles of ERAS (Enhanced Recovery After Surgery)).
- Basic knowledge of the applications, techniques and complications of anaesthesia and intensive care, nausea and vomiting prevention.

3.5 Radiotherapy

3.5.1: Basic knowledge of radiobiology

3.5.2: Detailed knowledge of indications for radiotherapy used in the management of gynaecological cancers (curative, adjuvant and palliative).

3.5.3: Radiotherapy in combination with other treatments:

1. Detailed knowledge on the use of e.g. chemotherapy or other drugs in combination with radiotherapy.
2. Basic knowledge on the role of hyperthermia in combination with radiotherapy.

3.5.4 Basic knowledge on the role, side effects and indications of the different radiotherapy modalities (external beam, brachytherapy, ...).
3.6 Systemic treatment

3.6.1 Chemotherapy
- Detailed knowledge of chemotherapy and selected targeted treatments in the management of gynaecological cancers:

3.6.2 Endocrine therapy
- Detailed knowledge of and experience in the use of endocrine therapy in gynaecological oncology.
- Detailed knowledge of state of the art treatment options
- Detailed knowledge of adverse effects and its management

3.6.3 Targeted therapy
- Detailed knowledge of and experience in the use of novel targeted agents in gynaecological oncology.
- Detailed knowledge of state of the art treatment options
- Detailed knowledge of adverse effects and its management

3.6.4 Immunotherapy
- Knowledge of the use of immunotherapy in gynaecological oncology.
- Detailed knowledge of state of the art treatment options
- Detailed knowledge of adverse effects and its management

3.7 Clinical trials
- Detailed knowledge in the principles of clinical trial conduction.
- Basic knowledge of clinical trial statistics
- Basic knowledge of protocol writing, including QOL topics, GCP, ....
- Detailed knowledge of understanding and interpreting clinical trial results
- Basic knowledge of the requirements for performing studies in the EU and in different European countries.

3.8 Special topics
- Detailed knowledge of cancer in pregnancy
- Detailed knowledge of cancer in the elderly or frail patients
- Detailed knowledge of survivorship issues
- Detailed knowledge on the organisation (how, why and when to organize) of multidisciplinary decisions in the management of gynaecological cancers.

3.9 Psychology
• Basic knowledge of the psychological management of patients treated for a gynaecological cancer.
• Detailed knowledge of the principles and management of sexual dysfunction of patients treated for a gynaecological cancer.

3.10 **Palliative and Terminal care**

• Detailed knowledge in palliative care and the management of terminal care of patients treated for a gynaecological cancer.
• Detailed knowledge of medical/surgical options for bowel occlusion, pain and other symptoms management of patients with gynaecological cancers.