



UNION EUROPEENNE DES MEDECINS SPECIALISTES  
EUROPEAN UNION OF MEDICAL SPECIALISTS

SECTION & BOARD OF SURGERY - BREAST SURGERY DIVISION

# European Training Requirements for Breast Surgery

## European Standards of Postgraduate Medical Specialist Training

### Preamble

The UEMS is a non-governmental organisation representing national associations of medical specialists at the European Level. With a current membership of 35 national associations and operating through 41 Specialist Sections and European Boards, the UEMS is committed to promote the free movement of medical specialists across Europe while ensuring the highest level of training which will pave the way to the improvement of quality of care for the benefit of all European citizens. The UEMS areas of expertise notably encompass Continuing Medical Education, Post Graduate Training and Quality Assurance.

It is the UEMS' conviction that the quality of medical care and expertise is directly linked to the quality of training provided to the medical professionals. Therefore the UEMS committed itself to contribute to the improvement of medical training at the European level through the development of European Standards in the different medical disciplines. No matter where doctors are trained, they should have at least the same core competencies.

In 1994, the UEMS adopted its Charter on Post Graduate Training aiming at providing the recommendations at the European level for good medical training. Made up of six chapters, this Charter set the basis for the European approach in the field of Post Graduate Training. With five chapters being common to all specialties, this Charter provided a sixth chapter, known as "Chapter 6", that each Specialist Section was to complete according to the specific needs of their discipline.

More than a decade after the introduction of this Charter, the UEMS Specialist Sections and European Boards have continued working on developing these European Standards in Medical training that reflects modern medical practice and current scientific findings. In doing so, the UEMS Specialist Sections and European Boards did not aimed to supersede the National Authorities' competence in defining the content of postgraduate training in their own State but rather to complement these and ensure that high quality training is provided across Europe.

At the European level, the legal mechanism ensuring the free movement of doctors through the recognition of their qualifications was established back in the 1970s by the European Union. Sectorial Directives were adopted and one Directive addressed specifically the issue of medical Training at the European level. However, in 2005, the European Commission proposed to the European Parliament and Council to have a unique legal framework for the recognition of the Professional Qualifications to facilitate and improve the mobility of all workers throughout Europe. This Directive 2005/36/EC established the mechanism of automatic mutual recognition of qualifications for medical doctors according to training requirements within all Member States; this is based on the length of training in the Specialty and the title of qualification.



Given the long-standing experience of UEMS Specialist Sections and European Boards on the one hand and the European legal framework enabling Medical Specialists and Trainees to move from one country to another on the other hand, the UEMS is uniquely in position to provide specialty-based recommendations. The UEMS values professional competence as *“the habitual and judicious use of communication, knowledge, technical skills, clinical reasoning, emotions, values, and reflection in daily practice for the benefit of the individual and community being served”*<sup>1</sup>. While professional activity is regulated by national law in EU Member States, it is the UEMS understanding that it has to comply with International treaties and UN declarations on Human Rights as well as the WMA International Code of Medical Ethics.

This document derives from the previous Chapter 6 of the Training Charter and provides definitions of specialist competencies and procedures as well as how to document and assess them. For the sake of transparency and coherence, it has been renamed as “Training Requirements for the Specialty of X”. This document aims to provide the basic Training Requirements for each specialty and should be regularly updated by UEMS Specialist Sections and European Boards to reflect scientific and medical progress. The three-part structure of this documents reflects the UEMS approach to have a coherent pragmatic document not only for medical specialists but also for decision-makers at the National and European level interested in knowing more about medical specialist training.

## General Policy Statement

The objectives of the European Board of Surgery (EBS) are to assess, set standards for and progressively harmonize the content and quality of training and continuing medical education in all fields of surgery within the member states of the European Union (EU) and the other European countries.

There is a trend towards increasing specialization within surgery which has progressed to different degrees in different parts of the EU and some of the fields of surgery encompassed by the EBS have become recognized in some countries as well-defined or even totally independent surgical specialties.

The trend towards greater specialization is supported by the EBS whenever consistent with improved standards of clinical practice and training. However, in order to meet the needs of the many European hospitals which are not large enough to justify the same highly compartmentalized departments of surgery that have become the norm in most teaching centres it is essential to ensure that surgeons are able to obtain broadly based training across all the various fields. This makes it essential for newly emerging surgical specialties to continue to collaborate closely within the well-defined framework of the EBS.

In order to encourage beneficial specialization, while maintaining the integrity of surgery as a whole, it is the policy of the EBS to establish Surgical Specialty Boards to accommodate the special requirements of well-defined areas of surgical practice.



UNION EUROPEENNE DES MEDECINS SPECIALISTES  
EUROPEAN UNION OF MEDICAL SPECIALISTS

SECTION & BOARD OF SURGERY - BREAST SURGERY DIVISION

Surgical specialty Boards have responsibility for establishing and monitoring standards of training within their specific field of surgery while the EBS functions as a “common house of surgery” to coordinate the interrelationship, recommendations and actions of the Surgical Specialty Boards as they develop.

The EBS will require input from the Specialty Boards in common trunk training. It is empowered to issue European Board of Surgery Certificates of Quality of Training (EBSQ) in the surgical specialties on the recommendation of its Surgical Specialty Boards.

The EBS cooperates with national professional authorities and especially with the scientific organizations in the process of standardization and harmonization of surgical curricula.

The standardization efforts are paralleled with the continuous development of surgical qualification, validation, certification, recertification, professional development and CME processes and projects.

The EBS enhances strategies to see the Board qualification (Fellowship of the EBS) legally adopted in the countries aiming to a common European qualification process that also respects national and regional peculiarities.

### **Training Policy and requirements**

The European Board of Surgery in Breast Surgery composed of representatives of EUSOMA, ESSO, and national Breast Surgery / Surgical Oncology/ Surgical Societies, representing European experts in breast surgery promotes cooperation between these entities and the harmonization of breast surgical training programs in the EU. It acts as a coordinating and monitoring body for the training in breast surgery in the EU and formulates standards, mentioned hereafter, for the training institutions, the teachers and the trainees within the specialty of breast surgery.

#### **Eligibility criteria for EBSQ examinations for the qualification as Fellow of European Board of Surgery in Breast Surgery**

1. The applicant must hold a current license to practice as a surgeon(including but not limited to general/ abdominal/ visceral/ gastrointestinal/ plastic/ digestive/ vascular/ paediatric surgery/ surgical oncology/ urology) or gynaecologist.
2. The applicant must be able to demonstrate that he/she has worked for a minimum of one year in a breast surgery unit with at least 150 new primary breast cancer cases a year.
3. The applicant should also have attended at least one national/international training course in breast surgery and has attended at least one well recognized international congress on breast disease during the last 3 years.
4. The applicant should present the log book for breast surgery with the application. The logbook should be signed by the applicant's supervisor/department head/ hospital director or



the President of the national breast surgery/surgical/gynaecological society

5. The applicant should have published either one scientific paper in the field of breast disease in a peer reviewed journal or written a chapter in a national or international textbook on breast disease or alternatively presented one paper (oral or poster) in a well recognized international congress on breast disease or cancer

6. The applicant should be able to show to comply with the requested theoretical knowledge and practical and clinical skills

Training in Breast surgery must be carried out in a recognized specialist breast centre, in EU or outside EU. Quality assurance of this can be evidenced by the breast centre certification/accreditation.

The trainee should have time and opportunities for practical and theoretical study. Access to adequate national and international literature should be provided.

The ratio between the number of specialists on the teaching staff and the number of trainees at any given moment should be tailored so as to provide close personal monitoring of the trainees as well as adequate exposure of the trainees to sufficient practical work.

## I. TRAINING REQUIREMENTS FOR TRAINEES

### 1. Content of training and learning outcome

Specialization in Breast Surgery requires the acquisition of “Theoretical knowledge” in the different aspects of breast disease, as well as practical and clinical skills not only in breast surgery but in the management of breast disease as a whole. It provides for the operative and non operative management, i.e. prevention, diagnosis, multidisciplinary decision making, loco-regional and systemic treatments, rehabilitation of patients, including the management of lymphoedema and pain.

Breast surgery cooperates with other specialties i.e., anaesthesia, radiology, internal medicine, geriatrics, rehabilitation medicine, obstetrics and gynaecology, plastic surgery, anatomy and pathology, genetics, radiation oncology, medical oncology, nuclear medicine, psycho-oncology and pharmacy in the management of patients. The acquisition of a multidisciplinary approach toward patient care must be the basis of the training in breast surgery.

The focus is on diagnosis and treatment. The breast surgeon must be capable of interpreting all types of radiological examinations of the breast. The breast surgical activity covers the pre-, peri- and post-operative period and follow-up of patients. The specialty also includes individual and general preventive activities, management of pain, palliation and rehabilitation.

Additionally breast surgeons are expected to have knowledge of anatomy, physiology, tumour biology, and pathogenesis of breast disease. They are expected to know the actions and toxic



effects of drugs commonly used in breast diseases.

The breast surgeon must be trained in the economics of health care, in the assessment of research methods and scientific publications and be given the option of research in a clinical and relevant field.

The breast surgery syllabus comprehensively describes theoretical knowledge and practical and clinical skills (= basis for an individual “logbook”) mandatory for the qualification in Fellow of European Board of Surgery in breast surgery.

The syllabus should not be viewed as static but will be continuously revised and up-dated by the members of the committee. It is noted that research and changes in medicine may lead to significant changes in theory and clinical practice and by that will influence the content of the syllabus.

The candidates are expected to up-date their level according to the recent surgical practice and scientific literature. To achieve the qualification as Fellow of European Board of Surgery in Breast Surgery “theoretical knowledge” has to be documented and provided for eligibility and are assessed by examination. “Practical and clinical skills” have to be documented and proved in the logbook for eligibility and may be additionally assessed by examination.

### *Theoretical knowledge*

The specialty of breast surgery requires documented and assessed knowledge (see appendix 1) in:

- Basic and clinical science aspect of breast anatomy, physiology, as well as pathophysiology of breast disease, especially carcinogenesis.
- Principles of breast investigations including detailed history, clinical examination, and imaging and screening procedures, as well as understanding the indication for and limits of diagnostic imaging procedures in different age groups. The candidate also has to be proficient in pre-operative diagnostic procedures (physical examination and biopsy).
- In depth knowledge of breast surgical treatment procedures and techniques
- In-depth knowledge of the principles involved in the following (direct practical experience is not expected):
  - Breast pathology benign and malignant
  - The use of radiotherapy for breast cancer (curative, adjuvant or palliative).
  - The use of chemotherapy for breast cancer in the preoperative and adjuvant setting and for advanced disease.
  - The use of hormonal manipulation or substitution specifically for breast cancer patients or women at high risk.
  - The use of biological agents for breast cancer.
  - Genetics in breast cancer. A breast surgeon should be able to give advice to women with a family history of breast cancer.

### *Practical and clinical skills*

### Diagnosis



Training requirements:

- Participate in diagnostic clinics
- Participate in a breast screening recall and assessment clinics

Trainees are required to have a knowledge of diagnostic procedures that has been gained by attending breast clinics together with specialist breast radiologist and surgeon as trainers. Trainees should attend these clinics initially as an observer, later seeing cases and presenting them to the trainers and, finally, when they are judged to be capable, seeing cases and making decisions on diagnosis themselves with the trainer in attendance at the clinic for consultation when required. Where breast cancer screening is carried out they should also attend these clinics for women who are recalled for assessment because of abnormalities on the initial mammogram.

This will ensure that the trainees know the procedures involved and have examined breasts in women with such tumours.

Management of primary breast cancer

Training requirements:

- Participate in preoperative clinics including oncoplastic/reconstructive clinics
- Participate in breast cancer –specific operating lists
- Participate in breast oncoplastic and reconstructive operating lists
- Participate in postoperative clinics (assessing wound healing, primary aesthetic outcome and recovery from surgery, is further surgery required, or follow-up etc.)

The trainee should understand which surgical procedures to recommend to each patient, and be clear about the protocols on which these recommendations are based (e.g. they must know the criteria by which tumours are judged suitable or unsuitable for breast conserving surgery).

The trainees should attend clinics at which the choice of the surgical procedures used for breast cancer surgery is discussed with the patient including clinics where reconstruction and reconstructions methods are discussed with the patient.

Trainees should also work on units where the plastic surgeon has a particular interest in breast disease, and has a link to a designated breast unit and supports the breast surgeon with techniques of tumour-specific immediate reconstruction. Alternatively, they should work with a dedicated oncoplastic breast surgeon.

The trainees should also attend at least two operating lists per week devoted to breast surgery during their specialty training year(s).

They should also attend lists in which immediate or delayed reconstructive surgery after both partial and total mastectomy reconstruction is carried out (either by oncoplastic breast surgeons or by breast surgeons together with the associated plastic surgeons).

Management of benign disease



Knowledge of the management of benign disease will in part result from attending and working at the diagnostic or pre-operative clinics. The trainee should achieve knowledge of operations to deal with inflammatory benign conditions, of which breast lumps falling under the broad diagnosis of 'benign' require excision (e.g. phyllodes tumour, borderline or high risk lesions), and of the management of gynecomastia in the male. They should have performed also operations on benign or borderline breast diseases in the regular operating lists.

#### Medical and Radiation oncology

Training requirements:

- Participate in oncology clinics
- Participate in follow up clinics
- Participate in advanced/metastatic clinics

Trainees must have knowledge of the protocols to which the unit works for the purposes of advising women on whether they should receive adjuvant radiotherapy or systemic therapies, and which agents they should receive.

They must have attended clinics with the clinical oncologist at which decisions on adjuvant systemic therapy and radiation therapy are made. In units where there is a separate medical radiation oncologist, it is preferable that the radiation oncologist and medical oncologist see the patients together. However, if this is not so, the attendance should be at whichever clinic the full management is discussed.

Trainees must attend a number of follow-up clinics at which the side-effects of surgery and radiation can be assessed.

They must attend at least ten clinics at which women with advanced disease (both locally advanced and distant metastatic disease) are seen.

#### Multidisciplinary pre- and post-surgical case management meetings

Training Requirement:

- Participate in Multidisciplinary Meetings

The trainees must be able to show that they have attended regular, at least weekly, multidisciplinary meetings where specialized breast surgeons, radiation/medical/clinical oncologists, pathologists and radiologists plan surgery and post-surgical treatments.

#### Palliative care

In attending the oncology clinics the trainee should acquire knowledge in purposes and methods in palliative care.

#### Data collection

The trainee must be able to use a data collection system on Breast Cancer Diagnosis and



Treatment. By the end of the training the trainee should be able to show that he/she has

1. Attended at least 20 regular, at least weekly, pre- and post-surgical multidisciplinary case management meetings
2. Attended at least 70 outpatient clinics during a regular 1-2 year work on a surgical unit with at least 150 primary breast cancer cases a year, according to the local organization practise, including:
  - A. Diagnostic, preoperative and postoperative clinics
  - B. Clinics with a radiation/medical/ clinical oncologist at which the decisions on adjuvant therapy are made.
  - C. Follow-up clinics at which the side-effects of surgery and radiation can be assessed
  - D. Clinics at which the management of women with advanced disease (both locally advanced and metastatic) takes place
  - E. Genetic/family historic clinics, in which women at risk are advised
  - F. Clinics at with oncoplastic and reconstructive counselling and planning are made
3. Personally performed during the last two years or assisted during one's entire career surgical procedures as follows
  - A: Assisted at (during one's entire career)
    - at least 10 operations on benign or borderline lesions
    - at least 20 axillary lymph node surgeries, including both full axillary dissections and sentinel lymph node biopsies
    - at least 20 breast conserving cancer operations including at least 5 observed or assisted oncoplastic level I - II breast remodelling procedures
    - at least 20 mastectomies, including at least 10 NAC- or skin-sparing mastectomies
    - observed or assisted at 10 immediate and delayed total breast reconstructions using both implants and autologous tissue.
  - B: Personally performed during the last two recent years
    - at least 40 operations on benign or borderline lesions
    - at least 100 full axillary lymph node dissections or sentinel node biopsies, including
      1. at least 30 full ALND
      2. at least 30 SNB
    - at least 100 breast cancer operations during the two last recent years, including



1. at least 40 breast conserving surgeries, including at least 5 oncoplastic level I - II breast remodeling procedures
2. at least 40 mastectomies, including at least 10 NAC- or skin-sparing mastectomies

The candidates must keep a logbook signed off by their trainer of the operations they have attended as an assistant or operations they have carried out, supervised or unsupervised, and also of the clinics they have attended and the multidisciplinary meetings they have attended.

### *Outcome measures*

Following training, the candidate should have sufficient knowledge, expertise and skill to enable independent practice within the setting of a multidisciplinary team. In particular the candidate should:

- Be able to communicate the diagnosis to the woman in the most appropriate way, explaining the different treatment options, facilitating decision making, and evaluating and taking into account the patient's preferences.
- Have direct experience of the different surgical techniques for the treatment of benign, borderline and malignant lesions and a detailed knowledge of the indications, contra-indications and complications for each technique.
- Have acquired knowledge regarding and principles of oncoplastic surgery and a basic knowledge of breast reconstruction.

He or she should also:

- Have a good knowledge of the literature.
- Have published either one scientific paper in the field of breast disease in a peer reviewed journal or written a chapter in a national or international textbook on breast disease or alternatively presented one paper (oral or poster) in a well recognized international congress on breast disease or cancer
- Be able to evaluate literature and write critiques of papers.
- Have visited other breast centres and attended national and international meetings on breast disease.
- Have sufficient knowledge of the ongoing research in breast cancer treatment.

## **II. TRAINING REQUIREMENTS FOR TRAINERS**

A certified/accredited Breast centre must have a Breast Surgery training programme. The leader of the training programme should have passed the EBSQ examination in Breast surgery, but preferably either contributed as an examiner in the EBSQ examinations in Breast surgery or received a Breast Surgery Honorary Diploma.

Other specialist breast surgeons working in accredited/certified Breast Centres will be recognized as trainers and will be directed and supervised by the leader of the training programme

## **III. TRAINING REQUIREMENTS FOR TRAINING INSTITUTIONS**

### **Process for Accreditation of Breast Centres for Training in Breast Surgery**



The Breast Surgery Division of the UEMS Section of Surgery considers the accreditation of centres in Europe for training in Breast Surgery to be of paramount importance.

The Breast Surgery Division of the UEMS Section of Surgery believes that it is important that training centres are breast dedicated centre following specific requirements such as those indicated by EUSOMA- *The requirements of a specialist breast unit. EUSOMA. Eur J Cancer 2013; 49: 3579-3587, Guidelines on the standards for the training of specialized health professionals dealing with breast cancer. Cataliotti L. et al, Eur J Cancer 2007; 43: 660-675.*

The process of application and evaluation prior to accreditation for training is based on the well-established relevant practice of the UEMS; the steps are as follows:

1. Initially, the Centre has to submit an application to the Division of Breast Surgery including:

a) A formal letter by the Chairman stating the wish of the Centre to apply and highlighting the history of the centre, its major achievements and providing evidence of any recognition i.e. certification at national, and or European level.

b) A report regarding the Centre and the Training Programme. The information must cover the following domains:

- Faculty (junior and senior)
- Brief history of the Centre and general description of breast surgical activity
- Number of procedures performed at the Centre per year over the last 5 years
- Facilities available (clinical, research, educational)
- Brief description of the training setting
- Trainee breast surgeons who worked and were trained in the Centre for minimum time of one year in the last 10 years
- Residents
- Clinical Fellows
- PhD Students
- Visiting Fellows
- Other (specify)
- Number of breast surgical procedures per specialised surgeon and per category of operation
- Number of breast surgical procedures per trainee surgeon and per category of operation
- Outcomes of operations performed by breast specialised and trainee surgeons per category of operation
- Library facilities
- Choice of best 20 papers in the last 5 years including at least one paper from the trainee surgeons
- Grants for scientific projects in the last 5 years
- Courses, lectures and other teaching initiatives in the last 5 years

Graphs, tables, reports or any other material that describe the work of Centre and especially its training programme can be included.

c) A fee (determined on a yearly basis) has to be paid to the account of the Division of Breast



UNION EUROPEENNE DES MEDECINS SPECIALISTES  
EUROPEAN UNION OF MEDICAL SPECIALISTS

SECTION & BOARD OF SURGERY - BREAST SURGERY DIVISION

Surgery of the Section of Surgery of the UEMS along with the initial application.

2. The application will be forwarded to Chairman of the Division of Breast Surgery (cc to the UEMS Section of Surgery Office in Berlin) via e-mail and will be reviewed by a subcommittee of the Division of Breast Surgery prior to its review by all the executives of the Division at the next business meeting for approval or return to the applicants requesting more information. The application has to be submitted to the Division at least 4 weeks prior to the business meeting.

3. If the initial application is approved, then the next step is to organize a visit to the Centre of a Committee of 3 members: two from the Division of Breast Surgery of the UEMS and one external reviewer. The Committee will visit the Centre on site and meet with the Chairman, the Faculty and the Trainees and review on site the work of the Centre in all the domains of the original application. The visit will last one day and it will be strictly professional with no social programme. The Centre applying for accreditation needs to cover the travel and accommodation expenses of the members of the Committee. An effort is made so that the members are from countries close to the applying Centre to minimize the expenses.

**For those Breast Units certified by national or European certification bodies, is sufficient to send copy of the certification certificate and of the requested information (see details at point 1b).**

**The centre will not need a UEMS committee visit**

4. The Committee will produce a report and scoring of the Centre in the same domains of the initial application.

Each domain will be scored from 0-3:

- 0: insufficient/ absent
- 1: sufficient
- 2: good
- 3: excellent

A minimum score of 36 (75%) is required for the Committee to give a positive recommendation to the Division. This will be presented at the next business meeting of the Division where a vote will be taken by all members regarding the approval of the application; 2/3 majority needed for approval.

5. If approved the Centre will be awarded the Accreditation for Training Certificate of the Division of Breast Surgery of the UEMS Section of Surgery.



## Appendix 1 – EBSQ BREAST SURGERY EXAMINATION

The EBSQ Breast Surgery examination consists of a written and an oral part. The maximum score for the entire exam is 100 points with 60 points as the limit to pass.

The additional requirements are as follows.

### **The written examination**

The written examination consists of 50 multiple choice questions. Each question has 5 alternative answers, with “best of five” principle. No penalty points from wrong answers.

The first 20 questions are basic questions, 16 of these should be correctly answered.

The maximum score from the written exam is 40 points= 0,8 points per correct answer. The minimum score to pass is 24 points=30 correct answers including 16 correct answers from the 20 basic questions

**Only those who pass the written examination, are allowed to attend the oral examination**

### **The oral examination**

The oral examination consists of three 20- 30 min tasks. Two tasks are clinical case discussions and the third is to evaluate a clinical research paper. Each task has 10 questions scored 0-2. The maximum score for each oral task is 20 points

0 points: the applicant gives a completely wrong answer *or* his/her answer is completely different to international guidelines and he/she cannot support his/her view, *or* it seems that the applicant does not know the subject *or* how to deal with this case.

1 point: the applicant knows the subject; however his/her answer is different from guidelines or the expected answer but, it is a “reasonable” option and the applicant can support well his/her view.

2 points: the applicant gives the expected answer (*which is written in the examiners paper with questions/answers*) and shows good knowledge of the subject. The applicant supports his/her answer effectively

**The maximum score from the oral examination is 60 points and a minimum to pass is 30 points with a minimum of 10 points from each task.**



UNION EUROPEENNE DES MEDECINS SPECIALISTES  
EUROPEAN UNION OF MEDICAL SPECIALISTS

SECTION & BOARD OF SURGERY - BREAST SURGERY DIVISION

### **To pass the entire examination**

- the applicant has to pass both the oral and the written parts achieving **at least altogether 60 points** from the written and the oral examinations including
- at least 24 points (30 correct answers) from the written examination with at least 16/20 basic questions correctly answered
- at least 10 points from each task in the oral examination

This means, that those who score lower than 36 points in the oral examination, have to score higher than 24 points in the written examination to be able to pass. A minimum of 60 points must be always achieved.