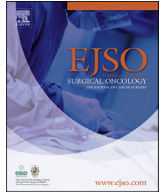




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## Editorial

# Implementation of the BRESO Theoretical and practical knowledge curriculum for European Breast Surgeons: The time has come



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Every resident interested in breast cancer surgery specialist training should be given the opportunity to receive it. In the United States, the Society of Surgical Oncology offers a growing number of educational programs, accessible through a national match, after finishing residency in general surgery [1]. In Europe, however, due to heterogeneous training systems across countries, a standardized training is lacking [2] and fellowship programs in breast surgical oncology are limited to specific countries such as the United Kingdom.

In 2018, the major European societies involved in breast surgical training, research, advocacy and education responded to this need by creating the European Breast Surgical Oncology (BRESO) project. In this edition of EJSO, BRESO present the Theoretical and practical knowledge curriculum for European Breast Surgeons [3], which has been developed by a panel of experts brought together to craft a 2-year fellowship program accessible to all young surgeons independent of discipline (general surgery, gynecology and plastic surgery). The BRESO Curriculum constitutes the framework of what a breast surgeon practicing within the European Union and European Economic Area should master in terms of theoretical knowledge and surgical skills.

Surgical oncology is rapidly evolving, where knowledge from different domains (related but different from each other) is needed. This is particularly true for breast cancer surgery, since oncological surgery and multidisciplinary and personalized care have evolved greatly in the last decades. Unfortunately, many residency programs fail to provide trainees with the required clinical exposure and theoretical knowledge to understand the interface between tumor biology and locoregional and systemic therapies. Trainees may therefore be uncomfortable actively participating in multidisciplinary meetings and struggle to keep up with the vast amount of published literature, which may potentially result in suboptimal care.

The BRESO Curriculum covers all theoretical and practical/surgical

aspects of breast cancer treatment. The required practical skills include conventional surgical procedures as well as Level 1 and 2 oncological techniques, radiological competencies (e.g. performing core biopsy, localization of non-palpable lesions, mammograms and breast ultrasound interpretation), basic genetic knowledge, communication skills (e.g. breaking bad news and shared decision making) and many other emerging topics. The theoretical knowledge required is based on the European Union of Medical Specialists (UEMS) Breast Exam syllabus and can be acquired through well-established courses and postgraduate study programs. The fellowship includes a period of 12–18 months in a breast unit practicing intermediate level care and a further 6–12 months in a specialized breast center approved by BRESO. To deal with the rapid evolution of BC treatment, the Curriculum recommends recertification at 5-year intervals. To adapt to different national requirements, the Curriculum is flexible in terms of the training period timing and can start during residency or after its completion. The Curriculum was also designed to account for the differing roles across European countries with respect to reconstructive surgery.

The challenge for the BRESO working group is now to implement the Curriculum across European countries given the inter-country differences in training pathways, resources and national societies. Help from the latter will be essential for the implementation phase. In order to increase the success of the program and improve BC care across Europe, the completion of this fellowship should become mandatory for each surgeon practicing breast cancer surgery in Europe. Combining the Curriculum with an academic postgraduate title such as a certificate in advanced studies, a diploma, or a master's program would certainly strengthen the attractiveness of the Curriculum. Additionally, to demonstrate the effectiveness of the program and to obtain governmental support, accurate monitoring of quality indicators should be implemented in parallel with the program.

Breast surgical oncologists in training applaud the BRESO working group for their aim to improve the training of new generations. Since surgeon specialization results in better oncological outcomes and increased patient satisfaction [4,5], implementation of the Curriculum should be a priority in every European country.

### Declaration of competing interest

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## References

- [1] Teshome M, Kuerer HM. Training of breast surgical oncologists. *Chin Clin Oncol* 2016;5(3):43.
- [2] Montagna G, Anderson D, Bochenek-Cibor J, et al. How to become a breast cancer specialist in 2018: the point of view of the second cohort of the Certificate of Competence in Breast Cancer (CCB2). *Breast* 2019;43:18–21.
- [3] Kovacs T, Rubio IT, Markopoulos C, Audisio RA, Knox S, Kühn T, Mansel R, Matrai Z, Meani F, Nava M, Wyld L, BRESO Structure Working Group. Theoretical and practical knowledge curriculum for European Breast Surgeons. *Eur. J. Surg. Oncol.* 2020. <https://doi.org/10.1016/j.ejso.2020.01.027>.
- [4] Gillis CR, Hole DJ. Survival outcome of care by specialist surgeons in breast cancer: a study of 3786 patients in the west of Scotland. *BMJ* 1996;312(7024):145–8.
- [5] Waljee JF, Hawley S, Alderman AK, Morrow M, Katz SJ. Patient satisfaction with treatment of breast cancer: does surgeon specialization matter? *J Clin Oncol* 2007;25(24):3694–8.

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