Phyllodes Tumors: From National Guidelines to European Evidence and Collaboration

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Phyllodes tumors (PT) remain among the most complex and debated entities in breast surgery. Their rarity—accounting for less than 1% of all breast tumors—has long hindered the development of uniform management strategies, forcing clinicians to navigate between undertreatment and unnecessary aggressiveness.

In this context, the recent consensus statement from the UK Association of Breast Surgery (ABS) represents a significant step towards harmonization [1]. Built on systematic literature review and expert consensus, the guidelines provide clear recommendations for the diagnosis and management of PT, while acknowledging persisting evidence gaps.

The Contribution of ABS Guidelines

A major strength of the document is its emphasis on multidisciplinary management, essential for tumors of dual biological nature that require the integrated expertise of breast and sarcoma surgeons, radiologists, pathologists, and oncologists.

Surgically, the guidelines confirm that breast-conserving surgery is appropriate across all histological subtypes, provided that adequate margins can be achieved. Mastectomy is reserved for cases where this is not feasible. The suggested thresholds—complete excision without capsule rupture for benign PT, 5 mm for borderline, and 10 mm for malignant lesions—may appear arbitrary, yet they provide pragmatic benchmarks to reduce overtreatment.

The document also clarifies two additional aspects: axillary staging is unnecessary, given the exceptional rarity of nodal spread, and adjuvant therapies play only a limited role. Radiotherapy is not indicated for benign PT and is considered only for high-risk malignant cases, while chemotherapy has no proven benefit in non-metastatic disease. Follow-up protocols, with closer surveillance in the first two to three years, are consistent with the recurrence behaviour of PT.

Remaining Controversies

Despite these advances, uncertainties remain. The optimal margin width is still debated, and growing evidence suggests that narrower excisions may suffice for benign and borderline tumors [2,3]. The role of radiotherapy is also unsettled, with meta-analyses reporting inconsistent results. Finally, genomic insights, including TP53 and other molecular alterations, hold promise for improved prognostic stratification but are not yet ready for clinical translation.

The European Contribution: The BEAM Study and Beyond

While the ABS guidelines provide a solid framework, they should be integrated with data from European collaborative experiences. In this regard, the recently published the Breast European Association for Mesenchymal Tumors (BEAM) study, appearing in European Journal of Surgical Oncology (EJSO), represents the largest multicentre series with over 20 years of follow-up on more than 100 patients with malignant PT and primary breast sarcomas [4].

The study confirmed surgery with negative margins as the cornerstone of treatment, questioned the effectiveness of adjuvant chemotherapy—which was associated with worse outcomes, likely reflecting the selection of high-risk patients—and identified mixed histologies as a distinct and particularly aggressive subgroup.

In parallel, recent European reviews have further underlined the diagnostic and therapeutic challenges posed by mesenchymal breast tumors, stressing the need for tailored strategies and international collaboration [5]. Together, these efforts reinforce the importance of long-term, collaborative European registries in refining risk stratification and treatment strategies.

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Towards a European Perspective

Across Europe, high-volume certified Breast Units already guarantee multidisciplinary expertise and advanced oncoplastic techniques. Their integration with sarcoma networks and participation in shared registries represent the natural next step to reduce variability of care and fill the evidence gaps that remain.

Italy and other European countries, with their strong tradition of collaborative breast cancer research, are well-positioned to lead this effort. Moving from national to continental perspectives is essential: only through data sharing, harmonized clinical pathways, and prospective multicentre studies can we ensure equity of care and meaningful advances in knowledge.

Conclusions

The ABS consensus statement represents a milestone in the management of phyllodes tumors, offering clarity on surgical decision-making, discouraging unnecessary procedures, and promoting multidisciplinary collaboration. When integrated with European long-term evidence such as the BEAM study and recent reviews, these recommendations can inspire continent-wide strategies.

By leveraging collaborative networks and registries, European Breast Units are uniquely placed not only to provide state-of-the-art care for women affected by this rare disease, but also to contribute decisively to the global advancement of knowledge on phyllodes tumors.

Availability of Data and Materials

Not applicable.

Author Contributions

AB, AMS and CVP conceived the concept. FDL, GF and NB outlined the editorial and contributed to the discussion. Writing—original draft preparation: FDL, AB, CVP; Writing—review and editing: AMS, AB. All authors contributed to the critical revision of the manuscript for important intellectual content. All authors read and approved the final manuscript. All authors have participated sufficiently in the work and agreed to be accountable for all aspects of the work.

Ethics Approval and Consent to Participate

Not applicable.

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Conflict of Interest

Alejandro Martin Sanchez and Gianluca Franceschini are serving as the Editorial Board Members of this journal. We declare that they had no involvement in the review of this article and have no access to information regarding its review. Other authors declare no conflict of interest.

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