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10-16-2022

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### **Recommended Citation**

Schwartz T, Marumoto AD, and Giuliano AE. ASO Author Reflections: The Evolution of Axillary Management in Breast Cancer. Ann Surg Oncol 2022.

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## ASO Author Reflections: The Evolution of Axillary Management in Breast Cancer

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#### PAST

Nodal status has historically been the most important factor in staging and guiding treatment for patients with breast cancer. Until the early 2000s, almost all women with invasive breast cancer received an axillary lymph node dissection (ALND) as part of their surgical management. NSABP B-04 illustrated that axillary surgery did not impact survival, but nodal status offered prognostic information to help determine which patients may benefit from adjuvant chemotherapy.<sup>1</sup> ALND is associated with significant morbidity and substantial efforts have been made during the past 40 years to deescalate axillary surgery. In our manuscript in this volume of Annals of Surgical Oncology, "Surgical Management of the Axilla in Breast Cancer: Evolving But Still Necessary," we briefly review the history, current status and future possibilities of axillary management in breast cancer.<sup>2</sup> It is a brief summary of a debate presented on April 8, 2022, at the American Society of Breast Surgeons 23rd annual meeting.

#### PRESENT

In the first decade of this century, sentinel lymph node biopsy (SLNB) began to replace ALND for staging of the clinically node-negative patient. Multiple, prospective, randomized trials, most notably ACOSOG Z0011, have since illustrated that SLNB alone is adequate for women with limited nodal metastases who are undergoing breast-

First Received: 4 October 2022 Accepted: 4 October 2022

A. E. Giuliano, MD e-mail: Armando.Giuliano@cshs.org conserving surgery.<sup>3</sup> Additionally, axillary radiation has been shown to offer equivalent regional control with no significant difference in survival but markedly lower rates of lymphedema, compared with ALND. While there are certain instances in which nodal staging can safely be omitted, for the vast majority of women with invasive breast cancer, SLNB is considered the standard of care.

#### FUTURE

As innovations in genomic testing continue to improve our understanding of tumor biology, there will be further de-escalation in axillary management. The much-awaited results of Alliance A11202 will provide guidance for optimal treatment in women with residual tumor-involved SLNs after neoadjuvant chemotherapy. While the utility of axillary ultrasound has been questioned, multiple trials are underway to determine whether SLNB can be abandoned in patients with normal axillary ultrasound. We must continue to question surgical dogma, conduct studies, and ensure that the best management strategies are developed. Understanding where we began, where we are now, and what we hope to achieve is how we can advance the field of breast surgical oncology and provide optimal care for those with breast cancer.

DISCLOSURES The authors declare no conflicts of interest.

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<sup>©</sup> Society of Surgical Oncology 2022

<sup>1.</sup> Fisher B, Jeong JH, Anderson S, Bryant J, Fisher ER, Wolmark N. Twenty-five-year follow-up of a randomized trial comparing radical mastectomy, total mastectomy, and total mastectomy followed by irradiation. *N Engl J Med.* 2002;347(8):567–75. h ttps://doi.org/10.1056/NEJMoa020128.

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