

# Acellular Dermal Matrices in Breast Surgery: Tips and Pearls

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## KEYWORDS

- Acellular dermal matrices
- Breast reconstruction
- Surgical techniques

## Key Points

- Acellular dermal matrices (ADMs) are useful in primary prosthetic breast reconstruction as well as in the treatment of secondary deformities.
- A periareolar incision gives excellent access to the breast in secondary revision.
- When implanting ADMs, it is important to use a single, thick layer of the product.
- Patient selection is an important factor; in the postmastectomy setting, ADM-assisted reconstruction is appropriate in patients who have an adequate skin envelope.
- ADMs may alleviate the occurrence of complications by reducing the inflammatory changes that cause capsular contracture and capsule formation.
- One drawback to the use of ADMs is their cost.

Acellular dermal matrices (ADMs) have been used for postmastectomy breast reconstruction, primary and secondary breast augmentation, and reduction mammoplasty.<sup>1,2</sup> In postmastectomy breast reconstruction, ADMs can be used either to create an implant pocket in single-stage reconstruction or to create the inferolateral portion of the tissue expander pocket in 2-stage reconstruction. Specific deformities after cosmetic breast augmentation such as contour irregularities and implant malposition can be addressed with ADMs (**Table 1**).<sup>1</sup> The benefits of using ADMs include a low complication rate, the ability to

provide needed tissue, and the ability to aid in repositioning the implant (**Table 2**). The disadvantages include the risk of infection and seroma, and high cost. The use of ADMs is a safe alternative for the correction of breast deformities after reconstructive and aesthetic breast surgery.

## OVERVIEW OF ADMs IN BREAST SURGERY

ADMs became available in 1994 and the most commonly used ADMs in breast surgery are AlloDerm<sup>®</sup> (LifeCell, Branchburg, NJ, USA), Stratice<sup>™</sup> (LifeCell Corporation, Branchburg, NJ, USA),

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