

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.^{1,2} 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**).¹ 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[®] (LifeCell, Branchburg, NJ, USA), Stratice[™] (LifeCell Corporation, Branchburg, NJ, USA),

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