

Patient Discussion Tool: Advances in Breast Implant Reconstruction

When facing breast reconstruction surgery, it is natural for women to have a number of questions. What are the next steps? What kind of reconstruction is right for me? What are my options? This is especially true as new advancements in breast reconstruction emerge.

Of course, nothing can take the place of a consultation with a breast reconstruction specialist to answer these questions, but it is often helpful for women facing a mastectomy and considering breast reconstruction to have up-to-date information to refer to in their own homes as they consider their options. This is why we have developed the following information specifically about the use of biological tissue matrices in breast implant reconstruction.

The intent is to provide this information to professional and patient advocacy groups, who, as trusted advisors, can decide whether they consider this information valuable and whether to incorporate relevant points into their patient support materials.

Making a new breast using an implant

The choice of using an implant to make a new breast is usually given to women who aren't suitable for reconstruction involving their own tissue from a different part of their body (usually the tummy or back) or women who don't want a big operation that will leave scars on other parts of their body.

To make a new breast using an implant involves inserting a silicone prosthesis under the chest wall to replace breast tissue removed during a mastectomy. This is called one-stage reconstruction.

Sometimes, a special kind of implant called an 'expander' is used which allows a doctor to adjust the volume of the new breast. Salt water injections (saline) are used to gradually increase the volume of the expander implant until the newly reconstructed breast matches the other breast. After the initial surgery, the saline injections are given over a number of weeks in an outpatient clinic. This is called two-stage reconstruction.

In either one-stage or two-stage reconstruction, surgeons sometimes need extra tissue to help make the new breast. This extra tissue can be used to:

- Create a breast pocket large enough to hold the implant
- Provide an "internal bra," giving the surgeon greater control over the final location of the implant
- Cushion the surface of the implant to create a more natural shape and feel
- Supplement muscles that may have been damaged during mastectomy or radiation therapy

When extra tissue is needed, surgeons have the choice of using a patient's own tissue from another part of their body (e.g., tummy or back), synthetic meshes or biological tissue matrices. In Europe, biological matrices come from animals (pigs). Special processing takes away the animal cells, leaving only a biological structure that can be implanted into the body. The body does not recognize the biological tissue matrix as a foreign body and works to restore blood flow, meaning that the implanted tissue matrix over time becomes a natural part of the body.

Questions patients may want to ask a breast reconstruction specialist:

- How will breast reconstruction impact my cancer treatment?
- What are all my options for breast reconstruction?
- Which reconstruction option is best for me, and why?
- How many surgeries and hospital visits will a breast reconstruction require?
- How long will my entire reconstruction take?
- What is the best result I can expect?
- Do you have before-and-after photos for different procedures that I can look at?
- What should I expect when I wake up after surgery?
- What will my recovery be like?
- How long will my recovery take?
- What are the potential risks, side effects and complications of each type of reconstruction?
- How many and what kind of procedures do you do per year?
- When will I be able to return to my normal routine? (i.e., go back to work, return to my normal physical activities, exercise, etc.)
- What will my scars look like?