MOVE BEYOND
DERMIS-BASED
BIOLOGIC GRAFTS
MOVE BEYOND
to the next generation
Biodesign is designed to reduce recurrence by giving the body a way to remodel strong, vascularized patient tissue, without long-term complications.

Biodesign evolved from one of the most thoroughly studied biologic graft technologies available.

Biodesign can provide an advanced tissue repair solution that minimizes overall cost while helping provide better patient outcomes.

Biodesign® Advanced Tissue Repair

Proven Technology

Reduced Recurrence

Cost Effective
Move beyond to advanced tissue repair

Biodesign is a non-dermis, non-cross-linked biologic graft technology that is completely remodeled into strong, well-vascularized tissue.

- **DERMIS BASED**
  Dermis-based grafts contain high amounts of elastin. Over time, this elastin remains in the patient’s body and can stretch, possibly leading to recurrence.

- **NON-DERMIS BASED**
  Biodesign is non-dermis based, so it does not contain meaningful amounts of elastin. As a result, the body completely remolds Biodesign into patient tissue that is not prone to overstretching.

- **NON-CROSS-LINKED**
  Biodesign has been designed to maintain strength throughout the remodeling process, so there is no need for cross-linking. And because Biodesign is remodeled completely into strong, vascularized tissue, it can provide a strong repair without a permanent material.

- **CROSS-LINKED**
  Cross-linked biologic grafts inhibit remodeling and vascular ingrowth, and have been associated with chronic inflammation and encapsulation.
Move beyond dermis-based biologic grafts

Specifically designed for hernia repair and abdominal wall reconstruction, the Biodesign hernia graft offers reduced recurrence rates in comparison to dermis-based and cross-linked biologic grafts. Biodesign has been extensively used in hernia repair and has been the subject of several long-term studies.

REDUCED RECURRENCE

Long-term strength: A meta-analysis

The graph below shows recurrence over time for Biodesign, acellular human dermis, and cross-linked porcine dermis in both clean and complex fields, according to a 2009 meta-analysis by Hiles et al. Updated through June 2011.\(^1\,\,^2\)
**HERNIA-SPECIFIC DATA**

Biodesign has been the subject of numerous high-level hernia repair studies, some with follow-up as far out as 5 years.

<table>
<thead>
<tr>
<th>Procedure</th>
<th># of Patients</th>
<th>Years of Follow-up</th>
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<tbody>
<tr>
<td>Ventral Hernia(^1)</td>
<td>113</td>
<td>5</td>
</tr>
<tr>
<td>Incision Reinforcement (^4)</td>
<td>379</td>
<td>2</td>
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<tr>
<td>Hiatal Hernia(^5,6)</td>
<td>108</td>
<td>5</td>
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<tr>
<td>Inguinal Hernia(^7)</td>
<td>70</td>
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</table>
Move beyond to continual improvement

Biodesign is the evolution of a technology that started the biologic graft soft tissue repair revolution.

1988
Discovery of SIS
Small intestinal submucosa (SIS) is used as an aortic replacement in a canine model. Remarkably, the SIS is fully remodeled into vascular tissue.

1998
Surgisis® is released
After rigorous research and development, Cook receives FDA clearance for release of Surgisis, the first medical-grade hernia device made from SIS-based technology.
Recent 6 month data from a randomized controlled trial by Sarr et al. shows that Biodesign is associated with significantly reduced rates of complication in comparison to earlier submucosa-based products.\textsuperscript{4}

### 2006

**Processing improvements**
In response to surgeon feedback, substantial improvements in the processing are made, opening the structure to allow the body to more easily infiltrate and remodel the graft.

### 2008

**Biodesign is released**
Additional improvements are made to the base technology, speeding rehydration and mitigating perioperative issues. The new generation of grafts is renamed Biodesign.
### Hiatal Hernia Repair

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### 4-Layer Tissue Graft

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### AWR and Ventral/Incisional Hernia Repair

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Some products or part numbers may not be available in all markets. Contact your local Cook representative or Customer Service for details.
### Incision Reinforcement

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Move beyond to Biodesign

10 reasons to choose Biodesign over other biologic grafts.

- Non-dermis based, so unwanted elastin stretch is not an issue.
- Non-cross-linked, so no residual cross-linked material is left behind to encapsulate, erode, or become infected.
- Completely remodeled into strong, vascularized patient tissue, providing long-term strength without a permanent material.
- An intact extracellular matrix, Biodesign is processed in a way that preserves its natural structure, supporting tissue remodeling.
- Derived from proven technology—demonstrated effective in more than 1,000,000 patient treatments.
- Based on a technology that has been the subject of more than 861 peer-reviewed journal articles, including 9 randomized controlled trials.
- Has specific data that shows efficacy across a wide variety of procedures, including ventral hernia repair, fistula repair, wound treatment, and pelvic floor restoration.
- Can provide cost-effective tissue repair, improving outcomes without increasing spend.
- Available in specific shapes and sizes to fit common soft tissue repairs, such as hiatal hernia and anal fistula repair.
- Has undergone more than 12 years of evolution on the basis of surgeon feedback and scientific research.
References


2. Data on file at Cook Biotech.


Randomized Controlled Trials


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