IN SOFT TISSUE REPAIR

reliability is critical

Permacol™ Surgical Implant
Soft Tissue Repair

To help you achieve the best outcome for your cases, you must seriously consider:

- **Risk of Recurrence**
- **Risk for Post-op Infection**
- **Defect Size**
  (loss of domain, atypical hernia location)
- **Clinical Data and Scientific Evidence**

**Durability and Strength are Critical**

The quality and durability of a collagen-based surgical implant depends on a balance between the rate of implant degradation and native tissue ingrowth.⁶

Some environments can potentially delay the body’s natural wound healing process, and may require a more durable implant that will provide a balanced repair.

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**Case Report¹**

46-year-old male patient with perineal hernia:

**Patient**
- Body mass index of 18.0
- Perforated duodenal ulcer many years earlier
- Circumferential rectal tumor
- Preoperative external beam radiotherapy

**Surgical Repair**
- Permacol™ surgical implant was styled to size and contours of the perineal defect

**Clinical Result**
- Patient had no recurrence of perineal hernia in 18 months following the repair
**Most Durable Repair†**

Permacol™ surgical implant is partially crosslinked to provide a durable and stable repair while resisting in vivo enzymatic breakdown. This proprietary crosslinking process enables an orderly deposition of collagen and allows for long-term mechanical strength.

**Lowest Hernia Recurrence Rates²**

<table>
<thead>
<tr>
<th>Material Name</th>
<th>Permacol™</th>
<th>Alloderm™*</th>
<th>Surgisis™*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Rate</td>
<td>5%</td>
<td>14%</td>
<td>7%</td>
</tr>
</tbody>
</table>

†Based on recurrence rates² over time as noted.

**Proportion of Patients Without Recurrence³**

- **Parastomal Hernia Repair**
  - 77% all cases
  - 88% last 17 cases
- **Abdominal Wall Repair**
  - 90%

Note: Study included patients with parastomal hernias. Two recurrences were associated with post-operative hematoma, and when oozing is significant, a suction drain is now inserted.
Strength Equal to Synthetic Mesh

Permacol™ surgical implant exhibits significant burst, tear and tensile strength comparable to that of synthetics, and shown to be greater than or equal to host tissue.\(^5\)

Permacol™ surgical implant also offers a slow, stable and controlled progression, balancing the rate of degradation and the rate of tissue ingrowth.\(^6\)

**Superior Breaking Strength Over Time**

*vs. Peri-Guard™*, Veritas™* and Alloderm™* at 6 months in a rat model\(^7\)

<table>
<thead>
<tr>
<th>Prostheses</th>
<th>Prostheses tensile strength (mean, gf)</th>
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</thead>
<tbody>
<tr>
<td>Permacol™ (10)</td>
<td>2,596</td>
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<tr>
<td>Peri-Guard™* (25)</td>
<td>2,025</td>
</tr>
<tr>
<td>Veritas™* (23)</td>
<td>743(^†)</td>
</tr>
<tr>
<td>Alloderm™* (10)</td>
<td>736(^†)</td>
</tr>
</tbody>
</table>

\(^†\)P<0.05 when compared to 0 months.

**Durable**

- Optimal crosslinking resists collagenase enzymatic breakdown, allowing for a more durable repair (Crosslinked with HMDI, which is water soluble and non-toxic)\(^8,9\)

- Permacol™ proprietary crosslinking provides durability without inhibiting tissue integration\(^8,9\)

- Multiple peer reviewed publications
Not all Crosslinked Surgical Implants are the Same.

**FACT:** In vivo studies performed with Permacol™ surgical implant have demonstrated cellular infiltration and neovascularization. Furthermore, similar blood vessels and collagen densities were observed between cross-linked and non cross-linked groups.⁶,¹¹

- Collagen implants with minimal or no crosslinking can degrade so quickly that the scaffolds disappear before the host tissue can deposit its own extracellular matrix⁸,⁹
- Over-crosslinked implants will resist enzymatic breakdown, but can hinder tissue ingrowth⁸,⁹
- Proper crosslinking provides an optimal environment for the laying down of new collagen⁸,⁹

"Diagram is an adaptation of Liang, HC, et al. (reference 8)."
You deserve clinical evidence behind your surgical implant. Put your trust in the most clinically evaluated Porcine Dermal Surgical Implant on the market.
Permacol™ Surgical Implant

Delivered Ready to Use

- No refrigeration required – quick, convenient access in the operating room
- No hydration or reconstitution required – improved efficiency
- Large variety of sizes, including large sizes – minimized need to suture smaller pieces together for a large wound, no “up” or “down” side, requires no special positioning

<table>
<thead>
<tr>
<th>Size (in cm)</th>
<th>Thickness 0.5 mm</th>
<th>Thickness 1 mm</th>
<th>Thickness 1.5 mm</th>
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References


4. Hooks V III. Preliminary Experience with Porcine Dermis in Abdominal Wall Repair. Presented at: 2nd Joint Meeting of the European Council of Coloproctology/European Association of Coloproctology; September 15-17, 2005; Bologna, Italy.


IMPORTANT: Before use, physicians should always refer to the Instructions for Use provided in the packaging of each piece of Permacol™ surgical implant for complete instructions, indications, contraindications, warnings and precautions.