At Covidien, Hernia Care means

LEADING THE FUTURE
OF FIXATION

[Innovation that matters]

PROGRIP™
Laparoscopic Self-Fixating Mesh

| HERNIA CARE | MESH • FIXATION • PERMACOL™ • DISSECTION
**PROGRIP™ Laparoscopic Self-Fixating Mesh**  
The Future of Fixation

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**DEVELOPED TO ADDRESS KEY ISSUES IN LAPAROSCOPIC INGUINAL HERNIA REPAIR**

Laparoscopic inguinal hernia repair is a well-established alternative to open inguinal repair with comparable outcomes. However, the use of tacks for mesh fixation can increase the risk of chronic post-operative pain.¹

### Key Issues

<table>
<thead>
<tr>
<th></th>
<th>Traditional Tack and Mesh</th>
<th>ProGrip™ Laparoscopic Mesh</th>
</tr>
</thead>
</table>
| **Chronic pain**    | Tack fixation can cause trauma to the tissue³  
• Increased post-operative pain  
• Longer hospital stays | Eliminates the pain associated with traditional tack fixation⁴,⁵ |
| **Increasing cost pressure** | US hospitals pay upwards of $720 per case for tack fixation and mesh⁶ | Combines the functionality of mesh and fixation into one product  
• Reduces cost associated with traditional tack fixation and/or glues⁷ |
| **Up to 2.84% recurrence rate in LIHR** and often occurring along the inferior edge of the mesh⁸ | Tacking below the inguinal ligament is contraindicated⁹  
• Medially due to vessels  
• Laterally due to nerves | Delivers tack-free fixation over the entire anatomy, including below the inguinal ligament where tacks cannot be placed¹⁰,¹¹ |

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The future of laparoscopic inguinal fixation will reduce pain and provide fixation of the entire surface while lowering the cost of the procedure.

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LIHR — Laparoscopic Inguinal Hernia Repair

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**PROGRIP™** Laparoscopic Self-Fixating Mesh

**The Future of Fixation**

**PRODUCT FEATURES**

- More than 5,000 resorbable PLA microgrips\(^1\) eliminate the need for traditional fixation\(^{1,11,12}\)
- Tack-free fixation over the entire anatomy, even in places where traditional fixation cannot be placed\(^{1,10}\)
- Fast resorbing film on posterior side for easy deployment\(^{1,15}\)
- Green medial marking to aid in orientation
- Lightweight, semi-resorbable construction reduces foreign material in patient\(^{1,13}\)
- Macroporous, hydrophilic textile promotes rapid tissue integration\(^{1,14}\)
- Available in flat as well as left and right anatomical configurations for versatility

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PLA — Polylactic Acid

**PLA** — Polylactic Acid

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PRODUCT BENEFITS

ProGrip™ laparoscopic self-fixating mesh:

- **Increases the security** of the laparoscopic inguinal hernia repair\(^1,0,10,11,16,19\)
- **Eliminates the pain** associated with traditional tack fixation\(^4,5\)
- **Is easy to use** and **faster** than tacks\(^1,15,17\)
- **Lowers the cost** of the laparoscopic inguinal procedure by combining the functionality of mesh and fixation into one device\(^6,7\)

**Self-Fixating**

- More than 5,000 microgrips\(^1\) eliminate the need for traditional tack fixation or glue\(^1,3,11,12\)
- Superior fixation strength compared to Bard 3DMax™ light textile with SorbaFix™ tacks or fibrin sealant\(^7,16\)
- Equivalent recurrence rate compared to laparoscopic repair with fixation\(^0,1,4,5,7\)
- Tack-free fixation over the entire anatomy, including below the inguinal ligament where tacks cannot be placed\(^10,19\)

**Less Pain**

- Eliminates the pain associated with traditional tack fixation\(^0,4,5\)
- Low post-operative pain and fast recovery in laparoscopic inguinal hernia repair\(^0,4,5,7,17\)
- 40% of the mesh weight resorbs reducing foreign material presence in patient over time\(^1,13\)
- Resorbable, atraumatic microgrips\(^1\) preserve cord and nerve structures\(^0,10,19\)

**Easy to Use**

- Doesn’t stick to itself making it easy to handle and unfold laparoscopically\(^1,15\)
- Faster than tacks or glue\(^17\)
- Easy to orient with green medial marking

**Lower Cost**\(^6\)

- Combines the functionality of mesh and fixation into one device
- Reduces the cost associated with traditional tack fixation and/or glues\(^7\)
- Less post-operative pain may result in lower cost of pain management therapy\(^0,18\)
### Technical Specifications †,11,13,15,20,21

<table>
<thead>
<tr>
<th>Property</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Textile Material</td>
<td>Monofilament Polyethylene Terephthalate (PET)</td>
</tr>
<tr>
<td>Microgrip Material</td>
<td>Monofilament Polylactic Acid (PLA)</td>
</tr>
<tr>
<td>Microgrips/cm²</td>
<td>36</td>
</tr>
<tr>
<td>Microgrip Absorption Time</td>
<td>&gt;18 Months</td>
</tr>
<tr>
<td>Fast Resorbing Film Composition</td>
<td>70% Collagen, 30% Glycerol</td>
</tr>
<tr>
<td>Fast Resorbing Film Dissolution Time</td>
<td>&lt;1 Day</td>
</tr>
<tr>
<td>Weight Before Absorption (g/m²)</td>
<td>82</td>
</tr>
<tr>
<td>Weight After Absorption (g/m²)</td>
<td>49 (lightweight)</td>
</tr>
<tr>
<td>Pore Size (mm) (height by width)</td>
<td>1.8 x 1.8 (macroporous)</td>
</tr>
<tr>
<td>Sterilization Method</td>
<td>Ethylene Oxide</td>
</tr>
<tr>
<td>Shelf-Life</td>
<td>18 Months</td>
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### Ordering Information

<table>
<thead>
<tr>
<th>Code</th>
<th>Product Description</th>
<th>Product Configuration</th>
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<tbody>
<tr>
<td>LPG1510</td>
<td>10x15</td>
<td>1 Unit per Box</td>
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<tr>
<td>LPG1510X2</td>
<td>10x15</td>
<td>2 Units per Box</td>
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<tr>
<td>LPG1510AR</td>
<td>Right Anatomical</td>
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<tr>
<td>LPG1510AL</td>
<td>Left Anatomical</td>
<td>1 Unit per Box</td>
</tr>
<tr>
<td>LPG1510AK2</td>
<td>Bilateral Anatomical</td>
<td>2 Units per Box</td>
</tr>
</tbody>
</table>

**Technical Specifications**

- Monofilament Non-Resorbable PET textile
- Monofilament Resorbable PLA Microgrips

**Ordering Information**

- Code: LPG1510
- Product Description: 10x15
- Product Configuration: 1 Unit per Box

- Code: LPG1510X2
- Product Description: 10x15
- Product Configuration: 2 Units per Box

- Code: LPG1510AR
- Product Description: Right Anatomical
- Product Configuration: 1 Unit per Box

- Code: LPG1510AL
- Product Description: Left Anatomical
- Product Configuration: 1 Unit per Box

- Code: LPG1510AK2
- Product Description: Bilateral Anatomical
- Product Configuration: 2 Units per Box
**PROGRIP™ Laparoscopic Self-Fixating Mesh**

**The Future of Fixation**

**REFERENCES**


4. Laxa, B, and Jacob, B. An ongoing prospective study evaluating self-gripping mesh (Parietex ProGrip™) without additional fixation during laparoscopic total extraperitoneal (TEP) inguinal hernia repair: initial analysis. IHS 2012 P1620.


6. This information is an estimate derived from the use of information under licence from the following IMS Health information service: Hospital Supply Index for the period Sep ’06 - Jun ’12. IMS expressly reserves all rights, including rights of copying, distribution and republication. Based on typical prices of anatomical mesh and absorbable fixation in the US.


9. Ethicon SecureStrap™ fixation system Instructions For Use.


12. ProGrip™ laparoscopic self-fixating mesh Instructions For Use.


22. ProGrip™ laparoscopic self-fixating mesh and ProGrip™ self-gripping mesh have equivalent gripping and mechanical properties†.

23. Based on preclinical animal and/or benchtop studies (See Covidien internal test report methodology for more information)

24. Measured in millimeter scale

25. If the mesh is cut to size, additional fixation should be used based on surgeon’s discretion

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