

# SIMPLY SMART



**Symbotex™** Composite Mesh  
For ventral hernia repair

| HERNIA CARE | **MESH** • FIXATION • BIOLOGICS • DISSECTION



**COVIDIEN**

*positive results for life™*

# Symbotex™ Composite Mesh

## For ventral hernia repair

### SMART DESIGN

Innovative mesh features for streamlined performance

- Exclusive 3D mesh structure delivering reinforced textile strength<sup>1</sup> and significant tissue ingrowth support<sup>2</sup>
- Established collagen bioabsorbable film technology with impressive resistance to surgical handling<sup>4,5</sup>
- Comprehensive shape and size portfolio for small, medium and large defects<sup>4,6</sup> (according to the IFU)



### SMART HANDLING

Experience simplicity in hernia repair

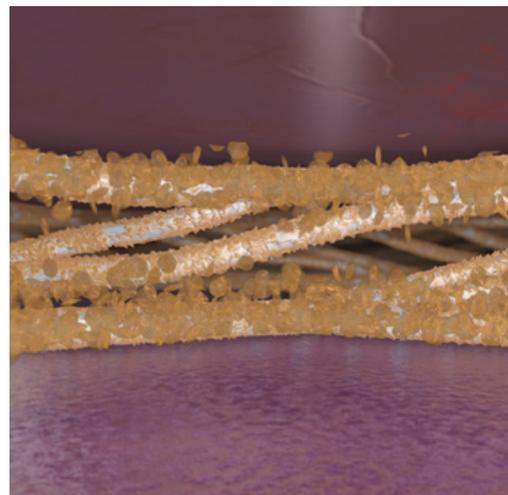
- Designed for easy mesh deployment<sup>3</sup>
- Centering and orientation marking for accurate mesh positioning<sup>2,3,4</sup>
- Mesh transparency for improved anatomy visualization during placement<sup>3</sup>
- Abdominal wall clinging effect for simplified mesh placement<sup>‡,3,7</sup>



### SMART REPAIR

Designed to offer your patients optimal hernia repair performance

- Excellent tissue integration<sup>8</sup>
- Minimized visceral attachment<sup>9</sup>
- Good level of neoperitonization and better minimizing tissue attachment compared to Physiomeshtm™ flexible composite mesh and Ventralighttm™ ST mesh¥,10
- Helping to meet patients' physiological needs through balanced mesh mechanical properties<sup>1</sup>

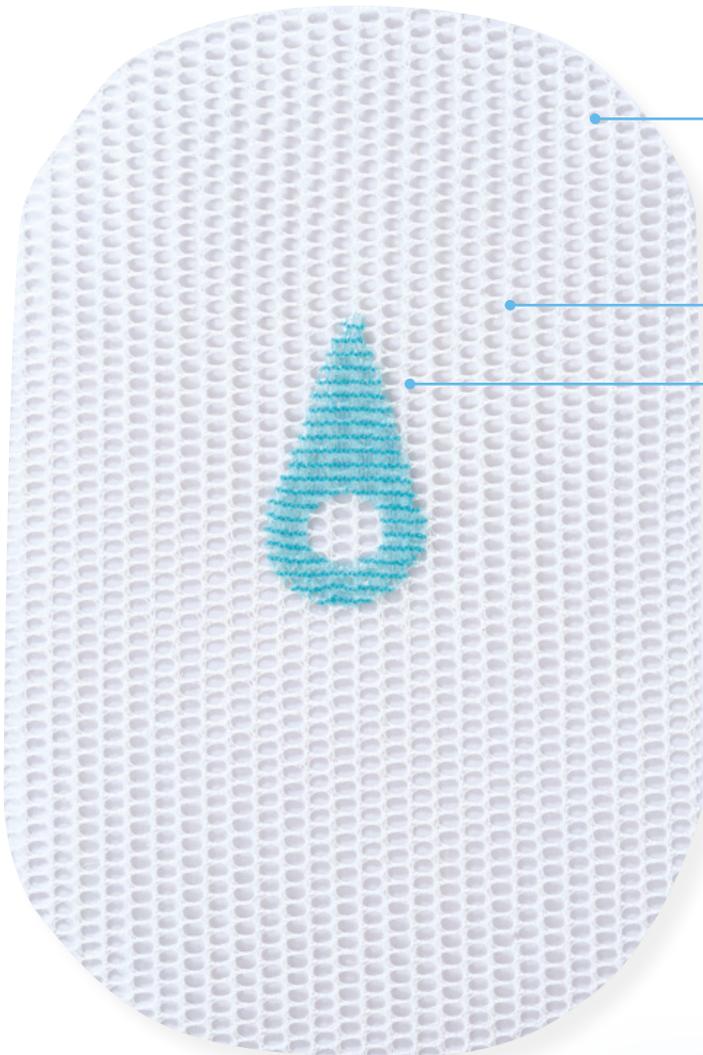


Ω If the mesh is not cut (Refer to IFUs)

‡ Except in cases where transfacial sutures are used as well as meshes in open approach

¥ Four weeks after implantation

## Symbotex™ Composite Mesh



### 3D monofilament macroporous textile

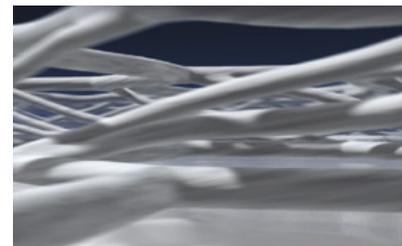
Pore size: 2.3 x 3.3 mm

Density: 66 g/m<sup>2</sup>

Thickness: 0.7 mm

### Bioabsorbable collagen film

### Orientation marking



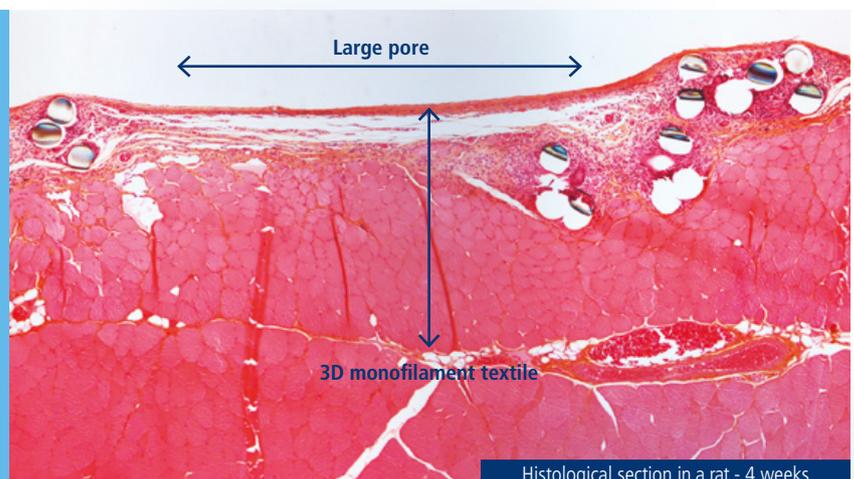
Exclusive 3D mesh structure<sup>1</sup>



Strong fixation with AbsorbaTack™ fixation device<sup>12</sup>

### Histological picture of mesh implantation at 4 weeks in an animal model<sup>11</sup>

- **1 week** after implantation, mesothelial cells colonized the surface of the bioabsorbable film, which is intact and continuous. On the parietal side, several types of cells colonized the 3D structure of the textile, including fibroblasts, which participate to the synthesis of the neo-collagen.
- **2 weeks** after implantation, mesothelial cells begin to degrade the bioabsorbable film. On the parietal side, the textile starts to be integrated into the abdominal wall, while keeping its 3D structure and porosity.
- **4 weeks** after implantation, the mesh is perfectly integrated into the abdominal wall. No inflammatory reaction is observed.

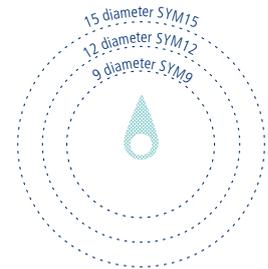
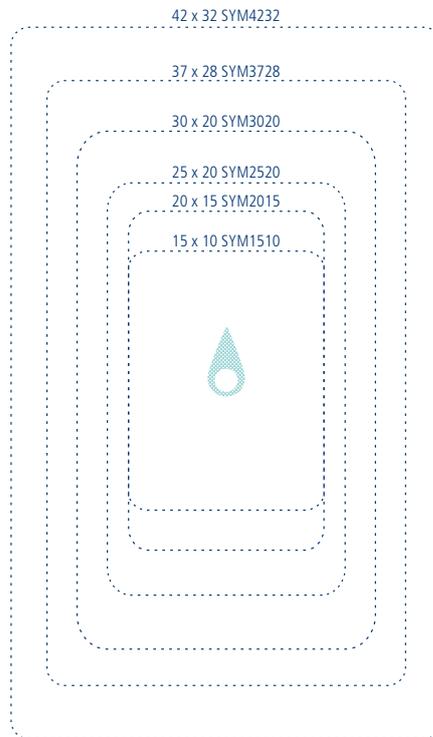
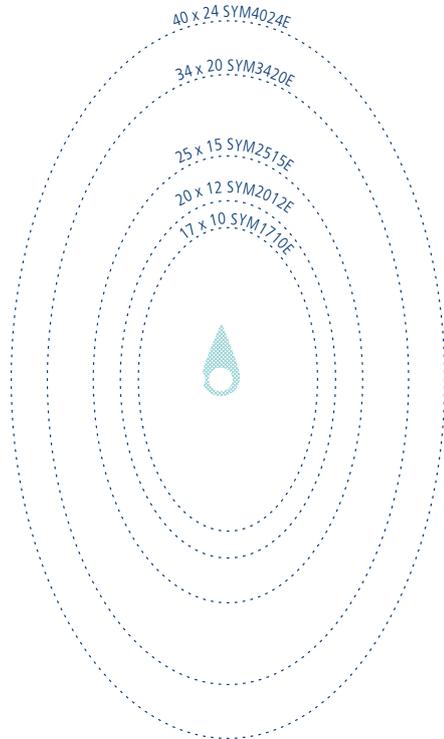


Histological section in a rat - 4 weeks

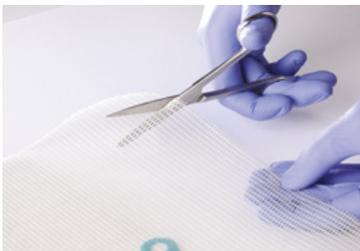
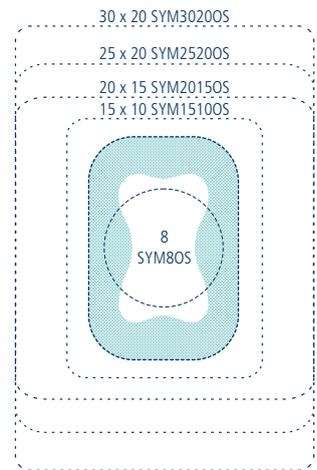
# Symbotex™ Composite Mesh

## For ventral hernia repair

### Laparoscopic ventral repair



### Open ventral repair



Contact your Covidien sales representative and learn more at [www.covidien.com/symbotex](http://www.covidien.com/symbotex)

#### REFERENCES

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2. D. Weyhe, W. Cobb, D. Lomanto et al, Comparative analysis of the performance of a series of meshes based on weight and pore size in a novel mini-pig hernia model - EHS 2013
3. Demonstrated in a preclinical study sponsored by Covidien, carried out on pigs in May 2013 with 6 surgeons and aiming at validating the design of Symbotex™ composite mesh - Covidien internal report 0901CR252a (June 2013)
4. Based on the results of the Covidien sponsored preclinical study carried out on a porcine model to validate the design of Symbotex™ composite mesh - Covidien design validation report 0901CR249a (June 2013)
5. Documented in the design verification report issued by Covidien in July 2013 - Covidien design verification report 0901CR247b (July 2013)
6. Covidien size & shape comparison chart
7. Definition of the Symbotex™ clinging effect observed during the design validation conducted by Covidien in a porcine model in May 2013 - Covidien internal memorandum 0901CR261a (July 2013)
8. Assessed in a preclinical study sponsored by Covidien, initiated in May 2013, using a porcine model to evaluate local tissue effects and tissue integration of Symbotex™ Composite mesh vs Parietex™ Optimized composite mesh after laparoscopic ventral repair - Namsa report No.163005 (May 2013)
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10. Evaluated in a preclinical study sponsored by Covidien, conducted in April 2013, and comparing local tissue effects and integration, collagen film degradation and tissue attachment performance of Symbotex™ composite mesh with Ventralight™\* ST mesh and Physiomesh™\* flexible composite mesh in a porcine model - Namsa report No.163905 - May 2013
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12. Hollinsky, C., et al. Tensile strength and adhesion of mesh fixation systems used in laparoscopic incisional hernia repair. Surg Endosc. 2010 Jun;24(6):1318

**IMPORTANT:** Please refer to the package insert for complete instructions, contraindications, warnings and precautions.

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