



Tissue-Guard
Family of Surgical Patches

A Heritage of Healing

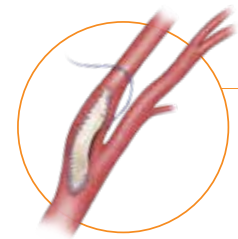
30 YEARS

1.3 MILLION
UNITS SOLD

Baxter

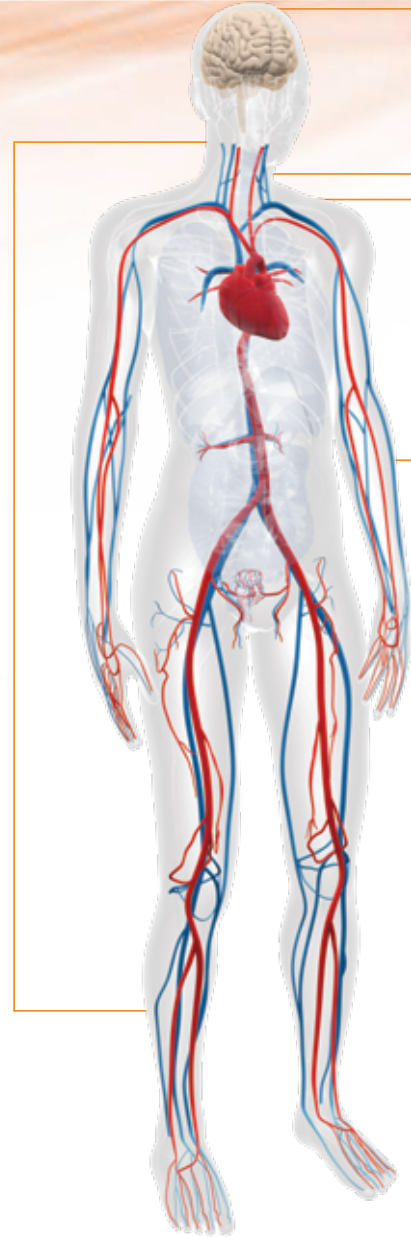
■ Standing the Test of Time

With more than 1.3 million units sold, the Baxter TISSUE-GUARD Family of Surgical Patches has over 30 years of clinical application across a broad range of indications.¹



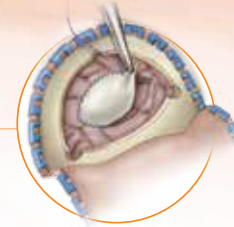
VASCU-GUARD Peripheral Vascular Patch²

Peripheral vascular reconstruction in vascular surgery



DURA-GUARD Dural Repair Patch³

Dura substitute for closure of dura mater in neurosurgery



PERI-GUARD Pericardium Patch⁴

Pericardial, intracardiac, great vessel and septal defects, soft tissue deficiency repairs and suture line buttressing in abdominal, thoracic and cardiothoracic surgery



SUPPLE PERI-GUARD Pericardium Patch⁵

Pericardial closure, and soft tissue deficiency repairs in abdominal, thoracic and cardiothoracic surgery

■ Proprietary Processing Provides Unique Features

The Baxter TISSUE-GUARD Family of products is derived from bovine pericardium, a material known for excellent suppleness and strength. Through a proprietary manufacturing process called **APEX Processing (Advanced Purification through EXtraction)**, the intrinsic nature of the material is maintained while meeting high levels of biocompatibility. The result is a biologic patch with a unique combination of characteristics that differentiates it from other bovine pericardium materials.²⁻⁵ With APEX Processing, the biological material is:

- Crosslinked with Glutaraldehyde
 - Adds strength to an inherently strong material⁶
- Treated with NaOH
 - Reduces cellularity⁷

Exceptional Biocompatibility

- Low Glutaraldehyde levels under 4 ppm⁸
 - Supports endothelialization^{*9,10}
 - Does **not** promote calcification/mineralization^{*11}
- Demonstrated to have a low risk of inflammatory response^{12,13}
- Shown to have a low adverse event rate (0.01–0.06%)¹

*Preclinical results may not correlate to results in humans.



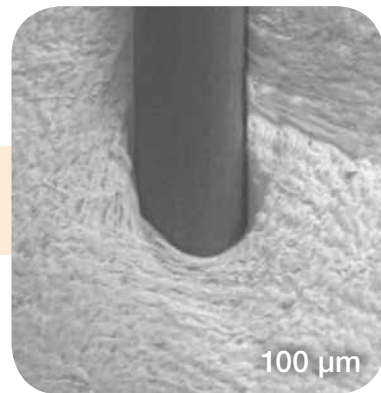
Proprietary Processing Provides Unique Features

Strength and Durability With Excellent Handling

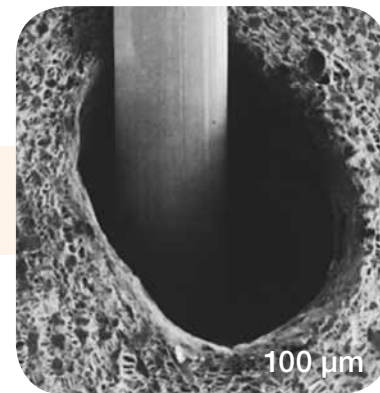
- Easy to handle and suture through, similar to autologous tissue¹²
- Tissue thickness: 0.25-0.75 mm⁸
- Flexible, and readily conforms to multiplanar shapes
- Resists suture line bleeding with excellent reapproximation^{12,14}

Excellent reapproximation around suture (polypropylene 6-0)¹⁵

Bovine Pericardium with APEX PROCESSING



ePTFE



Flexibility That Fits Your Needs



Tissue-Guard

Family of Surgical Patches

Product	Product Size	Product Code
DURA-GUARD Patch Dural repair • Neurosurgery	2 cm x 9 cm	DG0209SN
	4 cm x 4 cm	DG0404SN
	6 cm x 8 cm	DG0608SN
	8 cm x 14 cm	DG0814SN
	10 cm x 16 cm	DG1016SN
PERI-GUARD Patch Pericardial, intracardiac, great vessel and septal defects, soft tissue deficiency repairs and suture line buttressing • Abdominal surgery • Thoracic surgery • Cardiothoracic surgery	4 cm x 4 cm	PC0404NBIO
	6 cm x 8 cm	PC0608NBIO
	8 cm x 14 cm	PC0814NBIO
	10 cm x 16 cm	PC1016NBIO
	12 cm x 25 cm	PC1225NBIO
SUPPLE PERI-GUARD Patch Pericardial closure, and soft tissue deficiency repairs • Abdominal surgery • Thoracic surgery • Cardiothoracic surgery	4 cm x 4 cm	PC0404SNBIO
	6 cm x 8 cm	PC0608SNBIO
	8 cm x 14 cm	PC0814SNBIO
	10 cm x 16 cm	PC1016SNBIO
VASCU-GUARD Patch Peripheral vascular reconstruction • Vascular Surgery	1 cm x 6 cm	VG0106N
	0.8 cm x 8 cm (tapered end)	VG0108N
	1 cm x 10 cm	VG0110N
	2 cm x 9 cm	VG0209N

DURA-GUARD

INDICATIONS FOR USE:

DURA-GUARD is intended for use as a dura substitute for the closure of dura mater during neurosurgery.

CONTRAINDICATIONS:

DURA-GUARD is not designed, sold or intended for use except as indicated.

ADVERSE REACTIONS:

Failure to rinse the product may result in a sterile inflammatory reaction.

Rx only. For safe and proper use of this device refer to the complete Instructions for Use.

PERI-GUARD

INDICATIONS FOR USE:

PERI-GUARD is intended for repair of pericardial structures and for the surgical repair of soft tissue deficiencies which include: defects of the abdominal and thoracic wall, gastric banding, muscle flap reinforcement, and hernias (including diaphragmatic, femoral, incisional, inguinal, lumbar, paracolostomy, scrotal, and umbilical hernias). PERI-GUARD is also intended for use as a patch material for intracardiac defects, great vessel, septal defect and annulus repair, and suture-line buttressing.

CONTRAINDICATIONS:

PERI-GUARD is not designed, sold or intended for use except as indicated.

ADVERSE REACTIONS:

Failure to rinse the product may result in a sterile inflammatory reaction.

Rx only. For safe and proper use of this device refer to the complete Instructions for Use.

SUPPLE PERI-GUARD

INDICATIONS FOR USE:

SUPPLE PERI-GUARD is indicated for use as a prosthesis for pericardial closure and soft tissue deficiencies which include: defects of the abdominal and thoracic wall, gastric banding, muscle flap reinforcement, and hernias (including diaphragmatic, femoral, incisional, inguinal, lumbar, paracolostomy, scrotal and umbilical).

CONTRAINDICATIONS:

SUPPLE PERI-GUARD is not designed, sold or intended for use except as indicated.

ADVERSE REACTIONS:

Failure to rinse the product may result in a sterile inflammatory reaction.

Rx only. For safe and proper use of this device refer to the complete Instructions for Use.

VASCU-GUARD

INDICATIONS FOR USE:

VASCU-GUARD is intended for use in peripheral vascular reconstruction including the carotid, renal, iliac, femoral, profunda and tibial blood vessels and arteriovenous access revisions.

CONTRAINDICATIONS:

VASCU-GUARD is not designed, sold or intended for use except as indicated.

ADVERSE REACTIONS:

Failure to rinse the product may result in a sterile inflammatory reaction.

Rx only. For safe and proper use of this device refer to the complete Instructions for Use.

References

1. Data on File. Baxter Healthcare Corporation, TGCS2013.
2. VASCU-GUARD Peripheral Vascular Patch Instructions for Use. MS-0722001D.
3. DURA-GUARD Dural Repair Patch Instructions for Use. MS-0722002.
4. PERI-GUARD Pericardium Patch Instructions for Use. MS-0722500A.
5. SUPPLE PERI-GUARD Pericardium Patch Instructions for Use. MS-0722502A.
6. Data on File, Baxter Healthcare Corporation, SI-0102R.
7. Data on File. Baxter Healthcare Corporation, SI-0096R.
8. Data on File. Baxter Healthcare Corporation, DS-1011 and DS-1012.
9. Li X, Jadlowiec C, Guo Y, et al. Pericardial patch angioplasty heals via an ephrin-B2 and CD34 positive cell mediated mechanism. *PLoS One*. 2012;7(6):1-8.
10. Data on File, 2003. Baxter Healthcare Corporation, SI-0020 and SI-0020R.
11. Data on File. Baxter Healthcare Corporation, SI-0021 and SI-0021R.
12. Biasi GM, Mingazzini P, Baronio L, et al. Processed bovine pericardium as patch angioplasty for carotid endarterectomy: a preliminary report. *Cardiovasc Surg*. 1996;4(5):848-852.
13. Anson JA, Marchand EP. Bovine pericardium for dural grafts: clinical results in 35 patients. *Neurosurgery*. 1996;39(4):764-8.
14. Matsagas MI, Bali C, Arnaoutoglou E, et al. Carotid endarterectomy with bovine pericardium patch angioplasty: mid-term results. *Ann Vasc Surg*. 2006;20:614-619.
15. Biasi GM, Sternjakob S, Mingazzini PM, Ferrari S. Nine-year experience of bovine pericardium patch angioplasty during carotid endarterectomy. *J Vasc Surg*. 2002;36:271-277.



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