

BioIntegral No-React® Porcine Pericardial Patches



Features

- ❖ Supple, easy to handle
- ❖ No reports of calcification
- ❖ No rinsing required
- ❖ Good suture reapproximation
- ❖ Available in both flat and curved patches
- ❖ Curved patches suitable for Norwood Procedure

Indications

Use as an intracardiac patch to:

Close intercavity defects

Enlarge the aortic root and carotid endarterectomy

Pericardial closure

Soft Tissue Repair

BioIntegral Surgical manufactures cardiac and vascular implants made from all-biological materials using the No-React® treatment.

The No-React® treatment is a heparin-based proprietary detoxification and biomodification of glutaraldehyde-treated tissue that further stabilises tissue cross-linking and prevents the release of aldehydes.

The No-React® process “fixes” the glutaraldehyde so that it cannot leach out from the tissue – this avoids the problems that residual glutaraldehyde can cause which include infection, foreign body reaction, calcification and adhesions .

- No-React® Treated Porcine Patches
- Demonstrated to reduce adhesions¹ and offer high biocompatibility^{2,3}
- No pre-rinsing necessary, patches are ready to use and so save preparation time
- High tensile and pull strength⁴
- Available as Flat or Curved patches
- Vascular patches have curved ends

18 years of clinical experience with No-React® devices shows:

- ❖ **Reduced toxicity**
- ❖ **Enhanced biocompatibility**
- ❖ **Lower rates of infection, adhesion**
- ❖ **No reports of calcification**
- ❖ **The promotion of endothelial lining^{5,6}**

Curved Patches for Norwood Procedure

Contact

For customer services and for any further information on the Patches or any of the other products in the BioIntegral Surgical No-React® range please contact:

Pierson Surgical Ltd

01225 766632

Or

sales@piersonsurgical.com



Curved No-React® Porcine Patches are available in 4 diameters and lengths.

There are several advantages to the use of porcine pericardium over allograft material for the aortic arch reconstruction in patients undergoing a Norwood procedure:

- ◆ **Unlike Homografts , No-React® patches do not calcify:**
 "Aortic arch reconstruction was performed using a preformed curved xeno- pericardial patch/conduit (BioIntegral Surgical, Inc, Canada) after the year 2002 because of our experience with the use of aortic and pulmonary homografts for aortic reconstruction showing extensive calcifications at Fontan completion. This is a commercially available curved patch specifically designed for a use in Norwood-type procedures. With the No-React treatment this patch is free of calcification at Comprehensive Stage II and Fontan completion." *Yerebakan et al, Paediatric Heart Centre Giessen (J Thorac Cardiovasc Surg 2014)*
- ◆ The porcine pericardial patch is readily available and does not require any special storage (preserved in benzyl alcohol), unlike homograft tissue, which requires cryopreservation.
- ◆ Cost savings with the use of the porcine pericardium; the cost of a homograft is likely to be over twice that of the BioIntegral Surgical patch

Product Codes

CAUTION: Refer to the Instructions For Use provided with each device for complete information regarding indications for use, contraindications, warnings, precautions and potential complications.

Flat Patches	
NRPP-01x07	1 x 7 cm
NRPP-02x07	2 x 7 cm
NRPP-02x09	2 x 9 cm
NRPP-03x03	3 x 3 cm
NRPP-04x04	4 x 4 cm
NRPP-05x05	5 x 5 cm
NRPP-06x10	6 x 10 cm
NRPP-08x14	8 x 14 cm

Curved Patches	
NRPP-09mAP	9mm Diameter Min length 7cm
NRPP-11m09	11mm Diameter Min length 9cm
NRPP-13m11	13 mm Diameter Min length 11cm
NRPP- 15m12	15 mm Diameter Min length 12 cm

REFERENCES

- 1 Pelosi, MA II, Pelosi MA III. "A new nonabsorbable adhesion barrier for myomectomy", Am J Surg. 2002 Nov;184(5):428-32.
- 2 Amir Aboholda, et al. "No-React Detoxification Process: A Superior Anticalcification Method for Bioprostheses", Ann. Thor. Surg. 1996;62:1724-30.
- 3 Victor O. Morell and Peter A. Wearden. "Experience With Bovine Pericardium for the Reconstruction of the Aortic Arch in Patients Undergoing a Norwood Procedure", Ann Thorac Surg 84, no. 4 (October 1, 2007): 1312-1315.
- 4 Bench testing, data on file.
- 5 Michele Musci, et al. "Surgical therapy in patients with active infective endocarditis: seven-year single centre experience in a subgroup of 255 patients treated with the Shelhigh stentless bioprosthesis", European Journal of Cardiothoracic Surgery 34 (2008) 410-417.
- 6 Dohmen et al., "Endothelial Cell-Seeded Bovine Internal Mammary Artery for Complete Revascularization", Ann Thorac Surg 83, no. 3 (March 1, 2007): 1168-1169.