All-biological BioIntegral Surgical Bifurcated Vascular Graft

The only biological graft that compares well with the autogenous vein.





Aquilant

What's the secret? A Monolayer of endothelium on all blood contacting surfaces

A Totally Biological Perima™ and Perima™ Bifurcation

- Clinical experience with over 400 patients and 9000 BioConduit implants, prove resistance to infection at least as good as the autogenous vein^{1,2,3}
- Overwhelming results show resistance to stenosis, calcification, dilatation, and thrombosis
- Made from bovine pericardium for superior strength
- Substitute for replacing vascular bifurcated grafts or tissue in patients with infection or at high risk of infection
- Saves 3 to 4 hours in tailoring the autogenous bifurca- tion (see complete clinical manual)

The BioIntegral Surgical Technology

The BioIntegral Surgical biomodified technology functions to allow growth of the endothelium on all blood contacting surfaces.



- Reduced toxicity
- Enhanced biocompatibility
- Lower rates of infections, adhesions and calcifications⁴
- Allows for endothelialization, thus enhances patency better than any other vascular graft^{3,5,8}

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The Only Graft that Resists Biofilms

What is a biofilm?

- Biofilms are bacterial colonies covered by a layer of Mucopolysaccharides, preventing antibiotic penetration^{6,7}
- Bacterial colonies may resist 900 times the normal dose of antibiotics, a dose lethal to the patient

How does our graft resist biofilms?

- Naturally occurring, blood-borne antibiotics can pene- trate biological tissue, making it resistant to biofilms
- After six weeks, the graft is covered by the patient's own endothelium (which prevents the formation of biofilm), becoming practically native tissue



Implanted, aorta remains clamped



After unclamping the aorta, graft expands

under the pressure



Trunk and bifurcation clearly visible

References

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- 3. Michele Musci, et al. "Further Experience with the "No-React" Bioprosthesis in Patients with Active Infective Endocarditis: 11-Year Single Center Results in 402 Patients" Eur. J. Card. Surg. 61 (2013) 398-408.
- 4. Yerebakan, C., et al., "Long-term results of biventricular repair after initial Giessen hy- brid approach for hypoplastic left heart variants," J. Thor. Card. Surg. 149 (2015).
- 5. Meduoye, A., Sosnowski, A. and Manuel Galiñanes, "No-React Composite Stentless Aortic Valved Conduit: A Decade of Experience," Presented at Ten Years Follow-Up with No-React Heart Valves, Toronto, Canada. (May 2nd, 2010).
- 6. Proal, A. "Understanding Biofilms," Bacteriality (2008).
- 7. Leid, J.G., "Bacterial Biofilms Resist Key Host Defenses," Am. Soc. Microbio., (2009).
- 8. Victor O. Morell and Peter A Wearden, Experience With Bovine Pericardium for the Re- construction of the Aortic Arch in Patients Undergoing the Norwood Procedure, Ann. Thor. Surg. 84 (2007) 1312-1315. (Article of Interest)
- 9. Takkenberg J.J.M., et al., "Prognosis After Aortic Root Replacement with Cryopreserved Allografts in Adults," Ann. Thor. Surg. 75 (2003) 1482-1489. (Article of Interest).

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

Made in Canada. Not all products are available in all countries.



DEVICE	DIAMETER	LENGTH	PRODUCT CODE
BioModified Non-valved Conduit, Biological Vascular Graft - Periperal Straight	8mm	300-350mm	NVC-P08X08X300
		400-450mm	NVC-P08X08X400
		500-550mm	NVC-P08X08X500
		600-650mm	NVC-P08X08X600
	7mm	300-350mm	NVC-P07X07X300
		400-450mm	NVC-P07X07X400
		500-550mm	NVC-P07X07X500
		600-650mm	NVC-P07X07X600
	6mm	300-350mm	NVC-P06X06X300
		400-450mm	NVC-P06X06X400
		500-550mm	NVC-P06X06X500
		600-650mm	NVC-P06X06X600

DEVICE	DIAMETER	LENGTH	PRODUCT CODE
BioModified Non-valved Conduit, Bifurcated Biological Vascular Graft	20/10mm	300-350mm	NVC-B20X10X300
		400-450mm	NVC-B20X10X400
		500-550mm	NVC-B20X10X500
	18/9mm	300-350mm	NVC-B18X09X300
		400-450mm	NVC-B18X09X400
		500-550mm	NVC-B18X09X500
	16/8mm	300-350mm	NVC-B16X08X300
		400-450mm	NVC-B16X08X400
		500-550mm	NVC-B16X08X500

DEVICE	DIAMETER	LENGTH	PRODUCT CODE
BioModified Non-valved Conduit, Biological Vascular Graft - Thoracic	19mm	15cm	NVC-A19x19
	21mm	15cm	NVC-A21x21
	23mm	15cm	NVC-A23x23
	25mm	15cm	NVC-A25x25
	27mm	15cm	NVC-A27x27
	29mm	15cm	NVC-A29x29

DEVICE	THICKNESS	SIZE	PRODUCT CODE
Porcine pericardial patches	0.3mm	0.8 x 8 cm	NRPP-08x08
	0.3mm	1 x 6 cm	NRPP-01x06
	0.3mm	1 x 7 cm	NRPP-01x07
	0.3mm	2 x 9 cm	NRPP-02x09
	0.3mm	3 x 3 cm	NRPP-03x03
	0.3mm	4 x 4 cm	NRPP-04x04