

CardioGRAFT®



Allograft solutions for cardiac repair and reconstruction – from the world’s most trusted provider of allograft solutions

LifeNet Health grafts consistently perform as they should, allowing medical professionals to focus on the procedure, and patients to focus on healing. Year after year, this dedication to quality is validated internally and vetted by health-care organizations and industry partners, as well as government and industry regulators.

Our comprehensive portfolio allows customers to get more solutions from a single source – freeing time and resources to focus on providing the highest quality patient care. Our responsive Customer Experience team is available 24 hours a day. Local LifeNet Health representatives are available to consult with surgeons or conduct in-service programs for operating room staff on allograft preparation.

Commitment to Quality

LifeNet Health's expertise in cardiac and vascular tissue processing spans more than 40 years. Our refined processes, quality-control systems and proprietary disinfection protocols ensure the highest level of safety, reduced risk and better outcomes.

Multiple Processing & Distribution Locations

LifeNet Health has processing and distribution centers located strategically across the country, boosting our ability to provide efficient and reliable service, and minimizing the impact of uncontrollable events like weather. Our consignment and freezer programs offer both convenience and operational readiness.

Service & Reliability

We collaborate with more than 50 recovery partners across the US, all of whom are required to adhere to our strict standards of donor screening and recovery techniques. This enables us to maintain a ready supply of grafts for your hospital's needs.

Experience & Knowledge

Our staff brings more than 200 combined years of experience in cardiac tissue processing, and we hold the longest-running American Association of Tissue Banks accreditation.

Screening & Safety

LifeNet Health's stringent screening criteria determines which possible donors are potentially medically suitable. Less than 2% of all possible donors meet these standards designed to ensure that only the safest tissue is available for transplantation.

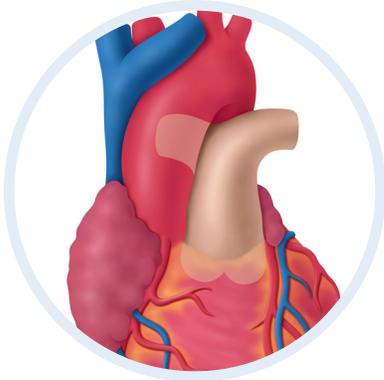
Donor Families

Our donor family support program is an expression of our appreciation and our commitment to honoring the precious gift. We offer support groups, workshops, online resources and remembrance events. Our Thanks2You program enables implant recipients to contact their tissue donor family to thank them for their loved one's gift. In addition to individual family communication and online resources, LifeNet Health hosts several events and workshops throughout the year to aid in the healing process and provide a meaningful way for families to celebrate the gift of life.



"I want you to know that your family's generosity in a time of grief made a difference to me, to my family, and to my newborn son. Without your precious gift, my son's heart would not be complete." - Amos's mom

Our record of safety, quality, innovation, and service enables us to produce the h



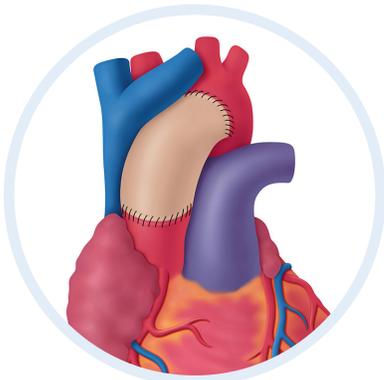
Valve Replacement

Clinical Applications:

Tetralogy of Fallot, Pulmonary Stenosis, Infective Endocarditis, Ross Procedure, Valve Incompetence/Regurgitation, Valve Atresia

Clinical Solutions:

CardioGraft Aortic Valve (HVA), CardioGraft Pulmonary Valve (HVP), CardioGraft Pediatric Conduit (PCV-C)



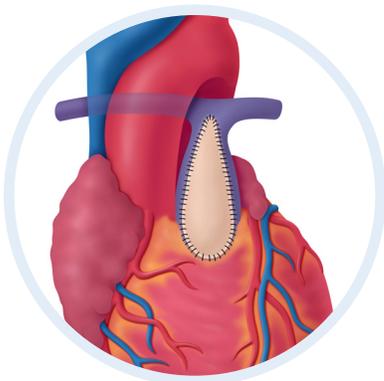
Valve-Sparing Reconstruction

Clinical Applications:

Tetralogy of Fallot, Pulmonary Atresia, Truncus Arteriosus, Transposition of the Great Arteries

Clinical Solutions:

CardioGraft Ascending Aorta (AA), CardioGraft Pulmonary Artery (PA), CardioGraft Thoracic Aorta (TA)



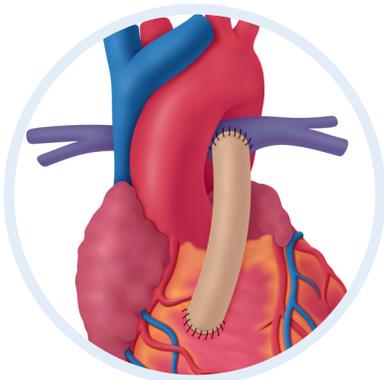
Outflow Tract Repair and Reconstruction

Clinical Applications:

Tetralogy of Fallot, Hypoplastic Left Heart Syndrome, Truncus Arteriosus, Transposition of the Great Vessels, Pulmonary Stenosis/Atresia, Outflow tract/Root reconstruction

Clinical Solutions:

CardioGraft Hemi Pulmonary Artery (LHPA/RHPA), CardioGraft Mono Cusp Patch (MCPL), CardioGraft Pulmonary Patch (PPGK/PPGN), CardioGRAFT Pediatric Conduit (PCV-C)



Features & Benefits

- **Human Tissue:** Closely resembles autograft; compliant, flexible, easy to handle and suture.
- **Resistant to Infection:** Natural ability to resist infection.¹⁻³
- **Convenient:** Availability in various sizes to best fit the patient's anatomy. Anterior mitral leaflet retained for use in endocarditis/abscess reconstruction.
- **Reduced Thrombosis Potential:** Alleviates the need for anticoagulation therapy.^{3,4}

highest quality allografts, including a full portfolio of cardiac surgical solutions.



Pediatric Pulmonary Outflow Tract Repair and Reconstruction

Clinical Applications:

Repair of the right ventricular outflow tract for Tetralogy of Fallot, Truncus Arteriosus, Hypoplastic Left Heart Syndrome, Transposition of the Great Arteries, Pulmonary Stenosis/Atresia

Clinical Solutions:

CardioGraft-MC[®] Decellularized Pulmonary Patch (DPPGK/DPPGN), CardioGraft-MC Decellularized Hemi Pulmonary Artery (DLHPA, DRHPA)

Features & Benefits

- **Human Tissue:** Closely resembles autograft; compliant, flexible, easy to handle and suture.
- **Resistant to Infection:** Natural ability to resist infection.¹⁻³
- **Convenient:** Availability in various sizes to best fit the patient's anatomy.
- **Decellularized:** Patented Matracell[®] technology removes ≥99% of donor DNA.⁵
- **Clinically Effective:** Lower potential for reoperation or intervention. Proven resistance to calcification and stenosis.⁶⁻⁸
- **Efficient:** Potentially reduces operating room time and cost by reducing the rate of serious adverse events and reoperations.⁹

Matracell-decellularized patches used for pulmonary arterioplasty in pediatric patients are associated with higher freedom from reoperations or reinterventions versus non-decellularized patches through 7 years post-implantation.^{7,8}

A retrospective study evaluating the use of LifeNet Health homografts to treat patients with infective endocarditis reported no reinfections during the follow-up period up to 12 years post-implantation.¹⁰

Matracell Technology

CardioGraft-MC allografts are technologically advanced decellularized cardiac patches created from donated human tissue. They offer the distinct clinical advantage of fewer reoperations stemming from graft failure compared to other cardiac patch materials.⁷

The patches are processed with Matracell, a validated, patented decellularization process unique to LifeNet Health. It renders tissue acellular without compromising the strong, biocompatible matrix that facilitates cell proliferation and migration.^{5,6,11-13}

Matracell[®]

Valves | CardioGRAFT®



Description	Size	Cryopreserved
Aortic	22 mm and greater	HVA-L
	17 to 21 mm	HVA-M
	16 mm and less	HVA-S
Pulmonary	22 mm and greater	HVP-L
	17 to 21 mm	HVP-M
	16 mm and less	HVP-S

Conduits | CardioGRAFT®



Description	Size	Cryopreserved
Ascending Aorta (Non-Valved)	22 mm and greater	AAL
	17 to 21 mm	AAM
	16 mm and less	AAS
Pulmonary Artery (Non-Valved)	22 mm and greater	PAL
	17 to 21 mm	PAM
	16 mm and less	PAS
Thoracic Aorta (Non-Valved)	22 mm and greater	TAL
	17 to 21 mm	TAM
	16 mm and less	TAS
Pediatric Conduit (Saphenous Vein with Competent Valve)	≥6 cm/4-10 mm	PCV-C

Repair | CardioGRAFT®



Description	Size	Cryopreserved
Hemi Pulmonary Artery - Left (No Leaflet)	Varies	LHPA
Hemi Pulmonary Artery - Right (No Leaflet)		RHPA
Mono Cusp Patch (With Leaflet)	22 mm and greater	MCPL
Pulmonary Patch - Trunk	W = 25-50 mm in 5 mm increments; L = 30-60 mm in 5 mm increments	PPGK
Pulmonary Patch - Branch		PPGN

Repair | CardioGRAFT-MC®



Description	Size	Frozen
Matracell® Decellularized Hemi Pulmonary Artery - Left	Varies	DLHPA
Matracell® Decellularized Hemi Pulmonary Artery - Right		DRHPA
Matracell® Decellularized Pulmonary Patch - Trunk	W = 25-50 mm in 5 mm increments; L = 30-60 mm in 5 mm increments	DPPGK
Matracell® Decellularized Pulmonary Patch - Branch		DPPGN

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References

1. Kirklin et al. Aortic Valve Endocarditis with Aortic Root Abscess Cavity: Surgical Treatment with Aortic Valve Homograft. Ann Thorac Surg 45:674-677, June 1988.
2. Tuna et al. Results of Homograft Aortic Valve Replacement for Active Endocarditis. Ann Thorac Surg 1990; 49: 619-24.
3. Hopkins et al. Cardiac Reconstructions with Allograft Tissues. Springer 2005.
4. Pettersson, Coselli, et al. 2016 The American Association for Thoracic Surgery (AATS) consensus guidelines: Surgical treatment of infective endocarditis. Journal of Thoracic and Cardiovascular Surgery, 2017; 153: 1241-1258.
5. Data on file LifeNet Health® PQ-07-078.
6. Lofland GK, et al. Initial pediatric cardiac experience with decellularized allograft patches. Ann of Thoracic Surg, 2012;93:968-71.
7. Hopkins RA, et al. Pulmonary Arterioplasty With Decellularized Allogeneic Patches. Ann of Thoracic Surg, Vol. 97, Issue 4, April 2014, Pages 1407-1412.
8. McKenzie: Bonilla-Ramirez C, Aggarwal V, Atyam M, Qureshi AM, Heinle JS, McKenzie ED. Decellularized vs Non-decellularized Allogeneic Pulmonary Artery Patches for Pulmonary Arterioplasty [published online ahead of print, 2022 Jul 22]. Semin Thorac Cardiovasc Surg. 2022;S1043-0679(22)00155-1. doi:10.1053/j.semtcvs.2022.07.005.
9. CardioGraft-MC (also known as Matracell®) Decellularized Cardiac Patch Allograft Cost-Effectiveness Analysis Musculoskeletal Clinical Regulatory Advisors, June 2014.
10. Preventza et al. Homograft Use in Reoperative Aortic Root and Proximal Aortic Surgery for Endocarditis: A 12-year Experience in High-risk Patients. Journal of Thoracic and Cardiovascular Surgery, September 2014, Volume 148, Number 3: 989-94.
11. LifeNet Health data on file: TR-0082.
12. LifeNet Health data on file: PQ-11-005.
13. LifeNet Health data on file: TR-0056.

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