

FOR IMMEDIATE RELEASE

For media inquiries, please contact: Doug Wilson Doug_wilson@lifenethealth.org 757-609-4468, office

Revolutionizing Care for Vascular Access, Bypass, and Trauma Patients LifeNet Health Introduces Nexeon[®] Decellularized Femoral Artery

Virginia Beach, VA – June 4, 2025 – LifeNet Health, a global leader in regenerative medicine, introduces <u>Nexeon Decellularized Femoral Artery</u>, the world's first decellularized, sterile, room temperature vascular allograft. Nexeon is intended for use as a conduit for blood flow in the peripheral vasculature. This innovation represents a significant advancement in vascular surgery, offering a breakthrough solution for patients with peripheral artery disease (PAD), kidney failure requiring hemodialysis, and vascular trauma. With an estimated 10–12 million Americans living with PAD and nearly 500,000 on hemodialysis, Nexeon has the potential to support improved outcomes in procedures where long-term graft performance and availability are critical.^{1,2}

"This is a great option for my patients in terms of patency, durability, and low infection risk," said Dr. Animesh Rathore, vascular surgeon with Sentara Vascular Specialists in Virginia Beach, Virginia. "What is also unique about this product is the off-the-shelf nature of this graft."

Nexeon is processed using LifeNet Health's proven and patented <u>Matracell®</u> decellularization technology, which removes more than 99% of donor DNA.^{3*-7} This process helps reduce inflammation and abnormal cell proliferation — two major contributors to graft failure — while preserving the structural integrity of the vessel.^{3*,4,8}

"Nexeon has the potential to be a game-changer in the hemodialysis space — given its decellularized properties. Bringing this off-the-shelf technology to patients is a testament to the dedication of the entire team and is a profound step towards enhancing the lives of hemodialysis patients", said Dr. Mark Archie, Associate Professor of Surgery at Harbor-UCLA Medical Center in Torrance, California, and principal investigator for the ongoing post-market registry evaluating Nexeon.

Clinical literature supports the use of vascular allografts in infected fields, and Nexeon may be an optimal choice for patients at elevated risk of infection.⁹⁻¹³ Additionally, room-temperature storage eliminates the need for ultra-cold freezers, simplifying logistics.

Dr. Rathore performed the world's first implantation of Nexeon in August 2023. The graft is now available at select hospitals and will be showcased at the 2025 Vascular Annual Meeting, June 4–7 in New Orleans.

"Nexeon is more than a new graft — it's a breakthrough in biologic innovation. For patients suffering from PAD, kidney failure or vascular trauma, Nexeon brings renewed hope," said Rony Thomas, President and CEO of LifeNet Health. "Making this solution widely available reflects our mission to give healing every advantage."

To learn more, visit: lifenethealth.org/vascular



About LifeNet Health

LifeNet Health is a global leader in regenerative medicine, providing a comprehensive range of transplant solutions from organ procurement to bio-implants and cellular therapies. LifeNet Health's mission is to improve the quality of human life by advancing medical possibilities in transplantation and research. * Based on a preclinical in vivo animal study. Results in animals may not be representative of results in humans.

References

- United States Renal Data System. 2022 USRDS Annual Data Report: Epidemiology of kidney disease in the United States. National Institutes of Health, National Institute of Diabetes and Digestive and Kidney Diseases, Bethesda, MD, 2022.
- 2. American Heart Association. Peripheral Artery Disease National Action Plan. https://www.heart.org/en/health-topics/peripheral-artery-disease/pad-resources/pad-action-plan Accessed 5/12/2025.
- 3. Data on file LifeNet Health ES-19-076.
- 4. Data on file LifeNet Health PQ-21-078.
- 5. Data on file LifeNet Health TR-0375.
- 6. Data on file LifeNet Health ES-20-001.
- 7. Data on file LifeNet Health ES-20-016.
- 8. Data on file LifeNet Health ES-19-064.
- Bossi, M., Tozzi, M., Franchin, M., Ferraro, S., Rivolta, N., Ferrario, M., Guttadauro, C., Castelli, P., & Piffaretti, G. (2017). Cryopreserved human allografts for the reconstruction of aortic and peripheral prosthetic graft infection. Annals of Vascular Diseases, 10(4), 391-397. doi: 10.3400/avd.oa.17-00068
- Castier, Y., Francis, F., Cerceau, P., Besnard, M., Albertin, J., Fouilhe, L., Cerceau, O., Albaladejo, P. & Lesèche, G. (2005). Cryopreserved arterial allograft reconstruction for peripheral graft infection. Journal of vascular surgery, 41(1), 30-37. https://doi.org/10.1016/j.jvs.2004.09.025
- 11. Harlander-Locke, M.P., Harmon, L.K., Lawrence, P.F., Oderich, G.S., McCready, R.A., Morasch, M.D., Feezor, R.J. & Vascular Low-Frequency Disease Consortium. (2014). The use of cryopreserved aortoiliac allograft for aortic reconstruction in the United States. Journal of vascular surgery, 59(3), 669-674. https://doi.org/10.1016/j.jvs.2013.09.009
- 12. Madden, R. L., Lipkowitz, G. S., Browne, B. J., & Kurbanov, A. (2004). Experience with cryopreserved cadaveric femoral vein allografts used for hemodialysis access. Annals of vascular surgery, 18(4), 453-458. https://doi.org/10.1007/s10016-004-0055-0
- Mousavi, S. R., Moatamedi, M. R. K., & ME AKBARI, M. (2011). Comparing frozen saphenous vein with Gore-tex in vascular access for chronic hemodialysis. Hemodialysis International, 15(4), 559-562. https://doi.org/10.1111/j.1542-4758.2011.00578.