ACUNAV ICE catheter clinical compendium

Included here are relevant articles and journal publications that have been published on ACUNAV ICE catheters, highlighting the benefits during structural heart disease procedures.

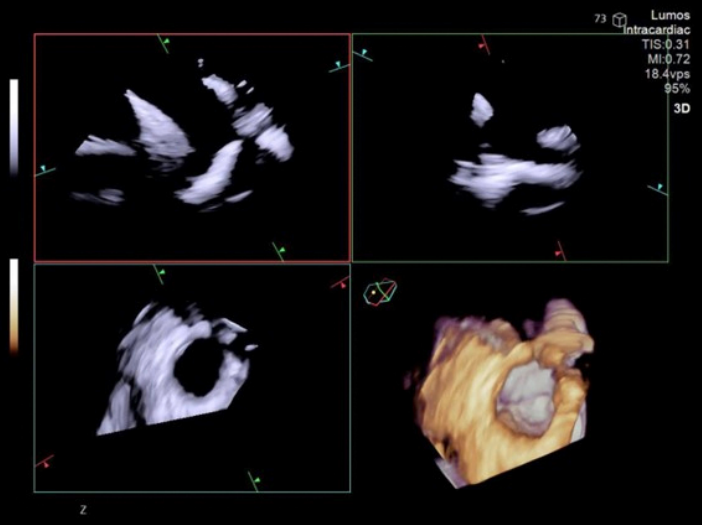
The scientific overlay is not that of the individual pictured and is not from a device of Siemens Healthineers.

SIEMENS Healthineers

The future of structural heart is complex

Your imaging shouldn't be.

The ACUNAV ICE portfolio delivers the excellence and efficiency you require, now and into the future.



Advanced procedures require advanced imaging

Comprehensive visualization

ACUNAV ICE catheters are designed to achieve unique views from inside the heart, providing more consistent and reliable image quality to help you to get closer to the anatomy and identify complications for patients before they become significant.[1]

Conscious sedation

Freedom to use conscious sedation means not compromising safety for optimal outcomes.

ACUNAV ICE catheters

Autonomy and performance

As structural heart procedures become more complex, physicians need imaging that gives them command, confidence, and procedural independence.

In combination with the ACUSON Origin ultrasound system, 4D ACUNAV ICE catheters provide the next-level tools you need for informed anatomical assessment and device guidance.

Leading the way

With over two million patients impacted, and over 25 years of innovation, Siemens Healthineers is the long-standing ICE market leader.

Our expert education and guidance support procedural excellence, backed by one of the most experienced clinical ICE teams.

[1] *In comparison to Siemens Healthineers legacy ultrasound systems.*

Peer-reviewed Medical Journals and Conferences

2019

First Reported 4D Volume Intracardiac Echocardiography Guided Left Atrial Appendage Closure in the USA

Roberto J. Perez, OMS II, Anish Amin, MD, Steven J. Yakubov, MD & Carlos E. Sanchez, MD

Structural Heart, 4:1, 72-74

→ Learn more*

4D Volume Intracardiac Echocardiography for Intraprocedural Guidance of Transcatheter Left Atrial Appendage Closure

Houman Khalili, MD,[1] Marquand Patton, DO,[1] Haider Al Taii, MD,[2] Priya Bansal, MD,[2] Matthew Brady, RDCS,[3] Jeanellil Taylor, RDCS,[3] Arati Gurung, PhD,[3] and Brijeshwar Maini, MD[1,2]

J Atr Fibrillation. 2019 Dec; 12(4): 2200

→ Learn more*

2020

4D Intracardiac Echocardiography-Guided LA Appendage Closure Under Conscious Sedation: Initial Experience and Procedural Technique

Alok Sharma, Stefan Bertog, Venkat Tholakanahalli, Mackenzie Mbai, and Y.S. Chandrashekhar

JACC Cardiovasc Imaging. 2020 Nov 18:S1936-878X(20)30903-7. doi: 10.1016/j.jcmg.2020.09.025

→ Learn more*

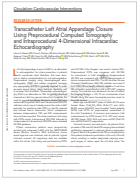
2021

4-Dimensional Intracardiac Echocardiography in Transcatheter Mitral Valve Repair With the Mitraclip System

Carlos E. Sanchez, Steven J. Yakubov, Gagan Singh, Jason H. Rogers, Nathan H. Kander, and Gilbert H.L. Tang

JACC Cardiovasc Imaging. 2021 Jan 6:S1936-878X(20)31030-5

→ Learn more*



Transcatheter Left Atrial Appendage Closure Using Preprocedural Computed Tomography and Intraprocedural 4-Dimensional Intracardiac Echocardiography

Lauren S. Ranard, MD; Omar K. Khalique, MD; Elena Donald, MD; Vratika Agarwal, MD; Nadira Hamid, MD; Rebecca T. Hahn, MD; Vivian Ng, MD; Matthew Brady, RDCS; Arati Gurung, PhD; Ziad A. Ali, MD, DPhil; Martin B. Leon, MD; Robert Sommer, MD; Torsten P. Vahl, MD

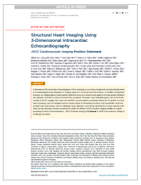
Circ Cardiovasc Interv. 2021;14:e010686. DOI: 10.1161/CIRCINTERVENTIONS.121.010686

→ Learn more*

**Articles may need to be purchased*

Peer-reviewed Medical Journals and Conferences

2024



Structural Heart Imaging Using 3-Dimensional Intracardiac Echocardiography: JACC: Cardiovascular Imaging Position Statement

Tang, G, Zaid, S, Hahn, R. et al. Structural Heart Imaging Using 3-Dimensional Intracardiac Echocardiography: JACC: Cardiovascular Imaging Position Statement. J Am Coll Cardiol Img. 2025 Jan, 18 (1) 93–115.

→ Learn more*

Four-dimensional intracardiac echocardiography for guidance of tricuspid transcatheter edge-to-edge repair: a case report

Van den Dorpel, M., Ben Ren, C., Van Mieghem, N., Gue, Y., Dikou, M., & Biasco, L. (2024). Four-dimensional intracardiac echocardiography for guidance of tricuspid transcatheter edge-to-edge repair: A case report. European Heart Journal – Case Reports, 8(9).

→ Learn more*

2025

Comparative Outcomes of Left Atrial Appendage Closure Guided by 4D Intracardiac Echocardiography vs Transesophageal Echocardiography

Kassier, A, Gao, V, Song, Y. TCT-607 Comparative Outcomes of Left Atrial Appendage Closure Guided by 4D Intracardiac Echocardiography vs Transesophageal Echocardiography. JACC. 2025 Oct, 86 (17_ Supplement) B263–B264.

→ Learn more*

2026

The role of 4D ICE imaging for concomitant PFA and LAAC: a procedural workflow

Nair, D.G., Song, Y. & Cocker, M.
J Interv Card Electrophysiol (2026).

→ Learn more*

**Articles may need to be purchased*

Trade Publications

2023

HMP Global Learning Network. (2023, October). Tricuspid TEER with 4D ICE guidance. Cath Lab Digest.

→ Learn more*

2025

HMP Global Learning Network. (2025, March). 4D ICE-guided pulsed-field ablation. Cath Lab Digest.

→ Learn more*

2026

HMP Global Learning Network. (2026, March). Using 4D ICE for LAAO in a Rural Patient. Cath Lab Digest.

→ Learn more*

**Articles may need to be purchased*

At Siemens Healthineers, we pioneer breakthroughs in healthcare. For everyone. Everywhere. Sustainably. As a leading medical technology company, we want to advance a world in which breakthroughs in healthcare create new possibilities sustainably. We've been pushing the boundaries in medical technology for more than 125 years. Today, we are active in imaging, diagnostics, cancer care, and minimally invasive therapies – augmented by digital technologies and artificial intelligence.

With our unique combination of strengths in Patient Twinning[1], Precision Therapy, and Healthcare AI, we take on the greatest challenges in healthcare. We help improve access to healthcare for underserved communities worldwide and overcome the most threatening diseases: Neurodegenerative and cardiovascular diseases, stroke, and cancer. We partner with healthcare providers to address their most pressing challenges so that they can deliver high-quality, patient-centered care, efficiently.

Motivated by our purpose and guided by our values, we foster an inclusive and innovative workplace for our diverse and engaged teams globally. We are a team of around 74,000 Healthineers in over 70 countries passionately pushing the boundaries of what is possible in healthcare so that patients can live with hope, not fear of disease.

Trademarks are the property of their respective owners.

[1] *Early detection, accurate diagnosis, individualized therapy selection, simulation and planning, continuous monitoring, and aftercare.*

Siemens Healthineers Headquarters
Siemens Healthineers AG
Siemensstr. 3
91301 Forchheim, Germany
Phone: +49 9191 18-0
siemens-healthineers.com

Manufacturer
Siemens Medical Solutions USA, Inc.
Ultrasound
22010 S.E. 51st Street
Issaquah, WA 98029, USA
Phone: 1-888-826-9702
siemens-healthineers.com/ultrasound

Published by Siemens Medical Solutions USA, Inc. · 18021 0326 · © Siemens Medical Solutions USA, Inc., 2026