

The logo for LINC (Laser and Interstitial Thermal Therapy) is located in the top left corner. It features a stylized, curved shape in shades of blue, red, and orange, resembling a flame or a laser beam. The letters "LINC" are positioned to the right of this graphic.

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# IVUS for Guiding Endovascular Therapy in Deep Veins

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## Disclosure

Speaker name:

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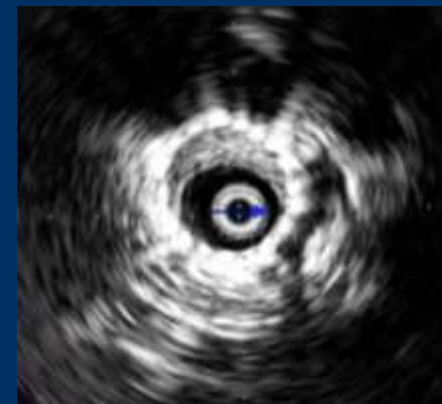
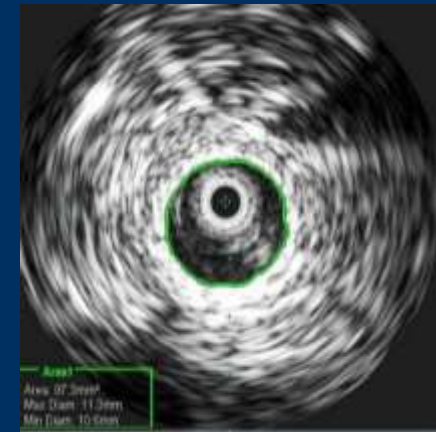
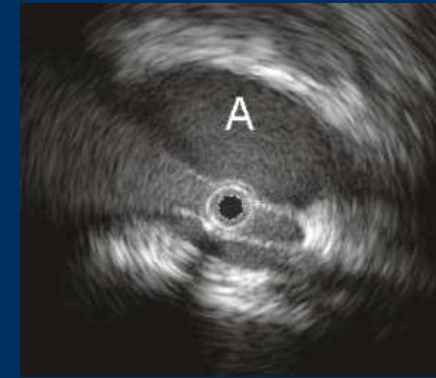
I have the following potential conflicts of interest to report:

- Consulting: Cook medical; Optimed GmbH; Bard; Volcano/Philips; Straub; Bentley; Vesper Medical;
- Employment in industry
- Stockholder of a healthcare company
- Owner of a healthcare company
- Other(s)
- I do not have any potential conflict of interest



# IVUS mainly used to...

- Determine significant Stenosis
  - >50% lumen reduction
- Determine stent landing zone
  - Healthy segment
- Evaluate after stenting
  - Residual stenosis/compression
  - Thrombus
- Evaluate after thrombectomy
  - Residual thrombosis



# Limitations of IVUS

- No value during guidewire recanalization
- No validated flow measurements
- Stent positioning on anatomical landmarks alone
  - Slight patient movements
  - Distal positioning is delicate

# Benefits of IVUS

- Subtle but significant pathology can be detected
  - Even more than MR-venography
- Instant & accurate 3D representation
  - Repeatedly
- Radiation reduction
  - Different angulations not necessary
  - More efficient imaging
- Contrast reduction
  - Less runs

# Where's the Data?

From the American Venous Forum

## Venography versus intravascular ultrasound for diagnosing and treating iliofemoral vein obstruction



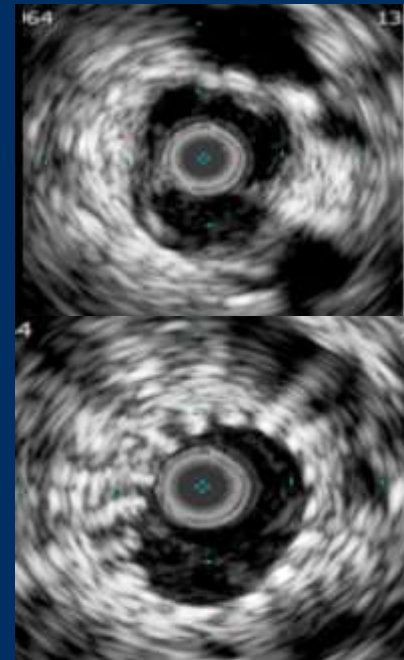
Paul J. Gagne, MD,<sup>a</sup> Robert W. Tahara, MD,<sup>b</sup> Carl P. Fastabend, MD,<sup>c</sup> Lukasz Dzieciuchowicz, MD,<sup>d</sup> William Marston, MD,<sup>e</sup> Suresh Vedantham, MD,<sup>f</sup> Windsor Ting, MD,<sup>g</sup> and Mark D. Iafrati, MD,<sup>h</sup> Darien, Conn; Bradford, Pa; Lake Charles, La; Poznan, Poland; Chapel Hill, NC; St. Louis, Mo; New York, NY; and Boston, Mass

- “High clinical yield of IVUS as sole diagnostic modality in DVO”  
*Saleem et al J Vasc Surg Venous Lymphat Disord. 2019 Dec*
- IVUS is an effective option to reduce radiation during DVO interventions  
*M. Lichtenberg, Data from The Arnsberg Registry*

# When and how to use in practice?

Not „always and solely“ – not „never“

- Principally, have it present in all cases
  - Never know what's going to happen
- Always use it when in doubt
  - Suboptimal or non-available cross-sectional imaging
- When the common femoral vein is involved
- In DVT treatment
- During re-interventions for in-stent stenosis or thrombosis





# Summary

The logo for LINC (Liver Imaging and Contrast) features a stylized, colorful graphic of a liver or vessel in shades of red, orange, and yellow, set against a dark blue background. The letters "LINC" are positioned to the right of the graphic.

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- IVUS obviously has significant value guiding venous interventions
- When and where it is used should merely depend on patient's best interests

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