



# EndoNaut

Intraoperative navigation system with image fusion  
to optimize endovascular procedures

Peripheral Edition



## Bring the fusion technology everywhere

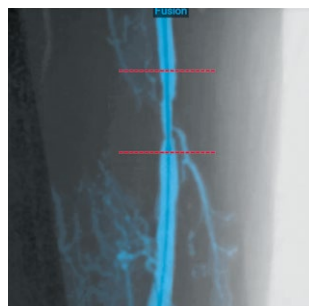
EndoNaut is a technologically leading image fusion device that empowers surgeons to conduct precise navigation directly at the interventional table. Compatible with most current C-arms, it can be intuitively controlled by the user via a smart touchscreen. The ability to generate panoramic views combined with the precision of the dedicated image fusion help the surgeon to significantly reduce the X-ray dose and the contrast media volume during Peripheral Arterial Disease (PAD) procedures\*.



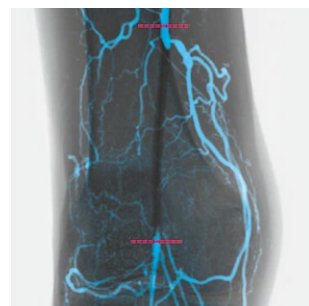
Algorithm based on artificial intelligence

- ✓ Plug & Play
- ✓ Exclusive PAD dedicated fusion technology
- ✓ Available at an affordable price
- ✓ Adapts easily to every surgeon's operating environment
- ✓ More confidence, accuracy and visual comfort during procedures
- ✓ Immediately ready for use with mobile or fixed C-arms
- ✓ Controlled by the surgeon right from the interventional table
- ✓ Helps reduce contrast media and X-ray dose
- ✓ Stand-alone, independent system – no cloud connection via internet required

## Applications



Stenosis



Thrombosis







## Import your Angio CT scan, if available

- Review the patient Angio CT scan, if necessary and available
- Make any measurements on the CT scan and visualize the 3D volume before the procedure starts
- Alternatively, begin the procedure by directly connecting EndoNaut to the C-arm



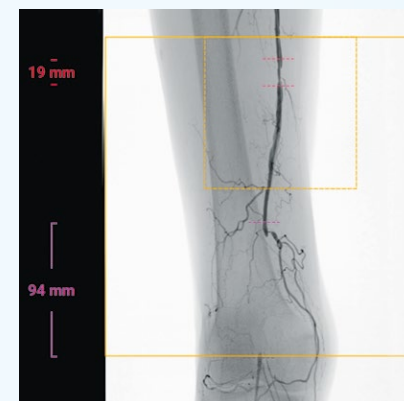
## Connect EndoNaut flexibly to your imaging systems

- Benefit from the seamless compatibility of EndoNaut with different imaging systems within your hospital, due to its open interface with both C-arms and fixed angiography systems
- Save time with the Plug & Play solution by requiring only a DVI cable for connecting EndoNaut to the imaging system
- Move the EndoNaut easily from one operating room to another as the system is compact and mobile, and place it by the interventional table



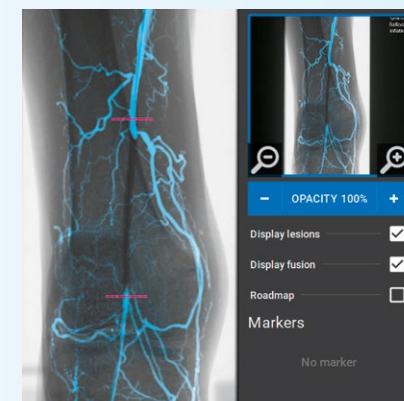
## Generate preoperative panoramas

- Easily create comprehensive preoperative panoramas, by stitching both fluoroscopic and angiographic limb images
- Display automatically a mixed panorama, getting a detailed view of the entire lower limb



## Identify and mark all the lesions

- Mark thrombotic and stenotic areas within the panorama to get a clear picture of the required treatment approach
- Make a calibration to easily get lesion cues and length measurement
- Use the measurements to optimize the choice of balloons and stents, resulting in improved procedural outcomes



## Navigate intuitively thanks to the 2D image fusion

- Benefit from ready-made 2D fusion at no additional contrast and reduced X-ray dose\* based on a patented image registration algorithm
- Experience fast unlimited adjustments to follow any shift of the surgical table or patient movement, at no extra contrast



## Generate post operative panoramas for outcome assessment

- Use control angiographic images to create a comprehensive postoperative panorama
- Compare pre- and post-operative views to get a clear indication of the procedure result

## EndoSize

### Your comprehensive solution for endovascular procedure planning

Create precise planning within minutes, with the confidence that every procedural detail has been carefully considered.



\*Validation through clinical research:

Endovascular revascularization using two-dimensional fusion imaging led to a reduction of >30 % in both the contrast medium volume and the dose-area product.

"EndoNaut two-dimensional fusion imaging with a mobile C-arm for endovascular treatment of occlusive peripheral arterial disease", The Journal of Vascular Surgery (2021)

**Patented EndoNaut technology:**

U.S. Patent Number 11564750

U.S. Patent Number 10959780

U.S. Patent Number US11900620

**Request an EndoNaut demo in your OR.**

Contact us and we will put you in touch  
with your local distributor.

**International support team at your side**

[contact@therenva.com](mailto:contact@therenva.com)

[www.therenva.com](http://www.therenva.com)



EndoNaut® is a registered trademark of Therenva SAS.

In the USA, the EndoNaut® software obtained a substantial equivalence determination and FDA clearance through the CDRH premarket notification process (510(K)).

In Europe, the EndoNaut® software is CE marked (class IIb), not eligible for reimbursement.

The information provided in the labelling and manual is intended for healthcare professionals only.

For the safe and successful operation and use of the device, always read the instructions.

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