

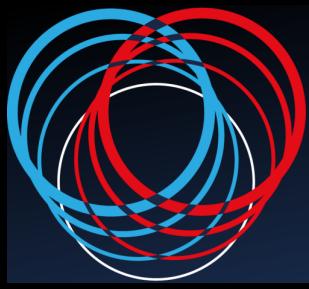
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WORLD

CHALLENGES & INNOVATIONS IN VASCULAR WORLD

31 MARS **2026**
1^{ER} AVRIL

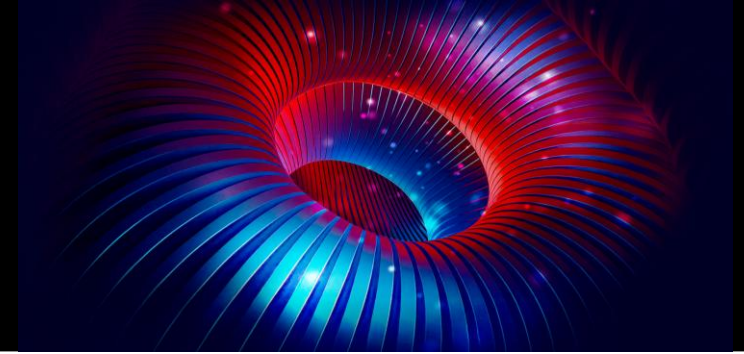
MÉRIDIEN ÉTOILE
PARIS



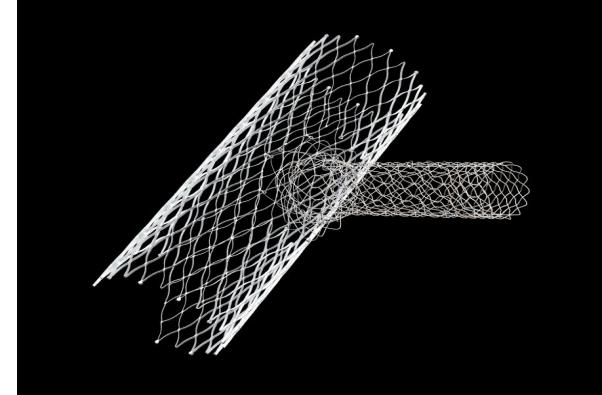
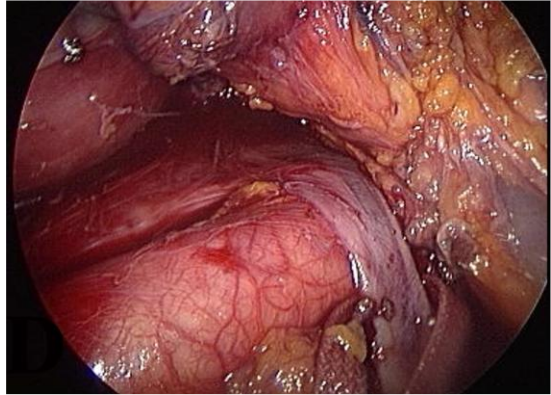
CIV
WORLD
CHALLENGES & INNOVATIONS IN VASCULAR WORLD

31 MARS
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PARIS



This Stent will revolutionize the treatment of the nutcracker syndrome ?

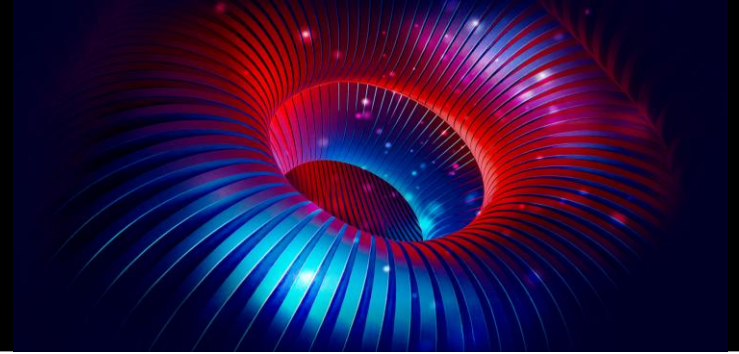


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Conflits et liens d'intérêts



Je n'ai aucun conflit d'intérêt potentiel à déclarer

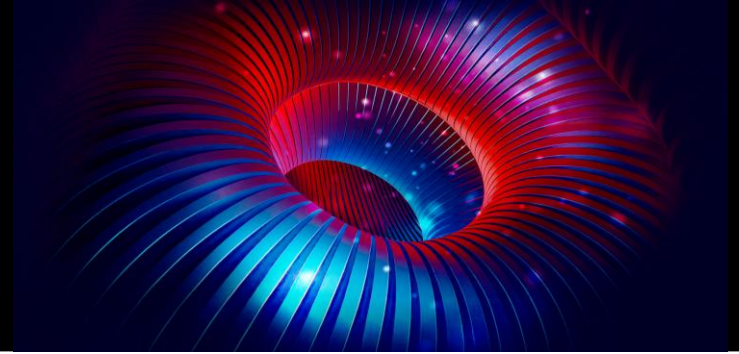
Hormis le fait d'être co fondateur de la Start-up: IDNest Medical

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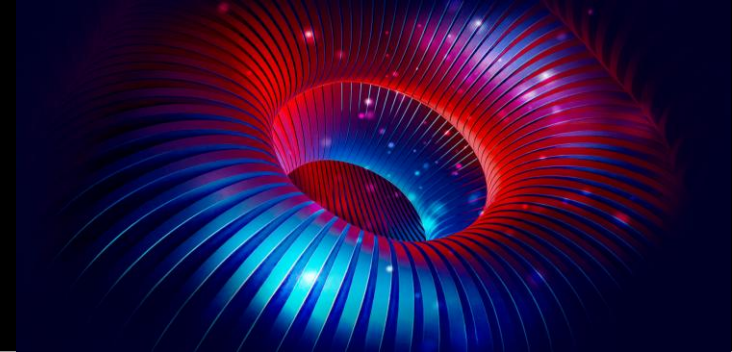
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Nutcracker syndrome introduction



- ❑ Functional but disabling pathology => not life-threatening nor renal risk
- ❑ First described in 1950
- ❑ Symptomatic form of the compression of the left renal vein between the aorta and the superior mesenteric artery => PeVD
 - Left lumbar/flank pain
 - Hematuria
 - Pelvic congestion syndrome/Varicocele
- ❑ Occurs mainly in 20-50 years old women (USA and Europe) but men in Asia
- ❑ 90 cases in 2008, more than >1000 cases now => underestimated

TREATMENT

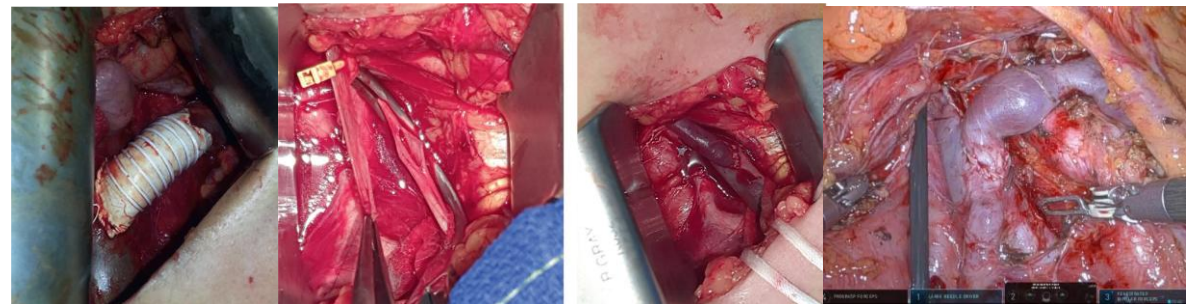
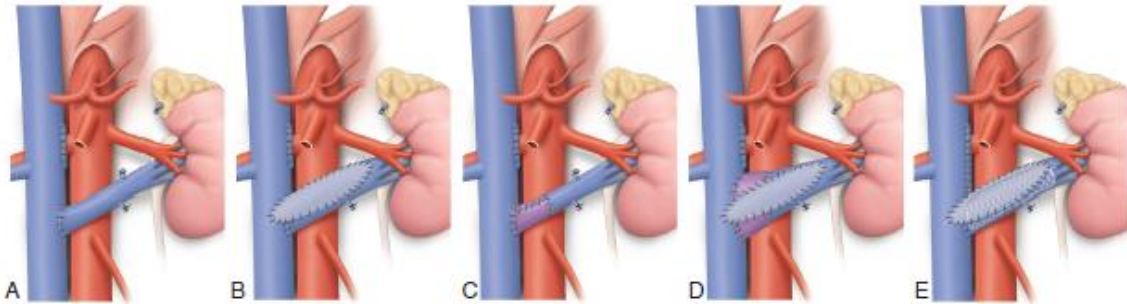
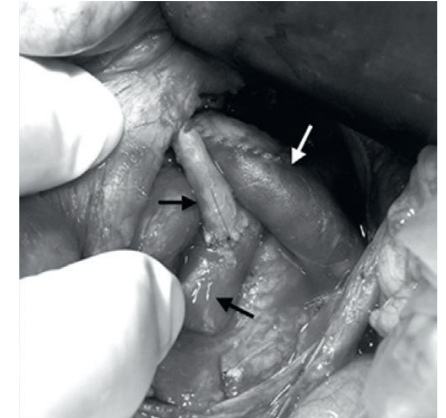


❑ **Conservative** : mainly in pediatric patients

❑ **Surgery** :

More than 10 different techniques
solution

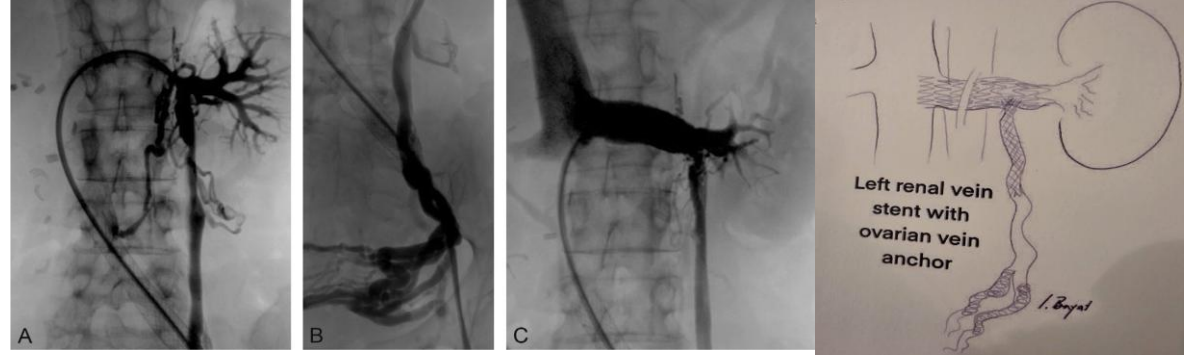
=> no perfect



Treatment

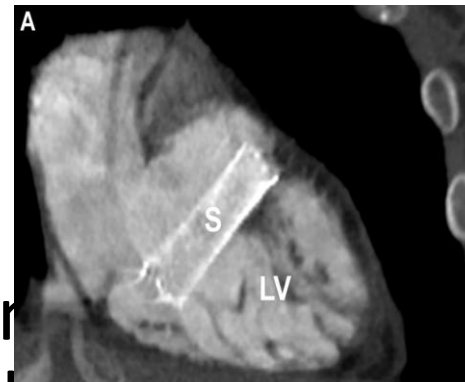
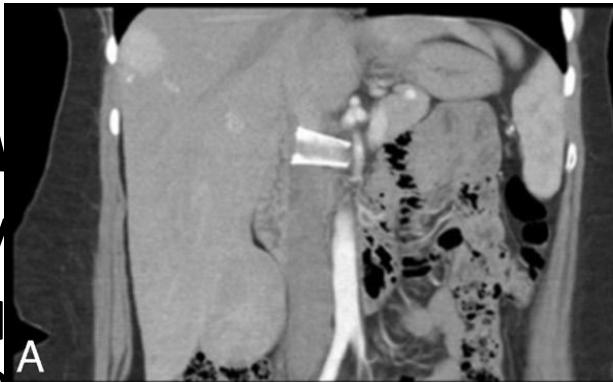
□ Stenting

- Percutaneous, poorly invasive, looks easy and simple
- Literature : first case in 1996, 34 in 2008, 126 in 2013, 351 in 2024
- 2005 : first cases of stent migration (Hartung JVS)
- To date : **14,6% migration**, restenosis, thrombosis, fractures



□ W

- Av
- Su

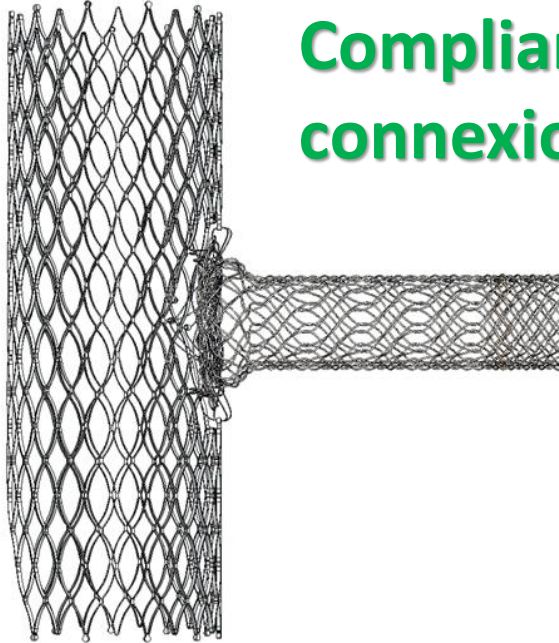
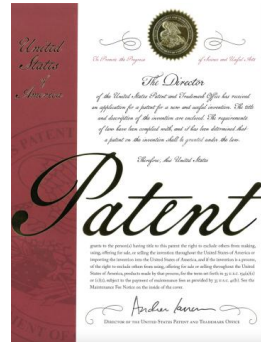


between 2 stent and pulsatile structures) and not fixed

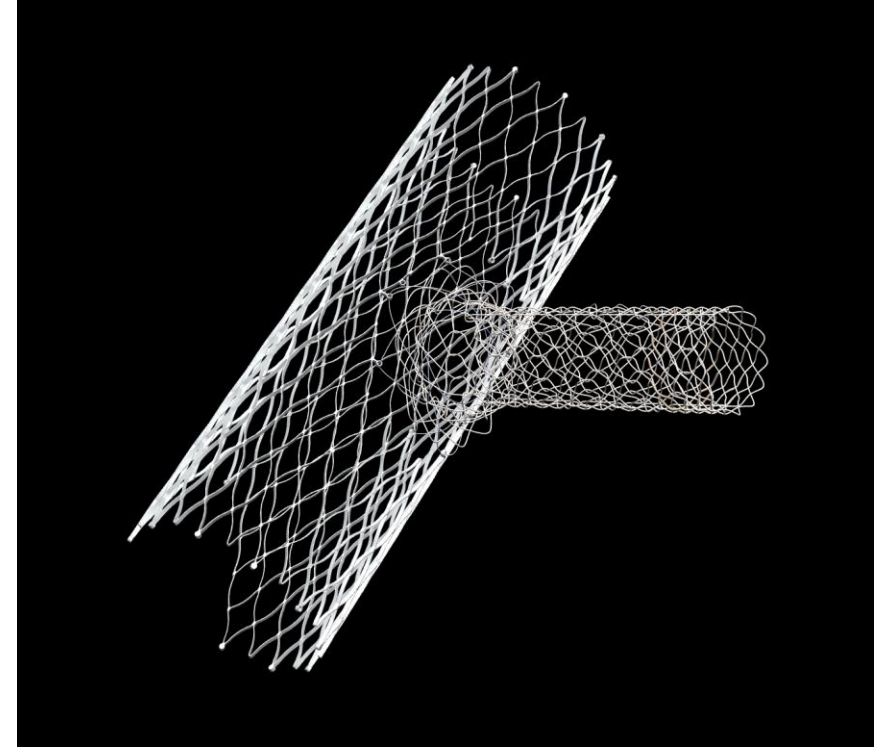
=> Need for a specifically designed stent

Dedicated stent

ID NEST MEDICAL



Compliant
connexion



Avoids proximal and distal migration

UNIVERSAL DELIVERY SYSTEM

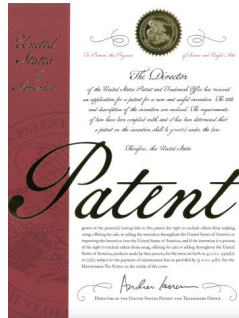
ID NEST MEDICAL

for the mother stent (Vena cava stent)



Problems encountered and ideas:

- A controlled and programmable release system
- The push-pull with a cam handle and with accessibility to all surgeons / users by a jugular approach
- A patented system



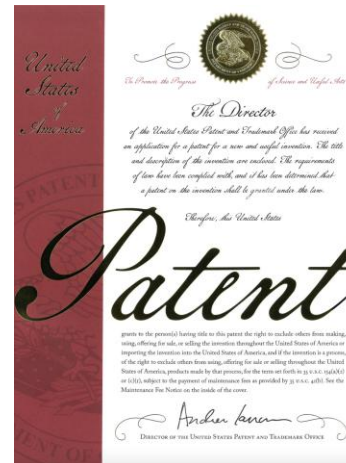
Universal and
Control delivery system

REVERSED DELIVERY SYSTEM

for the branch stent (left renal vein stent)

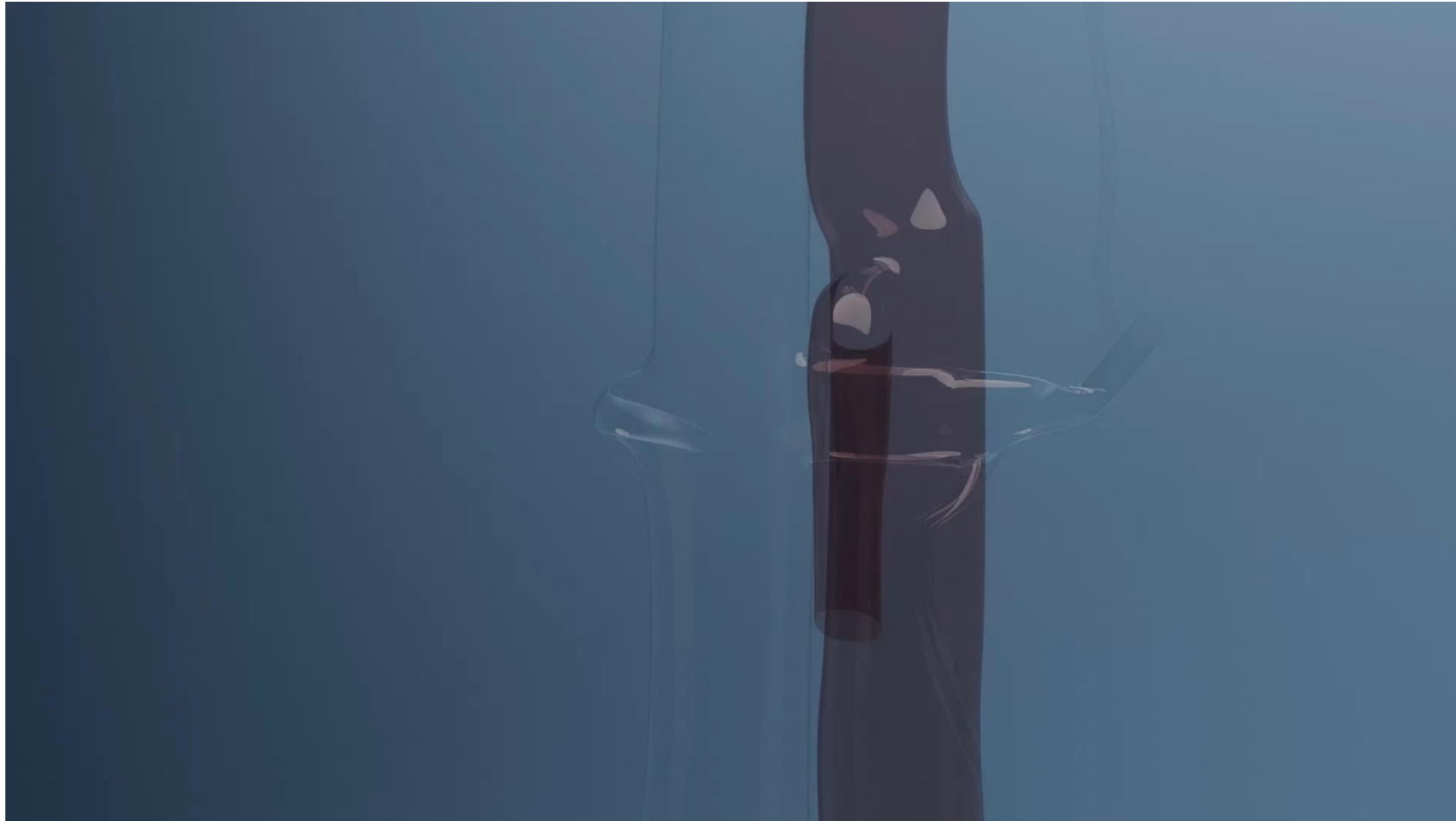
Problems encountered and ideas:

- A controlled and programmable release system
- A stent release in an unidirectional access by a femoral approach
- A patented system

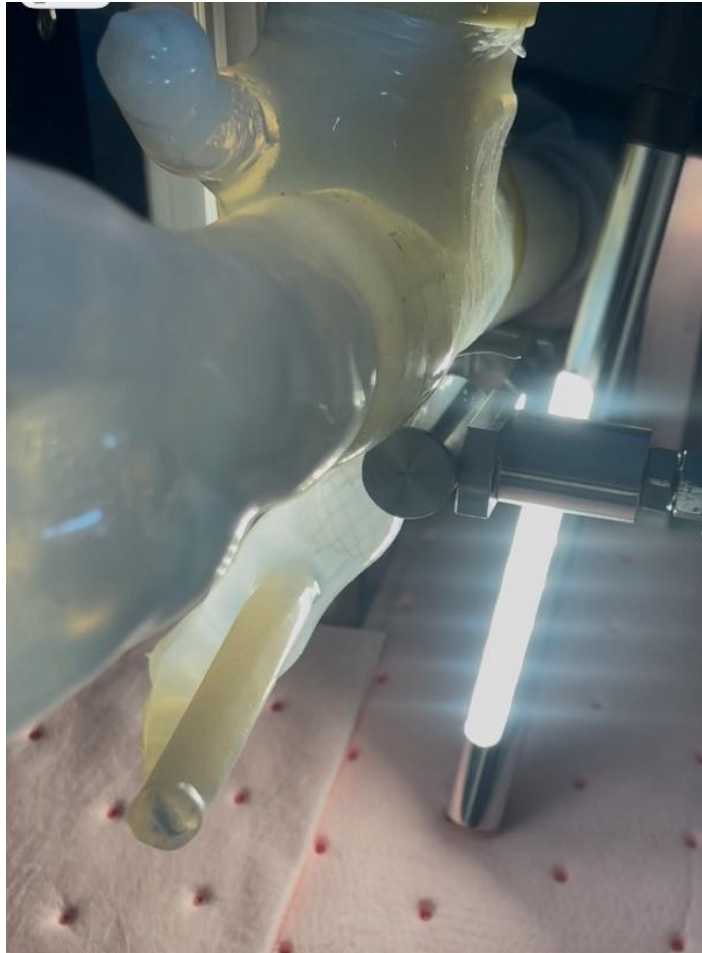


In vitro test in an hybrid operating room

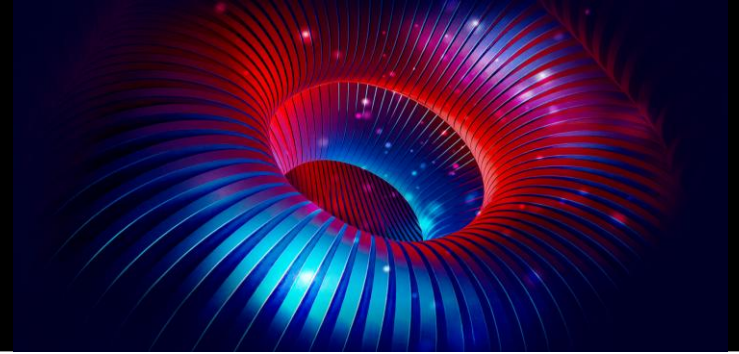




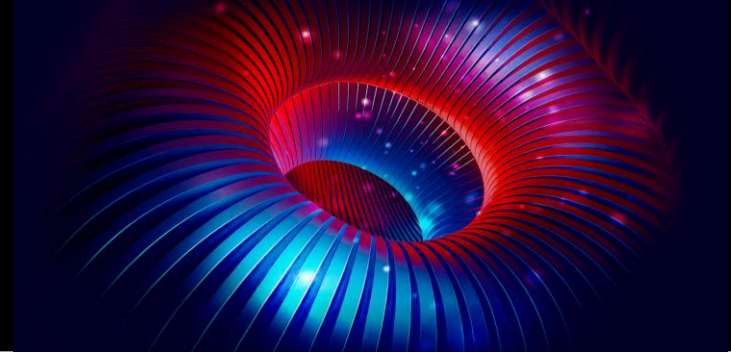
Fatigue testing and no migration



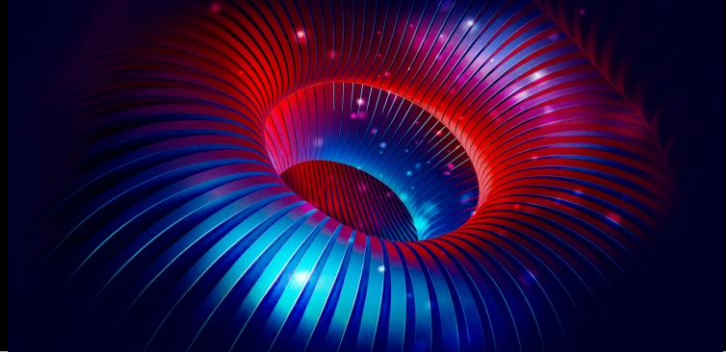
NEXT STEPS



**FINALIZATION OF THE PHASE OF DESIGN VERIFICATION AND
VALIDATION TO REAH THE CE MARK AND FDA APPROVALS
WITH AN INTERNATIONAL PROSPECTIVE MULTICENTER
STUDY**



Merci pour votre intention



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www.idnest-medical.com

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