



Université Claude Bernard Lyon 1



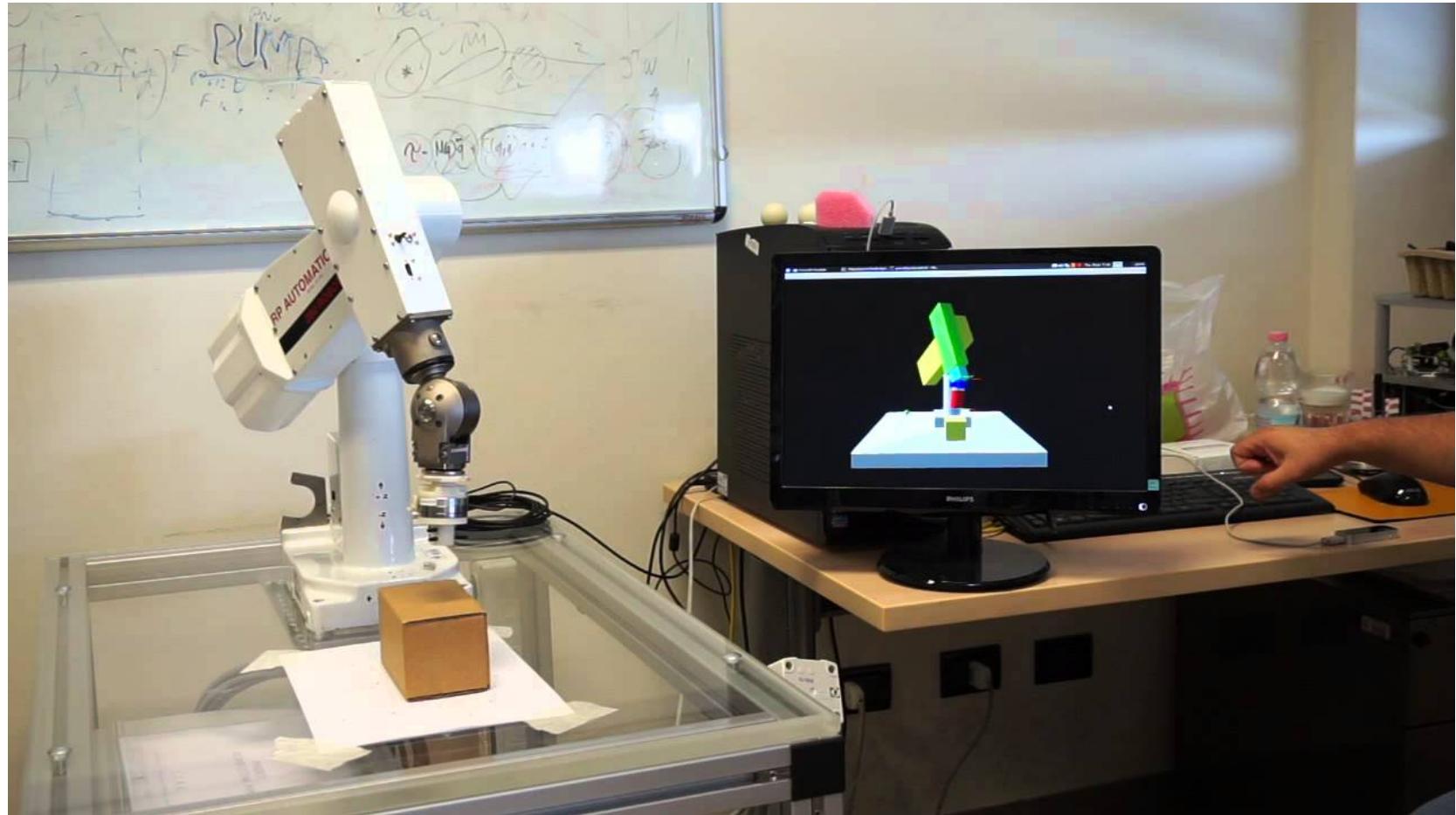
# HISTOIRE DE LA CHIRURGIE ROBOTIQUE

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Institut d'urologie des Hospices Civils de Lyon

# PUMA 260

## ■ Prothèse de hanche



# AESOP: contrôle vocal camera



# ZEUS: premier système mini invasif

## ZEUS Surgical Robotic System

- Released by Computer Motion in 1998
- Uses AESOP technology for camera movement
- 2 surgical arms and 2D optics available on console



Zeus Robot Arms



Zeus Console



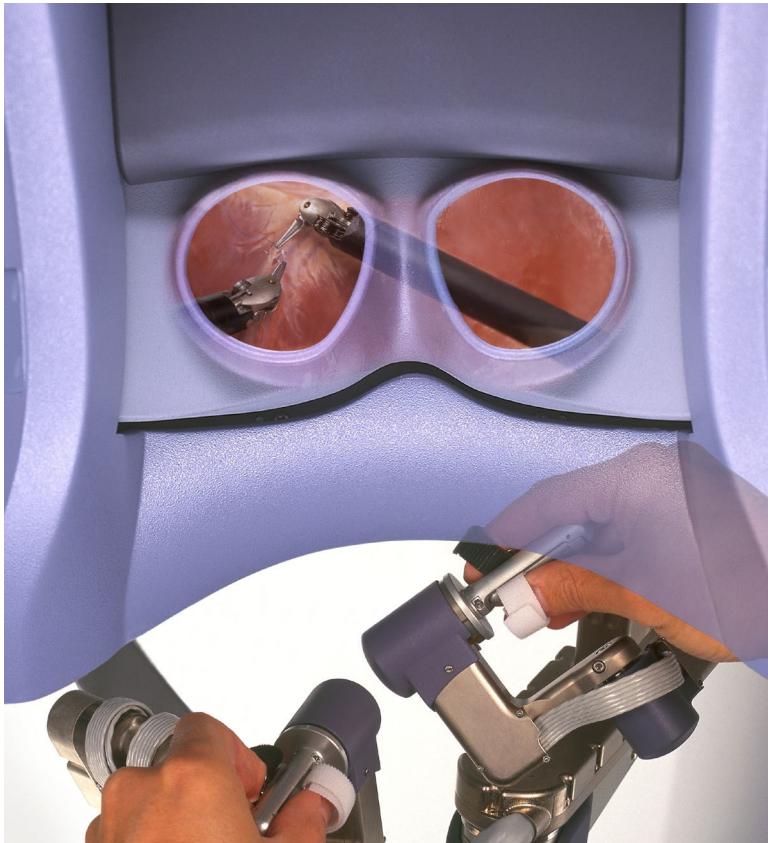
# DaVinci, Intuitive surgical

- 1998: première version 3 bras
- Rachète (et ferme) computer motion en 2003



# DaVinci, Intuitive surgical

- Principe maître/esclave
- Vision 3D, instruments articulé

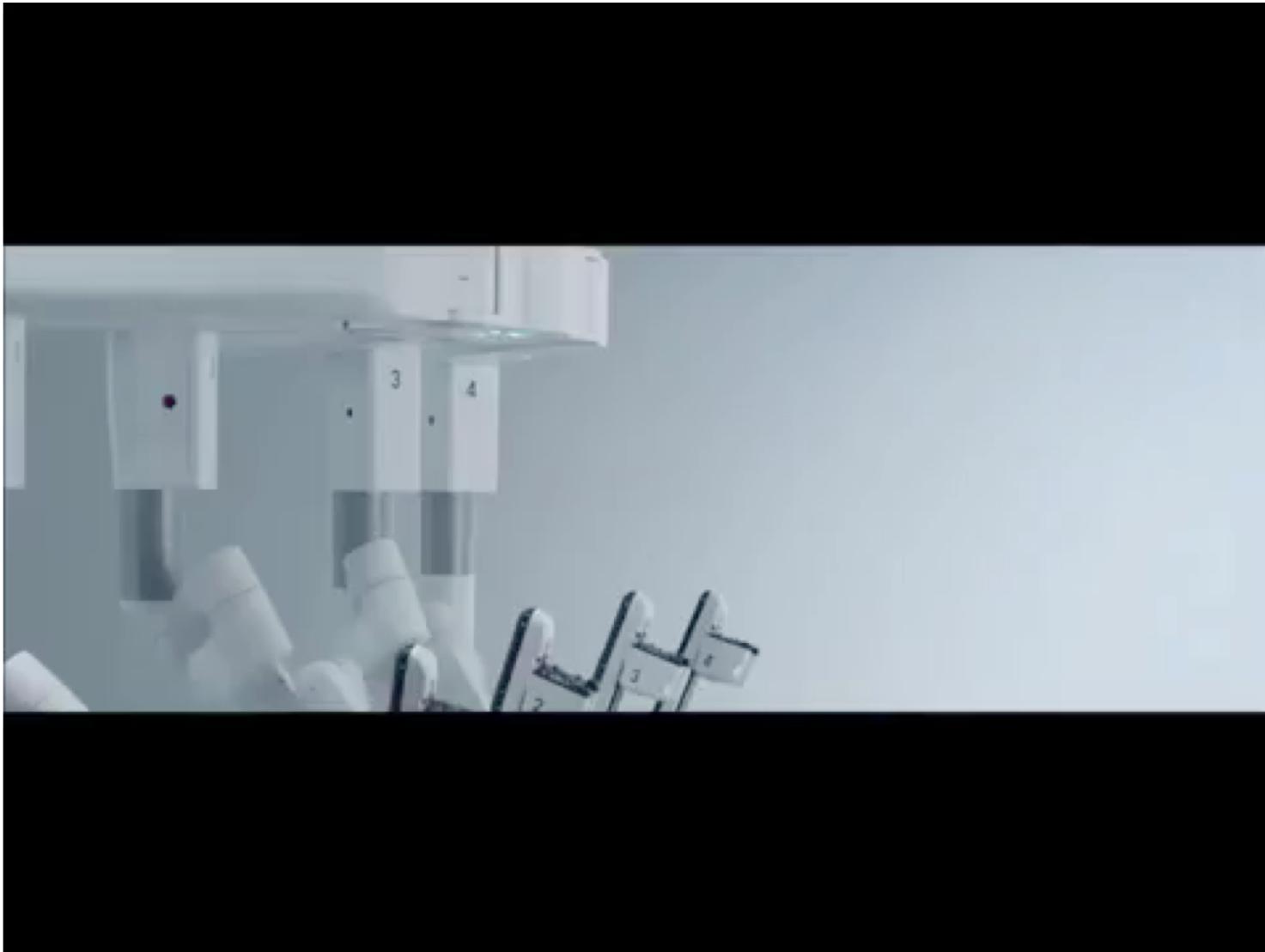


# DaVinci, Intuitive surgical

- Apparition de 3 bras

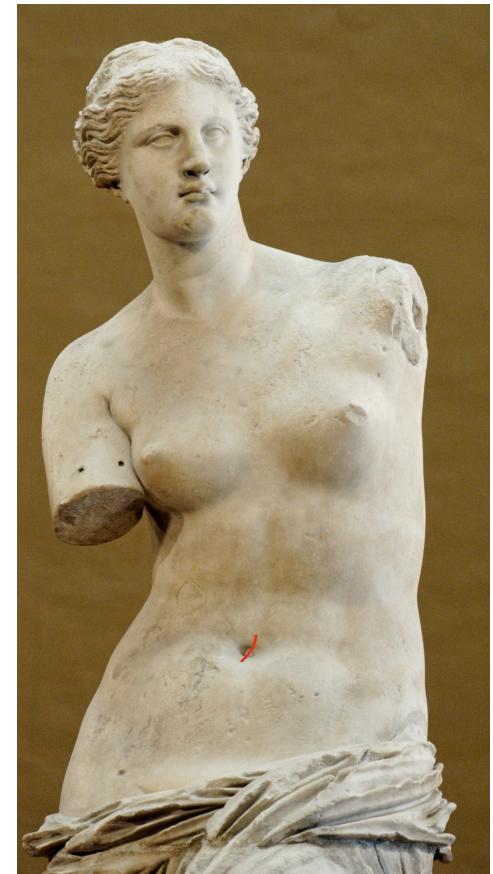
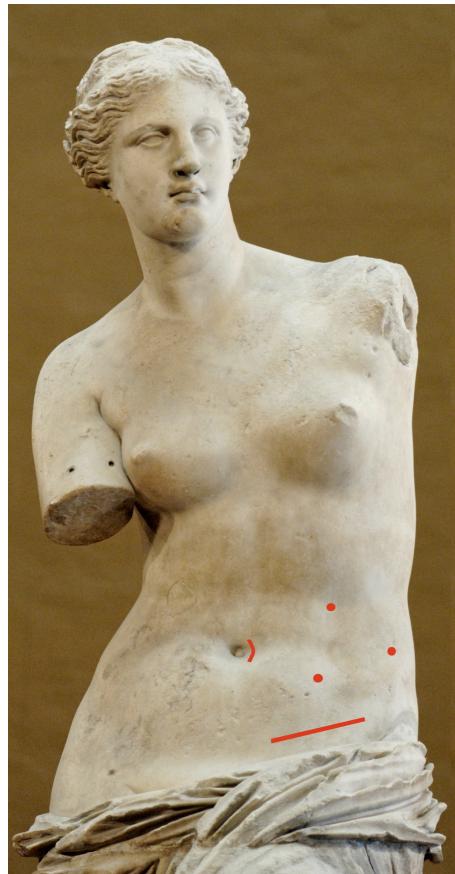
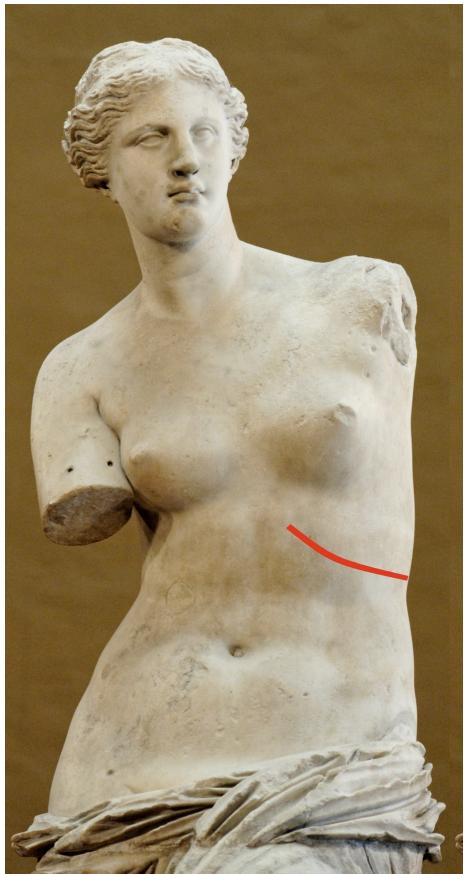


# DaVinci, Intuitive surgical

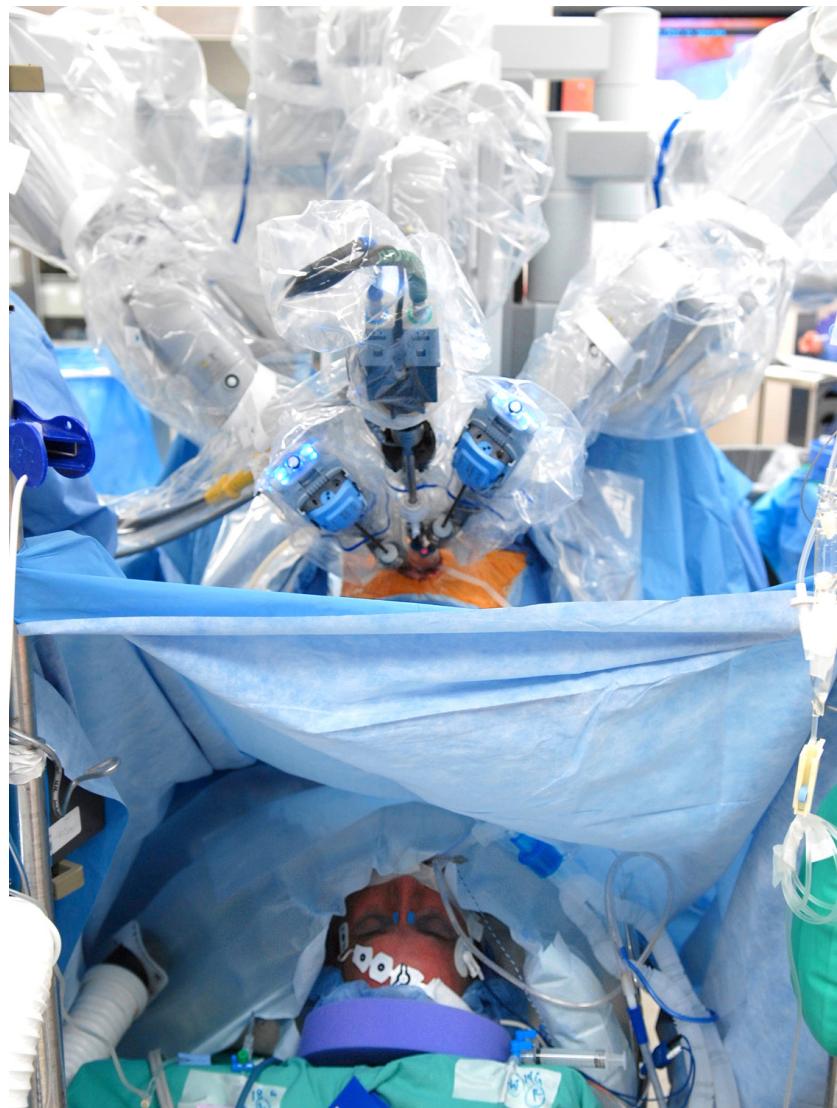
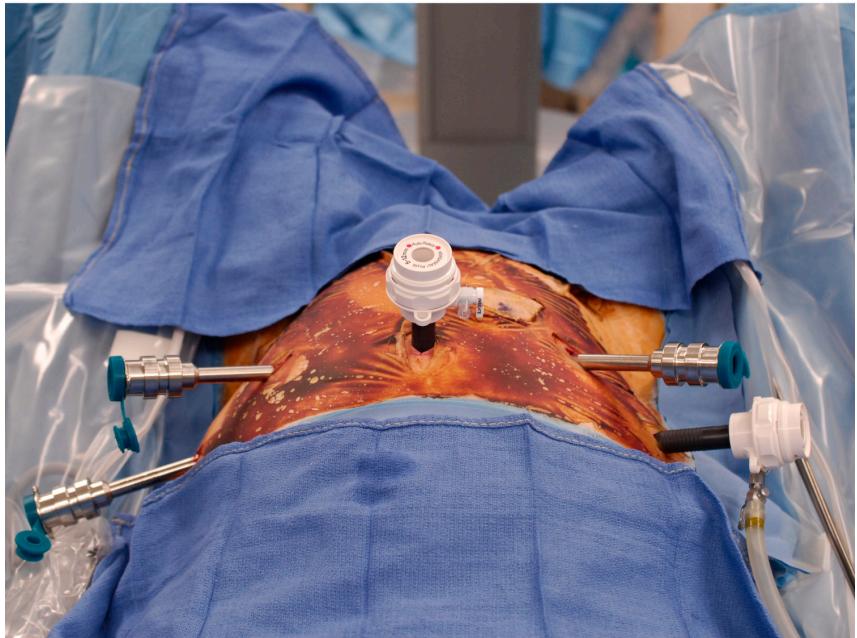


# Coelioscopie

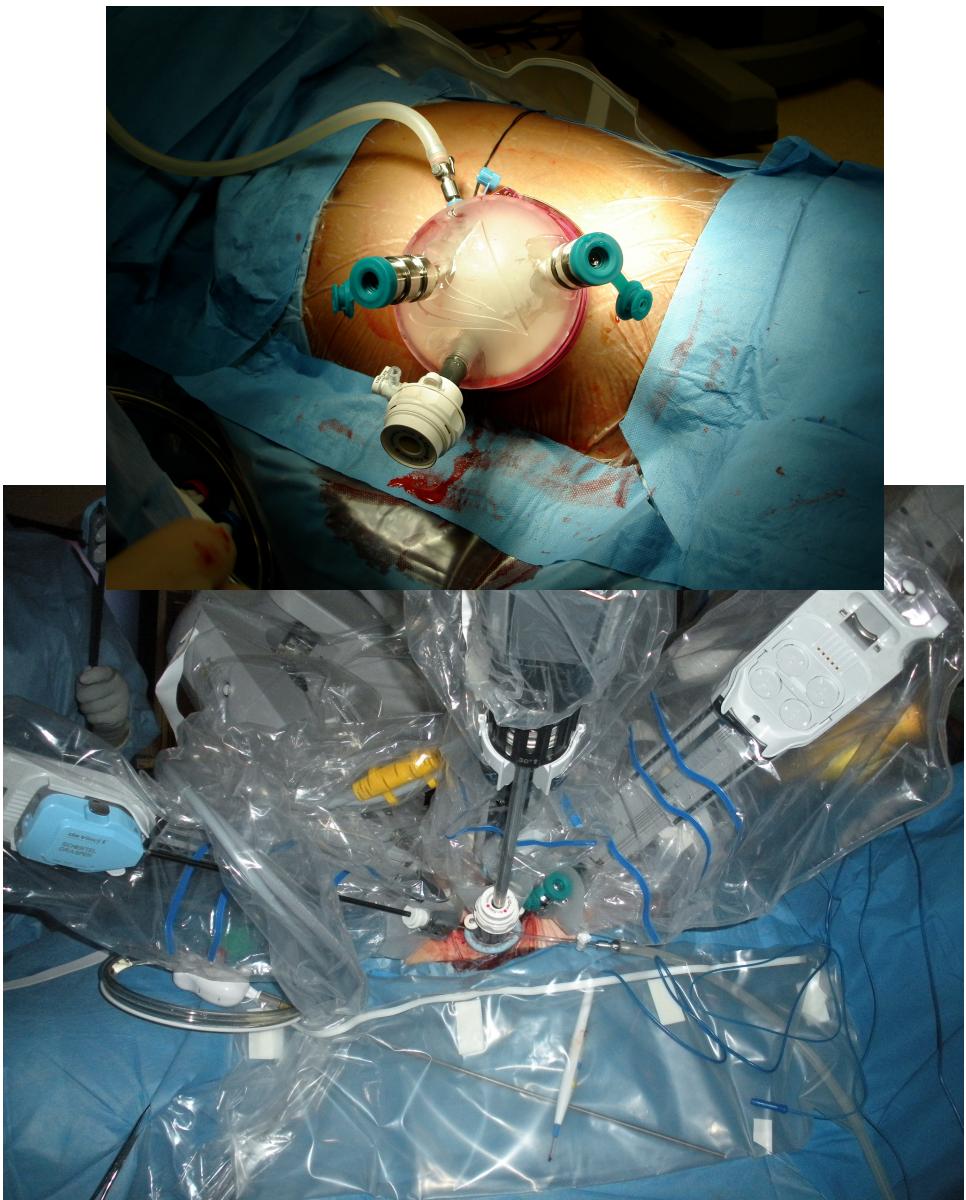
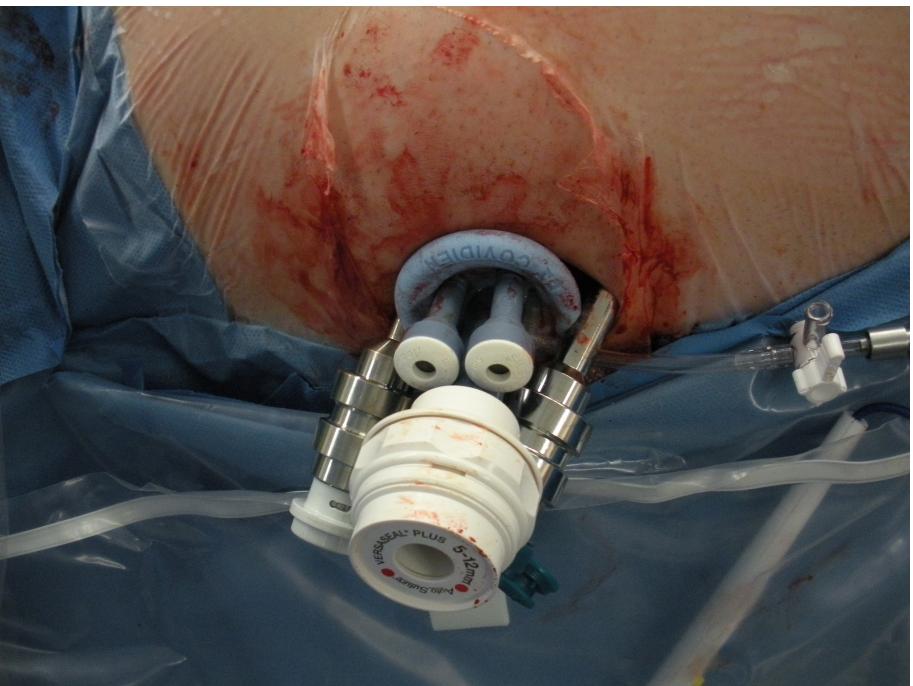
# Evolution of Surgical Care



# LESS : Robotique

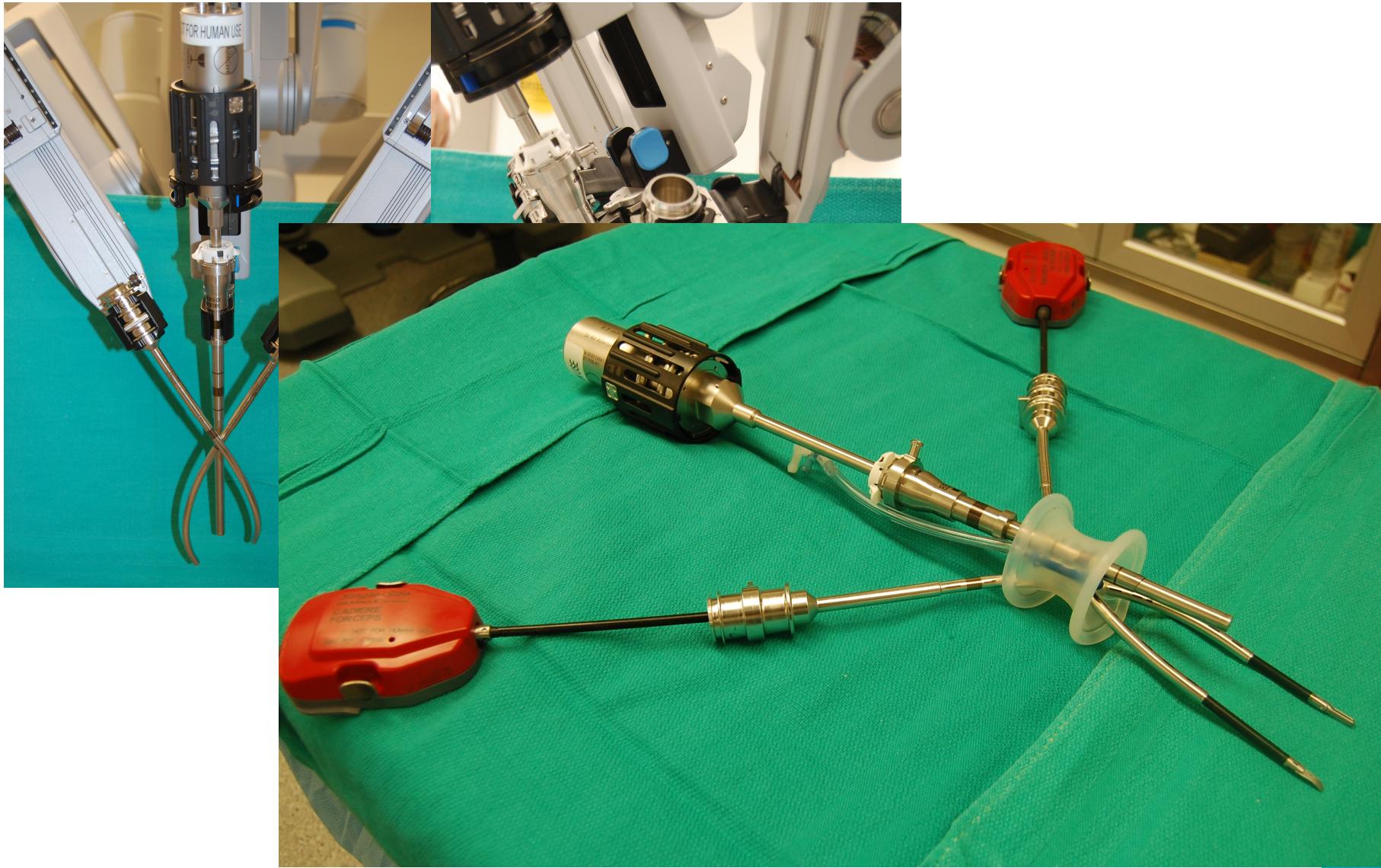


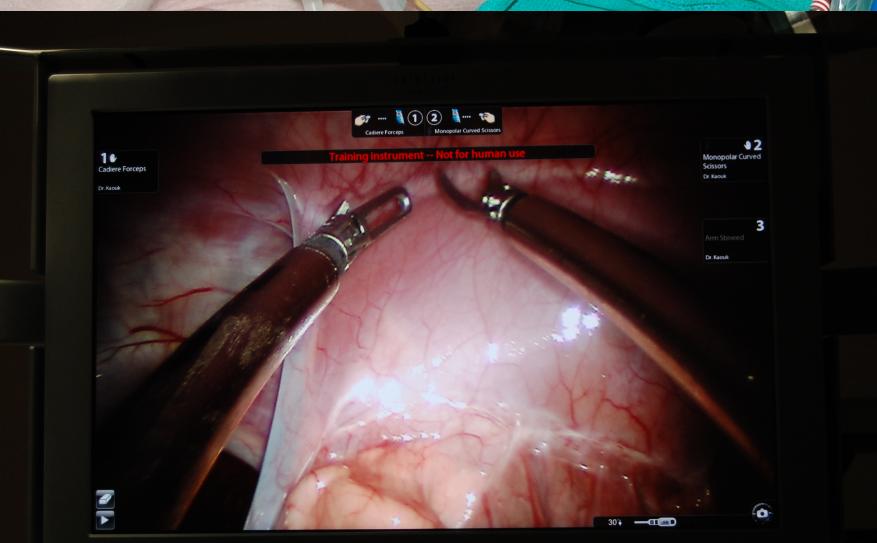
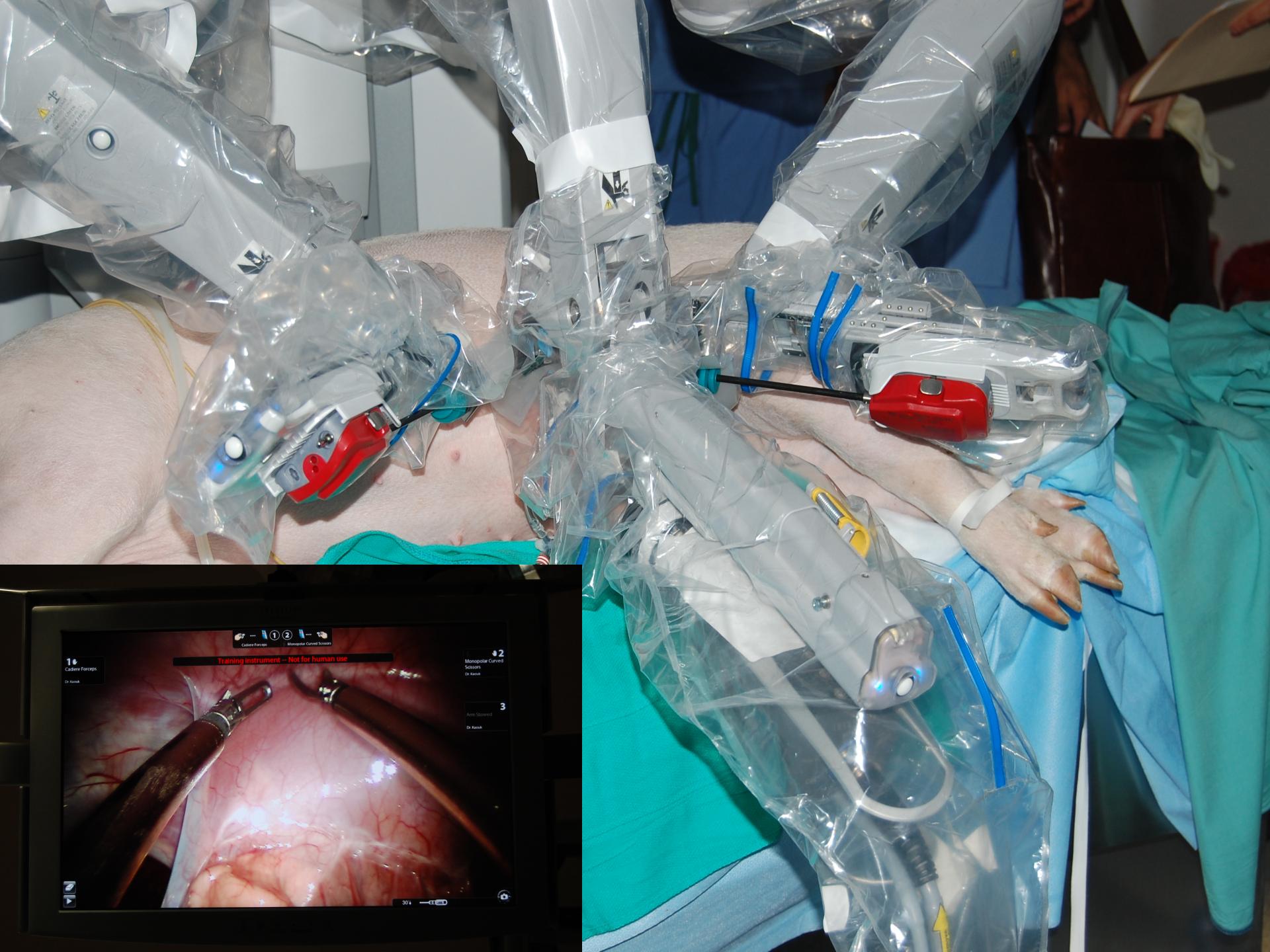
# LESS : Robotique



# LESS : Robotique

## Futures améliorations







Hôpitaux de Lyon



# First Partial Nephrectomy using the DaVinci Single Site System

**Sébastien Crouzet**

Urology and Transplantation surgery department  
Edouard Herriot Hospital, Lyon, France

# ROSA, Medtech

## ■ Neurochirurgie



# Nouveaux systèmes



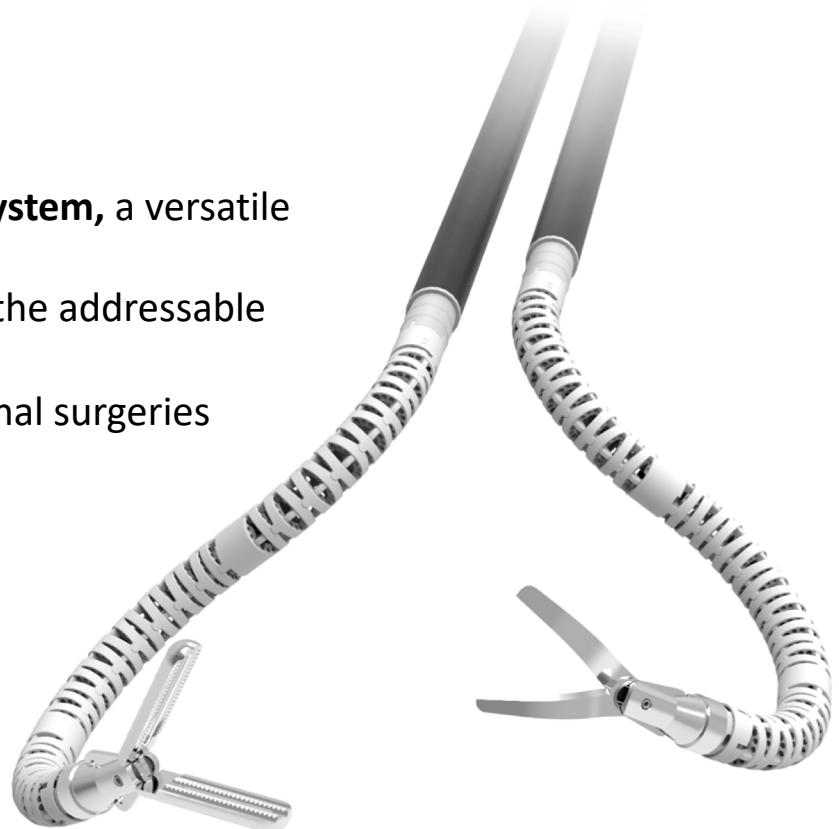
# LESS : Robotique nouveau robot



# Titan Medical Overview

Designer and developer of the **SPORT™ Surgical System**, a versatile single-port robotic surgery platform that expands the addressable applications for single and multi-quadrant abdominal surgeries performed using robotic technology.

Designed for improved clinical capabilities, OR efficiency and hospital economics.

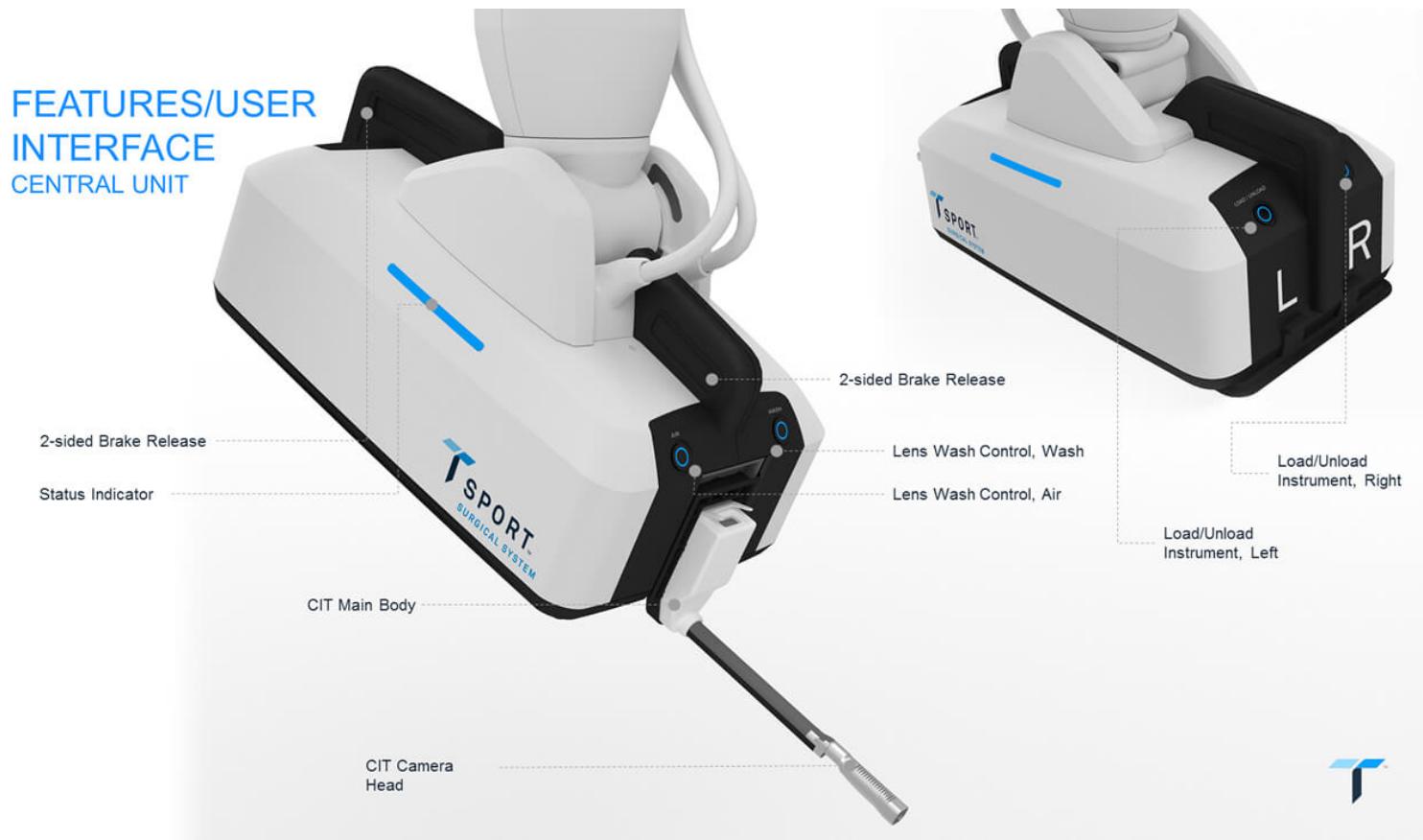




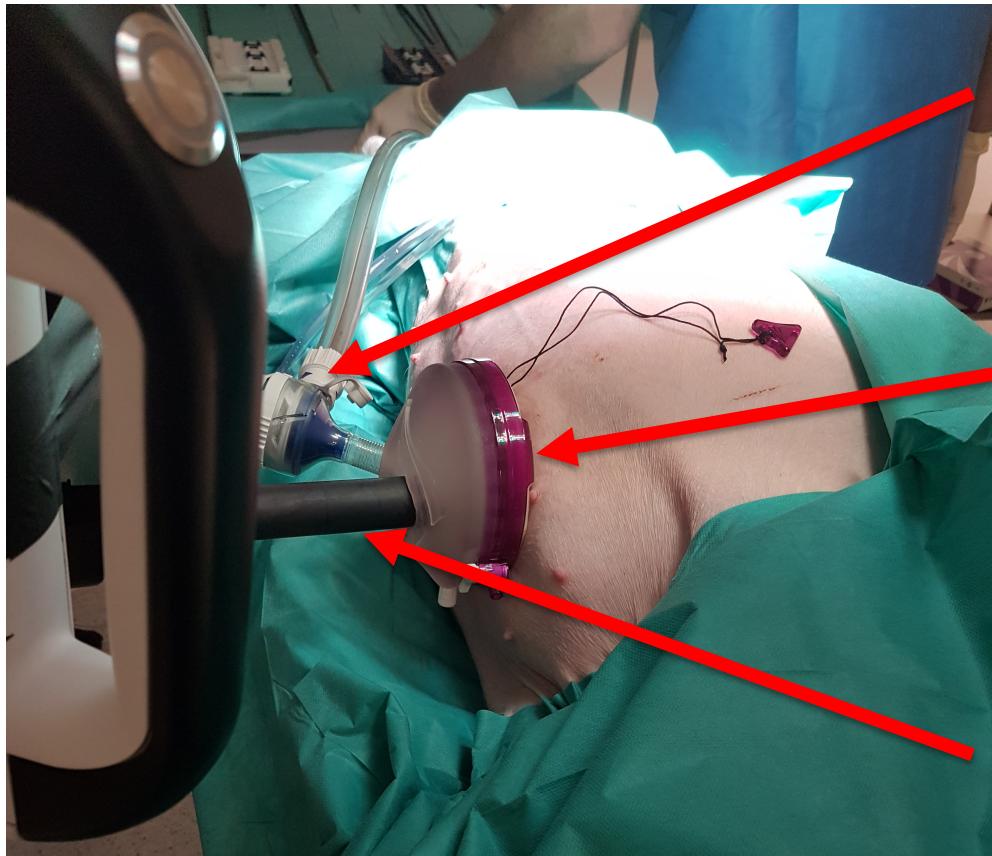
- Versatile single port robotic surgery solution
- Overcomes multi-port robotic surgery limitations
- Engineered for performance, efficiency and cost-effectiveness
- Provides single incision access to underserved procedures



# Central unit



# Minimal incision



Assistant port

Single Port

SPORT (camera end  
instruments)



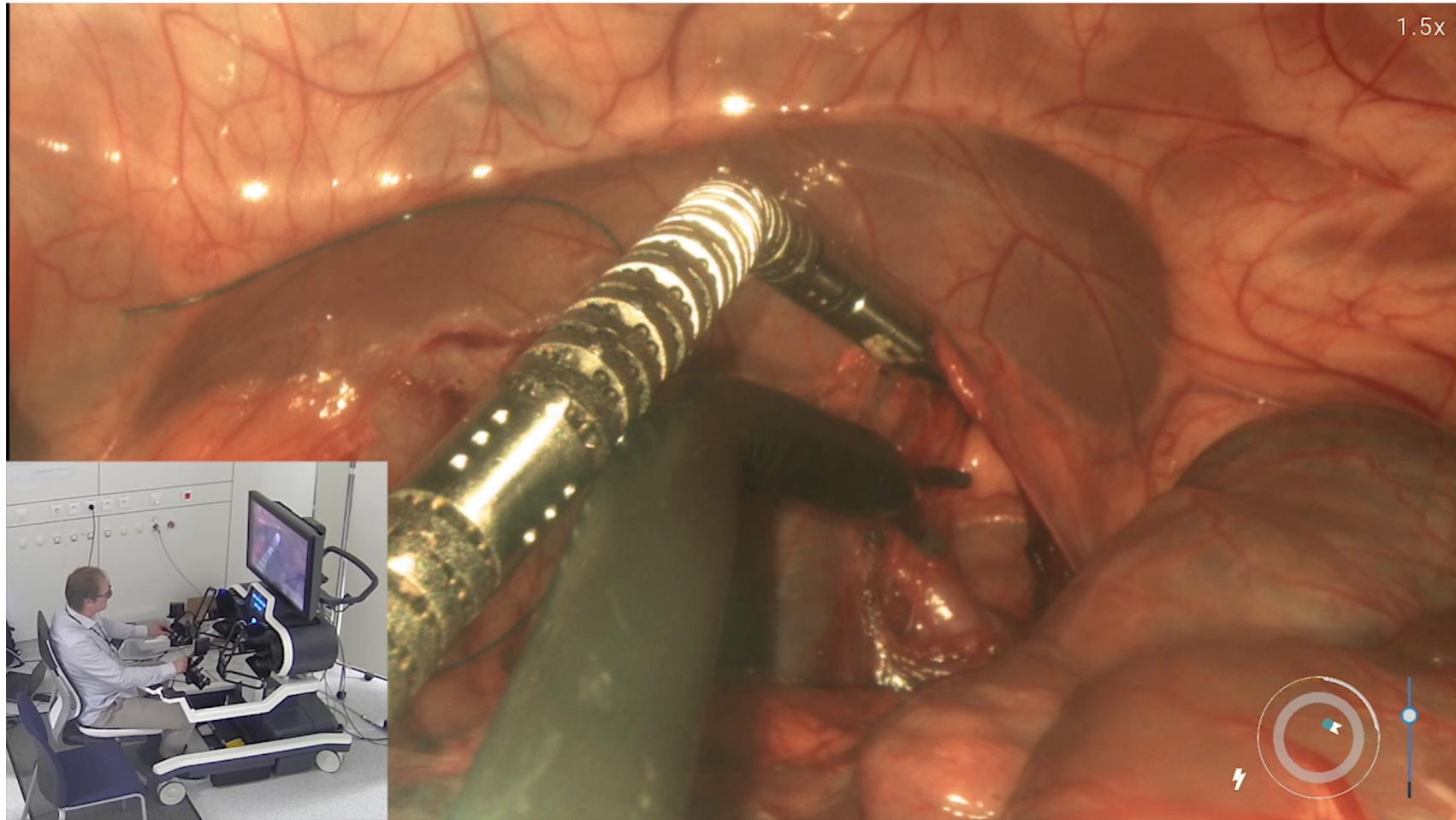
# Minimal incision



# Open, easy to use and comfortable console



# SPORT Pre-clinical Surgery Video



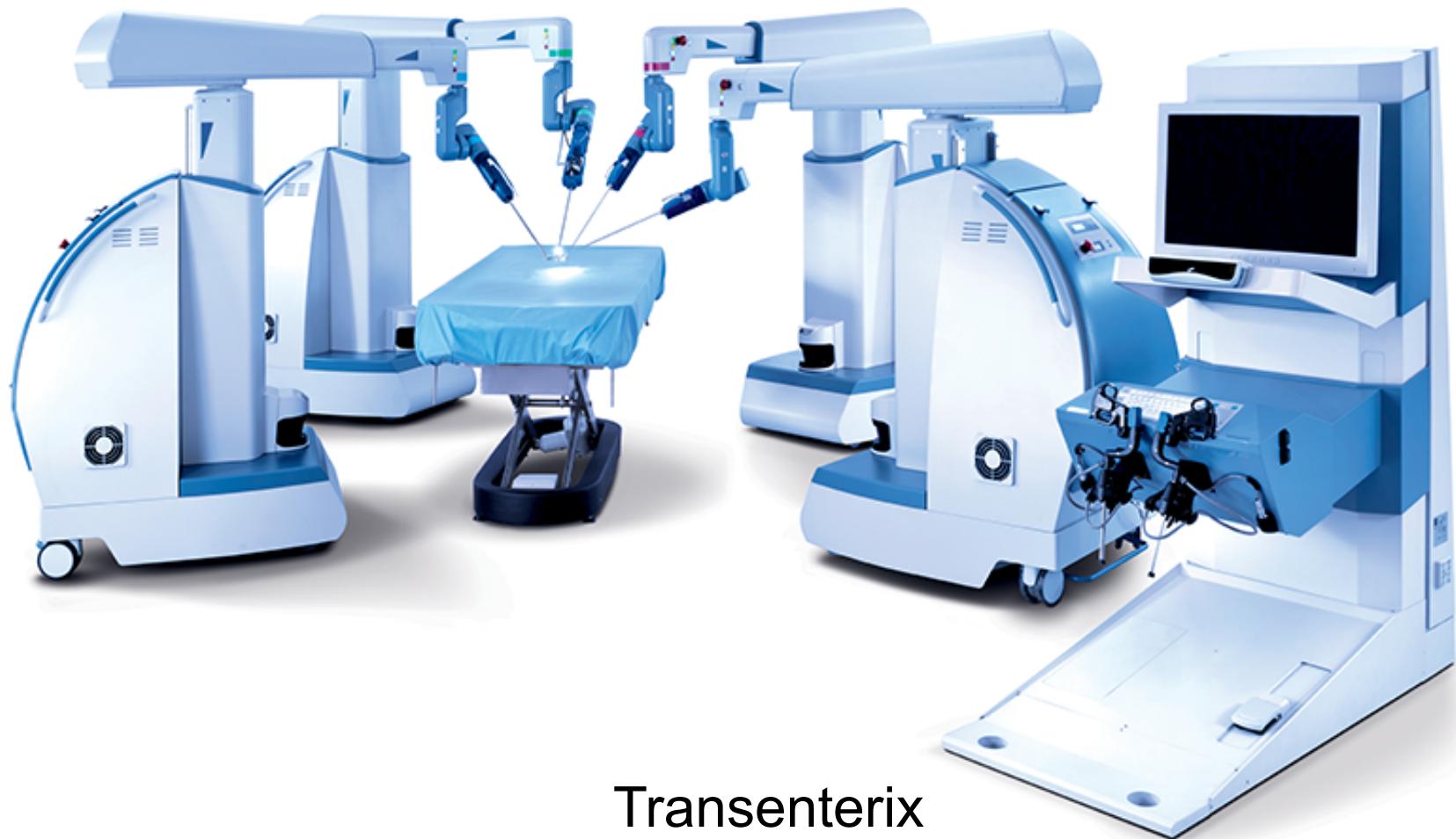
# Integral Simulation – Mimic Partnership



# VERSIUS, CMR surgical



# Autre concept : bras robot indépendant



Transenterix



# Medicaroid



# Traitements focal cancer prostate



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# Le futur: intégration de toutes les technologies avec robots autonomes





Hospices Civils de Lyon



votre santé,  
notre engagement