

Robotic Technology at the Service of Surgery -The Challenge of Robotic Urology -



Vassilis Poulakis MD, PhD, FEBU

Ass. Professor of Urology, University of Frankfurt, Germany

Director of Urologic Clinic

Metropolitan Hospital Athens, Greece

Our Hospital ...

- One of the largest private Hospital in Athens
- over 330 beds
- over 15 operative rooms
- all the medical specialities
- with the most modern and updated medical technologies
- with the most educated medical staff
- Temos (Excellence in Medical Tourism) certified

Our Robotic Urologic Center ...

- The largest in Greece and in South-East Europe!
 - the most recent model of da Vinci robotic system (*da Vinci Si HD* having 4 robotic arms)
 - a 2nd robotic system is going to be ordered in 2014
 - having all the technical facilities
 - operating 6 to 7 days a week
 - at least 2-3 cases a day

Our Robotic Urologic Team ...

- The most experienced team in Greece and South-East Europe
 - one Consol-Surgeon: Dr. Vassilis Poulakis
 - over 500 robotic urologic operations a year, in Greece
 - over 120 robotic urologic operations a year, in Cyprus
 - covering the whole spectrum of urologic surgery
 - organising robotic congresses with live operations
 - publishing in nominated medical journals
 - educating doctors and nurses

The Robotic Urologic Surgeon ...

- The most experienced robotic urologic surgeon in Greece and one of most experienced in Europe
 - over 2.000 robotic operations, self performed
 - he is always operating his patients by himself
 - the operation outcomes are comparable with the top robotic center of the world
 - he is operating live in robotic congress worldwide

The Robotic Urologic Surgeon ...

- my education background:
 - 12 years in Academic Hospital in Frankfurt, Germany
 - Associate Professor of Urology in University of Frankfurt
 - **the first robotic urological procedure in the world** was performed **in Frankfurt, Germany**
 - Director of Laparoscopic Section for 5 years, in Academic Hospital in Frankfurt, Germany
 - **the most experienced Laparoscopic Urologic Surgeon** with the highest success rates in the region **of Frankfurt** until 2006
 - I educated many German and Greek Urologists in laparoscopy
 - since 2006, I am practicing Urology in Greece

What is a da Vinci operation?

A less invasive surgical procedure

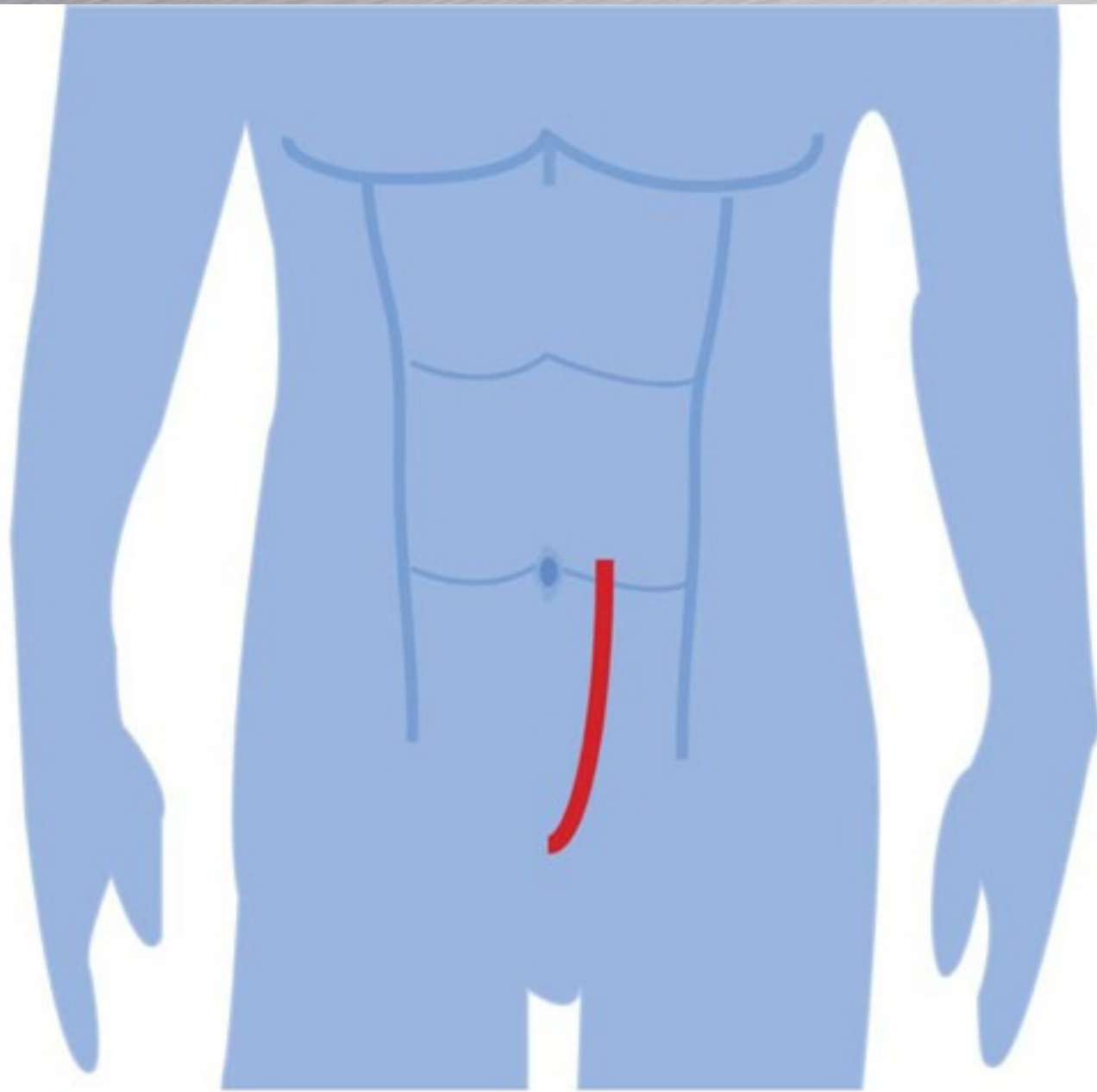
- laparoscopic procedure
- performed with a robotic surgical system
- that helps surgeon
 - to see vital anatomical structures more clearly and
 - to perform a more precise surgical procedure

da Vinci Surgical System: The Enabling Technology

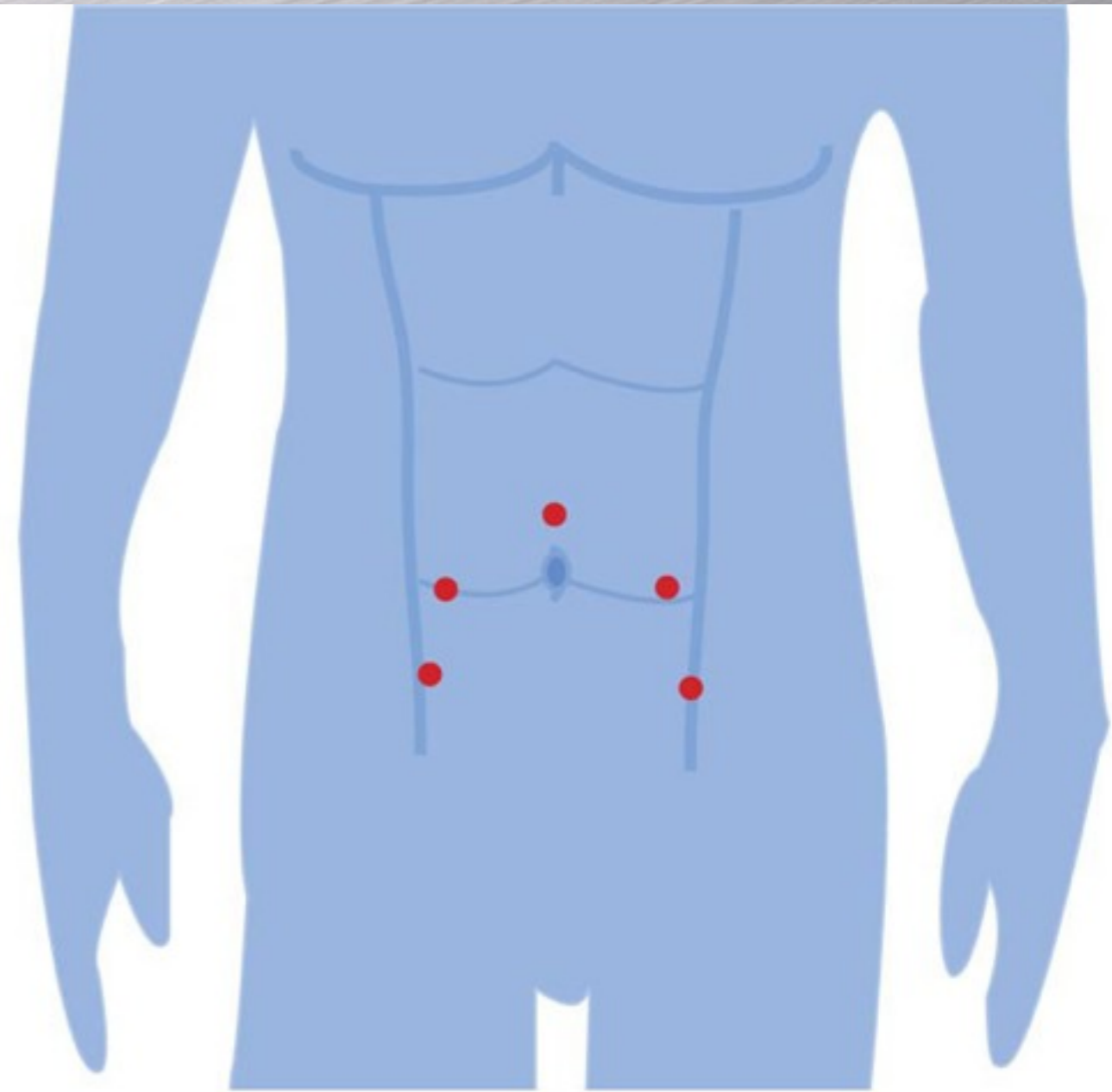
- allows surgeon's hand movements to be **scaled, filtered and translated into precise movements of micro-instruments** within the operative site
- enhances surgical capabilities by enabling the performance of complex surgeries **through tiny surgical openings**
- cannot be programmed nor can it make decisions on its own. **The surgeon performs the operation, not the robot!**

Robotic surgery:

- Minimal-Invasive Procedure -



Open Prostatectomy Incision



da Vinci Prostatectomy Incisions

da Vinci system
evolution:
from "Standard"

through "S"

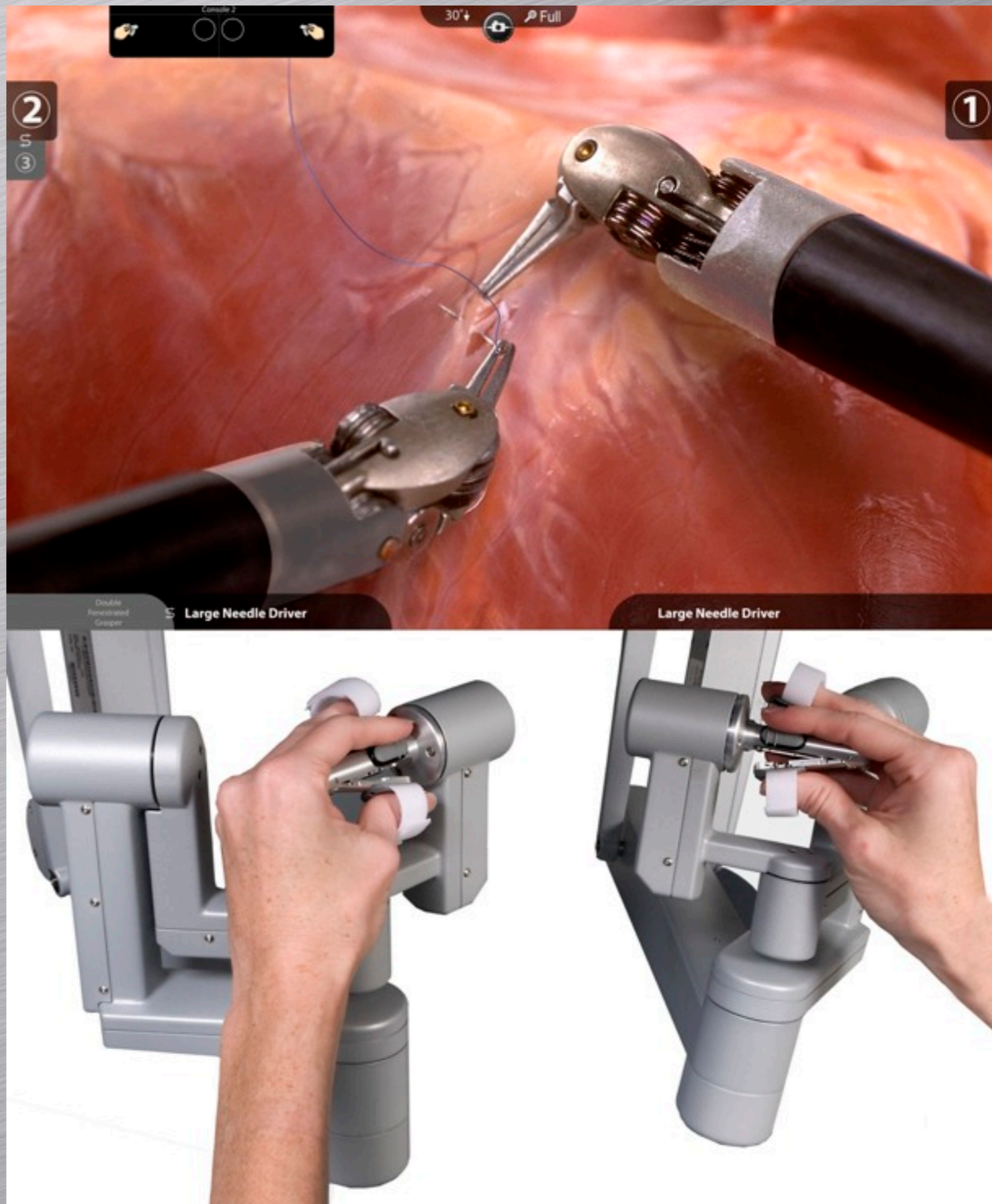
to "Si HD"



da Vinci Si HD: Metropolitan Hospital's choice!



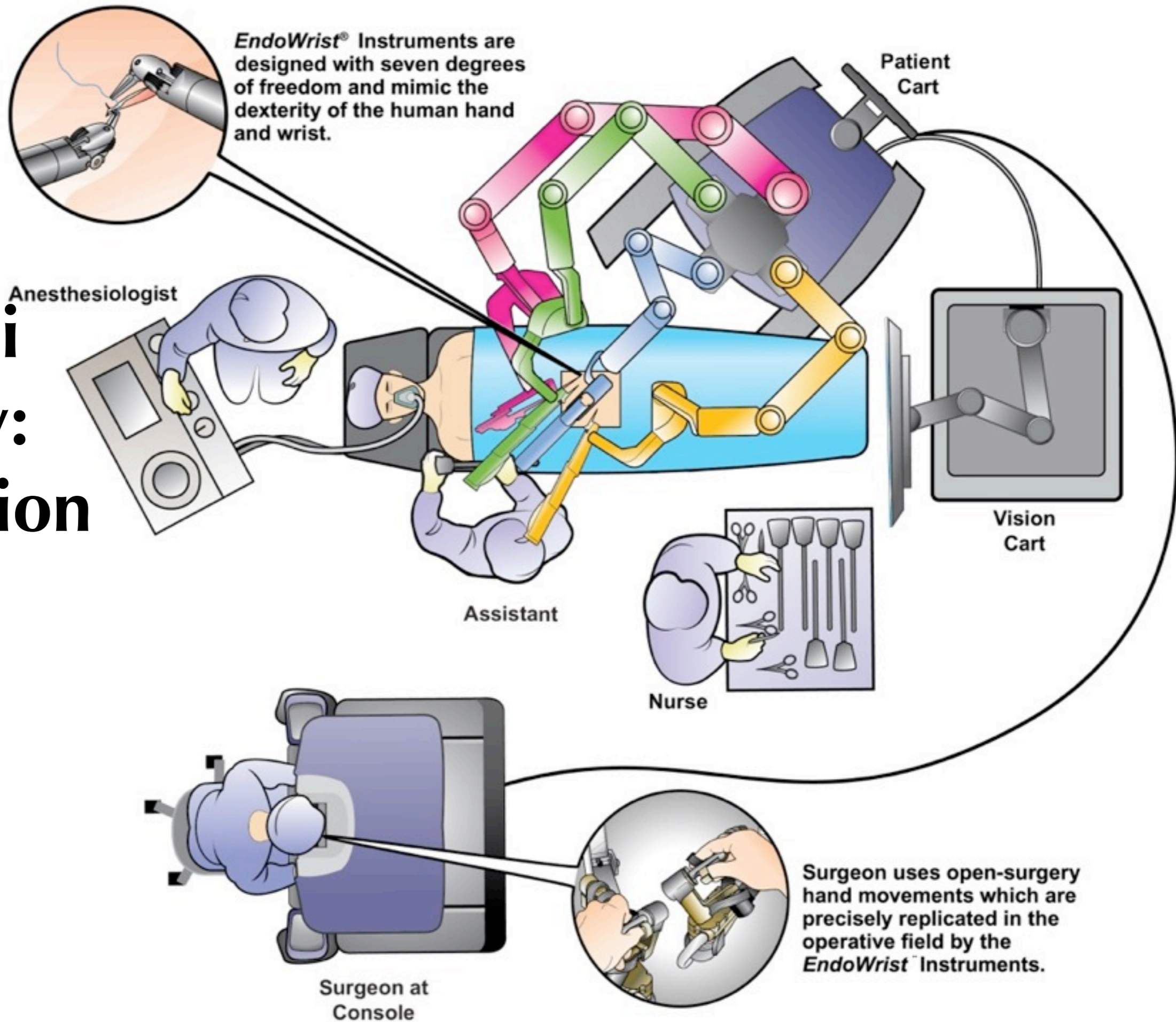
**Robotic
Instruments
Movements:
precise,
accurate,
filtered,
scaled!**



Hand-Instrument articulation in size comparison



da Vinci Surgery: Operation Room Setup



Benefits of da Vinci procedure over open surgery

- shorter hospital stay
- less pain
- less risk of infection
- less blood loss and transfusions
- less scarring
- faster recovery
- quicker return to normal activities
- better surgical outcomes
- reduction of total costs of hospitalization

The spectrum of robotic urologic procedure

- radical prostatectomy for prostate cancer
- simple prostatectomy for oversized prostate hyperplasia
- radical nephrectomy for large kidney tumor
- partial nephrectomy for small (<4cm) kidney tumor
- radical cystectomy with neobladder creation for invasive bladder cancer
- reconstructive operations, eg pyeloplasty, sacropexy, ureter new implantation in the bladder etc.

Why to choose Dr Poulakis and Metropolitan Hospital of Athens for robotic surgery in Urology?

- over 2.000 successful robotic surgeries
- over 500 robotic surgeries a year
- results comparable with the top centers of the world
- medical staff educated on the highest standards
- managing the patient and his/her escorts professional
- fast rehabilitation program adapting to each patient
- attractive and reasonable costs

Take home message

- Robotic Urologic Surgery is in **very high level** in Greece!
- One of the most experienced, high case-volume Robotic Urologic **Surgeon** in Europe and one of the largest private **Hospital** in Greece **guarantee for optimal results!**
- **Attractive cost package** are offered!