

# Masterclass in Robotic assisted hepatobiliary surgery

## Endorsed by ILLS

### Course Leaders

Course Directors:

Dr. Mathieu D'Hondt  
Dr. Iswanto Sucandy,

Faculty:

Dr. Mo Abu Hilal  
Dr. Luca Aldrighetti,  
Dr. Fabrizo Di Benedetto  
Dr. Rutger-Jan Swijnenburg  
Dr. Pieter Jan Steenlant

<b>Date:</b>	<b>Thursday 28<sup>th</sup> and Friday the 29<sup>th</sup> of November 2024</b>
<b>Venue:</b>	<b>Orsi Academy</b>
<b>Duration</b>	2 Days
<b>Delegates day 1</b>	120 attendees
<b>Delegates day 2</b>	12 trainees (2 on each system) and 12 observing trainees
<b>Robotic platform</b>	<i>da Vinci Xi</i>
<b>Aim</b>	To comprehensively cover robotic assisted liver surgery
<b>Pre-course requirements</b>	Basic knowledge of the robotic system and familiarity with (minimally invasive) liver surgery.
<b>Learning objectives</b>	understanding of the robotic set-up within liver surgery understanding of the different robotic liver resections the use of advance energy during the liver dissection implementation of imaging technology for surgical guidance

### Certification

Orsi Academy certificate of attendance & CME credits

## Time table

### Day 1 – 28<sup>th</sup> of November - Scientific lectures

#### a) Morning session

- 
- 8h30-9h00: History and Evolution of Minimally Invasive Hepatopancreatobiliary Surgery and Future Possibilities (dr. Abu Hilal)
- 9h00-9h30: Implementation of robotic liver surgery – Lessons learned after > 300 cases (dr. D’Hondt)
- 9h30-10h00: patient selection and preoperative preparation for robotic liver surgery (dr. Sucandy)
- 10h00-10h30 Anesthesia in minimally invasive liver surgery (dr. Steelant)
- 10h30-10h50: Coffee break
- 10h50-11h30: port placement for various types of liver surgery, OR set-up and robotic surgical instrumentation (dr. Swijnenburg)
- 11h30-12h00: techniques for inflow dissection and Pringle Maneuver (dr. Di Benedetto )
- 12h0-12h30: intraoperative liver ultrasound for tumor assessment and vascular mapping. Use of indocyanine green with firefly technology (dr. Swijnenburg )
- 12h30 – 13h00: different techniques for Parenchymal transection and choice of instruments. Why I do it this way?
  - o Hybrid Robotic-laparoscopic CUSA (dr. Aldrighetti)
  - o Energy devices (ultrasonic sychroseal/vessel sealer etc... (dr. Sucandy)
- 13h00-14h00: lunch

#### b) Afternoon session

- 14h00-14h30: management of intraoperative issue (portal vein/hepatic vein/IVC bleeding and bile leak and conversion to open (dr. D’Hondt)
- 14h30-15h00: outcomes of Robotic vs Laparoscopic liver surgery (dr. Aldrighetti)
- 15h00-15h30: technique of robotic Biliary surgery/hepaticojejunostomy (dr. Di Benedetto)
- 15h30-15h50: coffee break
- 15h50-17h50: video technique review and operative tips and tricks (15 minutes each with 5 minutes discussion)
  - o Robotic left lateral sectionectomy (dr. Swijnenburg)
  - o Robotic left hepatectomy (dr. D’Hondt)
  - o Robotic right hepatectomy (dr. Di Benedetto)
  - o Robotic right posterior sectionectomy (dr. Sucandy)
  - o Robotic central/right anterior/left medial sectionectomy (dr. Aldrighetti)

- Robotic non-anatomical resection/ posterosuperior segment 7 or 8 or 4a resection (dr. Swijnenburg)
- Robotic hepatectomy and biliary reconstruction (dr. Sucandy)
- 17h50-18h00: Wrap-up of the day

## ***Day 2 – 29<sup>th</sup> of November - hands-on with human cadaver models***

### **a) Morning session**

- 8h00-8h30: welcome and breakfast
- 8h30-12h: Robotic liver resection:
  - Robotic left lateral sectionectomy (prior to left hepatectomy)
  - Robotic left hepatectomy
  - Robotic right posterior sectionectomy (prior to right hepatectomy)
  - Robotic right hepatectomy
- 12h00-12h45: lunch break

### **b) Afternoon session**

- 12h45-14h45: robotic liver resection
  - Robotic biliary resection and hepaticojejunostomy
  - Laparoscopic liver tumor ablation
  - Bile duct exploration
- 14h45: wrap-up of the day