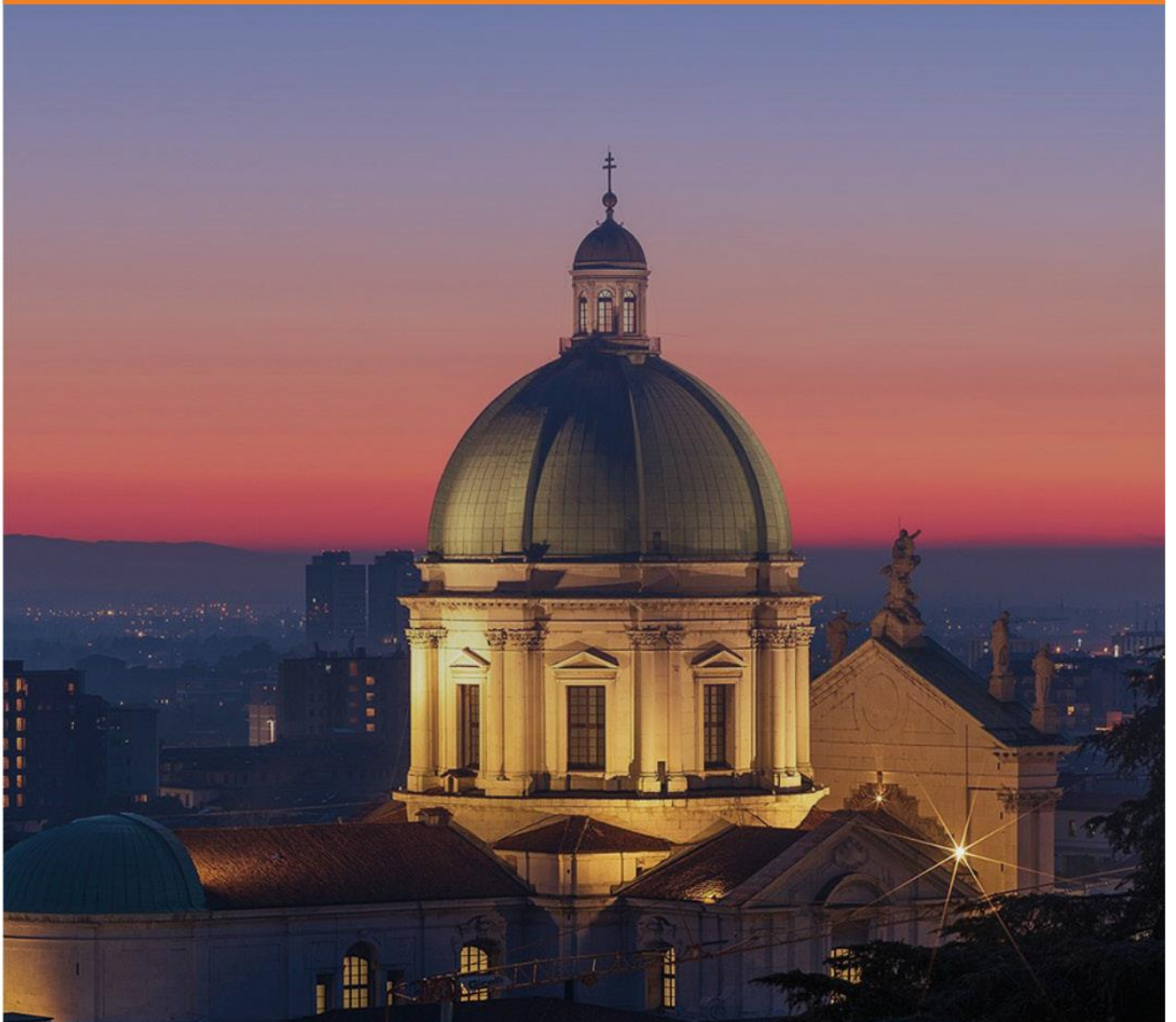


May 7th- 8th, 2024 Camera di Commercio, Brescia Italy

The First Internationally Validated European Guidelines Meeting on Minimally Invasive Liver Surgery





IEGUMILS

Brescia, May 7th-8th, 2024

The First Internationally Validated European Guidelines
Meeting on Minimally Invasive Liver Surgery

Steering Committee

Mohammed Abu Hilal
Luca Aldrighetti
Ibrahim Dagher
Mathieu D'Hondt
Bjørn Edwin
Hugo Pinto Marques
Rutger-Jan Swijnenbur

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Antonio Daniele Pinna
Nazario Portolani
Omar Saleh
Claudio Sallemi
Ajith Siriwardena
Sameer Smadi
Amal Suhool
Thomas van Gulik

Experts Panel

Hani Alsaati
Adnan Alseidi
Giammauro Berardi
Ugo Boggi
Daniel Cherqui
Umberto Cillo
Federica Cipriani
Ruben Ciria
Roland Croner
Espan Cugat
Fabrizio Di Benedetto
Rafael Diaz-Nieto
Patricia Duncan
Mikhail Efanov
Giuseppe Maria Ettore
Alessandro Ferrero
Constantino Fondevila Campo
Åsmund Fretland
Felice Giuliani
Andrew Gumbs
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Riccardo Memeo
Krishna Menon
Francesca Ratti
Nikki Rashidian
Riccardo Robles-Campos
Fernando Rottelar
Nadia Russolillo
Andrea Ruzzenente
Julio Santoyo Santoyo
Olivier Scatton
Moritz Schmelzle
Olivia Sgarbura
Catherine Sia Cheng Teh
Iswanto Sucandy
Robert Sutcliffe
Rutger-Jan Swijnenbur
Roberto Troisi
Marco Vivarelli
Go Wakabayashi
Steve White

Research Working Group

Roberta Angelico
Elisa Bannone
Andrea Benedetti Cacciaguerra
Emre Bozkurt
Maria Conticchio
Soufyan El Adel
Simone Famularo
Martina Guerra
Tijs Hoogteijling
Christoph Kuemmerli
Victor Lopez-Lopez
Fernando Pardo Aranda
Gabriela Pilz da Cunha
Florian Primavesi
Nikki Rashidian
Sara Saeidi
Andrea Sheel
Jasper Sijberden
Francesco Sucameli
Francesco Taliente
Teodros Veronesi

Local Committee

Nigel Baboeram
Charlotte Baggerman
Caro Bruna
Tessa Dinger
Marco Garatti
Dorine Klei
Alberto Manzoni
Giulio Cesare Vitali
Giuseppe Zimmitti

Invited Speakers

Don Giacomo Canobbio
Laura Castelletti
Stefano Partelli
Mario Taccolini
Simona Tironi



IEGUMILS

Brescia, May 7th-8th, 2024

The First Internationally Validated European Guidelines Meeting on Minimally Invasive Liver Surgery

Meeting Chairman: Prof. Mohammad Abu Hilal

Guest of Honor: Dr. Neil Pearce

RATIONALE

The upcoming Guidelines meeting in Minimally Invasive Liver Surgery will see the development of the first Internationally validated European Guidelines in the field of minimally invasive Liver surgery. These newly established guidelines will have the peculiarity of including separate guidelines for both laparoscopic and for robotic liver surgery based on the most recent evidence in the field, particularly evidence produced after the Southampton Guideline which collected evidence until June 2016. The guidelines will assess terminology, indications, instrumentation and their safety and validity, in addition to different other domains (see program). The Guidelines will adopt a thorough scientific methodology, which will be similar to those used in the successful Brescia Guidelines on minimally invasive pancreatic surgery (EGUMIPS 2022) and the Southampton Guidelines on laparoscopic liver surgery (EGMLLS 2017). The upcoming meeting has great potential, considering its high scientific content. This is also based on the involvement of over 100 European International experts in minimally invasive and open liver surgery.

IN PARTNERSHIP WITH:



ORGANIZING SECRETARIAT



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


















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PROGRAM Tuesday May 7th, 2024

Time	Event
08:00 – 08:30	Registration, Visit Exhibits
08:30 – 08:35	Welcome and Introduction - Prof. Mohammad Abu Hilal
08:35 – 08:50	Guest Lecture History and science: If You Don't Know Your Past, You Can't Build a Future - Don Canobbio
09:50 – 09:10	History and Art of Liver Surgery - Prof. Thomas van Gulik
09:10 – 09:25	Life and Time of Thomas Starzl - Prof. David Geller
	Chairs: Prof. M. Abu Hilal, Dr. Neil Pearce
09:25 – 09:35	Welcome to IEGUMILS - Dr. Mario Taccolini – President of Fondazione Poliambulanza - Prof. David Geller – Past president of ILLS - Prof. Marc Besselink – President of the E-AHPBA
09:35 - 09:45	Guest Lecture Societies' Views on Clinical Guidelines, When Do We Use Them? - Prof. Ajith Siriwardena – Past president of the E-AHPBA
	Chairs: Prof. Mohammad Abu Hilal, President of ILLS; Prof. Marc Besselink, President of E-AHPBA; Prof. Horacio Asbun, Past-president of SAGES; Prof. Ugo Boggi, President of AICEP
09:45 – 10:05	The IEGUMILS Methodology - Prof. Mohammad Abu Hilal
10:05 – 10:15	Institutional Welcome - Ms. S. Tironi – Education assessor, Region of Lombardy - Ms. L. Castelletti – Mayor of Brescia
	Chairs: Prof. Mario Taccolini, Prof. Mohammad Abu Hilal
10:15 – 10:35	Coffee Break
10:35 – 10:50	Professional Oaths - Prof. Bjorn Edwin – Chair of the Expert Panel - Prof. Horacio Asbun – Chair of the Validation Committee - Dr. Tijs Hoogteijling – Chair of the Research Working Group







10:50 – 11:30	Session 1 – TERMINOLOGY in MILS Chairs: Prof. Go Wakabayashi, Prof. Iswanto Sucandy, Dr. Marco Garatti	
	<ul style="list-style-type: none"> • Defined approaches in MILS • Definition of Hybrid Laparoscopic-robotic procedure and their role • Can different approaches be simultaneously used and how should they be defined? • Liver resection in PS segments, a minor or a major procedure? • How should conversion from either robotic to laparoscopic, or minimally invasive to open, be defined? 	Group 1: Experts *Prof. Alseidi  *Prof. Boggi  Prof. Han  Dr. Marsman  Prof. Lopez Ben  Dr. Schmelzle  Prof. Ferrero  Dr. Cipriani  Researchers *Simone Famularo  *Emre Bozkurt  Sara Saeidi  Victor Lopez-Lopez  Roberta Angelico 
11:30 – 11:45	Guest Lecture Laparoscopic 2nd Stage Rapid Liver Transplant - Prof. Umberto Cillo Chairs: Prof. Ugo Boggi, Dr. Giulio Cesare Vitali	
11:45 – 12:35	Session 2 – INDICATIONS Chairs: Prof. Ho-Seong Han, Prof. Alessandro Ferrero, Dr. Martina Guerra	
	<ul style="list-style-type: none"> • What is the role of the laparoscopic and the robotic approach in different indications? <ul style="list-style-type: none"> ○ (Non)Colorectal Liver metastases ○ Hepatocellular carcinoma ○ Cholangiocarcinoma ○ Benign liver tumors ○ Living donor hepatectomy ○ Combined resections Biliary/vascular reconstruction	Group 2: Experts *Prof. Rottelar  *Prof. Sucandy  Prof. Wakabayashi  Prof. Aldrighetti  Prof. Efanov  Prof. Lodge  Prof. Cillo  Prof. Cherqui  Dr. Berardi  Dr. Ratti  Researchers *Victor Lopez-Lopez  Maria Conticchio  Florian Primavesi  Elisa Bannone  Soufyan El Adel 



12:35 – 13:50	Validation Group Deliberation: Terminology & Indications	
12:35 – 13:00	QR Archamedics Symposium Absorbable Stents in Pancreatic Surgery - Prof. Stefano Partelli Absorbable Stents in Transplant & Liver Surgery - Prof. Krishna Menon Absorbable Stents in HPB Surgery - Dr. Fabio Ausania Chairs: Prof. Mohammad Abu Hilal	
13:00 – 13:40	Lunch Break	
13:40 – 13:55	Guest Lecture Surgery; Innovation, Safety, and Reinvention - Dr. Neil Pearce Chairs: Prof. Mohammad Abu Hilal, Prof. K. Menon	
13:55 – 14:20	Integra Symposium Parenchymal Transection Techniques in Minimally Invasive Liver Surgery - Prof. Robert Sutcliffe Operative and Oncological Challenges in Laparoscopic Liver Surgery - Prof. Mohammad Abu Hilal Chairs: Prof. R. Sutcliffe, Prof. M. Abu Hilal	
14:20 – 15:15	Session 3 – PATIENT SELECTION Chairs: Prof. Fabrizio Di Benedetto, Dr. Hani Al Saati, Dr. Giulio Cesare Vitali	
	<ul style="list-style-type: none"> • Are there contraindications for laparoscopic and/or robotic liver resection? • Which patients will benefit the most from minimally invasive approaches in liver surgery? • Is there a role for the laparoscopic and/or robotic approach in technically complex settings? <ul style="list-style-type: none"> ○ Two-stage hepatectomy ○ After future liver remnant modulation ○ Lesions in close proximity to major vessels ○ Repeat hepatectomy 	Group 3: Experts *Prof. D’Hondt  *Prof. Dagher  Prof. Fondevila  Prof. Menon  Prof. Efanov  Prof. Robles-Campos  Prof. Ettore  Dr. Ciria  Dr. Duncan  Prof. Felice Giuliani  Researchers *Tijs Hoogteijling  *Andrea Benedetti  Andrea Sheel  Francesco Taliente  Simone Famularo  Martina Guerra 
15:15 – 15:35	Break	



15:35 – 16:35	<p>Session 4 – PROCEDURES</p> <p>Chairs: Prof. Ibrahim Dagher, Prof. Mathieu D’Hondt, Dr. Giuseppe Zimmitti</p>
	<ul style="list-style-type: none"> • Is the laparoscopic and robotic approach applicable for major hepatectomies? • Is the laparoscopic and robotic approach applicable for resections in the posterosuperior segments? • Is the laparoscopic and robotic approach applicable for parenchyma-sparing liver resections? • Is the laparoscopic and robotic approach applicable for anatomical liver resections? <p>Group 4:</p> <p>Experts</p> <ul style="list-style-type: none"> *Dr. Swijnenburg  *Prof. Ferrero  Prof. di Benedetto  Dr. Cugat  Prof. White  Dr. Al Saati  Prof. Croner  Prof. Lopez Ben  Dr. Ruzzenente  Dr. Diaz-Nieto  <p>Researchers</p> <ul style="list-style-type: none"> *Jasper Sijberden  *Christoph Kuemmerli  Fernando Pardo Aranda  Roberta Angelico  Andrea Sheel 
16:35 – 18:00	<p>Validation Group Deliberation: Patient selection & Procedures</p>
16:35 – 16:50	<p>Guest Lecture</p> <p>Does Intervention Radiology Compete with MILS, or is it a match made in heaven?</p> <ul style="list-style-type: none"> - Dr. Claudio Sallemi <p>Chairs: Prof. Giuseppe Ettore, Dr. Federica Cipriani</p>
16:50 – 18:00	<p>Selected Videos</p> <ul style="list-style-type: none"> - Robotic living donor hepatectomy <ul style="list-style-type: none"> o Constantino Fondevila Campo[§] - Robotic Right Hepatectomy with Biliary Resection for PHCC <ul style="list-style-type: none"> o Simone Conci - ICG-Guided Laparoscopic Sg7 Segmentectomy for Hepatocellular carcinoma <ul style="list-style-type: none"> o Gaia Russo - Pure lap ALPPS Giant HCC <ul style="list-style-type: none"> o Loh Wei-Liang - Robotic left hemihepatectomy with lymph node dissection and intrahepatic hepatico-jejuno-stomy for perihilar cholangiocarcinoma <ul style="list-style-type: none"> o Ismael Chaoui - Robotic approach for perihilar cholangiocarcinoma IIIA type. Our tips and tricks <ul style="list-style-type: none"> o Emanuele Doria - Use of 3D reconstruction for laparoscopic liver surgery H78-RHV <ul style="list-style-type: none"> o Santiago Lopez Ben - Laparoscopic two stage hepatectomy <ul style="list-style-type: none"> o Constantino Fondevila Campo[§] - Left Hepatectomy pCCA <ul style="list-style-type: none"> o Nunzio Tralli <p>Chairs: Prof. Fabrizio Di Benedetto, Prof. R. Troisi, Dr. Rutger-Jan Swijnenburg</p>
18:00	<p>Closing Remarks</p> <ul style="list-style-type: none"> - Prof. Mohammad Abu Hilal



Wednesday May 8th, 2024

Time	Event	Faculty
08:00 – 08:20	Registration, Visit Exhibits	
08:20 – 08:30	Introduction to the day - Prof. Mohammad Abu Hilal	
08:30 – 10:10	<u>Session 5 – SURGICAL TECHNIQUES AND INSTRUMENTATION</u> Chairs: Prof. Mickaël Lesurtel, Dr. Catherine Teh, Dr. Nadia Russolillo,	
	<ul style="list-style-type: none"> • What type of energy devices and instruments should be used during parenchymal transection in laparoscopic and robotic liver surgery? • What is the role of intraoperative ultrasound in laparoscopic and robotic liver surgery? • What are the available and safe techniques in various minimally invasive (complex and/or combined) procedures? • What are the optimal techniques for hemorrhage control in laparoscopic and robotic liver surgery? • What is the role of hemostatic products in MILS? • What is the recommended drain policy in minimally invasive liver surgery? 	Group 5: Experts *Prof. Edwin  *Dr. Marsman  Dr. Fretland  Dr. Hagendoorn  Dr. Sutcliffe  Prof. Troisi  Dr. Santoyo  Prof. Memeo  Prof. Honda  Prof. Schmelzle  Dr. Ciria  Dr. Sgarbura  Researchers *Andrea Benedetti  *Tijs Hoogteijling  Gabriela Pilz da Cunha  Francesco Sucameli  Francesco Taliente 
10:10 – 11:10	Validation Group Deliberation: Surgical techniques and instrumentation	
10:10 – 10:35	Selected Video Session <ul style="list-style-type: none"> - Robotic anatomical segment VIII resection for HCC using the scissor-hepatectomy technique <ul style="list-style-type: none"> o Emrullah Birgin - Laparoscopic Resection Of HCC In Child C11 Patient With Severe Portal Hypertension After Massive Bleeding For Spontaneous Rupture <ul style="list-style-type: none"> o Ruben Ciria - Future Liver Remnant Modulation in Advanced Minimally Invasive Two-Stage Hepatectomy <ul style="list-style-type: none"> o Tijs Hoogteijling 	
	Chairs: Prof. G. Honda, Prof. Constantino Fondevila, Dr. Trish Duncan	
10:35 – 10:50	Break	














10:50 – 11:10	<p>Guest Lecture Robotic Liver and Transplant Surgical Practice - Prof. Hugo Pinto Marques</p> <p>Chair: Prof. Luca Aldrighetti, Dr. Ruben Ciria</p>
11:10 – 11:50	<p>Session 6 – OUTCOME MEASUREMENT & ASSESSMENT TOOLS</p> <p>Chairs: Prof. Bjorn Edwin, Dr. Francesco Sucameli, Prof. Santiago Lopez Ben</p>
	<ul style="list-style-type: none"> Which outcome measurements are most suitable in assessing the validity of laparoscopic and robotic liver surgery? <p>What is the optimal outcome measurement we need to develop for future assessments in MILS</p> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>Group 6:</p> <p>Experts</p> <p>*Prof. Pinto Marques </p> <p>*Prof. Scatton </p> <p>Prof. White </p> <p>Prof. Vivarelli </p> <p>Prof. Lesurtel </p> <p>Dr. Teh </p> <p>Dr. Russolillo </p> <p>Researchers</p> <p>*Christoph Kuemmerli </p> <p>*Jasper Sijberden </p> <p>Soufyan El Adel </p> <p>Fernando Pardo Aranda </p> <p>Teodros Veronesi </p> </div> </div>
11:50 – 13:00	<p>Validation Group Deliberation: Assessment Tools</p>
11:50 – 12:10	<p>Selected Oral Presentations</p> <ul style="list-style-type: none"> Risk Factors and Outcomes of Conversions in Robotic and Laparoscopic Liver Resections: A Nationwide Analysis <ul style="list-style-type: none"> Gabriela Pilz da Cunha Which is the best surgical strategy to resect single large hepatocellular carcinoma > 5 cm with surgical indication? A propensity-score weighted analysis. <ul style="list-style-type: none"> Mattia Garancini <p>Chairs: Prof. Hugo Pinto Marques, Prof. Roland Croner, Dr. Olivia Sgarbura</p>



<p>12:10 – 13:00</p>	<p>Selected Videos</p> <ul style="list-style-type: none"> - Laparoscopic Segmentectomy S7 For Hcc Using Hanging Maneuver And En Bloc Resection Of RHV <ul style="list-style-type: none"> o Soufyan El Adel - When Less Is More: Trisegmentectomy 5,6,7 <ul style="list-style-type: none"> o Hussein Abdallah - Indocyanine Green Fluorescence Imaging For Planned R1 Vascular Resection During Laparoscopic Left Hepatectomy <ul style="list-style-type: none"> o E. Prosperi - Combined Approach "Uniportal VATS And Laparoscopic" As Minimally Invasive Treatment For Hepatic Metastases From Ovarian Carcinoma <ul style="list-style-type: none"> o Andrea Benedetti Cacciaguerra - Laparoscopic Sg5-8 bisegmentectomy extended to ventral Sg7 for colorectal liver metastases <ul style="list-style-type: none"> o Chiara Peluso <p>Chairs: Prof. Felice Giuliani, Prof. Marco Vivarelli, Dr. Alberto Manzoni</p>	
<p>13:00 – 13:50</p>	<p>Lunch break</p>	
<p>13:50 – 14:35</p>	<p>Session 7 – TRAINING & ICES (Implementation, Cost-Effectiveness, and Sustainability)</p> <p>Chairs: Prof. Andrew Gumbs, Prof. Andrea Ruzzenente, Dr. Francesca Ratti</p>	
	<ul style="list-style-type: none"> • Which training programs and preparations should surgeons pursue before performing laparoscopic and/or robotic liver surgery? • What is the impact of European and national training programs on clinical outcomes of laparoscopic and robotic liver resection? • What is needed to increase access to training programs for practicing surgeons? • Which centers should be performing laparoscopic and/or robotic liver surgery? • What is the role of (inter)national registries in the wider implementation of minimally invasive liver surgery? • Is laparoscopic and/or robotic surgery cost-effective? • Are additional costs in robotic surgery justified? • What is needed to increase worldwide access to minimally invasive liver surgery? 	<p>Group 7: Experts</p> <p>*Prof. Alseidi </p> <p>*Prof. Troisi </p> <p>Dr. Swijnenburg </p> <p>Prof. Lesurtel </p> <p>Prof. Cillo </p> <p>Dr. Sutcliffe </p> <p>Dr. Cipriani </p> <p>Dr. Rashidian </p> <p>Researchers</p> <p>*Florian Primavesi </p> <p>*Nikki Rashidian </p> <p>Gabriela Pilz da Cunha </p> <p>Maria Conticchio </p> <p>Francesco Sucameli </p>
<p>14.35 – 15:05</p>	<p>Invited Videos: 3 Generations of Mi Liver Surgeons, 3 MI Resections</p> <ul style="list-style-type: none"> - Prof. Cristiano Huscher - Prof. Go Wakabayashi - Prof. Satiago Lopez Ben <p>Chairs: Prof. Safi Dokmak, Prof. Giuseppe Fusai, Dr. Rafael Diaz-Nieto</p>	



15:05-15:50	Session 8: ARTIFICIAL INTELLIGENCE & INNOVATIVE TECHNIQUES Chairs: Prof. Steve White, Prof. Giuseppe Fusai, Dr. Rafael Diaz.Nieto	
	<ul style="list-style-type: none"> • What is the role of artificial intelligence (AI) and innovative techniques in minimally invasive liver surgery? <ul style="list-style-type: none"> ○ Radiomics ○ 3D liver reconstruction ○ Liver segmentation ○ Indocyanine green (ICG) ○ Liver navigation ○ Haptics (robotic liver surgery) • What is the role of AI in the future expansion of laparoscopic and robotic liver surgery? • What is the role of the surgeon in pushing forward the role of AI in daily practice? 	Group 8: Experts *Prof. Gumbs  *Prof. Croner  Dr. Fretland  Prof. Sucandy  Dr. Rashidian  Researchers *Emre Bozkurt  *Nikki Rashidian  Martina Guerra  Elisa Bannone  Teodros Veronesi  Sara Saeidi 
15:50 – 16:40	Validation Group Deliberation: Implementation and training & Artificial Intelligence	
15:50 – 16:40	Selected Videos <ul style="list-style-type: none"> - Robotic PHC <ul style="list-style-type: none"> ○ Victor Lopez-Lopez - Techniques of laparoscopic hepatectomy: based on intraoperative ultrasound, indocyanine green fluorescence imaging and mixed reality technology <ul style="list-style-type: none"> ○ Yihu Li - Robotic right hepatectomy for multiple hepatocellular adenomatosis in a 15-year-old girl <ul style="list-style-type: none"> ○ Chiara Gatto - Simultaneous, fluorescence-guided, robotic resection of the paracaval portion of the caudate lobe and anterior resection of the rectum for stage IV low rectal cancer <ul style="list-style-type: none"> ○ Andrea Oddi - A Novel Mathematical Approach for Laparoscopic non-anatomical Resection of Liver <ul style="list-style-type: none"> ○ Uragoda Buddhika - Total Laparoscopic Right Hepatectomy with Partial IVC Resection for Intrahepatic cholangiocarcinoma <ul style="list-style-type: none"> ○ Marwan Bucheeri <p>Chairs: Prof. Moritz Schmelzle, Dr. Asmund Fretland, Dr. A. Suhoor</p>	
16:40 – 17:30	Validation Committee Report Prof. Horacio Asbun	
17:30	Closing remarks, summary, and next Steps Prof. Mohammad Abu Hilal	

§ = Presented by substitute team member



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