**Supplemental Table 2.** Characteristics of the participants. Participants are listed according to their role in the consensus.

|  |
| --- |
| EXECUTIVE COMMITTEE  |
| Horacio J Asbun Chief of Hepatobiliary and Pancreas Surgery at Miami Cancer Institute Professor of Surgery at Mayo Clinic College of Medicine and Science President of the Society of American Gastrointestinal and Endoscopic Surgeons   |
| Mohammad Abu Hilal Chairman of the Department of Surgery, Head of HepatobiliaryPancreatic and Minimally Invasive Surgery, Poliambulanza Foundation Hospital, Brescia, Italy. Professor of HPB and Minimally Invasive Surgery, Southampton University, Southampton, UK.   |
| Nader Francis Consultant Surgeon at Yeovil, England Honorary Professor at UCL at Division of Surgery and Interventional Science, University College London, London. Director of Training at Griffin Institute at Northwick Park Institute for Medical Research, Norwich Park London. Chair of Enhanced-Recovery After Surgery - UK (ERAS-UK)   |
| EXECUTIVE COMMITTEE - RESEARCHERS  |
| Filipe Kunzler Nahmad Research Fellow Hepatobiliary and Pancreas Surgery at Miami Cancer Institute   |
| Domenech Asbun Chief Resident in General Surgery Department of Surgery, University of California San Francisco Fresno, Fresno, CA, USA.   |
| DOMAIN CHAIRS AND STEERING COMMITTEE  |
| Jaap Bonjer Professor of Surgery and Chair of the Department of Surgery at the Amsterdam UMC, Amsterdam Associate Editor of Surgical Endoscopy and Past-President of the European Association of Endoscopic Surgery President of the Dutch Society of Surgery   |
| Nicolas Demartines Professor of Surgery, and Chairman of the Department for Visceral Surgery at the University Hospital CHUV in Lausanne Switzerland   |
| Liane S Feldman Professor of Surgery and Chief of the Division of General Surgery Steinberg-Bernstein Chair in Minimally Invasive Surgery and Innovation at the McGill University Health Centre President-elect of the Society of American Gastrointestinal and Endoscopic Surgeons   |
| Salvador Morales-Conde Chief of the Unit of Innovation in Minimally Invasive Surgery. Department of Surgery. University Hospital Virgen del Rocío. Sevilla (Spain). Head of the Department of General and Digestive Surgery of the Hospital Quirónsalud Sagrado Corazón. Sevilla (Spain). Associate Professor of Surgery. University of Sevilla (Spain). President Elect of the Spanish Association of Surgeons President Elect of the European Association for Endoscopic Surgery General Secretary of the European Hernia Society   |
| Andrea Pietrabissa Professor of Surgery | University of Pavia, Italy President of the European Association for Endoscopic Surgery Director of General Surgery | University of Pavia, Italy Director of General Surgery | Fondazione IRCCS Policlinico San Matteo, Pavia, Italy    |
| Aurora D Pryor Professor of Surgery and Vice Chair for Clinical Affairs Chief, Bariatric, Foregut, and Advanced Gastrointestinal Surgery Division Director, Bariatric and Metabolic Weight Loss Center Director, Minimally Invasive and Bariatric Surgery Fellowship Past-President of the Society of American Gastrointestinal and Endoscopic Surgeons President of the Society of American Gastrointestinal and Endoscopic Surgeons   |
| Christopher M Schlachta Professor in the Department of Surgery and the Department of Oncology at the Schulich School of Medicine and Dentistry Chief of Surgery, University Hospital Site and Medical Director of CSTAR (Canadian Surgical Technologies & Advanced Robotics) at London Health Sciences Centre Treasurer of the Society of American Gastrointestinal and Endoscopic Surgeons   |
| Patricia Sylla Associate Professor of Surgery, Icahn School of Medicine, Mount Sinai Hospital, Department of Surgery, Division of Colon and Rectal Surgery Executive Committee Member of the Society of American Gastrointestinal and Endoscopic Surgeons   |
| Eduardo M Targarona Chief of Unit of Gastrointestinal and Hematologic Surgery, Department of Surgery | Hospital de Santpau, Barcelona, Spain. Professor of Surgery | Medical School of the Autonomous University of Barcelona, Spain. Director and Coordinator. Master UAB Surgical Endoscopic Techniques | Autonomous University of Barcelona, Spain. Chairman of the National Board of Digestive and General Surgery Specialty | Ministry of Social Security and Health, Government of Spain Past-President of the European Association for Endoscopic Surgery   |
| DOMAIN CHAIRS  |
| Kevin Conlon Professor of Surgery, Academic Head of Discipline, Trinity College Dublin, Dublin, Ireland. President of the European‐African Hepato-Pancreato-Biliary Association Secretary General of the International Hepato-Pancreato-Biliary Association   |
| STEERING COMMITTEE  |
| Ho-Seong Han President of the Korean Society of HBP Surgery Past-President of the Korean Society of Endoscopic & Laparoscopic Surgery   |
| Davide Lomanto Secretary and Past-President of General of Endoscopic & Laparoscopic Surgeons of Asia Associate Professor and Senior Consultant Surgeon, Department of Surgery Director, Minimally Invasive Surgical Centre (MISC) Director, Khoo Teck Puat Advanced Surgery Training Centre (ASTC) Director, National University Health System, YLL School of Medicine, National University Singapore   |
| Suthep Udomsawaengsup President of the Endoscopic and Laparoscopic Surgeons of Asia (ELSA) President Elect of the Asia Pacific Metabolic and Bariatric Surgery Society (APMBSS) President of the Laparoscopic and Endoscopic Surgeons of Thailand (LEST) Immediate Past President of the Thai Hernia Society (THS) Member of the Executive Committee of the Royal College of Surgeons of Thailand (RCST) Director of CHULA BMI, King Chulalongkorn Memorial Hospital, Bangkok, Thailand Director of Chulalongkorn Minimally Invasive Surgery Center, Chulalongkorn University , Bangkok, Thailand Associate Professor of Surgery, Department of Surgery, Faculty of Medicine, Chulalongkorn University, Bangkok, Thailand   |
| EXPERTS  |
| Yolanda Agra Ministry of Health, Spain · General Direction of Public Health-Patient Safety Unit   |
| Marc G Besselink Professor of Pancreatic and Hepatobiliary Surgery at Amsterdam UMC, Cancer Center Amsterdam, University of Amsterdam, The Netherlands Chair of the Dutch Pancreatic Cancer Group's scientific committee   |
| Mark Callery Professor of Surgery, Harvard Medical School President - Society for Surgery of the Alimentary Tract Past-President - Americas Hepato-Pancreatop-Biliary Association   |
| Sean P Cleary Associate Professor of Surgery Chair, Division of Hepatobiliary and Pancreatic Surgery Vice Chair, Department of Surgery Mayo Clinic, Rochester Secretary of Americas Hepato-Pancreatico-Biliary Association President-Elect of the Canadian Association of General Surgeons    |
| Luis De La Cruz Director of Education, Department of Anesthesia, Baptist Hospital of Miami, Miami, FL, USA. Assistant Professor of Anesthesiology & Medicine, Herbert Wertheim College of Medicine, Florida International University, Miami, FL, USA.   |
| Philippe Eckert General Manager of the University Hospital CHUV, Lausanne, Switzerland   |
| Chad Evans Bachelor of Arts, Wake Forest University    |
| Daniel B Jones Professor of Surgery, Harvard Medical School Vice Chair, Surgery, Technology and Innovation Chief, Division of Bariatric and Minimally Invasive Surgery Co-Director, Carl J. Shapiro Simulation and Skills Center Past-President of the Society of American Gastrointestinal and Endoscopic Surgeons Past-President of the Association for Surgical Education   |
| Tong Joo Gan Professor and Chairman Department of Anesthesiology, Stony Brook University, New York, NY, USA. President, Perioperative Quality Initiative (POQI) Founding President, American Society for Enhanced Recovery (ASER)    |
| Daniel Koch Head of the Division Communicable Disease, Federal Office of Public Healths Swiss Federal Department of Home Affairs (FDHA), Bern, Switzerland   |
| Keith D Lillemoe Chief of the Department of Surgery at Massachusetts General Hospital and the W. Gerald Austen Professor of Surgery at Harvard Medical School   |
| Jeffrey Marks Professor of Surgery Director, Surgical Endoscopy University Hospitals Cleveland Medical Center Jeffrey L. Ponsky, M.D. Professor of Surgical Education Case Western Reserve University School of Medicine Past-President of the Society of American Gastrointestinal and Endoscopic Surgeons   |
| Brent Matthews Professor and Chair, Department of Surgery at Carolinas Medical Center Executive Committee of the Society of American Gastrointestinal and Endoscopic Surgeons Board of Directors for the Fellowship Council Surgeon-in-Chief, Atrium Health    |
| John Mellinger Board of Governors of the Society of American Gastrointestinal and Endoscopic Surgeons Director of the American Board of Surgery Director of the American Board of Family Medicine J. Roland Folse Endowed Chair in Surgery, Vice Chair of the Department of Surgery, and Professor and Chair of General Surgery at Southern Illinois University (SIU) School of Medicine Member of the Executive Committee of the Society of American Gastrointestinal and Endoscopic Surgeons   |
| W. Scott Melvin Vice Chairman for Clinical Surgery, Division Chief of General Surgery, Director of Advanced Gastrointestinal Surgery, Montefiore Medical Center, New York, NY, USA. Past-President of the Society of American Gastrointestinal and Endoscopic Surgeons   |
| Eduardo Moreno-Paquentin Medical Director - Líderes en Salud Académico de Número - Academia Mexicana de Cirugía Counselor at Consejo Mexicano de Cirugía General Executive Director of Federación Mexicana de Colegios de Especialistas en Cirugía Past-President of Asociación Mexicana de Cirugía General   |
| Claudio Navarrete Associate Professor of Surgery of University of Chile, Santiago, Chile. Past-President of the Chilean Society of Gastroenterology and Endoscopy. Chairman of Endoscopic unit Hosp San Borja Arriaran de Santiago, Chile. Chairman of Surgery, Clinica Santa Maria, Santiago, Chile. Honorary member of the American Gastrointestinal Endoscopy Society   |
| Timothy M Pawlik President of Americas Hepato-Pancreato-Biliary Association Past-President of the Association for Academic Surgery Chair of Surgery, Surgeon-in-Chief The Ohio State University Wexner Medical Center   |
| Patrick Pessaux Chief of the Department of Digestive Surgery Head of the Hepato-Biliary and Pancreatic Surgical Unit Deputy medical director of the IHU Institute of image-guided surgery of Strasbourg President of the Association Française de Chirurgie (AFC) (French Surgical Association)   |
| Walter Ricciardi Professor of Hygiene and Public Health, Università Cattolica del Sacro Cuore, Rome, Italy   |
| Steven Schwaitzberg Professor and Chairman of Surgery University of Buffalo Jacobs School of Medicine and Biomedical Sciences. Professor of Biomedical Informatics Director of Surgical Programming, Great Lakes Health President, University Surgeons Inc. Director, UB RIS²E² (Center for Research Innovation Structure Simulation Education Engineering) Past-President of the Society of American Gastrointestinal and Endoscopic Surgeons   |
| Paresh Shah Surgeon in Chief NYU Langone Health, New York, NY, USA. Director Division of General Surgery Professor and Vice Chair of Surgery NYU Grossman School of Medicine, New York, NY, USA. Board of Governors Society of American Gastrointestinal and Endoscopic Surgeons   |
| Joseph Szokol Harris Family Foundation Chair Chief Health Policy Officer at American Society of Anesthesiologists   |
| Mark Talamini Professor and Chairman of Surgery, Chief of Surgical services, Founding Director of Medical Innovation Institute, President of Stony Brook Surgical Associates, Co-Director of SOAR Collaborative Surgery Renaissance School of Medicine Past-President of the Society of American Gastrointestinal and Endoscopic Surgeons   |
| Ricardo Torres President of Asociación Latinoamericana de Cirugía Endoscópica Professor of Surgery, Northeast University Medical School, Corrientes, Argentina Chair of the Department of Surgery, Hospital Escuela José de San Martín, Corrientes, Argentina Director of CENCIL Laparoscopic Trainning Center, Northeast University Medical School, Correintes, Argentina Past-President Argentine Association of Surgery Past-President of the Latinamerica Association of Laparoscopic Surgery (ALACE)   |
| Alessandro Triboldi Chief Executive Officer/Operating Officer, Istituto Fondazione Poliambulanza, Brescia, Italy   |
| Federica Valsecchi President of Fondazione Nadia Valsecchi Onlus   |
| Jean-Nicolas Vauthey Professor of Surgery and Chief, Hepato-Pancreato-Biliary Section Dallas/Fort Worth Living Legend Chair for Cancer Research The University of Texas MD Anderson Cancer Center President-elect of the Society for Surgery of the Alimentary Tract Past-President of Americas Hepato-Pancreato-Biliary Association   |
| Michael Wallace Professor of Medicine Mayo Clinic Jacksonville, Florida, USA.   |
| Steven D Wexner Director, Digestive Disease Center; Chair, Department of Colorectal Surgery, Cleveland Clinic, FL USA. Clinical Professor of Surgery Cleveland Clinic Lerner College of Medicine of Case Western Reserve University, FL, USA. Clinical Affiliate Professor of Surgery Charles E. Schmidt College of Medicine, Florida Atlantic University, FL, USA. Clinical Professor Herbert Wertheim College of Medicine, Florida International University, FL, USA. Professor of Surgery Ohio State University Wexner College of Medicine, OH, USA. Affiliate Professor Department of Surgery University of South Florida Morsani College of Medicine, FL, USA. Honorary Professor Division of Surgery and Interventional Science, Department of Targeted Intervention, University College London, London, UK. Past-President of the Society of American Gastrointestinal and Endoscopic Surgeons.   |
| Michael Zinner CEO and Executive Medical Director of Miami Cancer Institute at Baptist Health South Florida Past-Chair of the Board of Regents of the American College of Surgeons   |