The IASGO Textbook of Multi-Disciplinary Management to Upper Gastrointestinal Diseases

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Editors

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Foreword

Gastric cancer remains the fifth most commonly diagnosed and the fifth most frequent cause of cancer-related death per the GLOBOCAN 2022 report. Although complete local resection by surgery or endoscopy has been the mainstay of treatment for potentially curable gastric cancer, multidisciplinary treatment has significantly improved the outcome of treatments, together with the development of new chemotherapeutic or molecular targeting drugs and immune checkpoint inhibitors. In my career as a surgeon, I was fortunate to have contributed to the globalization of oncological surgery for gastric cancer, performing gastric cancer surgery in 18 countries to teach how to carry out radical resection with regional lymph node dissection, so-called D2 surgery. It is not merely a coincidence that I have shared the mission of the International Association of Surgeons, Gastroenterologists, and Oncologists (IASGO)—the globalization of the best medical knowledge. Through my experience in conducting numerous multicenter clinical trials on surgical and adjuvant/neo-adjuvant treatments for gastric cancer, I am now convinced that multidisciplinary approaches are essential for the treatment of upper gastrointestinal diseases, except for stage 1, and thus agree with the philosophy of IASGO. Therefore, it is with great pleasure and honor that I write this Foreword to *The IASGO Textbook of Multi-Disciplinary Management of Upper Gastrointestinal Diseases*.

Edited by Professors Ming-Tsan Lin, Giovanni De Manzoni, Kazutaka Obama, Ali Guner, Kyoichi Takaori, and Dan G. Duda, this first edition of the IASGO Textbook focuses well on the multidisciplinary approaches to the treatment of upper gastrointestinal diseases. The textbook offers an outstanding overview of current approaches and future directions with worldwide outreach.

I am sure that, beyond its educational value, this textbook will certainly inspire the new generation of surgeons and other medical professionals involved in the multidisciplinary treatment of upper gastrointestinal diseases.

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Preface

The IASGO Textbook of Multi-Disciplinary Management of Upper Gastrointestinal Diseases is a landmark contribution to the global field of health science and the art of treatment, providing a detailed and comprehensive approach to upper gastrointestinal (UGI) diseases. Unlike previous textbooks, which often focus on a single organ or discipline, this volume offers an integrative perspective, addressing the esophagus, stomach, and small intestine from both surgical and medical viewpoints, spanning gastroenterology, surgery, oncology, pathology, radiology, and nutrition.

This important project was initiated and strongly supported by Professors Takaori and Duda, Secretary General of IASGO, since the world congress of the IASGO in Taipei in 2021. It was made possible through the unwavering support and collaboration of the IASGO leadership. It is my honor to extend my deepest gratitude to Professors Dan G. Duda, Ali Guner, Giovanni De Manzoni, Kazutaka Obama, and Kyoichi Takaori, the world-renowned leaders in the field, who serve as Editors and cooperated closely with me, providing visionary leadership and expert guidance throughout the planning and execution of this textbook. Our combined efforts have ensured that this volume represents the highest standard of international knowledge on UGI diseases.

A key feature of this textbook is the wide range of expertise from distinguished contributors across the globe, representing countries such as Thailand, Japan, the United States, Italy, Turkey, South Korea, Brazil, and Taiwan. This diversity of perspectives highlights the differences in approaches to UGI diseases worldwide. The varied cultural, social, and economic contexts shape patient outcomes and treatment methodologies, offering readers a valuable comparative analysis.

In keeping with the mission of IASGO, this volume covers all aspects of UGI diseases in a multidisciplinary fashion. It incorporates the latest advances in perioperative strategies such as Enhanced Recovery After Surgery (ERAS) protocols, nutrition optimization, minimally invasive techniques, and emerging technologies such as AI and telecare in UGI diseases. This project reflects IASGO's unique position as a bridge between the East and West and the socioeconomic status of developed and developing nations. It offers a holistic view transcending geographical and disciplinary boundaries, making it an indispensable resource for healthcare professionals worldwide.

Special thanks are also owed to Associate Editor Dr. Po-Jen Yang, whose tireless dedication and coordination were instrumental in bringing this project to fruition. His efforts, along with the contributions from Dr. Ching-Yao Yang, Ting-Chun Kuo, and our team from Taiwan, ensured the completion of this authoritative text. Through hundreds of online/in-person editorial meetings and e-mail discussions, the collective expertise and collaboration of these individuals have made this world-class textbook a reality.

Last but not least, I am confident that *The IASGO Textbook of Multi-Disciplinary Management of Upper Gastrointestinal Diseases* will not only contribute to academic knowledge but also lead to better patient outcomes all around the world.

Taipei, Taiwan — Ming-Tsan Lin, MD, PhD, EMBA, FASGO

Introduction

To address the complexity and difficulty in treating upper gastrointestinal diseases, surgeons, gastroenterologists, and oncologists have made great efforts to improve the management of the diseases in the esophagus, stomach, and small intestine for decades. Despite these efforts, management and treatment of these diseases have remained challenging for medical professionals and are a largely unmet medical need. Treating diseases in the upper gastrointestinal tract is particularly difficult due to the complex anatomy, aggressive biological behavior, and poor prognosis. What is worse, the incidence of these cancers is increasing worldwide at alarming rates.

We think that the key to success in this ongoing crusade is a multidisciplinary approach to the treatment that needs to be implemented worldwide. IASGO was founded on this principle by the late Professor Nikolaos Lygidakis and his colleagues more than 30 years ago. In keeping with this vision, we have been organizing, apart from Annual World Congresses, a number of Advanced Post-Graduate Training Courses all over the world. The main characteristics of this program are its multidisciplinary structure and global reach. These events are always organized in close cooperation with national academic centers or local governmental authorities, aiming to provide the latest updates to as many specialists as possible in the fields of surgery, gastroenterology, oncology, radiology, interventional radiology, endoscopy, pathology, and tumor biology.

We have edited this first edition of *The IASGO Textbook of Multi-Disciplinary Management of Upper Gastrointestinal Diseases* with this mission in mind. Edited by Drs. Ming-Tsan Lin, Giovanni De Manzoni, Kazutaka Obama, Ali Guner, Kyoichi Takaori, and Dan G. Duda, the textbook includes 53 chapters from a distinguished group of experts in all specialties relevant to managing upper gastrointestinal diseases. We are fortunate to have these leading experts as participants in this exciting IASGO project.

We would like to extend our gratitude to the team of Professor Ming-Tsan Lin, and in particular to Dr. Po-Jen Yang, whose efforts have been essential for the development of this project and the publication of this IASGO textbook. Last but not least, we would like to dedicate this textbook to all of our colleagues and patients around the globe.

IASGO
Kyoto, Japan

Dr. Kyoichi Takaori, MD, PhD
Dan G. Duda, DMD, PhD

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Editors

Ming-Tsan Lin is Professor and Chief of General Surgery in the Department of Surgery at National Taiwan University Hospital, Taiwan. He is also the president of the Taiwan Society of Surgical Metabolism and Nutrition, and an emeritus president of the Taiwan Surgical Society of Gastroenterology, and founder and emeritus president of Taiwan Medical Altruistic Society. He is an expert in gastrointestinal surgery, minimally invasive surgery, surgical metabolism and nutrition, and hospital administration.

Giovanni De Manzoni is Professor of Surgery at Verona University and the director of the upper gastrointestinal surgery unit at Verona University Hospital, Italy. He is the founding member of the Italian Research Group for Gastric Cancer (GIRCG) under which he has coordinated numerous research projects on the surgical and multimodal treatment of gastric cancer. He was the president of the International Gastric Cancer Association (IGCA) and works as an editor-in-chief of the *Gastric Cancer* journal.

Kazutaka Obama is a professor in the Department of Surgery, Kyoto University Graduate School of Medicine, Japan. He is an expert in minimally invasive upper gastrointestinal surgery, with a specialization in robotic gastrectomy. Currently, he is involved in conducting domestic and international multicenter clinical studies, researching novel treatments for gastric and colorectal cancers, and developing an integrated surgical education system for robotic surgery. He has published several articles on the advancement of gastrointestinal surgical research in peer-reviewed national and international journals.

Ali Guner is Professor of Surgery at Karadeniz Technical University, Turkey, where he leads the upper gastrointestinal surgery unit. With a PhD in Biostatistics and Medical Informatics, he brings a unique blend of surgical expertise and data analysis skills to his work. His research interests span a wide range of gastric cancer treatment, quality improvement in healthcare, patient safety protocols, advanced biostatistics, and artificial intelligence applications in medicine. He has authored numerous articles in peer-reviewed national and international journals, focusing on gastric cancer and innovative surgical approaches.

Dr. Kyoichi Takaori is the chief executive officer (CEO) of Nagahama City Hospital Enterprise and Professor at Asahi University, Japan. He has made significant contributions to developing surgical techniques for pancreatic and upper gastrointestinal diseases through open, laparoscopic, and robotic approaches. Currently, he is the Secretary General and Representative Director of the International Association of Surgeons, Gastroenterologists and Oncologists (IASGO) and Secretary and Representative of the Council of the International Association of Pancreatology (IAP).

Dan G. Duda, DMD, PhD is Professor of Cancer Biology in Surgery at Houston Methodist Academic Institute and Weill Cornell College of Medicine. He is also Scientific Director of the Transplant Oncology and Therapeutics Program at Houston Methodist, Houston, USA. His research focuses on the tumor microenvironment and therapeutic resistance in gastrointestinal malignancies, with particular emphasis on translational strategies integrating systemic therapy, immunotherapy, radiation and locoregional therapies, and surgery. He previously served as Professor at Harvard Medical School and an investigator at Massachusetts General Hospital, where he directed translational research in gastrointestinal radiation oncology. He serves as Secretary General of the International Association of Surgeons, Gastroenterologists and Oncologists (IASGO).

Associate Editor

Po-Jen Yang is Clinical Associate Professor of Surgery at National Taiwan University and Director of the Center for Obesity, Lifestyle, and Metabolic Surgery at National Taiwan University Hospital, Taiwan. He also serves as Chief of the Division of Metabolic, Bariatric, and Body Intervention. His clinical and research interests focus on metabolic and bariatric surgery, obesity, and related metabolic disorders, integrating clinical studies with experimental animal models. He received his PhD for research in obesity and bariatric surgery and subsequently served as a postdoctoral fellow at Massachusetts General Hospital and Harvard Medical School, USA.