There is no exact date or specific event that marks the birth of thoracic surgery. However, after Warren publicly demonstrated ether anesthesia in 1846, physicians in many countries began to explore the possible application of surgical techniques to relieve thorax diseases. In the 20th century, thoracic surgery techniques gradually matured. The goal of surgeons and patients in the 21st century is faster postoperative patient recovery and better postoperative quality of life. Over the past 23 years, modern medicine has proposed enhanced recovery after surgery (ERAS) and Precision Medicine plans to achieve this goal. Tubeless video-assisted thoracic surgery (VATS) techniques have also emerged as a result.

VATS began 29 (1994) years ago with laparoscopic surgery, the first technique used as an alternative option to thoracotomy, followed by the development and now worldwide implementation. The tubeless technique is an attempt to re-evaluate the need for each tube in a patient. It is explicitly designed based on their characteristics and the required surgical approach. The ultimate tubeless is a non-intubation surgery without a tracheal intubation catheter, urinary catheter, gastric tube, or chest drain. The combination of tubeless technique and thoracoscopy has made minimally invasive surgery simple to simplest, enabling immediate patient ambulation and oral intake post-operatively and patient discharge within 24 hours.

Compared to traditional VATS, the tubeless VATS can improve the patient's recovery experience during the perioperative period, reduce the incidence of cardiovascular, pulmonary, cerebral, hepatic, and renal complications caused by postoperative thrombosis and infection, lower the perioperative mortality rate, reduce hospitalization days and anesthesia costs, allowing patients to receive thoracic surgical treatment more safely and economically. However, the tubeless VATS will not benefit all patients, and the indications and contraindications for each tube in each field still require extensive investigation.

This book is a collection of papers recently published by experts in this field working in renowned centers all over the world, which provides a comprehensive review of the use of this technology in the treatment of thoracic surgical diseases, covering three main areas: consensus, anesthesia support, and current status of applications. In this way, readers gain a complete scenario of the current state of tubeless VATS, and this textbook will undoubtedly represent a valuable resource not only to thoracic surgeons but also to anesthesiologists and all allied healthcare professionals. Moreover, senior surgeons may also have an excellent opportunity to go deep into tubeless VATS, profitably comparing their clinical practice with the reported experiences of the most relevant experts in this field. Of particular importance, this is the era of Precise Medicine and ERAS; therefore, we should sometimes consider the tubeless VATS. It's my honor and pleasure to provide the preface to this textbook, and we hope to see the tubeless VATS adopted in more centers and specialties worldwide.

Mahmoud Ismail, MD
Department of Thoracic Surgery, Klinikum Ernst von Bergmann,
HMU – Health and Medical University,
Potsdam, Germany