

The world in the early 1990s was a very different place. Phones tended to be connected to the wall, and encouraged people to talk instead of making conversation redundant. A computer network that connected the entire globe was the stuff of science-fiction movie nightmares starring a former Austrian body-builder. Cardiac surgeons still had a comfortable near-monopoly on coronary therapy, untroubled by cardiologists waving catheters.

This was the world into which Video-Assisted Thoracic Surgery (VATS) was born.

When VATS – and especially VATS for major lung resection – was first pioneered, it immediately came under incredible resistance and even outright hostility. The thoracic surgery ‘establishment’ was largely content with the open thoracotomy, and conservative voices threw scepticism, scorn and scolding at the new kid on the block. In lieu of any good clinical evidence on either side, the debate nonetheless was vociferous and vicious. As the dust settled, VATS gradually gained a toehold in the specialty, and was grudgingly acknowledged as an ‘alternative’ approach but only for ‘selected’ patients and conditions.

In the quarter of a century since the painful birth of this approach, VATS has soared to previously unimaginable heights. VATS has arguably revolutionized thoracic surgery more than any other minimally invasive approach in any other surgical specialty. Thanks to the intrepid work of the VATS pioneers, a considerable body of clinical data has been accumulated illustrating the safety, versatility and advantages of this minimal access approach. Today, VATS has completely shed its previous identity as an ‘alternative’, and is now entrenched firmly as the mainstream strategy for almost every conceivable operation in the human chest. Moreover, official guidelines have increasingly recommended VATS as the *preferred* option for most operations, including curative resection for lung cancer.

In this era, when patients have virtually limitless access to the latest medical information in the palm of their hands, the appreciation and demand for VATS is ubiquitous. The public and their physicians are becoming increasingly aware that a minimally invasive surgical approach is not just a matter of feeling less pain or going home sooner: it may have potentially significant benefits for their treatment outcomes. VATS today is therefore no longer a ‘luxury’ for the practicing thoracic surgeon, but an essential element of his/her operative repertoire.

This book collects some of the finest articles on the state-of-the-art in VATS. The authors are a virtual who’s who in thoracoscopic surgery: experts from around the globe who are not only experienced masters in the operating room, but also amongst the finest teachers and advocates of the technique. The articles span everything from the theory and basic principles, through the technical details of each procedure, to the tips and tricks that will help in troubleshooting with difficult cases.

A special feature of this book is the attention paid to the emerging trends in minimally invasive surgery: sublobar resection, robot-assisted surgery, Uniportal surgery, novel anesthetic approaches, and so on. Regardless of the huge strides VATS has made over the last 20-odd years, thoracic surgery remains challenged by advances in other fields of chest medicine (including stereotactic body radiation therapy and many other disruptive technologies). The perspectives provided in this book on some of the evolving directions in VATS may prove highly significant in determining the future of our specialty.

It is the aim of this book to ultimately provide the reader with an authoritative, up-to-date, and comprehensive reference to this core component of modern thoracic surgery. For the beginner, this should be the ideal place to learn the fundamentals of the technique. For the experienced surgeon, this will serve as clinical companion and benchmark for the approach. It is sincerely hoped that whoever reads this book will continue the practice and development of VATS, and further the remarkable success story well into the future!

**Jianxing He**

Department of Thoracic Surgery, Guangzhou Medical University First Affiliated Hospital, Guangzhou 510120, China;  
Guangzhou Institute of Respiratory Disease, Guangzhou 510120, China;  
Key site of National Clinical Research Center for Respiratory Diseases, Guangzhou 510120, China

**Alan D. L. Sihoe**

Division of Cardiothoracic Surgery, Department of Surgery, The Li Ka Shing Faculty of Medicine,  
The University of Hong Kong, Queen Mary Hospital, Hong Kong 999077, China