

Enhanced Recovery After Surgery (ERAS) is a multimodal plan of care based on the application of multiple standardized evidence-based elements with the aim to improve the perioperative patient experience and surgical outcomes. These standardized elements cover all perioperative temporal domains: preoperative, intraoperative and postoperative. ERAS is founded on the concept of “marginal gains”, which is well known in sport. When applied in isolation the individual elements may not have the same positive effects on outcome compared to when they are applied together. Individual elements of the different perioperative phases act synergistically.

Although the concept of ERAS has been popularized in other specialties, particularly colorectal surgery, thoracic surgeons are very familiar with the elements of ERAS, even though in the past these were not badged as such. Certain practices, such as fluid balance, pain management, early mobilization, postoperative rehabilitation are in use in most of the thoracic surgery centers since decades. Nevertheless, the literature on ERAS in our specialty is not as abundant as in other surgical specialties. Only few studies have tried to analyze the effect of a standardized bundled perioperative practice on the outcome after lung surgery. These studies were inconsistent in the elements used to define a fast track protocol and their findings were also inconsistent. In general, the application of standardized elements of care contributed to reduce hospital stay. However, inconsistent findings were reported in terms of morbidity, mortality and re-admission rates.

In all specialties, minimally invasive surgery represents the most important element in an ERAS program. Yet until recently most of the studies in thoracic surgery failed to include patients submitted to video-assisted thoracoscopic surgery (VATS), mostly because they were conducted prior to the widespread use of this approach.

Only in the last few years, ERAS has been more intensively studied in our field. This book represents a collection of the most recent contributions published in AME journals on this subject.

The articles are ordered in thematic sections focusing on the generality of ERAS, and dealing in more details its different elements (preoperative optimization, nursing care, anesthesia and analgesia, early ambulation, psychological resilience, physiotherapy) and findings in specific type of surgery such as pulmonary surgery and esophagectomy.

This book will certainly represent a valuable resource not only to thoracic surgeons, but also to all allied healthcare professionals collaborating with thoracic surgeons in organizing, implementing and delivering ERAS to our patients. Hopefully this text may serve as a benchmark to future studies and analyses shifting the focus from traditional short-term outcomes to longitudinal patient centric outcomes such as cancer specific survival and quality of life in relation to overall costs of healthcare.



**Alessandro Brunelli, MD**  
Department of Thoracic Surgery,  
St. James's University Hospital,  
Leeds, UK