

This book addresses the role of radiotherapy in non-small-cell lung cancer (NSCLC) in the late 2010's. Is radiation oncology, a valiant hundred years old discipline, still a key-player in the management of NSCLC ? Radiotherapy in NSCLC has a long history, and its importance has been demonstrated by a large number of level I evidence-based studies on radiotherapy alone or combined with surgery and/or chemotherapy over the past four or five decades. However on the one hand, due in part to the slow overall survival improvement, and on the other hand due to the rapid progress in other disciplines, in the first place surgery and medical oncology, the role of radiotherapy in many situations has been recently challenged, and sometimes negated by well-intended experts in NSCLC. In spite of the remarkable discoveries in basic molecular mechanisms, leading to novel individualized therapies in metastatic disease, in spite of the growing knowledge in immune response, and in spite of superb developments in minimally invasive surgery, it would be a tragic mistake to ignore the extraordinary developments of radiotherapy in NSCLC. Indeed, radiotherapy continues to be a major actor at nearly all stages of NSCLC, from curative to palliative treatments. It would be also a great mistake to envisage all the recent progress in surgery, radiation oncology and medical oncology separately, since many of the major advances in the management of NSCLC at any stage in the past decades came from a multidisciplinary approach, with treatment decisions taken by all partners before any therapeutic action. Only then, the best of all disciplines can be offered to individual NSCLC patients, using optimal choices, combinations and sequencing while minimizing the risk of toxicity. Given the high-speed developments of the above-mentioned oncological fields, it is increasingly important that all specialists have a solid knowledge of their partners' disciplines, as the integration of innovations in surgery, radiation therapy and systemic treatments may be very complex, and sometimes confrontational. This is why the publication of this book *Radiation and Combined Therapies for Lung Cancer* is particularly timely and takes up this very difficult challenge. It contains 27 well-balanced and comprehensive chapters gathered together in 6 sections on radiotherapy techniques, combinations of radiotherapy and chemotherapy, radiotherapy and immunotherapy, radiotherapy and targeted therapies, radiotherapy and surgery, and sequencing of radiotherapy and chemotherapy in combination with surgery. These excellent chapters were written by a panel of international experts from North America, Europe and Asia, and will present the most recent advances in radiation oncology and its combination with other disciplines, intended not only for radiation oncologists, but also for all their partners involved in the management of NSCLC.

**René-Olivier Mirimanoff, MD**  
*Professor Emeritus, Radiation Oncology,  
Faculty of Biology and Medicine,  
University Hospital (CHUV),  
University of Lausanne,  
Lausanne, Switzerland  
(Email : rene-olivier.mirimanoff@chuv.ch)*