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Thoracic Malignancies

Edited by

S.G. Spiro, R.M. Huber and S.M. Janes



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Thoracic Malignancies

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Editor in Chief
K. Larsson

This book is one in a series of European Respiratory Monographs. Each individual issue provides a comprehensive overview of one specific clinical area of respiratory health, communicating information about the most advanced techniques and systems needed to investigate it. It provides factual and useful scientific detail, drawing on specific case studies and looking into the diagnosis and management of individual patients. Previously published titles in this series are listed at the back of this book with details of how they can be purchased.

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The Guest Editors



S.G. Spiro



R.M. Huber



S.M. Janes

S.G. Spiro was Head of the Dept of Thoracic Medicine at University College London Hospitals (London, UK) until December 2008; from 2001–2002 he was Medical Director. During 1996–1997 he was the President of the European Respiratory Society (ERS), and served as a member of the *European Respiratory Journal* Editorial Board for many years. He is also a former editor of *Thorax* and was Chair of the Royal College of Physicians Subcommittee on Respiratory Medicine (1997–2001). In 2004 he was President of the British Thoracic Society. His major interests include clinical trials in lung cancer and he was Co-Chair of the London Lung Cancer Group, a national clinical trials group in the UK. He also participates on other international bodies concerned with the treatment of lung cancer. His other research interests include respiratory physiology and sleep-disordered breathing.

R.M. Huber is Professor of Medicine at the Medical School at the Ludwig Maximilian University of Munich, and Head of the Division of Respiratory Medicine at the University Hospital of Munich, (Munich, Germany). He is also Chair of Thoracic Oncology section of the Cancer Centre of Munich. His research is focused on local endoscopic therapy, detection and treatment of early lung cancer, reactions of the bronchial wall (organ cultures, co-cultures and lung slices) and radiochemotherapy of locally advanced cancer, as well as integration of new systemic therapies in the management of lung cancer. He is the principal investigator of several multicenter studies on the treatment of lung cancer. R.M. Huber is Head of the ERS Thoracic Oncology Assembly and a member of the Arbeitsgemeinschaft Internistische Onkologie of the German Cancer Society. He was a board member of the Deutsche Gesellschaft für Pneumologie and co-chair of its Thoracic Oncology section. He is also the Secretary of the Süddeutsche Gesellschaft für Pneumologie. He has been, and is currently, a member of several national and international Task Forces covering all aspects of respiratory medicine.

S.M. Janes is a Consultant in respiratory and general medicine at University College London Hospitals. In 2006, he co-organised the British Association for Lung Research meeting on Stem Cells. He also co-organised the 2009 ERS Lung Science Conference in Estoril, Portugal. He was Guest Editor for a review issue of *International Journal of Biochemistry & Cell Biology* on respiratory epithelial biology. S.M. Janes is also Chair of the Lung Head and Neck and Neurology group, which is currently planning a new cancer centre. He is currently running the BOOST trial (a new pathway with Bronchoscopic or Oesophageal ultrasound for lung cancer diagnosis and STaging), which is run by a Medical Research Council Clinical Training Fellow. He is also co-principle investigator of the lung-SEARCH trial: a randomised controlled trial of surveillance for early lung cancer in a high-risk group.

Preface

In 1995, the very first issue of the *European Respiratory Monograph (ERM)* was published, an issue that was dedicated to carcinoma of the lung. Six years later, in 2001, the topic was again in focus and a new *ERM* on lung cancer appeared. Now it is time for the third *ERM* on the subject, this time with the title *Thoracic Malignancies*. As in the two former issues, S.G. Spiro is the Guest Editor, this time together with R.M. Huber and S.M. Janes. Within less than 15 years lung cancer is estimated to be the fifth most common cause of death in the world. This makes the subject of certain importance and, as there has been significant progress as regards diagnosis and treatment of malignant thoracic conditions, there are good reasons for continuous updates.

It is therefore a pleasure to introduce a new and extended *ERM* covering most types of thoracic malignancies. In this issue, a chapter on pre-malignant diseases of the lung has been added, as have three chapters on epidemiology, diagnosis, staging and treatment of mesothelioma. A chapter on functional evaluation for treatment will most likely be useful and much appreciated by physicians who are actively involved in pre-operative evaluation of patients with thoracic malignancies. Adjuvant therapy and novel techniques regarding endobronchial diagnosing and management of neoplasms have been addressed and new achievements in lung cancer biology are presented. I am convinced that this third *ERM* on thoracic malignancies will supply a felt demand and that it will be very useful for a great number of physicians working in the field.

**Editor in Chief,
K. Larsson**

INTRODUCTION

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This is the third *European Respiratory Monograph (ERM)* on lung cancer. The first in 1990 and the second in 2001 concentrated on just lung cancer; however, the current *ERM* now includes mesothelioma, which is reaching the peak of its epidemic within Europe. The *ERM* has been significantly updated from previous issues with a wide variety of contributors who have generously submitted cutting-edge research. This *ERM* is both scientific and educational, and provides readers with an updated and comprehensive educational tool to use in everyday clinical practice.

Lung cancer remains an alarming disease with high mortality and social cost. In Europe it remains the most common killing cancer in both males and females. Over the last 30 yrs there has been little improvement in the survival of lung cancer patients and its management remains a major challenge for respiratory physicians, surgeons and oncologists. However, since 2001, huge steps have been made in understanding the biology of lung cancer, as well as great improvements in diagnostic staging and the introduction to the therapeutic armory of new molecularly targeted therapies. Indeed, comparing the last *ERM* on lung cancer to the current *ERM*, it is surprising how much more is known and how clinical practice has altered in the last 8 yrs.

Thus, while the disease remains unconquered we hope this issue of the *ERM* illustrates that there have been major advances over the last 8 yrs which we will continue to build upon.

We hope this issue of the *ERM* is of interest to all our colleagues and helps to improve the understanding of this most serious of all cancers.