Lung Cancer. Volume II: Diagnostic and Therapeutic Methods and Reviews
B. Driscoll (ed). Methods in Molecular Medicine, 74–75. Humana Press, Totowa, NJ, 2003, 790 pp, $155.00, £95.00, US$149.50

“This book is intended to serve as a resource for researchers wishing to increase knowledge of current and cutting edge technologies, in order that their investigations into neoplasms of the lung may benefit from this enriched diversity of techniques and approaches.”

It is a comprehensive review of molecular biology (part 1), detection of altered tumor markers in clinical samples for diagnosis and prognosis (part 2) and novel therapies (part 3). More than 400 pages are devoted to different methods for molecular, genetic and immunohistochemical marker analyses. The chapters are well written and include theoretical background, currently available data and practical procedures for study protocols. These chapters are informative and give good practical guidelines for laboratory researchers. The markers chosen are, in general, relevant. However, rapid developments in biotechnology have been experienced within the last few years and some newer techniques are not included, such as DNA methylation assays (for sputum, blood and histology) and the use of tissue microarrays for immunohistochemical marker studies. Nevertheless, gene microarray and PCR techniques are well described.

The last section of the book is devoted to ‘novel therapies’, including surgery, radiotherapy, photodynamic therapy, gene therapy, antisense therapy, immunotherapy and chemoprevention. It is the reviewer’s opinion that too much space is devoted to classical surgery and immunotherapy. Significantly less space has been assigned to combined treatment modalities. Interesting chapters describe the details of the oligonucleotide antisense technique as a therapeutic approach (and preliminary clinical data in lung cancer are interesting). Hopefully, a future edition will include more chapters on other molecular targeted therapeutic possibilities, such as EGFR (epidermal growth factor receptor) inhibitors, antiangiogenic agents, etc., and combinations of targeted therapies with chemotherapy and radiotherapy. These therapeutic aspects are missing in the current edition.

The strongest part of the book is the detailed description of the different molecular laboratory techniques for marker analyses, which will be of great value for the lung cancer scientists working in basic science and translational lung cancer research.

Despite a thorough description of several novel therapeutic approaches (especially gene therapy and antisense techniques), such detail on the many molecular targeted therapeutic possibilities is missing, as are descriptions of new diagnostic techniques, such as positron emission tomography (PET) scanning, low-dose helical computed tomography, fluorescence bronchoscopy and endoscopic ultrasonography. However, overall, the book is very informative in many areas and deserves a place on the bookshelves, especially in laboratories dealing with lung cancer research.

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