

Principles & Practice of Lung Cancer, 4th edition. Harvey I Pass MD, David P Carbone MD PhD, David H Johnson MD, John D Minna MD, Giorgio V Scagliotti MD, and Andrew T Turrisi III MD, editors. Philadelphia: Wolters Kluwer/Lippincott, Williams & Wilkins. 2010. Hard cover, 1,040 pages, \$199.

The last few years have been an exciting time in the field of lung cancer. The International Staging System for lung cancer was revised in 2009. Advances in bronchoscopic technology, including endobronchial ultrasound and navigation bronchoscopy, have greatly facilitated the diagnosis and staging of lung cancer. Minimally invasive surgical techniques, such as video-assisted thoracoscopic surgery lobectomy, are becoming more widely used. For patients who are medically inoperable, stereotactic radiation therapy and radiofrequency ablation have become viable options. Newer chemotherapies such as the epidermal growth factor receptor tyrosine kinase inhibitors are now available, and other small-molecule kinase inhibitors are in development and being studied in clinical trials. And the preliminary results of the National Lung Screening Trial were recently released and indicated 20% fewer lung cancers deaths among patients screened with low-dose spiral computed tomography than among those screened with standard chest radiograph.

The release of **Principles and Practice of Lung Cancer**, 4th edition, is thus timely as an updated reference text for practitioners taking care of patients with lung cancer. The editors and chapter authors represent multiple nationalities, as is befitting in that it is the official reference text of the International Association for the Study of Lung Cancer. The authors are well recognized leaders in the various fields of care included in this text.

The 67 chapters are grouped into 13 sections. Section 1 covers the epidemiology and genetics of lung cancer, with an interesting chapter on the tobacco epidemic. Section 2 provides an overview of lung cancer biology. Lung cancer screening, early detection, and chemoprevention are covered in Section 3, which has an excellent chapter on computed tomography screening for lung cancer, and a chapter outlining experiences from the randomized Dutch-Belgian lung cancer screening trial. The preliminary results from the National Lung Screening Trial came out after this textbook, and so are not

included. Section 4 discusses the cellular and molecular pathology of lung cancer and mesothelioma.

The clinical presentation, diagnosis, and staging of lung cancer are provided in Section 5. The chapter on conventional imaging of non-small-cell lung cancer is excellent and provides many high-quality figures. The chapter on positron emission tomography is a little short but is also quite good. I would have liked to see more information on bronchoscopy in the chapter on diagnosis and evaluation of lung cancer. The International Staging System for lung cancer is presented in Chapter 30, with good discussion of the recent 7th edition changes to the tumor/nodes/metastases classification schema. Section 5 has a nice review of sex-related differences in lung cancer.

Treatment of lung cancer is covered in the next several sections. Section 6 addresses surgical management of lung cancer, including minimally invasive surgical techniques in addition to standard chapters on surgery for stage I and stage II cancers, surgical management of second primary tumors, and surgery for lung cancer with vertebral body involvement, brain metastasis, and adrenal metastasis. The chapter on percutaneous therapeutic technologies for medically inoperable patients nicely outlines these new therapies, although the reference list will need to be updated with a literature search, given the time delay for textbook publication. The chapter on complications of surgery for lung cancer is an excellent review for the non-thoracic surgeon.

Section 7 covers radiation therapy, including stereotactic radiation techniques, which have substantial advantages over conventional radiotherapy in patients for whom surgery is not an option, and contains an extensive chapter on radiation treatment-related lung damage. Section 8 contains chapters on chemotherapy for lung cancer. An excellent overview of standard chemotherapy regimens is provided in two chapters. The five chapters in Section 9 discuss the role of the newer chemotherapeutics, including epidermal-growth-factor-receptor-targeted agents, anti-angiogenic agents, and other signal-transduction agents, and the status of lung cancer vaccines. Given the time delay inherent to textbook publication, these chapters are reasonably to date. Section 10 deals with adjuvant and neoadjuvant approaches for non-small-cell lung cancer. The chapter on preoperative chemoradiotherapy for early stage and locally advanced non-

small-cell lung cancer provides a balanced overview of the controversial nature of this topic and the available data on which to form one's own opinion. Treatment of small-cell lung cancer is covered in Section 11.

Section 12 provides an overview of treatment of lung cancer emergencies. As a pulmonologist, I would have liked to see more information on bronchoscopic ablative therapies and stenting in Chapter 12, as I think that increased awareness by oncologists and radiation oncologists of those palliation modalities would be of benefit. The chapter on management of malignant pleural effusions is quite good. Treatment of brain metastases and spinal cord compression is also covered, although other issues such as superior vena cava obstruction are not.

This edition includes expanded coverage of some non-pulmonary thoracic malignancies, including thymoma and thymic carcinoma, malignant mesothelioma, mediastinal tumors, and carcinoid tumors. The chapter on mediastinal tumors could have been expanded somewhat.

In general, the reference lists in most of the chapters are relatively complete. There is excellent use of figures and tables within the text. The color plates in the chapters on pathology, imaging, and radiation therapy are of good quality, although could be somewhat larger. The textbook comes with access to a Web site that includes the full text on-line, and an image bank. Many of the figures can be downloaded as PDF and JPEG files, which is handy for preparing presentations.

In summary, **Principles and Practice of Lung Cancer**, fourth edition, is an excellent textbook. Being the official textbook of the International Association for the Study of Lung Cancer is certainly justified, as I would consider this the most complete reference text on lung cancer at this time. I highly recommend it for oncologists, radiation oncologists, thoracic surgeons, pulmonologists, and other practitioners who care for patients with lung cancer.

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