Preface

I am delighted to write the preface for the second edition of *Lung Cancer*; this textbook has been made possible by the hard work and commitment of Drs. Nanshan Zhong, Rafael Rosell, Heather Wakelee, Jianxing He, Thomas A. D'Amico, and Xiuyi Zhi. The release of this book is timely as we step into a new decade which brings hope and exciting possibilities in improving the lives of patients with lung cancer. The past two decades have seen incredible advances in the diagnosis and management of lung cancer; we have finally moved away from an era of nihilism. Patients diagnosed with lung cancer are living longer without compromise in quality of life. We can take heart from the fact that our understanding of lung cancer biology has yielded novel therapeutic options. However, much work remains to be done as lung cancer continues to be a major global threat to human health and claims approximately 1.8 million lives each year. Our efforts to achieve tobacco control have yielded modest results in some parts of the world, while other regions have witnessed a continued increase in cigarette smoking. The use of electronic nicotine delivery systems is gaining widespread adoption despite relatively limited knowledge on the long-term health consequences. Therefore, we cannot lose momentum in our fight against lung cancer; there is a continued need to educate ourselves and also to train the next generation of researchers and physicians. This textbook will be instrumental to meet these ends.

Lung Cancer provides comprehensive overview of several important topics related to lung cancer including epidemiology, early detection, and treatment. The fact that the articles are written by top-notch experts in the field will provide the readers with the latest knowledge combined with the experience of the authors. The chapters on lung cancer screening provide an excellent summary of data that support CT screening and guidance of management of pulmonary nodules; emerging technology to improve the predictive accuracy of imaging modalities, such as radiomics, will be of particular interest to researchers and physicians alike. The extensive set of discussions on advances in surgical approaches to the management of early-stage lung cancer are highly relevant in the era of screening for lung cancer. With greater adoption of screening, a much higher proportion of lung cancer patients will be diagnosed with stage I/II disease, and thus be candidates for surgical resection. There have also been major advances in the delivery of radiotherapy for lung cancer; recent studies have raised the hope that proton therapy may play a key role in the treatment of lung cancer with confirmatory clinical trials underway.

The molecular classification of lung adenocarcinoma has yielded several effective therapeutic agents. This topic is discussed in-depth, with description of the data that drive the care of each molecular subset along with emerging knowledge regarding resistance mechanisms. Immune checkpoint inhibition, the latest revolution in lung cancer, has yielded durable benefits for a subset of patients with non-small cell lung cancer. Several chapters provide details on the appropriate use of immunotherapy, role of biomarkers, and integration of this approach for patients with locally advanced stage III disease. Finally, a description of the technology and clinical applications of analyzing circulating tumor DNA detection will provide readers with insights into how this can be integrated into their clinical settings.

With the rapid pace of advances in lung cancer, and in the oncology field in general, it is increasingly difficult for the practicing physicians to stay updated on the latest developments. *Lung Cancer* will be an excellent source of practical information and a reference guide for physicians and researchers all over the world. I congratulate the authors, editors, and the editorial team for their excellent work. It is an honor for me to be a part of this highly valuable academic contribution. Let us work towards ushering in a new era of innovation in research and patient care, so that the next edition of this book can focus entirely on survivorship from lung cancer.

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