The book is an international effort, with authors representing 11 different countries and most chapters having authors from more than one country. However, it has a distinctly Italian flavor, with both of its editors and 19 of the 43 contributors representing that country. In a multi-contributor book with an international diversity of authorship, some unevenness in the English is not unexpected. In general, the chapter introductions and discussions are nicely edited and read well. Occasionally, unfamiliar descriptions and terminology in the case presentations may cause the American reader to stumble, although the intended meaning can nearly always be discerned. One exception was the baffling sentence (on page 171), “In a flat and treatable abdomen a mildly liver enlargement was noted.” There is also some variability in the use of units of measure, most problematically so with arterial blood gas tensions, which are mostly in mm Hg but sometimes in kPa. Typographical errors are very few, although one of potential importance (on page 9) recommends a daily prednisolone dose of 30 mL rather than 30 mg.

The 21 chapters average about 9 pages and 40 references (ranging from 5 to 95 references). The text is laid out in a single column that uses a fairly small font, which, with relatively few illustrations and tables, makes for pretty dense reading through some long stretches of uninterrupted text. There is some unevenness in the illustrations. Several of the conventional chest radiographs are poorly reproduced, which makes identification of the intended findings doubtful, although the latter are generally not really crucial to the message. The chest computed tomograms in Chapter 18 are small, uncropped, and lack arrows to identify the abnormalities described, whereas those in Chapter 20 are effectively cropped and labeled. I did not notice the extensive table of abbreviations in the back of the book until after reading the chapters, but this was not a serious problem, as in nearly every case the abbreviations and acronyms are defined in the text on first use.

I found the book’s contents to be up to date and accurate. A rare exception was this sentence on page 112: “Although chronic GC [glucocorticoid] therapy clearly reduces morbidity and mortality, GCs must be used prudently in the light of their numerous side effects.” This pronouncement is made without elaboration or clarification in the chapter that discusses the complications of prolonged corticosteroid therapy.

These are all minor complaints, and this is a most interesting, unusual, and useful book. It is not an introduction to COPD, and I think it will mainly be of interest to advanced trainees and practicing physicians. The book will also be useful to physician assistants, nurse practitioners, and others who provide front-line care to patients with COPD, but perhaps less so to hospital-based respiratory therapists and nurses who have less responsibility for diagnosis and overall approaches to management.

David J Plerton MD FAARC
Division of Pulmonary and Critical Care Medicine
Department of Medicine
University of Washington
Seattle, Washington

The author reports no conflicts of interest related to the content of this book review.


In the foreword, Tony George reveals his goal that this publication serve as a primer for both basic and clinical researchers, for students of various disciplines, and for clinicians who treat nicotine dependence. Parts of this book may appeal to respiratory therapists and clinicians. However, much of the book, as is suggested by the illustration on the cover, is dedicated to the mechanisms by which nicotine and medications interact with the nicotinic receptors and the pharmacologic profiles of the nicotinic acetylcholine receptor subtypes, which may be less interesting to individuals on the front lines in patient care.

This book, which incorporates contributions from leading basic and clinical scientists, is organized into 6 sections. Topics covered include basic science of the nicotinic receptor pathway; first-line, secondline, and novel medications; behavioral therapy; special populations; pharmacogenetics; neuroimaging; and future research subjects and treatments for nicotine dependence. Each chapter is written by an expert or experts in the field and includes its own abstract, introduction, and conclusions. Though there is some overlap of information in the chapters’ introductions, this format may help the reader target sections that will be most informative, depending on the reader’s goals, which may be research-oriented versus patient-care directed.

The first section is on the basic science and provides a foundation to understand the pharmacology and physiology of the effects of nicotine on nicotine receptors. This very detailed section explains the medications’ mechanisms of action, which are further discussed in later sections. The first chapter describes the interaction between nicotine and the various subtypes of nicotinic receptors, and then details the signaling pathways by which nicotine acts in the peripheral and central nervous system. Animal models of nicotine addiction that can be used to better understand human addiction to nicotine and to develop and evaluate candidate medical therapies for nicotine addiction are also described.

The second section reviews first-line medications, including nicotine-replacement therapy and sustained-release bupropion. Varenicline, which has since gained Food and Drug Administration approval for smoking cessation, is covered in the later section on novel therapies. The second section discusses the pharmacokinetic properties of these treatments, summarizes results from clinical trials, and provides practical information such as the pros and cons of the various forms of nicotine-replacement therapy and questions that help screen for contraindications to bupropion.

The section on second-line treatments provides great detail on tricyclic antidepressants, monoamine-oxidase inhibitors, and opioid antagonists. This level of detail may be more than most in a general audience need, so this section might serve as a reference resource to address questions that arise with patients who have either failed first-line therapy or for smokers considering a second-line agent for another indication.

The fourth section covers several novel medication treatments that are either in various stages of development or are currently approved for other indications. These treatments include nicotine vaccines, GABAergic (gamma-aminobutyric acid) agents (eg, bacofoxen, ligabene, topiramate), cannabinoid antagonists (eg, rimonabant), and medications that target the dopamine D3 receptor pathway. Varenicline, an α4β2 nicotinic acetylcholine receptor partial agonist that has since been FDA approved for smoking cessation, is covered in the last chapter in this section. However, this chapter does not contain as much practically useful information...
tion compared to the chapters on other first-line therapies. This is unfortunate, as therapists and clinicians may be especially interested in some of the practical aspects of working with a new medication, but this information was likely unavailable at the time the book was written.

The special-topics section includes the integration of behavioral therapies with pharmacologic therapy, special populations such as psychiatric patients and those with substance-abuse disorders, pharmacogenetics, and neuroimaging. The section on behavioral-therapy may be especially useful to respiratory therapists and some other clinicians. This chapter highlights the importance of the smoking-cessation message from a health-care provider for increasing the effectiveness of smoking-cessation therapy and provides some concrete examples of simple behavioral interventions, which are clearly outlined in tables and bullet lists. The chapter about treating psychiatric patients and those with coexisting substance-abuse disorders is also likely to be of interest to those focused primarily on patient care. This chapter details considerations pertaining to several specific disorders and reviews the scientific literature about nicotine-replacement therapy and sustained-release bupropion for each condition. The chapters on pharmacogenetics and neuroimaging describe advances that will be most relevant to researchers.

The concluding section provides an outlook for future research suggestions and approaches to treating nicotine dependence. This section addresses specific subpopulations and the potential to integrate genetic and imaging advances into the development of future therapies.

Though Medication Treatments for Nicotine Dependence is expansive in its coverage of the pharmacologic background of nicotine addition treatment, it may not be practically useful for many therapists or other clinicians. However, it can serve as an excellent reference to address questions about the mechanism of action or the pharmacologic rationale for a given therapy. The book is well-organized, so it will be useful as a reference.

Meredith C McCormack MD MHS
Pulmonary and Critical Care Medicine
Johns Hopkins University
Baltimore, Maryland

The author reports no conflicts of interest related to the content of this book review.


Paul Stein is best known as the researcher behind the Prospective Investigation of Pulmonary Embolism Diagnosis (PIOPED) I, II, and III studies. Those who search PubMed for articles about pulmonary embolism will no doubt encounter the name of this prolific author. He has used his vast knowledge and perspective to organize his definitive text, “Pulmonary Embolism.” In this long-awaited second edition he builds on the knowledge base regarding this common and yet often misdiagnosed condition.

Do we need another textbook in this era of bedside Internet searches and ready access to online resources such as UpToDate? In my opinion, yes. Providers often have inadequate time to wade through an exhaustive online search for detailed information about risks, diagnostic strategy, or treatment of this important disease. This text fills a gap in the knowledge-base of the physician, nurse, or therapist who cares for patients with pulmonary embolism. By using a clear and organized format with many graphs and diagrams, Stein provides detailed information beyond the scope of an online review, but in a readily searchable and easily accessible format.

The volume is divided into 4 parts. The first is devoted to the prevalence, risks, and diagnosis of pulmonary embolism and deep venous thrombosis. The chapters are focused and quite manageable for the busy clinician. Each has a clear derivation from the published literature. There are interesting topics, ranging from old classic concepts to new descriptive epidemiology. The subjects include air travel and the risk of pulmonary embolism and deep venous thrombosis, estrogen-containing oral contraceptives and pulmonary embolism risk, and venous thromboembolism in patients with cancer. Stein uses clinical epidemiology to illuminate other pulmonary embolism risk factors that provide the reader with further perspective on this disease. There are unique discussions on venous thromboembolism in the 4 seasons (no variation in rate of diagnosis or mortality), and regional differences in the United States rates of diagnosis of pulmonary embolism and deep venous thrombosis and mortality from pulmonary embolism (the western region has the lowest incidence and mortality). He also looks at the incidence of thromboembolism in Native Americans, including Alaskans, and Pacific Islanders (all lower than whites).

A brief section that compares the diagnostic process in African-American and European-American patients reveals that although the death rate among African Americans with pulmonary embolism was higher, there was no evidence of withholding of key diagnostic testing, such as ultrasound or ventilation-perfusion scan, and no difference in duration of hospitalization from 1979 to 1999. Stein discusses the challenge of separating race from socioeconomic divisions and the importance of post-hospitalization access to primary care.

The next chapters delineate the risk and impact of pulmonary embolism and deep venous thrombosis in various disease states: heart disease, stroke, chronic obstructive pulmonary disease, asthma, sickle cell disease, pregnancy, obesity, and hypercoagulable states. Each of these chapters succinctly reviews the data and presents in user-friendly format the increased risk or unique interaction of the specific disease and thromboembolism.

Part 2 is dedicated to the diagnosis of deep venous thrombosis. Stein starts with the clinical assessment of deep venous thrombosis: the symptoms and signs and their importance. He documents the utility of various clinical prediction scoring systems, the use of D-dimer testing, either alone or in combination with other data, and then elucidates the predictive values of various imaging modalities used to test for deep venous thrombosis. This discussion ranges from the older accepted standard, venography, to now-more-commonly used modalities such as compression ultrasonography. He also reveals preliminary data from the literature regarding the utility of magnetic resonance angiography and the more frequently used computed tomography (CT).

The chapter on the use of CT for diagnosis of deep venous thrombosis is remarkably detailed. In addition to providing evidence of efficacy of the technique, Stein documents the technical methods employed by the investigators (page 171): “Forty milliliters of iohexol diluted with 200 mL of saline was injected via a Y adapter... at 4 mL/s, using a power injector.” As one of the investigators in PIOPED II, he is able to give a “behind-the-scenes” view of the tech-