

Preface

Nuclear Cardiology Study Guide is the third publication in the series of nuclear medicine guides written in question and answer format. All three books—*Nuclear Medicine Technology*, *PET and PET/CT*, and *Nuclear Cardiology*—collectively provide comprehensive knowledge and cover a broad spectrum of problems involving the application of radioactive substances in the diagnosis and treatment of disease.

This book is designed for technologists, practitioners, students, and trainees in medical imaging to serve as a practical tool to study multiple aspects of nuclear cardiology. It was written and reviewed by individuals who have a wide range of nuclear medicine expertise: a practicing nuclear medicine physician, a nuclear medicine college teacher, and an experienced nuclear medicine technologist. A broad assembly of authors and contributors, with different nuclear medicine experiences, provides an array of problems that technologists and practitioners can, and will, encounter in everyday practice. Some of the questions are easy, and some of them are not. In either case, the book is not designed to test the reader's knowledge. Rather, it should be viewed as tool to learn and deepen knowledge of nuclear cardiology. It is said that a picture is worth a 1,000 words. Our book includes a variety of images, graphics, and diagrams. It is our hope that these illustrations will help the reader to get to the bottom of the problem and come up with the right solution quickly.

The book is divided into four chapters and three appendices. We kick off the book with a chapter on test-taking strategies, which is designed to equip readers with practical tools and methods to successfully navigate through the multiple-choice exam. It was written by a recent Master of Business Administration graduate, a GED Chief Examiner, and an instructor with a Master of Arts in philosophy; their knowledge and hands-on experience provide readers with valuable insider tips.

Chapters 2, 3, and 4 contain the test problems. Each test includes multiple-choice questions, with a total of more than 600 problems. The chapters are organized in three levels of complexity, from the easiest to the most difficult. Generally, tagging

questions as easy or difficult is a tricky matter and highly subjective. Nevertheless, for learning purposes, the proposed classification is beneficial for readers. Each chapter is a separate entity with answers and short explanations included. This approach works like building blocks, in which the completion of the first test will prepare the reader to progress to the second test, and so on.

Appendices A and B offer a list of commonly used abbreviations and a glossary of terms which are encountered in everyday nuclear medicine practice and beyond. The abbreviations and the glossary can appear as either too short or simply too long. Some readers will find the included terms as “unnecessary”; some readers will not find the abbreviation for which they are looking. One size never fits all, and thus the subjective choices, as is our selection, are not perfect. Use it to your advantage. There is enough space between the lines, and in the margins, to add or modify as to your own preferences. Understanding the acronyms will pay off in the long run; simply being able to decode it will be short lived. Therefore, a thorough review of the abbreviations and glossary before the examinations can be very helpful and highly suggested. Appendix C offers a list of updated, useful Web sites to refresh knowledge or to learn new skills.

The collection of problems in this book mirrors the exam content as provided by National Medicine Technology Certification Board (NMTCB). The questions cover topics in radiation safety, radionuclides, and instrumentation, to name a few. The reader should never be discouraged when the type of “never heard of” or “it is over my head” problem is encountered. We advise readers to go through these questions carefully and answer diligently—you will be surprised how much you already know and how much you still can learn. Both factors serve as great motivators. Learning should be fun, entertaining, and contagious. Nuclear medicine is a challenging and rapidly evolving field of medicine, and the only way to keep pace with its development is through continuous learning. Nuclear cardiology procedures that were popular in the 1970s are no longer performed, and many new radiotracers and procedures have since been successfully introduced. The integration of molecular imaging not only demonstrates a significant paradigm shift for the specialty but guarantees that nuclear medicine will be a major part of medical practice for the conceivable future.

Be a part of this exciting journey. Make learning fun, and make it a habit—this is the kind of addiction you can afford. The benefits are overwhelming. You can receive the 24 continuing education credit hours, keep your professional license, and, some would say—most importantly—meet your superiors’ expectations. You can read, you can study, you can investigate, and you can challenge yourself and others. Best of all you can exceed...your own expectations. The choice is yours.

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Certification Exams

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