

Cancer Therapy with Radiolabeled Antibodies. David Goldenberg, ed, CRC Press, Boca Raton, FL, 326 pages 1994, \$231.00

This book is edited by David Goldenberg, a pioneer in the field of radioimmunodetection and radioimmunotherapy of cancer whose leadership has brought about significant gains in the understanding of cancer antigens and antibodies. He prefaces the book with the concern "Would a book on this subject be outdated shortly after publication?," and proceeds to address the issue by stressing that "... it will serve as a basic source ..." of material for the field.

As indeed it does. The review is divided into appropriate separate sections, beginning with a current understanding of biology, physics, chemistry and pathophysiology, and moving into state-of-the-art clinical therapy before concluding with glimpses of and thoughts on the future. This reviewer has some interest in the field, and while reading the entire book during a beach holiday with a teenage son, could not think of any aspect of the issue that was not addressed. The review is extremely organized, permitting the cognoscenti to obtain a necessary occasional perspective, as well as serving as a superb reference source. The general nuclear medicine physician who seeks to become acquainted with the sinuously developing field of radiolabeled antibodies will come away knowledgeable in the basic principles of antigen-antibody interactions; radionuclide binding to large molecules; uptake, imaging and dosimetric issues and an optimistic view of the future treatment of cancer with a tailored array of nonimmunogenic radiolabeled antibody-derived complexes.

Goldenberg's concern is, however, certainly valid. Like developments in computing, obsolescence is built into a text which reviews a developing field. This fact can be mitigated when the authors are leaders in the field and can present their own current data. Goldenberg is to be credited for allowing the authors to speculate—the resulting mosaic is rich.

When human(ized) antibodies against tumor-associated antigens are more readily available, much of the data on nonhumanized molecules will need to be replicated here. This reviewer would perhaps have preferred more speculation about the future.

The future of cancer radioimmunotherapy is inextricably linked with the overall application of antigen-binding molecules, and this book would have benefited from a closer look at other forms of immunotherapy. A more detailed examination of immunotoxins and immunochemotherapeutic agents, as well as antibodies used directly for their cytotoxic effects would have complemented the excellent review of the kinetics of antibodies and associated radionuclides by M.J. Mattes and permitted a broader understanding of targeted cancer therapy.

This book is essential for anyone involved with radioimmunotherapy in particular and even immunotherapy in general. For the remainder of the medical and scientific community, this is a useful reference book.

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Combined Scintigraphic and Radiographic Diagnosis of Bone and Joint Disease. Yong Whee Bahk. Springer-Verlag, Berlin, Germany, 241 pages, 1994, \$200.00.

This book fills a void in the contemporary nuclear medicine literature, in that it is the first to cover the practical uses of pinhole imaging of the skeleton.

Bone scintigraphy is the first or second most frequently performed test in nuclear medicine departments. It is a test with high sensitivity but low specificity. More accurate anatomic localization of the changes demonstrated by bone scans increases its specificity. The enhanced spatial resolution of the scintigraphic lesions and the surrounding bone structures provide helpful information for more accurate diagnosis. Moreover, the superior structural information gleaned with pinhole imaging makes comparison possible with the other more anatomically oriented imaging modalities such as radiography, CT or MRI. Bahk demonstrates this fact very well in the examples shown in this book. With pinhole collimators, due to their physical shape and imaging characteristics, we can obtain imaging projections that are impossible with conventional imaging collimators. Those improved imaging characteristics are helpful not only for differential diagnosis in the search for bone metastases, but also in the wide and not fully explored field of benign bone diseases. Those characteristics (higher resolution and the capability to acquire special projections) are well demonstrated in the scintigraphic images distributed in different chapters.

This book covers a broad range of topics, including the most important applications of bone scintigraphy in malignant and benign bone pathologies, as well as in joint diseases. Almost every case presented has both high quality pinhole images and the corresponding radiographs. In some selected cases, the CT and MR images are also provided. The content of the different chapters is extremely well organized and the text is clear and pleasant to read. Each chapter provides a general description of the different diseases and their physio-pathological aspects, the radiological findings and scintigraphic aspects and pays particular attention to manifestations observed on pinhole images. For those interested in more advanced technical and physical information on pinhole technology, the appendix provides useful concepts and tips for better and more efficient pinhole imaging.

Since most nuclear medicine departments have their own pinhole collimators, this technique can be applied without the need of new investments. Although all the scintigraphic images shown in this book were obtained with a pinhole collimator, the anatomical information and scintigraphic-radiologic correlations will also prove useful in evaluating high-quality bone SPECT imaging.

The excellent print quality of the scintigrams and the radiographs allied to the broad spectrum of examples exceeds the descriptive value of this book, thereby turning it into a reference atlas of skeletal imaging. The correlative imaging approach shown on the title and cover pages and throughout the rest of the volume makes this book a "must read" for residents, nuclear physicians, oncologists, radiologists, orthopedic surgeons, pediatricians, rheumatologists and all "those who heal and help the sufferers of bone disease."

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Perspectives on cancer therapy with radiolabeled monoclonal antibodies. *J Nucl Med* 2005;46 Suppl 1:115S-127S. 4. Kaminski MS, Tuck M, Estes J, Kolstad A, Ross CW, Zasadny K et al. *J Nucl Med* 1994;35:1028-34. Interaction of radiolabeled antibodies with fungal cells and components of immune system in vitro and during radioimmunotherapy of experimental fungal infection. *J Infect Dis*. In press 2006. Wentworth P Jr, McDunn JE, Wentworth AD, Takeuchi C, Nieva J, Jones T et al. Evidence for antibody-catalyzed ozone formation in bacterial killing and inflammation. Development of effective antibody (Ab) therapy for cancer requires an understanding of Ab pharmacokinetics. Improved understanding of Ab pharmacokinetics will. *Cancer Therapy with Radiolabeled Antibodies*. *Cancer Therapy with Radiolabeled Antibodies*. By David M. Goldenberg. Pub. location Boca Raton. Imprint CRC Press. DOI <https://doi.org/10.1201/9781351070409>. Pages 336 pages. eBook ISBN 9781351070409. Subjects Medicine, Dentistry, Nursing & Allied Health. Back to book. chapter 8. Pharmacokinetics of Antibodies and their Radiolabels. With M. J. Mattes. Pages 12. Development of effective antibody (Ab) therapy for cancer requires an understanding of Ab pharmacokinetics. All CRC Press products available. Your CRC Press login credentials will work on TandFIndia.com. Stay on CRCPress.com. Go to TandFIndia.com. CRC Press Published December 12, 2017 Reference - 336 Pages ISBN 9781315891309 - CAT# K347509. eBooks are subject to VAT, which is applied during the checkout process. *Cancer Therapy with Radiolabeled Antibodies* explores the most current experimental and clinical advances in the newly emerging field of cancer radioimmunotherapy (RAIT). Providing a multidisciplinary and international context, some of the world's leading experts examine the problems and prospects of RAIT from radiation, immunological, chemical, physical, physiological, and clinical perspectives with both overviews and original research.