

# **MEDICAL RADIOLOGY**

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## **Diagnostic Imaging**

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# Percutaneous Tumor Ablation in Medical Radiology

With Contributions by

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Foreword by

A. L. Baert

With 133 Figures in 281 Separate Illustrations, 50 in Color and 33 Tables

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Continuation of Handbuch der medizinischen Radiologie  
Encyclopedia of Medical Radiology

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# Foreword

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Percutaneous image-guided non-invasive treatment of tumors is now widely regarded as one of the major advances achieved during the past decade in interventional radiology and in medicine.

Over the past years radiologists all over the world have been deeply involved in technological and animal research which has resulted in powerful new clinical tools for tumor ablation.

These include mainly thermal ablative techniques such as laser-induced thermotherapy, radiofrequency and microwave ablation, but also chemoembolization as well as selective internal irradiation therapy.

This volume is one of the most comprehensive books offering a complete overview of our current knowledge in percutaneous tumor ablation. It covers not only all technical aspects of the sophisticated new modalities now available, but also a variety of specific clinical indications for each of these techniques within the framework of a global approach to the oncological patient.

The very well readable text is completed by numerous superb illustrations.

This book should help radiologists not only to improve their skills in percutaneous image-guided ablation techniques, but also to fully assume their role as a key member of the multidisciplinary team that takes responsibility for designing the global treatment strategy and management of oncological patients.

I would like to thank and congratulate most sincerely the editors and authors for preparing this very attractive volume on a highly topical, important though rapidly evolving topic.

This book will be of great interest both to interventional radiologists and to oncologists. I am confident that it will meet with the same success among readers as the previous volumes published in this series.

Leuven

ALBERT L. BAERT

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# Preface

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Technological and oncological advances have provided new methods for the minimally invasive treatment of malignant tumors. A great deal of enthusiasm has developed recently in the use of local oncological treatment options such as thermal ablative therapies and locoregional chemotherapy. The present book features the clinical and practical aspects of thermal ablation as well as the latest advances and applications of this emerging, ground-breaking technology. The editors and authors extensively cover the principles and techniques for the safe usage of local oncological treatment options. Current concepts on the management of hepatic tumors and lung malignancies are presented. The book further stresses applications on primary and secondary bone tumors, primary breast cancer, renal tumors and head and neck cancer. All the technical aspects of locoregional therapies are extensively discussed. Practical guidelines and an evaluation of the results so far obtained are presented. Special focus is also put on the different monitoring technologies such as ultrasound guidance, CT and MRI.

In summary, we have tried to provide a state-of-the-art textbook on the current theoretical and clinical aspects of thermal ablative therapies in order to establish a safe and viable treatment modality for our patients.

Frankfurt  
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Frankfurt  
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THOMAS J. VOGL  
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