

Contents

List of contributors vi

Preface ix

-
- 1 **Basic physical principles of body diffusion-weighted MRI** 1
Eric E. Sigmund and Jens Jensen
 - 2 **Diffusion-weighted MRI of the liver** 18
Bachir Taouli and Dow-Mu Koh
 - 3 **Diffusion-weighted MRI of diffuse renal disease and kidney transplant** 32
Frederik De Keyzer and Harriet C. Thoeny
 - 4 **Diffusion-weighted MRI of focal renal masses** 46
Sooah Kim and Bachir Taouli
 - 5 **Diffusion-weighted MRI of the pancreas** 55
Tomoaki Ichikawa, Ali Muhi, Utaroh Motosugi, and Katsuhiko Sano
 - 6 **Diffusion-weighted MRI of the prostate** 72
Sophie F. Riches and Nandita M. deSouza
 - 7 **Breast applications of diffusion-weighted MRI** 86
Yong Guo
 - 8 **Diffusion-weighted MRI of lymph nodes** 103
Taro Takahara and Thomas C. Kwee
 - 9 **Diffusion-weighted MRI of female pelvic tumors** 119
Hela Sbrano and Anwar R. Padhani
 - 10 **Diffusion-weighted MRI of the bone marrow and the spine** 144
Olaf Dietrich and Andrea Baur-Melnyk
 - 11 **Diffusion-weighted MRI of soft tissue tumors** 162
Masayuki Maeda
 - 12 **Evaluation of tumor treatment response with diffusion-weighted MRI** 172
Andriy M. Babsky, Shenghong Ju, and Navin Bansal
 - 13 **Diffusion-weighted MRI: future directions** 198
Dow-Mu Koh and David J. Collins
-
- Index* 211