

Cancer Dissemination Pathways

Daniele Regge, Candiolo Cancer Center,
Torino, Italy *Series Editor*

This series uses a practical and clinically driven approach to describe the pathways of cancer dissemination, enabling readers to select the best therapeutic option for each patient and to predict disease outcome. Each volume includes an introduction to the morphopathological characteristics and genetic drivers of tumour spread, followed by a chapter describing the radiological signs and pathways of diffusion. The subsequent chapters include a systematic review of pathways of dissemination of each neoplasm. The content is presented schematically, with high-quality illustrations and images obtained from various imaging modalities. The clinical significance of findings and possible therapeutic options is also described where relevant.

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Hepatobiliary and Pancreatic Cancer

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Foreword

The editors of this book, Prof. Dr. Daniele Regge and Dr. Giulia Zamboni, are highly esteemed experts in the field of abdominal and oncologic imaging. Together with other eminent imaging scientists in this area, they compiled a most informative book. The reader can acquire valuable and practical information on tumors of the hepatobiliary and pancreatic system and the spread of these neoplasms. After an introductory chapter on the principal mechanisms of tumor dissemination, specific hepatobiliary and pancreatic tumor entities, such as hepatocellular carcinoma, cholangiocarcinoma, bile duct and gallbladder tumors, pancreatic adenocarcinoma, neuroendocrine pancreatic tumors, mucinous carcinoma, and IPMN are discussed.

All chapters follow a common structure: after an overview on epidemiology, risk factors, pathology, diagnosis, staging and treatment, and the patterns of local as well as regional and distal spread are described.

I found this book to be a very informative and stimulating read. The presentations are concise and easy to follow for the reader. Understanding is supported by excellent radiological images and illustrated by schematic representations. The pathology and the natural history of the diseases are mentioned so that the dissemination pathways can be reproduced. This also allows for understanding the therapeutic implications of radiological findings and should enable the readers to generate correct and meaningful radiological reports.

In this book, the most recent tumor classifications and guidelines are shown and critically discussed, which again should help the radiologist put his or her findings into perspective and thereby contribute to state-of-the-art therapy planning.

I am indeed convinced that this book may greatly contribute to adequate and precise assessment and treatment planning in patients with hepatobiliary and pancreatic tumors. I hope it will achieve the great success it rightly deserves.

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Abbreviations

ADC	Apparent diffusion coefficient	MEN1	Multiple endocrine neoplasia type 1
AFP	Alfa-fetoprotein	MRCP	Magnetic resonance cholangiopancreatography
AJCC	American Joint Committee on Cancer	MRI	Magnetic resonance imaging
BCLC	Barcelona Clinic Liver Cancer	MVI	Microvascular invasion
BD-IPMN	Branch duct IPMN	NCAM	Neural cell adhesion molecules
BRPC	Borderline resectable pancreatic cancer	NCCN	National Comprehensive Cancer Network
BTT	Biliary tumor thrombus	NF1	Neurofibromatosis type 1
CT	Computed tomography	NK	Natural Killer
cTNM	Clinical tumor-node-metastasis	PC	Plexus pancreaticus capitalis
DWI	Diffusion weighted imaging	PDAC	Pancreatic ductal adenocarcinoma
EASL	European Association for the Study of the Liver	PET	Positron emission tomography
ENETS	European Neuroendocrine Tumor Society	PNET	Pancreatic neuroendocrine tumors
eCC	Extrahepatic cholangiocarcinoma	PNI	Perineural invasion
ECM	Extracellular matrix	PRRT	Peptide receptor radionuclide therapy
EM	Extrahepatic metastasis	pTNM	Pathological tumor-node-metastasis
NAFLD	Nonalcoholic fatty liver disease	PTV	Peritumoral lymphatic vessels
GC	Gallbladder carcinoma	PVE	Portal vein embolization
GB	Gallbladder	PVI	Portal vein vascular invasion
HVI	Hepatic vein vascular invasion	RCT	Randomized controlled trial
HCC	Hepatocellular carcinoma	RF	Radiofrequency
HGDN	High-grade dysplastic nodules	RLN	Regional lymph nodes
HIV	Human immunodeficiency virus	SEER	Surveillance, Epidemiology, and End Results
iCC	Intrahepatic cholangiocarcinoma	SLN	Sentinel lymph node
IPMN	Intraductal papillary mucinous neoplasms	SMV	Superior mesenteric vein
IPNB	Intraductal papillary neoplasm of the bile duct	SSA	Somatostatin analogues
ISGPS	International Study Group of Pancreatic Surgery	TACE	Trans-catheter arterial chemoembolization
LGDN	Low-grade dysplastic nodules	TAE	Trans-catheter arterial embolization
LI-RADS	Liver Imaging Reporting and Data System	TNM	Tumor-node-metastasis
LTx	Liver transplantation	TSC	Tuberous sclerosis complex
MCN	Mucinous cystic neoplasms	UICC	Union Internationale Contre le Cancer/International Union Against Cancer
MDCT	Multidetector computer tomography	US	Ultrasound
MD-IPMN	Main duct IPMN	VHL	von Hippel Lindau
		WHO	World Health Organization
		Y90-RE	Yttrium-90 labeled spheres