

英文影印版

临床肿瘤学

(上册)

第2版

CLINICAL ONCOLOGY

Second Edition

Martin D. Abeloff ■

James O. Armitage ■

Allen S. Lichter ■

John E. Niederhuber ■

科学出版社 · Harcourt Asia · CHURCHILL LIVINGSTONE



英文影印版

临床肿瘤学

第2版 • 上册

CLINICAL ONCOLOGY

Second Edition • Volume 1

Martin D. Abeloft, MD

James O. Armitage, MD

Allen S. Lichter, MD

John E. Niederhuber, MD



科学出版社

Harcourt Asia
Churchill Livingstone

2001



CLINICAL

ONCOLOGY

Second Edition

Martin D. Abeloff, M.D.

Eli Kennerly Marshall, Jr. Professor and Chairman
Department of Oncology
The Johns Hopkins University School of Medicine
Oncologist-in-Chief
The Johns Hopkins Hospital and Health System
Baltimore, Maryland

James O. Armitage, M.D.

Henry J. Lehnhoff Professor and Chairman
Department of Internal Medicine
University of Nebraska Medical Center
Omaha, Nebraska

Allen S. Lichter, M.D.

Professor of Radiation Oncology
Dean, College of Medicine
University of Michigan Medical Center
Ann Arbor, Michigan

John E. Niederhuber, M.D.

Director
University of Wisconsin Comprehensive Cancer Center
Assistant Dean for Oncology
Wattawa Professor-Bascom, Departments of Surgery and Oncology
University of Wisconsin Medical School
Madison, Wisconsin

SCIENCE PRESS

HARCOURT ASIA

CHURCHILL LIVINGSTONE

Martin D. Abeloff, James O. Armitage, Allen S. Lichter, John E. Niederhuber: Clinical Oncology, 2nd Edition

Copyright © 2000 **Harcourt Publishers Limited**.

Authorized Reprinting by **Science Press**, A division of *China Science Publishing Group*.

All rights reserved. For sale in the People's Republic of China only.

Reprint ISBN 0-8089-2227-0

本书英文影印版由科学出版社——中国科学出版集团核心企业和美国哈克出版集团国际公司合作出版。本版本是最新美国版,惟一获正式授权的完整和无节略的复制版,仅限在中国境内(不包括香港特别行政区和台湾省)出版和标价销售。

未经出版者书面许可,不得以任何方式复制或抄袭本书的任何部分。

版权所有,翻印必究。

北京市版权局版权登记号:图字 01-2000-2831

图书在版编目(CIP)数据

临床肿瘤学:第2版:英文影印版/(美)阿贝洛夫(Abeloff, M. D.),主编. —北京:科学出版社,2001.1

书名原文: Clinical Oncology

ISBN 7-03-008822-0

I. 临… II. 阿… III. 肿瘤学 IV. R73

中国版本图书馆CIP数据核字(2000)第69914号

注 意

医学是一门不断发展的科学。由于新的研究及临床实践在不断丰富人们的知识,因此在药物使用及治疗方面也在谋求各种变化。本书编者及出版者核对了各种信息来源,并确信本书内容完全符合出版时的标准。然而,鉴于不可避免的人为错误和医学学科的发展,不管是编者、出版者还是其他参与本书出版的工作者均不能保证此书中的内容百分之百正确。因此,他们不能对由此类错误引起的后果负责。

我们提倡读者将本书内容与其他资料进行确证。例如,我们希望读者对他们将要使用的每一种药品的说明书仔细阅读,以确证本书的有关信息是正确的,且推荐的药品用量及禁忌证等没有变化。该建议对新药或非常用药尤为重要。

科学出版社 出版

北京东黄城根北街16号

邮政编码:100717

中国科学院印刷厂 印刷

科学出版社发行 各地新华书店经销

*

2001年1月第一版 开本:889×1194 1/16

2001年1月第一次印刷 印张:189 1/4 插页:16

印数:1—3 000 字数:6 587 000

定价:548.00元(上、下册)

(如有印装质量问题,我社负责调换(科印))

SCIENCE PRESS

*A division of China Science Publishing Group
16 Donghuangchenggen North Street,
Beijing 100717
China*

HARCOURT ASIA PTE.LTD

*A Harcourt Publishers International
Company
583 Orchard Road #09-01 Forum
Singapore 238884*

Distribute in the Mainland China by Science Press,
16 Donghuangchenggen North Street, Beijing 100717, China.

Copyright © 1999 by Churchill Livingstone

All rights reserved. No part of this publication may be reproduced, or transmitted in any form of by any means, electronic, mechanical, including photocopy, recording or any information storage and retrieval system, without permission in writing from the publisher.

Printed in China by HARCOURT ASIA PTE, LTD and SCIENCE PRESS under special arrangement with Churchill Livingstone, A Harcourt Health Science Company. This edition is the only authorized complete and unabridged reproduction of the latest American Edition, published and priced for sale in China only, not including Hong Kong SAR and Taiwan.

Unauthorized export of this edition is a violation of the Copyright Act Violation of this Law is subject to Civil and Criminal penalties.

This Edition First Printed in China in 2001.

ISBN 7-03-008822-0/R · 603

Reprint ISBN 0-8089-2227-0

Printed in China

To my wife, Diane, and my family, who have provided encouragement and enormous support during this project and throughout my career. To my colleagues and patients, who have taught me a great deal about science, medicine, and life.

MARTIN D. ABELOFF, M.D.

To my wife and my family.

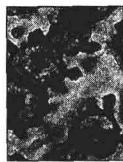
JAMES O. ARMITAGE, M.D.

To my wife, Evie, to my family, and to my colleagues, for their inspiration and unfailing support.

ALLEN S. LICHTER, M.D.

To my wife and partner, Tracey, and to my son Matthew, daughter Elizabeth and niece Lindsay, who provide the love and supportive atmosphere in which to pursue my career in medicine. To my parents, Helen and Bill Niederhuber, who created an environment and interest in learning and made great sacrifices for me to pursue my career in medicine and surgery. To my mentors, Zollinger, Child, Fry, and Owens, who have had enormous influence on my life and career.

JOHN E. NIEDERHUBER, M.D.



CONTRIBUTORS

James L. Abbruzzese, MD

Professor of Medicine, University of Texas M.D. Anderson Cancer Center; Chairman, Department of Gastrointestinal Medical Oncology and Digestive Diseases, University of Texas M.D. Anderson Cancer Center, Houston, Texas
Carcinoma of Unknown Primary

Martin D. Abeloff, MD

Eli Kennerly Marshall Jr. Professor and Chairman, Department of Oncology, The Johns Hopkins University School of Medicine; Oncologist-in-Chief, The Johns Hopkins Hospital and Health System, Baltimore, Maryland
Breast

Joseph Aisner, MD

Professor of Medicine, Professor of Environmental and Community Medicine, Robert Wood Johnson Medical School, University of Medicine and Dentistry of New Jersey; Associate Director of Clinical Sciences, Cancer Institute of New Jersey, New Brunswick, New Jersey
Pleura and Mediastinum

Mark R. Albertini, MD

Assistant Professor, Medical Oncology Section, Department of Medicine, K4/414 Clinical Science Center, University of Wisconsin, Madison, Wisconsin
Tumor Immunology and Immunotherapy

Richard F. Ambinder, MD, PhD

Professor, Departments of Oncology, Pharmacology, and Pathology, The Johns Hopkins University School of Medicine; Director, Lymphoma Program, Johns Hopkins Hospital, Baltimore, Maryland
HIV-Associated Malignancies: Kaposi's Sarcoma and Lymphoma

Clay M. Anderson, MD

Assistant Professor of Clinical Medicine, Division of Hematology/Oncology, Department of Internal Medicine, University of Missouri/Ellis Fischel Cancer Center, Columbia, Missouri
Chemotherapy

Kenneth C. Anderson, MD

Associate Professor of Medicine, Harvard Medical School; Medical Director, Kraft Family Blood Donor Center, Dana Farber Cancer Institute, Boston, Massachusetts
Disorders of Blood Cell Production in Clinical Oncology

Karen H. Antman, MD

Wu Professor of Medicine, Chief, Division of Medical Oncology, Director, Herbert Irvings Comprehensive Cancer Center, Columbia University, New York, New York
Pleura and Mediastinum

James O. Armitage, MD

Professor and Chairman, Department of Internal Medicine, University of Nebraska Medical Center, Omaha, Nebraska
Bone Marrow Transplantation; Non-Hodgkin's Lymphomas

Sarah S. Auchincloss, MD

Consultant, Department of Psychiatry, Memorial Sloan-Kettering Cancer Center, New York, New York
Evaluation and Management of Sexual Dysfunction

Vicki V. Baker, MD

G.W. Morley Professor of Obstetrics and Gynecology, University of Michigan, Ann Arbor, Michigan
Gestational Trophoblastic Disease

M. Derya Balbay, MD

Urology, The University of Texas M.D. Anderson Cancer Center, Houston, Texas
Penis and Urethra

David S. Bardenstein, MD

Assistant Professor of Ophthalmology and Pathology, Case Western Reserve University School of Medicine, Cleveland, Ohio
Eye, Orbit, and Adnexal Structures

J. Augusto Bastidas, MD

Assistant Professor, Department of Surgery, Stanford University, Stanford, California
Pancreas

Atul Bedi, MD

Assistant Professor of Oncology, The Johns Hopkins University School of Medicine, Baltimore, Maryland
Regulation of the Cell Cycle

Chandra P. Belani, MD

Professor of Medicine, University of Pittsburgh School of Medicine; Co-Director Lung Cancer Program, University of Pittsburgh Cancer Institute, Pittsburgh, Pennsylvania
Pleura and Mediastinum

Charles L. Bennett, MD, PhD

Associate Professor, Northwestern University Medical School; Senior Research Associate, VA Chicago Health Care Systems Lakeside Division, Chicago, Illinois
Economic Analysis of Cancer Treatment

John M. Bennett, MD

Professor of Medicine, Laboratory Medicine, and Pathology, Emeritus, University of Rochester School of Medicine; Senior Attending in Medicine, Strong Memorial Hospital, Rochester, New York
The Myelodysplastic Syndromes

Jonathan S. Berek, MD

Professor and Vice Chair, Chief, Gynecologic Oncology, Director, UCLA Women's Gynecologic Oncology Center, Jonsson Comprehensive Cancer Center, Los Angeles, California
Cervix, Vulva, and Vagina

Stacey Lynn Berg, MD

Assistant Professor of Pediatrics, Baylor College of Medicine; Co-Director, Texas Children's Cancer Center, Houston, Texas
Childhood Leukemias

Pankaj Bhargava, MD

Instructor of Medicine, Division of Hematology-Oncology, Lombardi Cancer Center, Georgetown University Medical Center, Washington, D.C.
New Developmental Therapies

Philip J. Bierman, MD

Associate Professor, Department of Internal Medicine, University of Nebraska Medical Center, Omaha, Nebraska
Bone Marrow Transplantation

Michael R. Bishop, MD

Clinical Head, Department of Experimental Transplantation and Immunology, National Cancer Institute, Bethesda, Maryland
Bone Marrow Transplantation; Tumor Lysis Syndrome

Joan Bladé, MD

Visiting Clinician, Division of Hematology and Internal Medicine, Postgraduate School of Hematology, "Farreras-Valenti," Hospital Clinic i Provincial, Barcelona, Spain
Multiple Myeloma and Related Disorders

W. Archie Bleyer, MD

Mosbacher Chair in Pediatrics, Professor of Pediatrics, University of Texas M.D. Anderson Cancer Center; Pediatrician, University of Texas M.D. Anderson Cancer Center, Houston, Texas
Childhood Leukemias

Clara D. Bloomfield, MD

William G. Pace, III Professor of Cancer Research, Director, Comprehensive Cancer Center, The Ohio State University; Director, Division of Hematology and Oncology, Department of Internal Medicine, College of Medicine and Public Health, The Ohio State University, Columbus, Ohio
Adult Acute Lymphoblastic Leukemia

Gerald P. Bodey, MD

Professor of Medicine, Emeritus, University of Texas M.D. Anderson Cancer Center, Houston, Texas
Fever in the Neutropenic Patient

Patrick J. Boland, MD, FRCS, FRCSI, FACS

Associate Attending Surgeon, Memorial Sloan-Kettering Cancer Center, New York, New York
Physical Rehabilitation

Thierry Boon, PhD

Professor, Université Catholique de Louvain; Director, Ludwig Institute, Brussels, Belgium
T-Lymphocyte Responses

Murray F. Brennan, MD

Professor of Surgery, Cornell University Medical College; Chairman, Department of Surgery, Memorial Sloan-Kettering Cancer Center, New York, New York
Sarcomas of Soft Tissue

Julia A. Bridge, MD

Professor, Department of Pathology/Microbiology, Orthopaedic Surgery, Pediatrics, University of Nebraska Medical Center, Omaha, Nebraska
Sarcomas of Bone

Patrick A. Burch, MD

Assistant Professor of Oncology, Mayo Foundation, Mayo
Clinic, Rochester, Minnesota
Stomach

Lowell J. Byers, MD

Assistant Professor, University of Missouri Kansas;
Gynecologic Oncologist, Staff, St. Luke's Hospital,
Kansas City, Missouri
Uterus

John C. Byrd, MD

Visiting Assistant Professor of Oncology, Johns Hopkins
University, Baltimore, Maryland; Director of Clinical
Research, Hematology-Oncology Service, Walter Reed
Army Medical Center, Washington, D.C.
Adult Acute Lymphoblastic Leukemia

Michael J. Campbell, PhD

Assistant Adjunct Professor, Department of Surgery,
University of California, San Francisco, Mount Zion
Medical Center, San Francisco, California
B-Lymphocyte Responses

Alfred E. Chang, MD

Professor of Surgery, University of Michigan Medical
School, Ann Arbor, Michigan
Acute Abdomen, Bowel Obstruction, and Fistula

Bruce D. Cheson, MD

Clinical Professor of Medicine, Lombardi Cancer Center,
Georgetown University Medical Center, Washington,
D.C.; Head, Medicine Section, Cancer Therapy
Evaluation Program, National Cancer Institute,
Bethesda, Maryland
Chronic Lymphocytic Leukemias

Theodore D.K. Chung, MD, PhD

Assistant Professor, Department of Radiation and Cellular
Oncology, University of Chicago; Attending Physician,
University of Illinois at Chicago, Chicago, Illinois
Head and Neck

Anthony J. Cmelak, MD

Assistant Professor, Department of Radiation Oncology,
Vanderbilt University Medical Center, Nashville,
Tennessee
Superior Vena Cava Syndrome

Peter F. Coccia, MD

Ittner Professor of Pediatrics, Chief, Section of Pediatric
Hematology/Oncology, Director, Pediatric Bone
Marrow Transplant Program, Vice-Chair, Department of
Pediatrics, University of Nebraska Medical Center,
Omaha, Nebraska
Tumor Lysis Syndrome

Carolyn E. Cole, BS, BA, MSN, MM

Associate Director, Colon Cancer Prevention Program,
University of Wisconsin Comprehensive Cancer
Center, Madison, Wisconsin
Molecular Diagnostic Methods in Cancer Genetics

R.E. Coleman, MD, FRCP

Reader in Medical Oncology, University of Sheffield;
Honorary Consultant Medical Oncologist, Weston Park
Hospital, Sheffield, United Kingdom
Bone Metastases

Sharon L. Collins, MD

Associate Professor, Department of Otolaryngology-Head
and Neck Surgery, Loyola University of Chicago
Medical Center, Maywood, Illinois; Chief, Section of
Otolaryngology-Head and Neck Surgery, Hines VA
Hospital, Hines, Illinois
Head and Neck

Robert L. Comis, MD

Professor of Medicine, MCP Hahnemann University;
Director, Clinical Trials Research Center; Group Chair,
Eastern Cooperative Oncology Group; President, Board
of Directors, Coalition of National Cancer Cooperative
Groups, Inc., Philadelphia, Pennsylvania
Hyponatremia

Pierre G. Coulie, MD, PhD

Professor, GECE (Cellular Genetics) Unit, Université
Catholique de Louvain, Brussels, Belgium
T-Lymphocyte Responses

Steven A. Curley, MD

Professor of Surgery, University of Texas M.D. Anderson
Cancer Center; Chief of Gastrointestinal Tumor
Surgery, University of Texas M.D. Anderson Cancer
Center, Houston, Texas
Liver and Bile Ducts

Giulio J. D'Angio, MD

Professor Emeritus, Radiation Oncology, University of
Pennsylvania, Philadelphia, Pennsylvania
Second Malignant Neoplasms

George D. Demetri, MD

Assistant Professor of Medicine, Harvard Medical School;
Director, Center for Sarcoma and Bone Oncology,
Dana Farber Cancer Institute, Boston, Massachusetts
*Disorders of Blood Cell Production in
Clinical Oncology*

Donald C. Doll, MD

Professor of Medicine, University of Missouri; Chief, Division of Hematology/Medical Oncology, Harry S. Truman Veterans Memorial Hospital, Columbia, Missouri
Effusions

Jeffrey S. Dome, MD

Assistant Professor, Department of Pediatrics, College of Medicine, University of Tennessee, Memphis; Assistant Member, Department of Hematology/Oncology, St. Jude Children's Research Hospital, Memphis, Tennessee
Pediatric Tumors

Edward A. Dominguez, MD

Associate Professor, Internal Medicine, University of Nebraska Medical Center, Omaha, Nebraska
Fever in the Patient Without Neutropenia

Ross C. Donehower, MD

Professor of Oncology, Director of Medical Oncology, Johns Hopkins Oncology Center, The Johns Hopkins University School of Medicine, Baltimore, Maryland
Chemotherapy

John H. Donohue, MD

Professor of Surgery, Mayo Medical School; Consultant in Surgery, Mayo Clinic, Rochester, Minnesota
Stomach

William C. Dooley, MD

Associate Professor of Surgery, The Johns Hopkins University School of Medicine, Baltimore, Maryland
Establishing and Maintaining Vascular Access

Michael J. Dougherty, MD

Triangle Radiation Oncology, Inc., Beaver, Pennsylvania
Head and Neck

William F. Dove, PhD

Professor of Oncology and Medical Genetics, University of Wisconsin; Cancer Genetics Program Director, McArdle Laboratory for Cancer Research, University of Wisconsin Comprehensive Cancer Center, Madison, Wisconsin
Genes and Cancer: Risk Determinants and Agents of Change

Rosalie Elenitsas, MD

Assistant Professor of Dermatology, Department of Dermatology, University of Pennsylvania, Philadelphia, Pennsylvania
Skin: Malignant Melanoma

John C. Elkas, MD

Clinical Fellow, Division of Gynecologic Oncology, UCLA School of Medicine, Los Angeles, California
Cervix, Vulva, and Vagina

Victor M. Elnor, MD, PhD

Associate Professor of Ophthalmology, Department of Ophthalmology, W.D. Kellogg Eye Center, University of Michigan; Assistant Professor of Pathology, Department of Pathology, University of Michigan Hospital, Ann Arbor, Michigan
Eye, Orbit, and Adnexal Structures

Robin Farias-Eisner, MD

Assistant Professor, Division of Gynecologic Oncology, UCLA School of Medicine, Los Angeles, California
Cervix, Vulva, and Vagina

Eric R. Fearon, MD, PhD

Maisel Professor of Oncology, Associate Professor of Internal Medicine, Human Genetics, and Pathology, University of Michigan School of Medicine, Ann Arbor, Michigan
Oncogenes and Tumor Suppressor Genes

Ronald Feld, MD, FRCPC

Professor of Medicine, University of Toronto; Senior Staff Physician, Princess Margaret Hospital, Toronto, Ontario, Canada
Lung

Isaiah J. Fidler, DVM, PhD

Professor of Cancer Biology and Urology, Graduate School of Biomedical Sciences, University of Texas; R.E. "Bob" Smith Chair in Cell Biology, Chairman, Department of Cancer Biology, Director, Cancer Metastasis Research Center, University of Texas M.D. Anderson Cancer Center, Houston, Texas
Cancer Biology: Invasion and Metastasis

Alexandra H. Filipovich, MD

Professor of Pediatrics, Director, Immunodeficiency Program, Division of Hematology/Oncology, Children's Hospital Medical Center, Cincinnati, Ohio
Immunodeficiency and Cancer

Ian W. Flinn, MD

Assistant Professor, Department of Oncology, The Johns Hopkins University School of Medicine, Baltimore, Maryland
HIV-Associated Malignancies: Kaposi's Sarcoma and Lymphoma

Robert L. Foote, MD

Associate Professor of Oncology, Mayo Medical School,
Mayo Clinic, Rochester, Minnesota
Oral Complications

Arlene A. Forastiere, MD

Professor of Oncology, Otolaryngology, Head and Neck
Surgery, Johns Hopkins Medical Institutions, The Johns
Hopkins University School of Medicine, Baltimore,
Maryland
Esophagus

Jeffrey M. Fowler, MD

Associate Professor, The Ohio State University School of
Medicine; Division Director, Gynecologic Oncology,
James Cancer Hospital and Research Institute,
Columbus, Ohio
Uterus

Douglas Fraker, MD

Associate Professor of Medicine, Department of Surgery,
University of Pennsylvania, Philadelphia, Pennsylvania
Skin: Malignant Melanoma

Stanley R. Frankel, MD

Associate Professor of Medicine, Georgetown University
Medical School; Director, Adult Leukemia Service,
Lombardi Cancer Center, Georgetown University
Medical Center, Washington, D.C.
Adult Acute Lymphoblastic Leukemia

Robin S. Freedberg, MD

Associate Professor of Clinical Medicine, New York
University School of Medicine; Aldenley Tish and
Bellevue Hospital, New York, New York
Cardiac Complications

George C. Garrow, MD

Clinical Assistant Professor of Medicine in Oncology,
University of Rochester; Attending Physician, The
Genesee Hospital, Rochester, New York
Pulmonary Complications

Laurie E. Gaspar, MD, FRCP(C)

Chair, Radiation Oncology, University of Colorado,
Boulder, Colorado
Anal Canal

Dennis A. Gastineau, MD

Associate Professor of Medicine, Mayo Medical School,
Mayo Clinic, Rochester, Minnesota
Oral Complications

Mark R. Gilbert, MD

Associate Professor of Neurosurgery, Neurology, and
Medicine, Emory University School of Medicine; Co-
Director, Brain Tumor Program, Winship Cancer
Center, Emory University, Atlanta Georgia
Neurologic Complications

Robert J. Ginsberg, MD

Professor of Surgery, Cornell University Medical College;
Head, Thoracic Surgery, Memorial Sloan-Kettering
Cancer Center, New York, New York
Lung Metastases; Lung

Jesse M. Goldman, MD

Clinical Instructor, Division of Nephrology, Department
of Medicine, Jefferson Medical College of Thomas
Jefferson University; Director, Peritoneal Dialysis,
Intermediate Dialysis Unit, Thomas Jefferson
University Hospital, Philadelphia, Pennsylvania
Hyponatremia

John M. Goldman, DM, FRCP, FRCPath

Professor of Leukemia Biology, Imperial College School
of Medicine; Chairman, Department of Haematology,
Hammersmith Hospital, London, United Kingdom
Chronic Myeloid Leukemia

Daniel M. Green, MD

Professor of Pediatrics, Department of Pediatrics, School
of Medicine and Biomedical Sciences, University of
Buffalo, State University of New York; Associate Chief,
Pediatrics, Roswell Park Cancer Institute, Buffalo,
New York
Second Malignant Neoplasms

Michael S. Grimley, MD

Pediatric Hematology/Oncology Fellow, Division of
Hematology/Oncology, Children's Hospital Medical
Center, Cincinnati, Ohio
Immunodeficiency and Cancer

Louise Grochow, MD

Visiting Associate Professor, The Johns Hopkins
University School of Medicine, Baltimore, Maryland;
Chief, Investigational Drug Branch, National Cancer
Institute, Bethesda, Maryland
Colon and Rectum

H. Barton Grossman, MD

W.A. "Tex" and Deborah Moncrief, Jr. Distinguished
Chair in Urology, Professor, Departments of Urology
and Cancer Biology, Deputy Chairman, Department of
Urology, University of Texas M.D. Anderson Cancer
Center, Houston, Texas
Penis and Urethra

Stuart A. Grossman, MD

Professor of Oncology, Medicine, and Neurosurgery, The Johns Hopkins University School of Medicine, Baltimore, Maryland
Cancer Pain

Leonard L. Gunderson, MD

Professor and Chair of Oncology, Mayo Medical School; Chair of Oncology, Consultant in Radiation Oncology, Mayo Clinic, Rochester, Minnesota
Stomach

Thomas M. Habermann, MD

Associate Professor of Medicine, Mayo Graduate School of Medicine, Rochester, Minnesota
Cutaneous T-Cell Lymphoma

John D. Hainsworth, MD

Director, Clinical Research, Sarah Cannon Cancer Center, Centennial Medical Center, Nashville, Tennessee
Nausea and Vomiting

William D. Haire, MD

Professor, Department of Internal Medicine, University of Nebraska Medical Center, Omaha, Nebraska
Thrombotic Complications

David Hakimian, MD

Consultant, Northwestern Medical Faculty Foundation, Northwestern University Medical School, Chicago, Illinois; Attending Physician, Lutheran General Hospital, Park Ridge, Illinois
Hairy Cell Leukemia

Daniel Haller, MD

Professor and Associate Chief for Clinical Affairs, Division of Hematology-Oncology, Department of Medicine, University of Pennsylvania School of Medicine, Philadelphia, Pennsylvania
Endocrine System

Frank Haluska, MD

Assistant Professor of Medicine, Department of Medicine, Harvard Medical School; Director, Melanoma Research Program, Harvard Medical School, Boston, Massachusetts
Skin: Malignant Melanoma

Andrea B. Hamilton, MD

Consultant, Department of Psychiatry, Memorial Sloan-Kettering Cancer Center, New York, New York
Evaluation and Management of Sexual Dysfunction

Bruce A. Harms, MD

Professor of Surgery, University of Wisconsin, Madison, Wisconsin
Colon and Rectum

Michael J. Hawkins, MD

Associate Director, Washington Cancer Institute, Washington Hospital Center, Washington, D.C.
New Developmental Therapies

Richard F. Heitmiller, MD

Associate Professor of Surgery and Oncology, Johns Hopkins Medical Institutions, The Johns Hopkins University School of Medicine; Chief, Division of Thoracic Surgery, Johns Hopkins Hospital, Baltimore, Maryland
Esophagus

Bruce E. Hillner, MD

Professor of Medicine, Division of General Internal Medicine, Virginia Commonwealth University, Richmond, Virginia
Economic Analysis of Cancer Treatment

Margaret L. Ho, MA, CCC/SLP

Supervisor, Speech Pathology, Memorial Sloan-Kettering Cancer Center, New York, New York
Physical Rehabilitation

John T. Isaacs, PhD

Professor of Oncology and Urology, Johns Hopkins Oncology Center, The Johns Hopkins School of Medicine, Baltimore, Maryland
Prostate Cancer

Russell F. Jacoby, MD

Associate Professor of Medicine, University of Wisconsin; Director, Colon Cancer Prevention Program, University of Wisconsin Comprehensive Cancer Center, Madison, Wisconsin
Molecular Diagnostic Methods in Cancer Genetics

David H. Johnson, MD

Professor and Director, Division of Oncology, Department of Medicine, Vanderbilt University Medical Center, Nashville, Tennessee
Superior Vena Cava Syndrome

Michael B. Kastan, MD, PhD

Professor and Director, Pediatric Hematology-Oncology Program, University of Tennessee, Memphis; Member and Chair, Department of Hematology-Oncology, Co-Director, Molecular Oncogenesis Program, St. Jude Children's Research Hospital, Memphis, Tennessee
Regulation of the Cell Cycle

Dwight Kaufman, MD, PhD

The Jackson Clinic, Jackson, Tennessee
Hodgkin's Disease

Kristin A. Keefe, MD

Clinical Instructor, Division of Gynecologic Oncology,
University of California, Irvine, Orange, California
Cancer Prevention

Margaret Kemeny, MD

Professor of Surgery, SUNY Stony Brook; Chief, Division
of Surgical Oncology, SUNY Stony Brook, Stony Brook,
New York
Liver Metastases

Nancy E. Kemeny, MD

Professor of Medicine, Cornell University Medical
College; Attending Physician, Gastrointestinal
Oncology Service, Memorial Sloan-Kettering Cancer
Center, New York, New York
Liver Metastases

Thomas W. Kensler, PhD

Professor, Division of Toxicological Sciences, Department
of Environmental Health Sciences, School of Hygiene
and Public Health, Johns Hopkins University,
Baltimore, Maryland
*Chemical and Physical Agents in Our
Environment*

Anne Kessinger, MD

Professor, Department of Internal Medicine, University of
Nebraska Medical Center, Omaha, Nebraska
Bone Marrow Transplantation

Elliott Kieff, MD, PhD

Albee Professor of Medicine, Microbiology, and
Molecular Genetics, Harvard University; Co-Director,
Channing Laboratory, Brigham and Women's Hospital,
Boston, Massachusetts
Tumor Viruses

Barry M. Kinzbrunner, MD

Vice President, National Medical Director, Vitas
Healthcare Corporation, Miami, Florida
The Terminally Ill Patient

Lawrence R. Kleinberg, MD

Assistant Professor of Oncology, Johns Hopkins Medical
Institutions, The Johns Hopkins University School of
Medicine, Baltimore, Maryland
Esophagus

Peter A. Kouides, MD

Assistant Professor of Medicine, University of Rochester
School of Medicine; Attending Hematologist,
Rochester General Hospital, Rochester, New York
The Myelodysplastic Syndromes

Robert A. Kyle, MD

Consultant, Division of Hematology and Internal
Medicine, Mayo Foundation Mayo Clinic; Professor of
Medicine and Laboratory Medicine, Mayo Medical
School, Rochester, Minnesota
Multiple Myeloma and Related Disorders

Elisabeth Lachmann, MD

Assistant Professor of Rehabilitation Medicine, Cornell
University Medical College; Attending Physiatrist,
New York Presbyterian Hospital (Cornell Campus),
New York, New York
Physical Rehabilitation

Alessandro Laviano, MD

Assistant Professor of Medicine, Department of Clinical
Medicine, University of Rome "La Sapienza," Rome,
Italy
Weight Loss and Cachexia

Theodore S. Lawrence, MD, PhD

Professor and Department Chair, Department of
Radiation Oncology, University of Michigan Medical
School, Ann Arbor, Michigan
Liver Metastases

Renato Lenzi, MD

Associate Professor of Medicine, University of Texas
M.D. Anderson Cancer Center, Houston, Texas
Carcinoma of Unknown Primary

Allen S. Lichter, MD

Professor of Radiation Oncology, Dean, College of
Medicine, University of Michigan Medical Center,
Ann Arbor, Michigan
*Radiation Therapy; Eye, Orbit, and Adnexal
Structures; Breast*

Allan Lipton, MD

Professor of Medicine, Department of Medicine,
Pennsylvania State University College of Medicine,
Milton S. Hershey Medical Center; Chief, Division of
Oncology, Milton S. Hershey Medical Center, Hershey,
Pennsylvania
Hypercalcemia

T. Andrew Lister, MD, FRCP, FRCPath

Professor of Medical Oncology, Imperial Cancer
Research Fund Medical Oncology Unit, St.
Bartholomew's Hospital, London, United Kingdom
Non-Hodgkin's Lymphomas

G. Scott Long, MD, PhD

Assistant Professor of Medicine, University of Pittsburgh School of Medicine; Staff Physician, University of Pittsburgh Cancer Institute, University of Pittsburgh Medical Center, Pittsburgh, Pennsylvania
Reproductive Complications; Endocrine Complications

Dan L. Longo, MD

Professor of Oncology and Medicine, The Johns Hopkins University School of Medicine; Scientific Director, National Institute on Aging, GRC, Baltimore, Maryland
Hodgkin's Disease

Charles L. Loprinzi, MD

Professor and Chair, Medical Oncology, Mayo Clinic, Rochester, Minnesota
Oral Complications

Matthew J. Loscalzo, MSW

Research Associate, The Johns Hopkins University School of Medicine; Director, Patient and Family Services, Co-Director, Center for Cancer Pain Research, The Johns Hopkins Oncology Center, Baltimore, Maryland
Psychosocial Rehabilitation

Richard R. Love, MD

Professor, Departments of Medicine and Family Medicine, University of Wisconsin Medical School-Madison, Madison, Wisconsin
Breast

John S. Macdonald, MD

Professor of Medicine, New York Medical College; Medical Director, St. Vincent's Comprehensive Cancer Center, New York, New York
Endocrine System

Irfan Maghfoor, MD

Clinical Assistant Professor of Medicine, Division of Oncology, Saskatoon Cancer Center, University of Saskatchewan, Saskatoon, Saskatchewan, Canada
Effusions

David M. Mahvi, MD

Associate Professor of Surgery, School of Medicine, University of Wisconsin, Madison, Wisconsin
Small Bowel

Fray F. Marshall, MD

Professor of Urology, Emory University School of Medicine; Chairman, Department of Urology, The Emory Clinic, Atlanta, Georgia
Kidney and Ureter

John L. Marshall, MD

Assistant Professor, Lombardi Cancer Center, Georgetown University, Washington, D.C.
New Developmental Therapies

Robert J. Mayer, MD

Professor of Medicine, Harvard Medical School; Vice Chair for Education, Department of Adult Oncology, Dana Farber Cancer Institute, Boston, Massachusetts
Acute Myeloid Leukemia in Adults

Patricia M. McCormack, MD

Retired Thoracic Surgeon, Memorial Sloan-Kettering Cancer Center, New York, New York
Lung Metastases

J. Stephen McDaniel, MD

Associate Professor of Psychiatry and Behavioral Sciences, Emory University School of Medicine, Atlanta, Georgia
Psychological Distress and Depression

Charles J. McDonald, MD

Professor of Medical Science, Chair, Department of Dermatology, Brown University School of Medicine; Physician-in-Chief, Department of Dermatology, Rhode Island Hospital, Providence, Rhode Island
Alopecia and Cutaneous Complications

Sandra McDonald, MBChB, MMed(RadT)

Clinical Associate Professor, University of Rochester; Chief, Radiation Oncology, The Genesee Hospital, Rochester, New York
Pulmonary Complications

I. Ross McDougall, MD, PhD

Professor of Radiology, Department of Nuclear Medicine, Stanford University, Stanford, California
Endocrine System

Michael M. Meguid, MD, PhD, FACS

Professor, General and Oncologic Surgery and Neuroscience Program, SUNY Health Science Center; Professor, Department of Surgery, University Hospital, Syracuse, New York
Weight Loss and Cachexia

Steven G. Meranze, MD

Associate Professor, Radiology and Radiological Sciences, Department of Radiology and Radiological Sciences, Vanderbilt University Medical Center, Nashville, Tennessee
Superior Vena Cava Syndrome

Frank L. Meyskens, Jr., MD

Professor of Medicine and Biological Chemistry,
University of California, Irvine; Director, Chao Family
Comprehensive Cancer Center, University of
California, Irvine, Orange, California
Cancer Prevention

James E. Montie, MD

Head, Section of Urology, Valassis Professor of Urologic
Oncology, University of Michigan, Ann Arbor, Michigan
Carcinoma of the Bladder

A. Ross Morton, MD

Associate Professor, Department of Medicine, Queen's
University; Consultant Nephrologist, Kingston General
Hospital, Kingston, Ontario, Canada
Hypercalcemia

Jennie J. Muglia, MD

Assistant Professor, Department of Dermatology, Brown
University School of Medicine; Associate Director,
Dermatopharmacology Division, Rhode Island
Hospital, Providence, Rhode Island
Alopecia and Cutaneous Complications

Dominique L. Musselman, MD

Assistant Professor of Psychiatry and Behavioral
Sciences, Emory University School of Medicine,
Atlanta, Georgia
Psychological Distress and Depression

James R. Neff, MD

Professor and Chairman, Department of Orthopaedic
Surgery and Rehabilitation; Professor, Department of
Pathology, University of Nebraska Medical Center,
Omaha, Nebraska
Sarcomas of Bone

Charles B. Nemeroff, MD, PhD

Reunette W. Harris Professor and Chairman, Department
of Psychiatry and Behavioral Sciences, Atlanta, Georgia
Psychological Distress and Depression

John E. Niederhuber, MD

Director, University of Wisconsin Comprehensive Cancer
Center; Assistant Dean for Oncology, Watawa
Professor-Bascom, Departments of Surgery and
Oncology, University of Wisconsin Medical School,
Madison, Wisconsin
*B-Lymphocyte Responses; Surgical Therapy;
Establishing and Maintaining Vascular Access;
Colon and Rectum; Pancreas; Breast*

Kenneth Offit, MD, MPH

Associate Professor of Medicine, Associate Professor of
Public Health, Cornell University Medical College;
Chief, Clinical Genetics Service, Associate Attending,
Department of Human Genetics, Memorial Sloan-
Kettering Cancer Center, New York, New York
Genetics in Clinical Oncology

Alberto S. Pappo, MD

Associate Professor of Pediatrics, College of Medicine,
University of Tennessee, Memphis; Associate Member,
Department of Hematology/Oncology, St. Jude
Children's Research Hospital, Memphis, Tennessee
Pediatric Tumors

Ugo Pastorino, MD

Director, Division of Thoracic Surgery, European Institute
of Oncology, Milan, Italy
Lung Metastases

Roy A. Patchell, MD

Associate Professor of Neurology and Neurosurgery,
Chief of Neuro-Oncology, University of Kentucky
Medical Center, Lexington, Kentucky
Brain Metastases and Carcinomatous Meningitis

David G. Payne, MD

Associate Professor, Department of Radiation Oncology,
University of Toronto; Department of Radiation
Oncology, Princess Margaret Hospital, University
Health Network, Toronto, Ontario, Canada
Lung

Michael C. Perry, MD, FACP

Nellie B. Smith Chair of Oncology, Professor and Chair,
Division of Hematology/Oncology, Department of
Internal Medicine, University of Missouri/Ellis Fischel
Cancer Center, Columbia, Missouri
Chemotherapy

LoAnn C. Peterson, MD

Professor of Pathology, Northwestern University Medical
School; Attending Pathologist, Director,
Hematopathology, Northwestern Memorial Hospital,
Chicago, Illinois
Hairy Cell Leukemia

Curtis A. Pettaway, MD

University of Texas M.D. Anderson Cancer Center,
Houston, Texas
Penis and Urethra

Steven Piantadosi, MD, PhD

Professor of Oncology, Director, Oncology Biostatistics, Joint Appointments Epidemiology and Biostatistics, The Johns Hopkins University School of Medicine, Baltimore, Maryland
Biostatistics for Clinical Trials

Lori J. Pierce, MD

Associate Professor, University of Michigan Medical School, Ann Arbor, Michigan
Breast

Peter W.T. Pisters, MD

Assistant Professor of Surgical Oncology, University of Texas M.D. Anderson Cancer Center, Houston, Texas
Sarcomas of Soft Tissue

Mark R. Pittelkow, MD

Professor, Department of Dermatology, Mayo Medical School, Mayo Clinic, Rochester, Minnesota
Cutaneous T-Cell Lymphoma

Joseph C. Poen, MD

Assistant Professor, Department of Radiation Oncology, Stanford University Medical Center, Stanford, California
Pancreas

David G. Poplack, MD

Elise C. Young Professor of Pediatrics, Department of Pediatrics, Baylor College of Medicine; Director, Texas Children's Cancer Center, Texas Children's Hospital, Houston, Texas
Childhood Leukemias

Elizabeth Poplin, MD

Associate Professor, Department of Medicine, University of Medicine and Dentistry of New Jersey; Cancer Institute of New Jersey, New Brunswick, New Jersey
Anal Canal

Laurel C. Preheim, MD

Professor and Chief of Infectious Diseases, VA Medical Center, Omaha, Nebraska
Fever in the Patient Without Neutropenia

Martin N. Raber, MD

Professor of Medicine, University of Texas M.D. Anderson Cancer Center; Vice President for Managed Care and Business Development, University of Texas M.D. Anderson Cancer Center, Houston, Texas
Carcinoma of Unknown Primary

Elizabeth C. Reed, MD

Associate Professor, Department of Internal Medicine, University of Nebraska Medical Center, Omaha, Nebraska
Bone Marrow Transplantation

Mark A. Ritter, MD, PhD

Associate Professor, University of Wisconsin, Madison, Wisconsin
Colon and Rectum

Naiyer A. Rizvi, MD

Assistant Professor of Medicine, Lombardi Cancer Center, Georgetown University, Washington, D.C.
New Developmental Therapies

John Roberts, MD

Assistant Professor, Cardiac and Thoracic Surgery, Department of Cardiac and Thoracic Surgery, Vanderbilt University Medical Center, Nashville, Tennessee
Superior Vena Cava Syndrome

W. Mark Roberts, MD

Associate Professor of Pediatrics, University of Texas M.D. Anderson Cancer Center, Houston, Texas
Childhood Leukemias

Carlos Rodriguez-Galindo, MD

Assistant Professor of Pediatrics, School of Medicine, University of Tennessee, Memphis; Assistant Member, Department of Hematology/Oncology, St. Jude Children's Research Hospital, Memphis, Tennessee
Pediatric Tumors

Jeffrey Ross, MD

Professor of Oncology, University of Wisconsin, Madison, Wisconsin
Structure and Function of the Gene

R.D. Rubens, MD, FRCP

Professor of Clinical Oncology; Consultant Medical Oncologist, Guy's Hospital, London, United Kingdom
Bone Metastases

Philip Rubin, MD

Professor of Radiation Oncology, University of Rochester, Rochester, New York
Pulmonary Complications

John C. Ruckdeschel, MD

Professor of Medicine, University of South Florida College of Medicine; Director and Chief Executive Officer, H. Lee Moffitt Cancer Center and Research Institute, Tampa, Florida
Spinal Cord Compression

Mark E. Rupp, MD

Associate Professor, Internal Medicine, University of Nebraska Medical Center; Medical Director, Infection Control, Nebraska Health System, Omaha, Nebraska
Fever in the Patient Without Neutropenia

Howard M. Sandler, MD

Associate Chair, Clinical Research, Associate Professor, Department of Radiation Oncology, University of Michigan, Ann Arbor, Michigan
Carcinoma of the Bladder

John T. Sandlund, MD

Department of Medicine, University of Tennessee, Memphis; Associate Professor, Department of Hematology/Oncology, St. Jude Children's Research Hospital, Memphis, Tennessee
Childhood Lymphoma

Victor M. Santana, MD

Associate Professor of Pediatrics, College of Medicine, University of Tennessee, Memphis; Associate Member, Department of Hematology/Oncology, St. Jude Children's Research Hospital, Memphis, Tennessee
Pediatric Tumors

Peter T. Scardino, MD

Alfred P. Sloan Chair, Department of Urology, Memorial Sloan-Kettering Cancer Center and Professor of Urology, Cornell University College of Medicine, New York, New York
Prostate Cancer

Howard I. Scher, MD

Associate Professor of Medicine, Cornell University Joan and Sanford I. Weill Medical College; Chief, Genitourinary Oncology Service and Attending Physician, Memorial Sloan-Kettering Cancer Center, New York, New York
Prostate Cancer

David Schottenfeld, MD

John G. Searle Professor of Epidemiology, Professor of Internal Medicine, School of Public Health, University of Michigan School of Medicine, Ann Arbor, Michigan
Epidemiology

Lynn M. Schuchter, MD

Associate Professor of Medicine, Department of Medicine, University of Pennsylvania, Philadelphia, Pennsylvania
Skin: Malignant Melanoma

Herbert S. Schwartz, MD

Professor, Department of Orthopaedics and Rehabilitation; Professor of Pathology, Vanderbilt University Medical Center, Department of Orthopaedics, Nashville, Tennessee
Sarcomas of Bone

Joan Rankin Shapiro, PhD

Adjunct Professor, Arizona State University, Tempe, Arizona; Director, Neuro-Oncology Research, Barrow Neurological Institute, Phoenix, Arizona
Central Nervous System

William R. Shapiro, MD

Professor of Clinical Neurology, College of Medicine, University of Arizona, Tucson, Arizona; Chief, Neuro-Oncology, Kemper and Ethel Marley Chair in Neurology, Barrow Neurological Institute, Phoenix, Arizona
Central Nervous System

Daniel G. Sheehan, MB, BCh, MSc

Professor of Pathology, University of Pittsburgh School of Medicine, Pittsburgh, Pennsylvania
Anal Canal

Vivian R. Sheidler, MS, RN

Senior Clinical Research Scientist, Glaxo Wellcome, Research Triangle Park, North Carolina
Cancer Pain

Frances A. Shepherd, MD, FRCPC

Professor of Medicine, Director, Division of Medical Oncology, University of Toronto; Senior Staff Physician, Princess Margaret Hospital, Toronto, Ontario, Canada
Lung

Jonathan W. Simons, MD

Associate Professor of Oncology and Urology, Cancer Gene Therapy Laboratory, The Johns Hopkins University School of Medicine; Attending Physician, Johns Hopkins Hospital, Baltimore, Maryland
Kidney and Ureter

Eric J. Small, MD

Associate Professor of Medicine and Urology, Co-Director, Urologic Oncology Program, Associate Director, General Clinical Research Center, University of California, San Francisco, San Francisco, California
Testes

David C. Smith, MD

Assistant Professor of Internal Medicine, University of Michigan, Ann Arbor, Michigan
Carcinoma of the Bladder