Nutrition Panel

Editorial Board Liaison

Katherine Hammond Chessman, Pharm.D., FCCP, BCPS, BCNSP Professor Department of Clinical Pharmacy and Outcome Sciences Pediatric Pharmacy Practice Residency Program Director South Carolina College of Pharmacy Medical University of South Carolina Campus Clinical Pharmacy Specialist Pediatrics/Pediatrics Surgery MUSC Children's Hospital Charleston, South Carolina

Authors

Jennifer L. Ash, Pharm.D., BCNSP (deceased) Assistant Professor of Pharmacy Practice Butler University Indianapolis, Indiana

> Cathy L. Bartels, Pharm.D., FAAIM *Clinical Pharmacist* Children's Hospital of Omaha Omaha, Nebraska

Brian M. Hodges, Pharm.D., BCPS, BCNSP Clinical Director Department of Pharmacy and Drug Information Comprehensive Pharmacy Services, Charleston Area Medical Center Charleston, West Virginia Clinical Assistant Professor Department of Clinical Pharmacy West Virginia University School of Pharmacy Morgantown, West Virginia

Sarah J. Miller, M.S., Pharm.D., BCNSP *Professor* Department of Pharmacy Practice University of Montana Skaggs School of Pharmacy Missoula, Montana

John K. Siepler, Pharm.D., FCCP, BCNSP *Research Specialist* Nutrishare, Inc. Elk Grove, California *Clinical Professor* UCSF School of Pharmacy University of California–San Francisco San Francisco, California Cathy L. Worrall, BSN, Pharm.D., BCPS, BCNSP, FAPhA Surgical Critical Care/Trauma/Nutrition Support Clinical Pharmacy Specialist Department of Pharmacy Services Medical University of South Carolina Clinical Associate Professor South Carolina College of Pharmacy – MUSC Campus Charleston, South Carolina

Reviewers

The American College of Clinical Pharmacy and the authors thank the following individuals for their careful review of the Book 9, Gastroenterology I chapters:

H. Gwen Bartlett, BSPharm, Pharm.D., BCPS *Clinical Pharmacist II* Department of Pharmacy St. Francis Health Center Topeka, Kansas

> Karen Norris, Pharm.D. Overland Park, Kansas

<u>Metabolic and Nutrition Issues in Patients Receiving</u> <u>Continuous Renal Replacement Therapy</u>

Judy W.M. Cheng, Pharm.D., MPH, FCCP, BCPS (AQ Cardiology) *Professor of Pharmacy Practice* Department of Pharmacy Practice Massachusetts College of Pharmacy and Health Sciences *Clinical Pharmacist* Department of Pharmacy Brigham and Women's Hospital Boston, Massachusetts

Katherine Hammond Chessman, Pharm.D., FCCP, BCPS, BCNSP Professor Department of Clinical Pharmacy and Outcome Sciences Pediatric Pharmacy Practice Residency Program Director South Carolina College of Pharmacy Medical University of South Carolina Campus Clinical Pharmacy Specialist Pediatrics/Pediatrics Surgery MUSC Children's Hospital Charleston, South Carolina

Home Parenteral Nutrition

Kristina N. Bryowsky, Pharm.D., BCPS *Clinical Pharmacist, NICU* St. Louis Children's Hospital Department of Pharmacy St. Louis, Missouri

Nutrition Panel

Emilie L. Karpiuk, Pharm.D., BCPS, BCOP Oncology Pharmacist Department of Pharmacy Froedtert Hospital Milwaukee, Wisconsin

Vanessa J. Kumpf, Pharm.D., BCNSP Clinical Specialist, Nutrition Support Center for Human Nutrition Vanderbilt Medical Center Nashville, Tennessee

Todd P. Semla, Pharm.D., M.S., FCCP, BCPS, AGSF *Clinical Pharmacy Specialist* VACO Pharmacy Benefits Management Service U.S. Department of Veterans Affairs Hines, Illinois *Associate Professor* Departments of Medicine and Psychiatry and Behavioral Sciences The Feinberg School of Medicine Northwestern University Chicago, Illinois

Immunonutrition

Jennifer M. Blanchard, Pharm.D., BCPS Associate Chief Department of Pharmacy Service, Inpatient Programs Cincinnati VA Medical Center Cincinnati, Ohio

Adam B. Jackson, Pharm.D., BCPS Pharmacy Benefits Analyst/Pharmacist Pharmacy Department Kaiser Permanente Colorado Clinical Assistant Professor University of Colorado Denver School of Pharmacy Denver, Colorado

Bishoy Luka, Pharm.D., BCNSP *Clinical Pharmacist – Critical Care* Department of Pharmacy Kingsbrook Jewish Medical Center *Assistant Clinical Professor of Pharmacy Practice* Division of Pharmacy Practice Arnold and Marie Schwartz College of Pharmacy and Health Sciences Long Island University Brooklyn, New York

Dietary Supplements

Clarence Chant, Pharm.D., BCPS, FCSHP *Clinical Pharmacy Specialist* Critical Care/Research, Pharmacy Department St. Michael's Hospital *Assistant Professor* Leslie Dan Faculty of Pharmacy University of Toronto Toronto, Ontario, Canada

Teresa M. Bailey Klepser, Pharm.D., FCCP, BCPS *Professor* College of Pharmacy Ferris State University Big Rapids, Michigan Department of Family Practice Promed at Woodbridge Portage, Michigan

Disclosure of Potential Conflicts of Interest

Consultancies: Nelly Adel (Amgen, Astra-Zeneca); Nabila Ahmed-Sarwar (Little Victories Legal and Cunsulting Services, Bari MD); Cathy L. Bartels (Children's Hospital of Omaha); William R. Bartle (Pharmacy Examining Board of Canada, Thrombosis Interest Group of Canada); Judy W.M. Cheng (Scios Pharmaceuticals, Sanofi-Aventis); Rebecca Corey (Biotest Pharmaceuticals, Astellas Pharma US, Inc.); Brian Hemstreet (Conexus Health); Anne Hume (New England Research Institute, Pharmacotherapy Consultants of New England); Lisa C. Hutchison (Arkansas Medicaid); Jiwon Kim (Roche Pharmaceuticals, Cubist Pharmaceuticals, Pfizer Pharmaceuticals); Vanessa J. Kumpf (Baxter Healthcare); Bishoy Luka (Long Island University, Enhanced Care Initiatives); Linda G. Martin (Laramie Reproductive Health, Wyoming Medicaid Drug Utilization, Downtown Clinic—Laramie, Wyoming, Wyoming Society of Health-System Pharmacy); Michelle M. Richardson (National Kidney Foundation, Agency for Health Care Research [AHRQ]/Centers for Medicare and Medicaid Services, Amgen); Marisel Segarra-Newnham (Tibotec Therapeutics, Scios, Inc., USP); Lisa Smith (NCPRN, NCAP Emergency Preparedness Task Force)

Stock Ownership: Katherine H. Chessman (Procter & Gamble, stock owned by spouse or significant other); Lisa C. Hutchison (Cardinal Health); Jiwon Kim (Isotechnika, Inc.); Michelle M. Richardson (TEI Biosciences Inc., stock owned by spouse or significant other); Lisa Smith (Mylan Pharmaceuticals [stock owned by spouse or significant other]) *Royalties:* Lisa C. Hutchison (ASHP)

Grants: Lingtak-Neander Chan (ZymoGenetics Inc.); Brian Hemstreet (Astra Zeneca, McKesson [two grants]); Anne Hume (National Library of Medicine, Bureau of Health Professions, AHRQ); Lisa C. Hutchison (Boehringer Ingelheim, NIH); Linda G. Martin (State of Wyoming Department of Health, Aging Division); Michelle M. Richardson (NIDDK)

Honoraria: Nelly Adel (Amgen); Nabila Ahmed-Sarwar (Bari MD, Michigan Pharmacists Association [two honoraria]); Judy W.M. Cheng (Scios Pharmaceuticals, Millennium Pharmaceuticals); Katherine H. Chessman (Pfizer); Rebecca Corey (Astellas Pharma US); Brian Hemstreet (Axcan Pharma); Vanessa J. Kumpf (Enturia); Bishoy Luka (Long Island University; SUNY Downstate College of Nursing); Michelle M. Richardson (Amgen); Julie M. Sease (Novartis Pharmaceuticals); Marisel Segarra-Newnham (Scios, Inc.)

Other: Kristina N. Bryowsky (spouse or significant other employed by Forest Pharmaceuticals; brother employed by Pfizer); Todd P. Semla (spouse or significant other employed by Abbott); John Siepler (employed by Nutrishare)

Nothing to Disclose: Jennifer Ash, Jennifer Blanchard, Larry Buie, Clarence Chant, Paulina Deming, Jennifer Downing, Joy Greene, Brian Hodges, Hannah Howell, Adam Jackson, Emilie Karpiuk, Teresa M. Bailey Klepser, Sarah Miller, Priti Patel, Cathy L. Worrall