

# Cardiology Critical Care III Panel

---

## Series Editors:

### **Bradley A. Boucher, Pharm.D., FCCP, FNAP, MCCM, BCPS**

*Professor of Clinical Pharmacy*  
*Associate Dean for Strategic Initiatives and Operations*  
College of Pharmacy  
University of Tennessee Health Science Center  
Memphis, Tennessee

### **Curtis E. Haas, Pharm.D., FCCP**

*Director of Pharmacy*  
University of Rochester Medical Center  
Rochester, New York

## Faculty Panel Chair:

### **Jo Ellen Rodgers, Pharm.D., FCCP, FHSA, FAHA, BCPS-AQ Cardiology**

*Clinical Associate Professor*  
Division of Pharmacotherapy and  
Experimental Therapeutics  
UNC Eshelman School of Pharmacy  
University of North Carolina  
Chapel Hill, North Carolina

## ACLS and Post-Arrest Management

### Authors

### **Barbara S. Wiggins, Pharm.D., FCCP, FAHA, FNLA, BCCCP, BCPS-AQ Cardiology, CLS, AACC**

*Pharmacy Clinical Specialist-Cardiology*  
Pharmacy Department  
Medical University of South Carolina  
Charleston, South Carolina

### **Cynthia A. Sanoski, Pharm.D., FCCP, BCPS**

*Chair and Associate Professor*  
Department of Pharmacy Practice  
Jefferson College of Pharmacy  
Philadelphia, Pennsylvania

### Reviewers

### **Toby C. Trujillo, Pharm.D., FCCP, FAHA, BCPS-AQ Cardiology**

*Associate Professor*  
Department of Clinical Pharmacy  
University of Colorado Skaggs School of  
Pharmacy and Pharmaceutical Sciences  
Aurora, Colorado

### **Antonia Vilella, Pharm.D., BCCCP, BCPS**

*ER Clinical Pharmacist*  
Bayfront Health-St. Petersburg  
St. Petersburg, Florida

### **Jessica M. Louie, Pharm.D., BCCCP**

*Assistant Professor of Pharmacy Practice*  
West Coast University, School of Pharmacy  
Los Angeles, California

## Beyond Randomized Placebo Controlled Trials in Cardiology

### Author

### **Cynthia A. Jackevicius, Pharm.D., M.Sc., BCPS-AQ Cardiology, FCCP, FCSHP, FAHA**

*Professor, Pharmacy Practice*  
College of Pharmacy, Western  
University of Health Sciences  
*Clinical Pharmacy Specialist, Cardiology*  
VA Greater Los Angeles Healthcare System  
Los Angeles, California  
*Senior Adjunct Scientist*  
Institute for Clinical Evaluative Sciences  
Toronto, Canada

### Reviewers

### **Edith A. Nutescu, Pharm.D., M.S., FCCP**

*Associate Professor*  
Department of Pharmacy Systems, Outcomes and Policy  
Director, Center for Pharmacoepidemiology  
and Pharmacoeconomic Research  
University of Illinois at Chicago, College of Pharmacy  
Chicago, Illinois

### **Nicole E. Cieri, Pharm.D., BCPS**

*Clinical Assistant Professor*  
Department of Pharmacy Practice  
D'Youville College School of Pharmacy  
Buffalo, New York

### **Jonathon Pouliot, Pharm.D., MSCR, BCPS**

*Assistant Professor of Pharmacy Practice*  
Department of Pharmacy Practice  
Lipscomb University College of  
Pharmacy and Health Sciences  
Nashville, Tennessee

The American College of Clinical Pharmacy and the authors thank the following individuals for their careful review of the Cardiology Critical Care III chapters:

**Shannon W. Finks, Pharm.D., FCCP, BCPS-AQ Cardiology**

*Associate Professor*  
Department of Clinical Pharmacy  
University of Tennessee College of Pharmacy  
*Clinical Pharmacy Specialist, Cardiology*  
Department of Pharmacy  
VA Medical Center  
Memphis, Tennessee

**Ralph H. Raasch, Pharm.D., FCCP, BCPS**

*Associate Professor of Pharmacy (retired)*  
Division of Practice Advancement and Clinical Education  
Eshelman School of Pharmacy  
The University of North Carolina at Chapel Hill  
Chapel Hill, North Carolina

## DISCLOSURE OF POTENTIAL CONFLICTS OF INTEREST

**Consultancies:** Paul P. Dobesh (AstraZeneca); Toby C. Trujillo (Boehringer-Ingelheim, Janssen Pharmaceuticals, Pfizer/BMS); Douglas Jennings (Novartis Pharmaceuticals)

**Stock Ownership:**

**Royalties:**

**Grants:** Cynthia A. Jackevicius (CIHR); Sarah Livings (Pfizer); Scott Mueller (CSL Behring); Edith A. Nutescu (NHLBI);

**Honoraria:** Cynthia A. Jackevicius (American Heart Association);

**Other:**

**Nothing to disclose:** Ola Adejuwon; Stephanie Bass; Seth R. Bauer; Jonathan D. Cicci; Nicole E. Cieri; Megan M. Clarke; Abigail M. Cook; Ilya M. Danelich; Steven P. Dunn; Ian B. Hollis; Alexander Kantorovich; Hasan O. Kazmi; Jessica M. Louie; John E. MacKay; Jennifer H. Mai; Michael P. Moranville; Jonathon Pouliot; Cynthia A. Sanoski; Laura A. Siemianowski; Zach R. Smith; Antonia Vilella; Johnathan Voss; Phillip Weeks; Barbara S. Wiggins; Jason L. Williamson

**ROLE OF BPS:** The Board of Pharmacy Specialties (BPS) is an autonomous division of the American Pharmacists Association (APhA). BPS is totally separate and distinct from ACCP. The Board, through its specialty councils, is responsible for specialty examination content, administration, scoring, and all other aspects of its certification programs. CCSAP has been approved by BPS for use in BCCCP recertification. Information about the BPS recertification process is available [online](#).

Other questions regarding recertification should be directed to:

[Board of Pharmacy Specialties](#)

2215 Constitution Avenue NW

Washington, DC 20037

(202) 429-7591