

**Reviewer Relationships With Industry and Other Entities (Comprehensive)—2018 ACC/AHA/HRS Guideline on the Evaluation and Management of Patients With Bradycardia and Cardiac Conduction Delay (August 2018)**

Reviewer	Representation	Employment	Consultant	Speakers Bureau	Ownership/ Partnership/Principa l	Personal Research	Institutional, Organizational, or Other Financial Benefit	Expert Witness	Salary
Yong-Mei Cha	Official Reviewer—AHA	Mayo Clinic, Division of Cardiovascular Diseases	None	None	None	None	None	None	None
Zachary D. Goldberger	Official Reviewer—ACC/AHA Task Force on Clinical Practice Guidelines	University of Washington School of Medicine—Assistant Professor of Medicine; Division of Cardiology, Harborview Medical Center	None	None	None	None	None	None	None
Richard J. Kovacs	Official Reviewer—ACC Science and Quality Committee	Indiana University School of Medicine, Krannert Institute of Cardiology—Professor of Clinical Medicine	<ul style="list-style-type: none"> <li>• Biomedical Systems*</li> <li>• Jazz Pharmaceuticals</li> <li>• Theravance, Inc.</li> </ul>	None	None	<ul style="list-style-type: none"> <li>• Amaron Pharmaceuticals †</li> <li>• Eli Lilly and Company (DSMB)*</li> <li>• NIH†</li> <li>• Siemens†</li> </ul>	• MED Institute*	None	None
Kevin F. Kwaku	Official Reviewer—AHA	Dartmouth-Hitchcock Medical	None	None	None	None	None	None	None
Daniel M. Philbin Jr	Official Reviewer—ACC Board of Governors	New England Heart Institute	• Medtronic High Energy*	• St. Jude Medical	None	None	<ul style="list-style-type: none"> <li>• Abbott ‡</li> <li>• Boston Scientific‡</li> </ul>	None	None
Peter A. Brady	Organizational Reviewer—HRS	Mayo Clinic, Mayo Foundation	None	None	None	None	None	None	None

Ratika Parkash	Organizational Reviewer—HRS	Dalhousie University and Nova Scotia Health Authority—Professor of Medicine, Division of Cardiology (Arrhythmia); Director of Research, Division of Cardiology	None	None	None	<ul style="list-style-type: none"> <li>• Bayer*</li> <li>• Medtronic</li> <li>• Pfizer*</li> <li>• St. Jude Medical*</li> </ul>	None	None	None
Jonathan Philpott	Organizational Reviewer—STS	Mid-Atlantic Cardiothoracic Surgeons	<ul style="list-style-type: none"> <li>• AtriCure*</li> <li>• LifeNet Health</li> </ul>	None	None	None	None	None	None
Kevin Shannon	Organizational Reviewer—PACES	Mattel Children's Hospital at UCLA—Clinical Professor, Division of Pediatric Cardiology	None	None	None	None	<ul style="list-style-type: none"> <li>• Amgen†</li> </ul>	<ul style="list-style-type: none"> <li>• Defendant, Cardiac arrest during Amiodarone administration, 2017*</li> </ul>	None
Gus J. Vlahakes	Organizational Reviewer—AATS	Harvard Medical School and Massachusetts General Hospital—Professor of Surgery	None	None	None	None	None	None	None
Nazem Akoum	Content Reviewer	University of Washington	None	None	None	None	None	None	None
Sana M. Al-Khatib	Content Reviewer—ACC/AHA Task Force on Clinical Practice Guidelines	Duke Clinical Research Institute—Professor of Medicine	None	None	None	<ul style="list-style-type: none"> <li>• AHRQ*</li> <li>• FDA*</li> <li>• PCORI*</li> <li>• VA Health System (DSMB)</li> </ul>	<ul style="list-style-type: none"> <li>• Elsevier*</li> <li>• NHLBI‡</li> </ul>	<ul style="list-style-type: none"> <li>• Third party, ICDs, 2017</li> <li>• Third party, ICD implantation, 2018</li> </ul>	None

Joshua A. Beckman	Content Reviewer— ACC/AHA Task Force on Clinical Practice Guidelines	Vanderbilt University Medical Center— Director, Section of Vascular Medicine	<ul style="list-style-type: none"> <li>• Antidote Pharmaceuticals</li> <li>• AstraZeneca*</li> <li>• Bristol Myers Squibb*</li> <li>• Janssen Pharmaceuticals</li> <li>• Sanofi</li> </ul>	None	<ul style="list-style-type: none"> <li>• EMX†</li> <li>• JanaCare†</li> </ul>	<ul style="list-style-type: none"> <li>• Bayer (DSMB)*</li> <li>• Novartis (DSMB)</li> </ul>	<ul style="list-style-type: none"> <li>• Vascular Interventional Advances*</li> </ul>	None	None
Kim K. Birtcher	Content Reviewer— ACC/AHA Task Force on Clinical Practice Guidelines	University of Houston College of Pharmacy— Clinical Professor	<ul style="list-style-type: none"> <li>• Jones &amp; Bartlett Learning</li> </ul>	None	None	None	<ul style="list-style-type: none"> <li>• Accreditation Council for Clinical Lipidology†</li> </ul>	None	<ul style="list-style-type: none"> <li>• University of Houston College of Pharmacy*</li> </ul>
Mitchell I. Cohen	Content Reviewer— PACES	Pediatric Cardiology Associates	None	None	None	None	None	None	None
Freddy Del-Carpio Munoz	Content Reviewer—ERC Member	Mayo Clinic	None	None	None	None	None	None	None
Bernard Dennis	Content Reviewer— ACC/AHA Lay Reviewer	Dennis Associates, LLC	None	None	None	None	None	None	None
Anita Deswal	Content Reviewer— ACC/AHA Task Force on Clinical Practice Guidelines	Michael E. DeBakey VA Medical Center—Chief, Cardiology; Baylor College of Medicine— Professor of Medicine	None	<ul style="list-style-type: none"> <li>• PeerView Institute of Medical Learning*</li> </ul>	None	<ul style="list-style-type: none"> <li>• NIH*</li> </ul>	<ul style="list-style-type: none"> <li>• AHA Committee on HF and Transplantation†</li> <li>• AHA Get with the Guidelines Steering Committee†</li> <li>• HFSA†</li> <li>• KDIGO</li> <li>• NIH†</li> <li>• Novartis†</li> </ul>	None	None
Andrew E. Epstein	Content Reviewer	The Hospital of the University of Pennsylvania— Professor of Medicine	<ul style="list-style-type: none"> <li>• ZOLL Medical</li> </ul>	None	None	None	<ul style="list-style-type: none"> <li>• Biotronik*</li> <li>• Boston Scientific*</li> <li>• Boston Scientific (DSMB)*</li> <li>• Medtronic*</li> <li>• Medtronic (DSMB)</li> <li>• St Jude Medical/Abbott*</li> <li>• St. Jude Medical/Abbott (DSMB)*</li> </ul>	<ul style="list-style-type: none"> <li>• Defendant, Appropriateness of Monitoring, 2017</li> </ul>	None

Michael E. Field	Content Reviewer	University of Wisconsin School of Medicine and Public Health— Director, Clinical Electrophysiology and Cardiac Arrhythmia Service	None	None	None	None	None	None	None
Michael S. Firstenberg	Content Reviewer—ACC Surgeons Member Section and Leadership Council	The Medical Center of Aurora—Chair, Cardiovascular and Cardiothoracic Surgery	<ul style="list-style-type: none"> <li>• AllMed*</li> <li>• Johnson &amp; Johnson/Ethicon*</li> <li>• Maquet Cardiovascular*</li> <li>• Medtronic</li> </ul>	None	None	None	<ul style="list-style-type: none"> <li>• Grifols‡</li> </ul>	None	None
John D. Fisher	Content Reviewer—ACC Electrophysiology Member Section Chair	Montefiore Medical Center— Program Director CCEP	<ul style="list-style-type: none"> <li>• Medtronic*</li> </ul>	None	None	None	<ul style="list-style-type: none"> <li>• Biotronik*</li> <li>• Biotronik‡</li> <li>• Boston Scientific/Guidant*</li> <li>• Boston Scientific‡</li> <li>• Medtronic*</li> <li>• Medtronic‡</li> <li>• St. Jude Medical*</li> <li>• St. Jude Medical‡</li> </ul>	None	None
Federico Gentile	Content Reviewer— ACC/AHA Task Force on Clinical Practice Guidelines	Centro Cardiologico Gentile	None	None	None	None	None	None	None
Anne M. Gillis	Content Reviewer	University of Calgary	<ul style="list-style-type: none"> <li>• AHA</li> </ul>	None	None	<ul style="list-style-type: none"> <li>• Medtronic*</li> </ul>	<ul style="list-style-type: none"> <li>• Libin Cardiovascular Institute of Alberta†</li> </ul>	None	None
Bulent Gorenek	Content Reviewer	Eskisehir Osmangazi University Cardiology Department— Professor of Cardiology	None	<ul style="list-style-type: none"> <li>• Bayer</li> <li>• Boehringer Ingelheim</li> <li>• Daiichi-Sankyo</li> <li>• Pfizer</li> </ul>	None	None	None	None	None

Mohamed H. Hamdan	Content Reviewer	University of Wisconsin-Madison— Chief of Cardiovascular Medicine	None	None	<ul style="list-style-type: none"> <li>• ClinicNotes, LLC†</li> <li>• F2 Solutions, Inc</li> </ul>	None	<ul style="list-style-type: none"> <li>• University of Wisconsin-Madison*</li> </ul>	None	None
Glenn N. Levine	Content Reviewer— ACC/AHA Task Force on Clinical Practice Guidelines	Baylor College of Medicine— Professor of Medicine; Michael E. DeBakey Medical Center— Director, Cardiac Care Unit	None	None	None	None	None	<ul style="list-style-type: none"> <li>• Defendant, Out of hospital cardiopulmonary arrest, 2017*</li> <li>• Defendant, Out of hospital death, 2018*</li> </ul>	None
Mark S. Link	Content Reviewer	UT Southwestern Medical Center	None	None	None	None	<ul style="list-style-type: none"> <li>• NEJM Group</li> <li>• TIMI Study Group*</li> <li>• UpToDate*</li> <li>• Journal Watch Cardiology</li> </ul>	None	<ul style="list-style-type: none"> <li>• Circulation*</li> </ul>
Daniel L. Lustgarten	Content Reviewer	University of Vermont School of Medicine	<ul style="list-style-type: none"> <li>• Abbott/St. Jude Medical</li> <li>• Biotronik</li> <li>• Boston Scientific</li> <li>• Medtronic*</li> </ul>	None	None	<ul style="list-style-type: none"> <li>• Medtronic (DSMB)*</li> </ul>	<ul style="list-style-type: none"> <li>• Gilead Sciences, Inc.‡</li> <li>• Biotronik‡</li> <li>• Medtronic‡</li> </ul>	None	None
Siva K. Mulpuru	Content Reviewer—ERC Member	Mayo Clinic— Associate Professor	None	None	None	None	<ul style="list-style-type: none"> <li>• Mayo Clinic‡</li> </ul>	None	None
Patrick T. O'Gara	Content Reviewer— ACC/AHA Task Force on Clinical Practice Guidelines	Harvard Medical School— Professor of Medicine; Brigham and Women's Hospital— Director, Strategic Planning	None	None	None	None	<ul style="list-style-type: none"> <li>• Edwards Scientific†</li> <li>• Medtronic</li> <li>• NIH*</li> </ul>	None	None
Brian Olshansky	Content Reviewer	Professor of Medicine	<ul style="list-style-type: none"> <li>• Boehringer Ingelheim</li> <li>• Lundbeck Inc.*</li> </ul>	None	None	None	<ul style="list-style-type: none"> <li>• Amarin (DSMB)*</li> </ul>	None	None
David S. Park	Content Reviewer—AHA	NYU Langone Health— Assistant Professor, Department of Medicine	None	None	None	None	None	None	None

Mariann Piano	Content Reviewer—ACC/AHA Task Force on Clinical Practice Guidelines	Vanderbilt University School of Nursing—Nancy and Hilliard Travis Professor of Nursing; Senior Associate Dean for Research	None	None	None	• NIH	None	None	None
Merritt H. Raitt	Content Reviewer—ERC Vice Chair	Oregon Health & Science University; VA Portland Health Care System—Cardiologist	None	None	None	None	None	None	None
Satish R. Raj	Content Reviewer	University of Calgary	<ul style="list-style-type: none"> <li>• Allergan Inc</li> <li>• GE Healthcare*</li> <li>• Lundbeck Inc.</li> </ul>	None	None	<ul style="list-style-type: none"> <li>• Canadian Institutes of Health Research*</li> <li>• Cardiac Arrhythmia Network of Canada (CANet)*</li> </ul>	<ul style="list-style-type: none"> <li>• American Autonomic Society†</li> <li>• Association of Clinical and Translational Research†</li> <li>• Dysautonomia International†</li> </ul>	None	None
Win-Kuang Shen	Content Reviewer	Mayo Clinic Arizona, Phoenix Campus—Professor of Medicine; Chair, Department of Cardiovascular Diseases	None	None	None	None	None	None	None
David J. Slotwiner	Content Reviewer—ERC Chair	Weill Cornell Medical College—Chief, Division of Cardiology; Assistant Professor of Clinical Medicine	None	None	None	None	None	None	None

Cynthia M. Tracy	Content Reviewer	The George Washington University School of Medicine & Health Sciences— Professor of Medicine; Associate Director of Cardiology	None	None	None	• NIH	• Cheney Cardiovascular Institute†	None	None
Richard G. Trohman	Content Reviewer	Rush University Medical Center	• Daiichi Sankyo*	None	None	None	• HRS† • Sorin Group‡ • Rush University Medical Center†	None	None
Gaurav A. Upadhyay	Content Reviewer—ACC Electrophysiology Member Section	The University of Chicago Medicine— Assistant Professor of Medicine; Director, Heart Station	• Biosense Webster • Biotronik • Boston Scientific • Medtronic • ZOLL Medical	None	None	• Biotronik* • Medtronic*	• Biosense Webster • Biotronik‡ • Boehringer Ingelheim‡ • Boston Scientific‡ • Brady Diagnostics‡ • The Max Schaldach Fellowship in Cardiac Pacing and Electrophysiology* • Medtronic‡ • Pfizer‡ • Schwarzer Cardiotek‡ • Sorin‡ • St. Jude Medical‡ • Stereotaxis • University of Chicago‡ • University of Michigan‡ • University of Rochester‡ • VG Bio‡	None	None

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\*Significant relationship.

†No financial benefit.

‡This disclosure was entered under the Clinical Trial Enroller category in the ACC's disclosure system. To appear in this category, the author acknowledges that there is no direct or institutional relationship with the trial sponsor as defined in the ACC/AHA Disclosure Policy for Writing Committees.

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