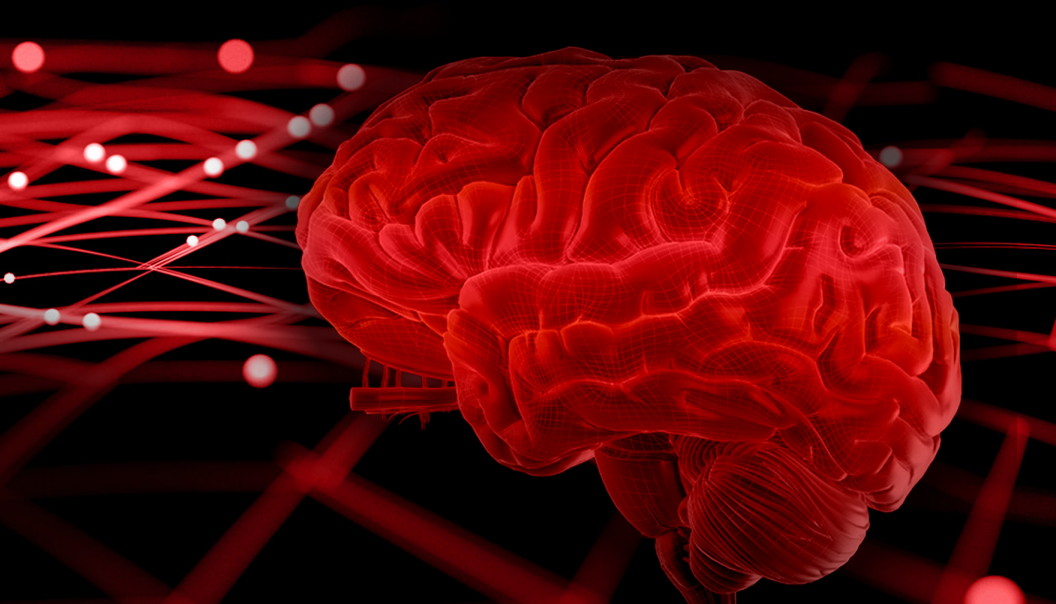# Amyloid-Related Imaging Abnormalities (ARIA) Summit: Cardiovascular and Stroke Considerations for β-Amyloid Immunotherapy in Alzheimer Disease

July 16, 2025
Chicago, IL

Overview

The American Heart Association welcomes you to the Amyloid-Related Imaging Abnormalities (ARIA) Summit: Cardiovascular and Stroke Considerations for β-Amyloid Immunotherapy in Alzheimer Disease. This Summit has convened invited experts from diverse fields—including neurology, cardiology, emergency medicine, nursing, ethics and more—to share insights on ARIA and explore considerations for issues related to the use of amyloid plaque-lowering monoclonal antibodies and their side effects.

Through a series of plenary presentations and focused breakout sessions, participants will explore clinical and systems of care considerations for implementing β-amyloid therapies in patients with cardiovascular or stroke risk. These insights will inform the development of an ARIA Summit Special Report.

Agenda

8:00 AM   **Registration and Breakfast**

8:30 AM   **Welcome and Opening Remarks**

Mitchell S.V. Elkind, MD, MS, Chief Science Officer, Brain Health and Stroke, American Heart Association

Steve Greenberg, MD, PhD, Massachusetts General Hospital and Harvard Medical School
Co-Chair, ARIA Summit

Costantino Iadecola, MD, Weill Cornell Medical College
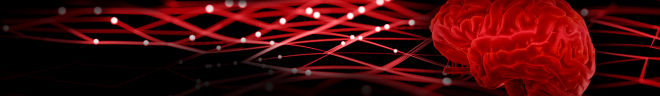Co-Chair, ARIA Summit

8:40 AM   **Patient Perspective Interview**

Col. Joellen de Berg, RN, BSN, MA, United States Air Force (retired)

Col. Oak H. DeBerg, PhD, University of Texas at San Antonio and United States Air Force (retired)

Moderator
Sudha Seshadri, MD, DM, University of Texas Health Science Center at San Antonio

9:00 AM **Plenary Session 1 – Pathophysiology of ARIA**
Costantino Iadecola, MD

9:20 AM **Plenary Session 2 – Clinical Overview of ARIA**
Sharon J. Sha, MD, MS, Stanford University

9:40 AM **Break**

9:55 AM **Plenary Session 3 – Vascular Considerations for Patient Selection and Acute Patient Management**
Steve Greenberg, MD, PhD

10:15 AM **Plenary Session 4 – Improving Systems of Care: Perspectives on the Patient Journey**

Presentation
Maggie Tubiello, MSN, MBA, RN, Penn Medicine

Panel Discussion
Cynthia Carlsson, MD, MS, University of Wisconsin

David S. Knopman, MD, Mayo Clinic

Maggie Tubiello, MSN, MBA, RN

Kori Zachrison, MD, MSc, Massachusetts General Hospital and Harvard Medical School

Moderator
Heather Snyder, PhD, Alzheimer's Association

11:00 AM **Review Goals and Deliverables for Breakout Sessions**
Mitchell S.V. Elkind, MD, MS

11:15 AM **Breakout Session 1: Work Groups A-D**

12:30 PM **Lunch Break**

1:15 PM **Breakout Session 2: Work Groups E-H**

2:30 PM **Breakout Session Recaps**

3:45 PM **Closing Remarks and Next Steps**

4:00 PM **Adjourn**

Co-Chairs

Steven Greenberg, MD, PhD
Harvard Medical School
Massachusetts General Hospital

Dr. Greenberg, Professor of Neurology at Harvard Medical School, holds the John J. Conway Endowed Chair in Neurology, is Vice Chair for Faculty Development and Promotions at the Massachusetts General Hospital and directs the Hemorrhagic Stroke Research Program, a globally recognized center for cerebral amyloid angiopathy research. His research focuses on hemorrhagic stroke and small vessel brain disease.

Costantino Iadecola, MD
Weill Cornell Medicine

Dr. Iadecola is the Director and Chair of the Feil Family Brain and Mind Research Institute and the Anne Parrish Titzell Professor of Neurology at Weill Cornell Medicine. A champion of the involvement of neurovascular dysfunction in neurodegenerative diseases, he focuses in his research on the basic mechanisms of neurovascular function and on the cellular and molecular alterations underlying ischemic brain injury, neurodegeneration and other conditions associated with cognitive impairment.

Speakers

Cynthia Carlsson, MD, MS
University of Wisconsin

Dr. Carlsson is the Louis A. Holland, Sr., Professor in Alzheimer's Disease in the Division of Geriatrics and Gerontology at the University of Wisconsin Department of Medicine, Director of the Wisconsin Alzheimer's Institute and Clinical Core Leader at the UW-Madison Alzheimer's Disease Research Center. Her research focuses on the effects of vascular risk factors and their treatments on cognition and biomarkers for Alzheimer's disease in persons at risk for dementia.

Col. Joellen de Berg, RN, BSN, MA and Col. Oak DeBerg, PhD
United States Air Force (retired)

Joellen and Oak each served in the United States Air Force for 30 years. Col. Joellen de Berg served as an ICU nurse, followed by assignments as a flight nurse, hospital chief nurse, and

command nurse. Col. Oak DeBerg is a retired U.S. Air Force officer and adviser and recently retired from a second career as a Professor of Philosophy at the University of Texas at San Antonio.

Mitchell S.V. Elkind, MD, MS*
American Heart Association

Dr. Elkind is the American Heart Association's Chief Science Officer for Brain Health and Stroke and serves as the senior staff science leader for all Association initiatives related to stroke, brain health and new integrated efforts, including cardio-renal-metabolic health. His research focuses on stroke prevention, inflammatory and infectious biomarkers in stroke risk prediction, atrial cardiopathy, immune therapy for acute stroke and vascular causes of cognitive aging.

David S. Knopman, MD
Mayo Clinic

Dr. Knopman is a Professor of Neurology and clinical neurologist involved in research in late-life cognitive disorders, such as mild cognitive impairment and dementia. His specific interests are in the very early stages of Alzheimer's disease, cognitive impairment due to stroke (cerebrovascular disease) and cognitive impairment due to frontotemporal degeneration. He is involved in epidemiology, clinical trials and diagnostic studies of these disorders.

Sharon J. Sha, MD, MS
Stanford University

Dr. Sha is a Clinical Professor of Neurology and Neurological Sciences at Stanford University, where she serves as Chief for the Memory Disorders Division and the Stanford Memory Disorders Center. Her clinical time is devoted to caring for patients with Alzheimer's disease and other neurodegenerative disorders, and her research is devoted to finding treatments for these cognitive disorders.

Maggie Tubiello, MBA, MSN, RN
Penn Medicine

Maggie Tubiello is a program coordinator at the Penn Medicine Department of Neurology for the anti-amyloid program. She holds a BSN from Pennsylvania College of Technology and dual master's degrees in business administration and science in nursing from Bloomsburg University. She was a Neuro ICU staff nurse and ICU travel nurse before working for Penn Medicine.
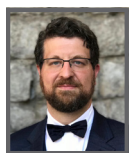
*Also a Planning Committee member

Work Groups

A. **Vascular considerations for patient selection when implementing immunotherapy** • Facilitator: Sudha Seshadri, MD, DM • *Ontario*

Can I start, continue or restart my patient with cerebrovascular lesions (microbleeds, superficial siderosis, white matter disease, prior stroke, AVM) or other ARIA risk factors (APOE genotype) on immunotherapy?

B. **Considerations for imaging in amyloid immunotherapy monitoring and diagnosis and treatment of ARIA** • Facilitator: Petrice Cogswell, MD, PhD • *Michigan*

How do I image and diagnose ARIA and identify and distinguish stroke from stroke mimics?

C. **Considerations for primary care professionals (including doctors, nurses and advanced practice professionals) in management of patients with CV comorbidities** • Facilitator: Lauren Massimo, PhD, CRNP • *Illinois*

How does being on immunotherapy affect my primary care treatment (e.g., blood pressure management, statin use and management of co-morbid cardiovascular risks)?

D. **Considerations for systems of care changes** • Facilitator: Richard Lipton, MD • *Erie*

What changes are needed to clinical systems of care to make information and best practices for immunotherapy widely available?

E. **Emergency evaluation and treatment of patients on amyloid immunotherapies with acute neurological symptoms** • Facilitator: Kori Zachrison, MD, MSc • *Ontario*

How should the prehospital, emergency department and hospital workflow of acute stroke be adapted to patients on immunotherapy?

F. **Considerations for a team-based approach to cardiovascular and other systemic conditions** • Facilitator: Sherry Chou, MD • *Michigan*

How do I weigh risks and benefits of treatment options for Alzheimer's disease patients with atrial fibrillation, other indications for anticoagulation, heart failure or other cardiovascular conditions?

G. **Considerations for communicating with patients and families (shared decision-making, communicating risk)** • Facilitator: Deborah Levine, MD, MPH • *Illinois*

How do I implement shared decision-making for my patients that addresses potential risks and benefits from immunotherapy and the impact on CVD treatment?

H. **Future research and data collection needs** • Facilitator: William (B.J.) Hicks, MD • *Erie*

What research and data needs should be prioritized, and how can we build on existing infrastructures (e.g., ALZ-NET or Get With The Guidelines) to efficiently advance ARIA research and data collection?

Planning Committee

A multidisciplinary planning committee of clinicians, researchers and organization leaders has been convened to inform the event agenda and support the development of the Summit Special Report.

Alessandro Biffi, MD
Eli Lilly and Company

Dr. Biffi is the Associate Vice President, Lilly Neuroscience, of Eli Lilly and Company. He graduated from the University of Milan Bicocca Medical School in Italy and pursued clinical residency and fellowship training in neurology at Harvard Medical School. He established a clinical research program at Massachusetts General Hospital and Harvard Medical School investigating the intersection of neurodegenerative, cerebrovascular and psychiatric disorders. He has made high-profile contributions in the fields of neurogenomics, neuropsychiatry, vascular and cognitive neurology.

Sherry Chou, MD
Northwestern Feinberg School of Medicine

Dr. Chou is the Chief of Neurocritical Care in the Department of Neurology and an Associate Professor of Neurology (Neurocritical Care) at the Northwestern Feinberg School of Medicine. She is a physician-scientist with expertise in clinical neurology, neurocritical care and vascular neurology. Her research program focuses on the role of inflammation and immune response in vascular brain injuries and biomarker discovery.

Petrice Cogswell, MD, PhD
Mayo Clinic

Dr. Cogswell is an Associate Professor of Radiology at Mayo Clinic. She is a diagnostic neuroradiologist and member of the Aging and Dementia Imaging Research Laboratory, which serves as the central MRI lab for multiple observational and therapeutic studies in Alzheimer's disease. Her research interests include the temporal evolution of Alzheimer's disease biomarkers and amyloid-related imaging abnormalities.

Planning Committee (cont.)

William (B.J.) Hicks, MD
OhioHealth

Dr. Hicks is the Vice President of Neurosciences at OhioHealth, a health system with 16 care sites and over 4 million outpatient clinical visits annually. He oversees a comprehensive neuroscience service that addresses all aspects of brain health, including neurodegenerative conditions, geriatrics and stroke. As a vascular neurologist, his clinical interests include rapid access to acute stroke rescue therapies.

Deborah Levine, MD, MPH
University of Michigan Medicine

Dr. Levine is a Professor of Internal Medicine at the University of Michigan Medical School. Her research includes improving the quality of stroke care, stroke-related dementia and cognitive impairment, and reducing health care disparities in cardiovascular disease and stroke. She also focuses on quality improvement program design, implementation and evaluation research, and research on provider behavior. Some of her research examines cognitive outcomes after stroke, seeking to understand the predictors and long-term trajectory of cognitive decline after stroke.

Richard Lipton, MD
Albert Einstein College of Medicine

Dr. Lipton is the Edwin S. Lowe Professor and Vice Chair of Neurology, Professor of Epidemiology and Population Health and Professor of Psychiatry and Behavioral Sciences at the Albert Einstein College of Medicine. His research focuses on cognitive aging, Alzheimer's disease and migraine headaches. His recent studies examine cognitive aging across the lifespan with an emphasis on the effects of pain and stress on brain function.

Lauren Massimo, PhD, CRNP
Penn Nursing

Dr. Massimo is an Associate Professor of Nursing at University of Pennsylvania. Her research program focuses on identifying the cognitive and neural basis for symptoms of neurodegenerative disease. With her clinical experience and background in neuroscience, she translates these findings to design interventions based on an understanding of underlying neurobiological mechanisms.

Sudha Seshadri, MD, DM
University of Texas Health at San Antonio

Dr. Seshadri is a behavioral neurologist and the Robert R. Barker Distinguished University Professor of Neurology, Psychiatry and Cellular and Integrative Physiology at the Joe R. and Teresa Lozano Long School of Medicine at the University of Texas Health Sciences Center at San Antonio. She is the founding director of the Glenn Biggs Institute for Alzheimer's & Neurodegenerative Diseases and treats patients with various dementia, MCI, and brain-related diagnoses at the South Texas Alzheimer's Disease Research Center. Her research interests are in uncovering the biology of Alzheimer's and related dementias, stroke, and vascular brain injury.

Heather Snyder, PhD
Alzheimer's Association

Dr. Snyder is the Senior Vice President, Medical & Scientific Relations, at the Alzheimer's Association. She oversees initiatives that accelerate innovative Alzheimer's and dementia research and provides opportunities for the global dementia community to connect and collaborate. She leads the Association's International Research Grant Program and other strategic funding initiatives that accelerate promising investigations into the understanding of Alzheimer's and dementia.

Kristine Yaffe, MD
University of California, San Francisco Medical Center

Dr. Yaffe is the Scola Endowed Chair and Leon Epstein Endowed Chair and Vice Chair, Distinguished Professor of Psychiatry, Neurology, and Epidemiology, and Director of the Center for Population Brain Health at the University of California, San Francisco. She is an expert in the epidemiology of dementia and cognitive aging and in identifying modifiable risk factors for dementia. Her research bridges the fields of neurology, psychiatry and epidemiology.

Kori Zachrison, MD, MSc
Harvard Medical School
Massachusetts General Hospital

Dr. Zachrison is an Associate Professor of Emergency Medicine at Harvard Medical School and Chief of the Division of Health Services Research in the Mass General Brigham Department of Emergency Medicine. Her federally funded research portfolio focuses on improving systems of care for time-sensitive emergency care delivery, particularly stroke. Her approach includes applications of network science and mathematical decision modeling.

Attendees

Robert Adams, MD, MS
Medical University of South Carolina

Marc Agronin, MD
Miami Jewish Health

Alireza Atri, MD, PhD
Banner Health

Suzanne Bakken, PhD, RN
*Columbia University Irving
Medical Center*

Mary Ann Bauman, MD

James L. Bernat, MD
*Dartmouth
Geisel School of Medicine*

James Bishop, PhD
Eli Lilly and Company

Kevin Biese, MD
*University of North Carolina
Chapel Hill, West Health*

Sonja Blum, MD, PhD
Weill Cornell Medicine

Marion Buckwalter, MD, PhD
Stanford School of Medicine

Thierry Bussiere, PhD

Tara Carlisle, MD, PhD
*University of Colorado
Anshutz Medical Campus*

Maria C. Carrillo, PhD
Alzheimer's Association

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Alexander Chaitoff, MD, MPH
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Salvador Cruz-Flores, MD,
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*Texas Tech University
Health Sciences Center El Paso*

Janice Y. Chyou, MD
*Icahn School of Medicine
at Mount Sinai*

Colin Derdeyn, MD
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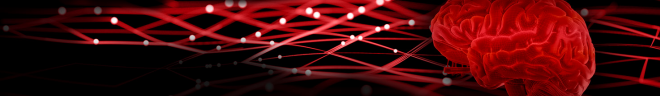Anshutz Medical Campus*

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Lawrence S. Honig, MD, PhD
*Columbia University
Irving Medical Center*

Elaine Hylek, MD, MPH
*Boston University Chobanian and
Avedisian School of Medicine*

Makoto Ishii, MD, PhD
*University of Texas
Southwestern Medical Center*

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University of Alabama at Birmingham

Hooman Kamel, MD
Weill Cornell Medicine

Devin Marie Keating
American Heart Association

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Ambar Kulshrestha, MD
Emory University School of Medicine

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American Heart Association

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University of California, Los Angeles

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University of Alabama Birmingham School of Medicine

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American Heart Association

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Georgetown University Medical Center

Steve Messe, MD
Penn Medicine

Stephanie Mohl
American Stroke Association, a division of the American Heart Association

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University of California, San Francisco

David C. Weisman, MD
Abington Neurological Associates

Richard G. Wunderink, MD
Northwestern University Feinberg School of Medicine

Jaclyn Young
American Heart Association

American Heart Association.

Lilly

Lilly is a supporter of the American Heart
Association's ARIA Summit.