

CURRICULUM VITAE

Ramandeep K. Brar, MD, FACC, FHRS

Joined Los Alamitos Cardiovascular in 2006 | Partner since 2009 Pacemaker Clinic Director

5300 Katella Avenue, Los Alamitos, CA 90720

p: (562) 430-7533 | f: (562) 430-8055 | website: www.losalcardio.com

Specialties:	Cardiovascular Diseases, Cardiac Electrophysiology and Nuclear Cardiology
Board Certifications:	 Certified Clinical Cardiac Electrophysiology American Board of Internal Medicine November 2010 (Recertification 2019) Certified in Nuclear Cardiology Board of Nuclear Cardiology December 2007 (Recertification 2018) Certified in Cardiovascular Disease American Board of Internal Medicine November 2006 (Recertification 2017) Certified in Internal Medicine American Board of Internal Medicine August 2001 (Recertification 2020) Expert Reviewer The Medical Board of California August 2014-Present

Research Experience:

 AEGIS: A Phase 3, Multicenter, Double-blind, Randomized, Placebo controlled, Parallel-group Study to Investigate the Efficacy and Safety of CSL112 in Subjects with Acute Coronary Syndrome.

Sub-Investigator | 2019 Sponsor: CSL Behring LLC

NCT03473223: https://clinicaltrials.gov/ct2/show/NCT03473223

COVET: Comparison of Oral anticoagulants for extended Venous
 Thromboembolism (COVET). It is a randomized, open label, active
 comparator to determine whether the direct oral anticoagulant apixaban
 and rivaroxaban are safer than warfarin (fewer bleeding complications)
 and still as effective as warfarin (no increase in recurrent blood clots).
 Sub-Investigator | 2018 – Present

Sponsor: Patient-Centered Outcomes Research Institute (PCORI) NCT03196349: https://clinicaltrials.gov/ct2/show/NCT03196349

NODE 301: Multi-Centre, Randomized, Double-Blind, Placebo-Controlled, Efficacy, and Safety Study of Etripamil Nasal Spray for the Termination of Spontaneous Episodes of Paroxysmal Supraventricular Tachycardia.

Principal Investigator | 2019

Sponsor: Milestone Pharmaceuticals Inc.

NCT03464019: https://clinicaltrials.gov/ct2/show/NCT03464019

NODE 302: Multi-Centre, Open-Label, Safety Study of Etripamil Nasal Spray in Spontaneous Episodes of Paroxysmal Supraventricular Tachycardia (Extension of NODE-301).

Principal Investigator | 2019

Sponsor: Milestone Pharmaceuticals Inc.

NCT03635996: https://clinicaltrials.gov/ct2/show/NCT03635996

 PARADISE MI: A multi-center, randomized, double-blind, activecontrolled, parallel-group Phase 3 study to evaluate the efficacy and safety of LCZ696 compared to ramipril on morbidity and mortality in high risk patients following an acute myocardial infarction.

Sub-Investigator | 2018 – Present

Sponsor: Novartis

NCT02924727: https://clinicaltrials.gov/ct2/show/NCT02924727

 PEA-VALVE: Phono- and Electrocardiogram Assisted Detection of Valvular Disease. This is data collection of recorded heart sounds + ECGs using Eko Duo and Eko Core devices to further refine and validate algorithms using de-identified diagnosis confirmed by gold-standard echocardiograms. Sub-Investigator | 2018 – Present

Sponsor: Eko Devices

GALACTIC-HF: Double-blind, Randomized, Placebo-controlled, Multicenter Study to Assess the Efficacy and Safety of Omecamtiv Mecarbil on Mortality and Morbidity in Subjects With Chronic Heart Failure With Reduced Ejection Fraction.

Sub-Investigator | 2017 – Present

Sponsor: Amgen

NCT02929329: https://clinicaltrials.gov/ct2/show/NCT02929329

PROVE-HF: A 52 Week, Open Label Evaluation of the Effects of Sacubitril/Valsartan (LCZ696) Therapy on Biomarkers, Myocardial Remodeling and Patient-reported Outcomes in Heart Failure With Reduced Left Ventricular Ejection Fraction.

Sub-Investigator | 2017 – 2019

Sponsor: Novartis

NCT02887183: https://clinicaltrials.gov/ct2/show/NCT02887183

Barostim Therapy for Heart Failure (BeAT-HF): The Barostim Neo - Baroreflex Activation Therapy for Heart Failure is a prospective, randomized trial in subjects with reduced ejection fraction heart failure. Sub-Investigator | 2016 – Present Sponsor: CVRx, Inc.

NCT02627196: https://clinicaltrials.gov/show/NCT02627196

MLHFQ Study: Evaluate and establish content validity of the Minnesota Living with Heart Failure Questionnaire (MLHFQ) in patients with Symptomatic Hypertrophic Cardiomyopathy.

Sub-Investigator | 2016 – 2017

Sponsor: Gilead/ICON

THEMIS- A Study Comparing Cardiovascular Effects of Ticagrelor Versus Placebo in Patients With Type 2 Diabetes Mellitus (THEMIS): A

Multinational, Randomized, Double-Blind, Placebo-Controlled Trial to Evaluate the Effect of Ticagrelor Twice Daily on the Incidence of Cardiovascular Death, Myocardial Infarction or Stroke in Patients With Type 2 Diabetes Mellitus (THEMIS - Effect of Ticagrelor on Health Outcomes in Diabetes Mellitus Patients Intervention Study).

Sub-Investigator | 2015 – Present

Sponsor: AstraZeneca

NCT01991795: https://clinicaltrials.gov/show/NCT01991795

Retrospective Medical Records Review of Participants Interviewed for Study M-12347 (Concept Elicitation Focus Groups and Cognitive Interviews to Develop a New Patient Reported Outcome Instrument in Chronic Heart Failure).

Sub-Investigator | 2015 – 2016 Sponsor: Amgen, Evidera

DECLARE-TIMI 58 <u>Dapagliflozin</u> <u>Effect on CardiovascuLAR Events:</u>

A Multicenter, Randomized, Double-Blind, Placebo-Controlled Trial to Evaluate the Effect of Dapagliflozin 10 mg Once Daily on the Incidence of Cardiovascular Death, Myocardial Infarction or Ischemic Stroke in Patients with Type 2 Diabetes.

Sub-Investigator | 2013 – 2018

Sponsor: AstraZeneca

NCT01730534 | http://clinicaltrials.gov/ct2/show/NCT01730534

ODYSSEY EFC11570: A Randomized, Double-Blind, Placebo-Controlled, Parallel-Group Study to Evaluate the Effect of SAR236553/REGN727 on the Occurrence of Cardiovascular Events in Patients Who Have Recently Experienced an Acute Coronary Syndrome Sub-Investigator

| 2013 – 2017 Sponsor: Sanofi

NCT01663402 | http://clinicaltrials.gov/ct2/show/NCT01663402

SILVER-AMI Risk Stratification in Older Persons with Acute Myocardial Infarction.

Sub-Investigator | 2013 – 2017

Sponsor: Yale University School of Medicine/NIH

NCT01755052 | http://clinicaltrials.gov/ct2/show/NCT01755052

 RivaroxAFL3003: An Open Label Study Exploring two treatment strategies in patients with Atrial Fibrillation who undergo Percutaneous Coronary Intervention.

Sub-Investigator | 2013 – 2014

Sponsor: Janssen Scientific Affairs/Johnson & Johnson

Phase III Trial to confirm the Anti-Anginal effect of T-89 in patients with Stable Angina.

Sub-Investigator | 2013

Sponsor: Tasly Pharmaceuticals

NCT0169580 | http://clinicaltrials.gov/ct2/show/NCT01659580

Cardiovascular Inflammation Reduction Trial (CIRT): Event Driven Trial of weekly Low-Dose Methotrexate in prevention of recurrent cardiovascular events among stable post myocardial infarction patients with Type II Diabetes or Metabolic Syndrome.

Sub-Investigator | 2013 – 2018

Sponsor: Center for Cardiovascular Disease Prevention Brigham and Women's Hospital/National Heart Lung and Blood Institute

NCT01594333 | http://clinicaltrials.gov/ct2/show/NCT01594333

User Comprehension Evaluation of a New Cleaning and Disinfection Procedure for the INRatio® 2 PT/INR Monitoring System (ADAPT) BSTE0159.

Sub-Investigator | 2012 Sponsor: Alere San Diego

Mission® PT Coagulation Monitoring System Clinical Study.

Sub-Investigator | 2012

Sponsor: ACON Laboratories, INC.

The "BRIDGE" Trial (1U01HL08675501A1): Bridging Anticoagulation in Patients Who Require Temporary Interruption of Warfarin Therapy for an Elective Invasive Procedure or Surgery.

Sub-Investigator | 2012 – 2015

Sponsor: National Institutes of Health (NIH)-National Heart, Lung and

Blood Institute (NHLBI)

NCT00786474 | http://clinicaltrials.gov/ct2/show/NCT00786474

GLORIA-AF 1160.129: Global Registry on Long-Term Oral Anti-thrombotic

Treatment in Patients with Atrial Fibrillation Phase II-III.

Sub-Investigator | 2012 – Present

Sponsor: Boehringer Ingelheim

NCT01468701 | http://clinicaltrials.gov/ct2/show/NCT01468701

• BRADYCARE: Advanced Bradycardia Device Feature Utilization and Clinical Outcomes.

Principal Investigator | 2010 – 2012 Sponsor: St. Jude Medical Center

NCT01062126 | http://clinicaltrials.gov/ct2/show/NCT01062126

The PROMISE Trial: PROspective Multicenter Imaging Study for

Evaluation of Chest Pain.

Sub-Investigator | 2010 – 2014

Sponsor: National Heart, Lung, and Blood Institute (NHLBI)

NCT01174550 | http://clinicaltrials.gov/ct2/show/record/NCT01174550

 $\textbf{ORBIT-AF I and II:} \ \textbf{Outcomes Registry for Better Informed Treatment of}$

Atrial Fibrillation.

Sub-Investigator | 2010 – 2017

Sponsor: Janssen Scientific Affairs, LLC Collaborator: Duke Clinical Research

NCT01165710 | http://clinicaltrials.gov/ct2/show/NCT01165710 NCT01701817 | http://clinicaltrials.gov/ct2/show/NCT01701817

RATE: Registry of Atrial Tachyarrhythmia/Atrial Fibrillation (AT/AF)
 Episodes in the Cardiac Rhythm Management (CRM) Device Population.
 Principal Investigator | 2008 – 2010

Sponsor: St. Jude Medical Center

NCT00837798 | http://clinicaltrials.gov/ct2/show/NCT00837798

ENGAGE: Phase III, randomized, double-blind, double-dummy, parallel group, multi-center, multi-national study for evaluation of efficacy and safety of DU-176b versus Warfarin in subjects with Atrial Fibrillation - Effective Anticoagulation with Xa next Generation in Atrial Fibrillation (ENGAGE - AF TIMI - 48).

Sub-Investigator | 2009 – 2015

Sponsor: Daiichi Sankyo Pharma Development

NCT00781391 | http://clinicaltrials.gov/ct2/show/record/NCT00781391

• **FREEDOM:** A Frequent Optimization Study the Quick Opt ™ Method.

Principal Investigator | 2008 – 2010 Sponsor: St. Jude Medical Center

NCT00418314 | http://clinicaltrials.gov/ct2/show/NCT00418314

Current Hospital Appointments:

 Los Alamitos Medical Center 3751 Katella Avenue Los Alamitos, California 90720

Memorial Care Health System
 Long Beach Memorial Medical Center
 2801 Atlantic Avenue
 Long Beach, California 90801

UCLA Ronald Reagan Medical Center
 757 Westwood Plaza
 Los Angeles, CA 90095

Staff Positions & Committees:

Los Alamitos Medical Center

- Director, Cardiac Electrophysiology- Effective January 2016 to present
- Chair, Medicine- January 2016 to January 2020
- Chair, Physician Leadership Council- July 2014-August 2017
- Vice Chair, Medicine- January 2014-December 2015
- Vice Chair, Credentialing- January 2013 to present
- Vice Chair, Peer Review Committee-May 2016 to present
- Chair Performance Improvement Committee- January 2020 to present
- Secretary Treasurer Medical Staff January 2020 to December 2021
- Vice Chief of Staff-January 2022 to present

Professional Societies:

American College of Cardiology (FACC) Fellow

 Heart Rhythm Society (FHRS) Fellow

Publications:

 Anthony P, Chandraratna N, Skeikh Y, Brar R, Kim D. "Feasibility of Continuous Cardiac Imaging Using a Novel Ultrasound Transducer." Circulation: Journal of American Heart Association: Abstracts from the 71st Scientific Sessions.

Anthony P, Chandraratna N, Skeikh Y, **Brar R**, Khan Z, Chen Q. "Continuous Recording of Pulmonary Artery Diastolic pressure and cardiac Output using a Novel Ultrasound Transducer." *Circulation: Journal of the American Heart Association: Abstracts from the 71st Scientific Sessions*.

- Chandraratna P, Brar R, Agioian E, Vijaysekara S. "Using of a Novel Chest Wall Attachable Ultrasound Transducer for Continuous Bedside Monitoring of Left Ventricular Regional Wall Motion Abnormalities."
- Anthony P, Chandraratna N, Brar R, Vijaysekaran S, Chen Q. "Feasibility
 of Continuous Transthoracic imaging Using a Novel Ultrasound Transducer."
- Anthony N, Chandraratna N, Brar R, Vijaysekaran S, Sheikh Y. "Continuous Recording of Pulmonary Artery Diastolic Pressure and Cardiac Output Using a Novel Ultrasound Transducer." Echocardiography.
- **Brar R**, Attai S, Brar PK, Butler M, Chandraratna P. "Echocardiographic Evaluation of Left Ventricular Systolic Function." *Cardiac Ultrasound Today* 2003; Vol 9: Number 5.

Education:	 Cardiac Electrophysiology Fellowship University of California, Los Angeles July 2005 – August 2006 Cardiovascular Diseases Fellowship
	 Cornell University Medical Center/ Wyckoff Heights Medical Center July 1998 – June 2001 Rotatory Internship Dayanand Medical College and Hospital Ludhiana, Punjab, India January 1996 – June 1997 MBBS /MD Dayanand Medical College and Hospital Ludhiana Punjab, India August 1991 – December 1995
Educational Honors and Awards:	 Intern of the Year Department of Internal Medicine, June 1999 Cornell University Medical Center/ Wyckoff Heights Medical Center Intern of the Month Department of Internal Medicine, August 1998 Cornell University Medical Center/ Wyckoff Heights Medical Center