

CURRICULUM VITAE

Robert S. Lee, MD

Joined Los Alamitos Cardiovascular in 2013 | Partner since 2015

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Specialties:	Cardiology, Nuclear Cardiology, Echocardiography and Interventional Cardiology
Board Certifications:	 Certified in Interventional Cardiology American Board of Internal Medicine 2013 (Expires 2023) Certified in Cardiovascular Disease American Board of Internal Medicine 2012 (Expires 2022) Diplomate, Echocardiography National Board of Echocardiography 2011 (Expires 2021) Diplomate, Nuclear Cardiology Certification Board of Nuclear Cardiology 2010 (Expires 2020) Certified in Internal Medicine American Board of Internal Medicine 2008 (Expires 2018) Drug Enforcement Administration (DEA) Certificate 2006 (Expires 2018) California State Licensure Medical Board of California 2006 (Expires 2020)
Research Experience:	 AEGIS: A Phase 3, Multicenter, Double-blind, Randomized, Placebocontrolled, 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. Sub-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).

Sub-Investigator | 2019

Sponsor: Milestone Pharmaceuticals Inc.

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

• PARADISE MI: A multi-center, randomized, double-blind, active-controlled, 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 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

 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

• 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

 ORBIT-AF I and II: 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

 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 | 2013 – 2015

Sponsor: Daiichi Sankyo Pharma Development

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

 Harbor-UCLA, Division of Cardiology: Clinical research involving the management and outcomes of patients with acute coronary syndromes in the cardiac catheterization laboratory, particularly patients with STelevation myocardial infarctions (STEMI).

2010 - 2013

Faculty Mentor: Dr. Joseph Thomas, Assistant Professor, Assistant Fellowship Program Director, Harbor-UCLA Medical Center

 Harbor-UCLA, Division of Cardiology: Clinical research involving the utilization of computed tomography in the evaluation of various cardiovascular diseases.

2007 - 2009

Faculty Mentor: Dr. Matthew Budoff, Associate Professor, Fellowship Program Director and Director of Cardiac Computed Tomography, Harbor-UCLA Medical Center

• UCLA Heart Transplant Program: Clinical research involving the medical care of cardiac transplant recipients.

2007 - 2009

Faculty Mentor: Dr. Jon Kobashigawa, Clinical Professor and Medical Director of the UCLA Heart Transplant Program

Publications and Presentations:

ARTICLES

- Ahmadi N, Hajsadeghi F, Gul K, Leibfried M, DeMoss D, Lee R, Flores F,
 Nasir K, Hecht H, Naghavi M, Budoff MJ. Vascular Function Measured by
 Fingertip Thermal Reactivity is Impaired in Patients with Metabolic
 Syndrome and Diabetes Mellitus. *Journal of Clinical Hypertension,*November 2009; 11(11): 678-84.
- Ibebuoju UN, Nasir K, Gopal A, Ahmadi N, Mao SS, Young E, Honoris L, Nuguri VK, Lee RS, Usman N, Rostami B, Pal R, Flores F, Budoff MJ.
 Comparison of Atherosclerotic Plaque Burden and Composition Between Diabetic and Non-diabetic Patients by Non-invasive CT Angiography. International Journal of Cardiovascular Imaging, October 2009; 25(7):

717-23.

- Nagarakanti R, Sodhi S, Lee R, Ezekowitz M. Chronic Antithrombotic Therapy in Post- Myocardial Infarction Patients. Cardiology Clinics, May 2008; 26(2): 277-88.
- Sodhi S, Lee R, Ezekowitz M. Chronic Antithrombotic Therapy in Post-Myocardial Infarction Patients. Clinics in Geriatric Medicine, February 2006; 22(1): 167-82.

ABSTRACTS

- RS Lee, R Kaushal, T Bholat, KA Zhiroff, SC Jaquez, QT Bui, JL Thomas, WJ French. Patient Differences by Mode of Hospital Arrival for ST-Elevation Myocardial Infarction Treated with Primary PCI. *Journal of the American College of Cardiology, November 2011; 58(20): B91*.
- Jug B, Papazian J, Lee R, Budoff MJ. Association of Lipoprotein Subfractions and Coronary Calcifications in Individuals at Intermediate Cardiovascular Risk. Journal of Cardiovascular Computed Tomography, June 2011; 5(4): S16.
- Hajsadeghi F, Ahmadi N, Lee R, Sarlak B, Ramirez J, Flores F, Mao SS, Budoff MJ. Low Density Lipoprotein, High Density Lipoprotein and Lipoprotein (a) Subclasses and Their Relationship With Coronary Artery Calcification Is Asymptomatic Population. *Journal of the American College* of Cardiology, March 2008; 51(10): A150.
- Ibebuogu UN, Nasir K, Gopal A, Ahmadi N, Mao SS, Young E, Honoris L, Nuguri VK, Lee R, Usman N, Rostami B, Pal R, Flores F, Budoff M.
 Comparison of Coronary Atherosclerotic Plaque Burden and Composition Between Diabetic and Nondiabetic Patients by Noninvasive CT Angiography. Arteriosclerosis, Thrombosis, and Vascular Biology, June 2008; 28(6): e134-e135.
- Lee R, Hajsadeghi F, Ramirez R, Sarlak B, Gopal A, Ahmadi N, Budoff MJ. Insulin Resistance and Coronary Artery Calcification measured by Electron Beam Computed Tomography. *Circulation, October 2007; 116(16): S611*.
- Budoff MJ, Lee R, Hajsadeghi F, Ahmadi N, Gopal A, Flores F.
 Homocysteine, Lipid Parameters, and Inflammatory Markers Relationship
 to Advanced Coronary Atherosclerosis on CT. Journal of Cardiovascular
 Computed Tomography, July 2007; 1(15): S9.
- Budoff MJ, Gao YL, Child J, Carson S, Liu SL, Young E, Lee RS, Zemsky A, Shareghi S, Gopal A, Mao SS. A Comparison of Electron Beam Computed Tomography and 64-Channel Multislice Computed Tomography Scanner in Measuring Coronary Artery Calcium. *Journal of Nuclear Cardiology*, *April 2007*; 14(2): 592.
- Seto TC, Barrett M, Bradley J, **Lee R**. Mastering Cardiac Auscultation over the Internet: Use of Computer-based Testing to Demonstrate the Power of Repetition. *Chest*, *October 2004*; *126(4)*: *880-881Sb*.
- Lee RS, Devereaux DC, Hamilton MA, Kobashigawa JA. Is Corticosteroid Weaning More Successful in Older Heart Transplant Patients? *Journal of Investigative Medicine, January 2000; 48(1): 3A.*

- Kobashigawa JA, Takemoto S, Wener L, Tobis J, Lee R, Kumar N, Chuang JM, Moriguchi JD, Kawata N, Laks H. Development of Circulating, IgG Class I Antibodies is Associated with Increase in Intimal Thickness by Intravascular Ultrasound (IVUS) after Heart Transplant.
 The Journal of Heart and Lung Transplantation, January 2000; 19(1): 81-82.
- Kobashigawa J, Kubak B, Camara R, Inglish J, Lee R, Moriguchi J, Hamilton M, Hage A, Kawata N, Laks H. Effective Cytomegalovirus Prophylaxis with Intravenous Followed by Oral Ganciclovir for Donor Positive/Recipient Negative Mismatch. *Transplantation, April 15, 1999; 67(7): S102*.
- Lee RS, Ro TK, Hamilton MA, Kobashigawa JA. Treatment of Hypertension in Cardiac Transplant Recipients with Irbesartan. *Journal of Investigative Medicine*, February 1999; 47(2): 5A.
- Kobashigawa JA, Ro TK, Moriguchi JD, Lee RS, Cassem JD, Hamilton MA, Hage A, Kawata N, Laks H. Hemodynamic Compromising Rejection is Associated with Increased Incidence of Transplant Coronary Artery Disease in Cardiac Transplant Recipients. The Journal of Heart and Lung Transplantation, January 1999; 18(1): 50.
- Inglish JA, Hamilton MA, Lee RS, Kobashigawa JA. Effective Cytomegalovirus Prophylaxis with Intravenous Followed by Oral Ganciclovir. Journal of Investigative Medicine, March 1998; 46(3); 200A.

PRESENTATIONS

- RS Lee, R Kaushal, T Bholat, KA Zhiroff, SC Jaquez, QT Bui, JL Thomas, WJ French. Patient Differences by Mode of Hospital Arrival for ST-Elevation Myocardial Infarction Treated with Primary PCI. *Transcatheter* Cardiovascular Therapeutics, San Francisco, CA, November 8, 2011.
- Wallin D, Hunt D, **Lee R**. Adrenal Insufficiency: An Unusual Cause of Hypercalcemia. *Solomon Scholars, University of California at Los Angeles, Los Angeles, CA, June 9, 2009*.
- Yan E, **Lee, R**, Swerdloff R. A Case of Elephantiasic Nodular Pretibial Myxedema? *Solomon Scholars, University of California at Los Angeles, Los Angeles, CA, June 9, 2009*.
- Lee R, Hajsadeghi F, Ahmadi N, Gopal A, Flores F, Budoff M. Serum Inflammatory Markers and Coronary Artery Calcification. Solomon Scholars, University of California at Los Angeles, Los Angeles, CA, June 12, 2007.
- Lee RS, Devereaux DC, Hamilton MA, Kobashigawa JA. Is Corticosteroid Weaning More Successful in Older Heart Transplant Patients? *American Federation for Medical Research, Western Regional Meetings, Carmel, CA, February 9-12, 2000.*
- Lee RS, Ro TK, Hamilton MA, Kobashigawa JA. Treatment of Hypertension in Cardiac Transplant Recipients with Irbesartan. *American Federation for Medical Research, Western Regional Meetings, Carmel, CA, January 27-30, 1999*.

Foreign Languages:	Spanish and Korean
Committees:	 Ad Hoc Committee for the Internal Review of the Pediatric Neonatal/Perinatal Training Program April 2009 Clinical Radiology Committee 2008 – 2009 Utilization Review Committee 2008 – 2009 Internal Medicine Quality Improvement Committee 2008 – 2009 Intern Selection Committee 2008 – 2009
Professional Societies:	 American Society for Cardiovascular Angiography and Interventions (FSCAI) Member American College of Cardiology (FACC) Member American Heart Association (AHA) Member
Education and Training:	 Interventional Cardiology Fellowship Harbor-UCLA Medical Center/Good Samaritan Hosptial Torrance, CA/Los Angeles, CA 2012 – 2013 Chief Fellow, General Cardiology Harbor-UCLA Medical Center Torrance, CA 2011 – 2012 General Cardiology Fellowship Harbor-UCLA Medical Center Torrance, CA 2009 – 2012 Chief Resident, Internal Medicine Harbor-UCLA Medical Center Torrance, CA 2008 – 2009

 Residency, Internal Medicine Harbor-UCLA Medical Center

Torrance, CA 2006 – 2008

• Internship, Internal Medicine Harbor-UCLA Medical Center

> Torrance, CA 2005 – 2006

Medical Doctorate (MD)
 Drexel University, College of Medicine, Class of 2005
 Philadelphia, PA
 2001 – 2005

 Certificate, Interdepartmental Medical Sciences Program Medical College of Pennsylvania, Hahnemann University Philadelphia, PA 2000 – 2001

Bachelor of Science, Biochemistry
 Minor, Applied Developmental Psychology
 University of California Los Angeles, Class of 2000
 Los Angeles, CA
 1995 – 2000