

## CURRICULUM VITAE Bret A. Witter, MD, FACC, FACP Joined Los Alamitos Cardiovascular as a partner in 2003

5300 Katella Avenue, Los Alamitos, CA 90720

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Specialties:	Cardiovascular Diseases and Echocardiography
Board Certifications:	<ul> <li>Certified Echocardiography National Board of Echocardiography 2012</li> <li>Certified in Cardiovascular Disease American Board of Internal Medicine November 1993 (Recertifications: 2003 and 2013)</li> <li>Certified in Internal Medicine American Board of Internal Medicine 1990 (Recertifications: 2000 and 2009)</li> <li>FLEX (Federal Licensing Examination) Part 1: 1985   Part 2: 1986</li> <li>National Boards (Taken Individually) 1984 – 1987</li> <li>NASPE Testamur (Exam) North American Society of Pacing and Electrophysiology 1998</li> </ul>
Research Experience:	<ul> <li>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: <u>https://clinicaltrials.gov/ct2/show/NCT03473223</u></li> </ul>

- 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: <u>https://clinicaltrials.gov/ct2/show/NCT03635996</u>
- 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: <u>https://clinicaltrials.gov/ct2/show/NCT02924727</u>
- 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: <u>https://clinicaltrials.gov/ct2/show/NCT02929329</u>

- 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: <u>https://clinicaltrials.gov/ct2/show/NCT02887183</u>
- 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: <u>https://clinicaltrials.gov/show/NCT02627196</u>
- 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 Dapagliflozin Effect on CardiovascuLAR Events: 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<sup>®</sup> 2 PT/INR Monitoring System (ADAPT) BSTE-0159.
   Sub-Investigator | 2012
   Sponsor: Alere San Diego
- Mission<sup>®</sup> PT Coagulation Monitoring System Clinical Study. Principal 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 | <u>http://clinicaltrials.gov/ct2/show/NCT01468701</u>
- BRADYCARE: Advanced Bradycardia Device Feature Utilization and Clinical Outcomes.
   Sub-Investigator | 2010 – 2012
   Sponsor: St. Jude Medical Center
   NCT01062126 | <u>http://clinicaltrials.gov/ct2/show/NCT01062126</u>
- 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 | <u>http://clinicaltrials.gov/ct2/show/record/NCT01174550</u>
- 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 | <u>http://clinicaltrials.gov/ct2/show/NCT01165710</u>
   NCT01701817 | <u>http://clinicaltrials.gov/ct2/show/NCT01701817</u>
- 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 | <u>http://clinicaltrials.gov/ct2/show/NCT00837798</u>
- FREEDOM: A Frequent Optimization Study the Quick Opt ™ Method. Sub-Investigator | 2008 – 2010 Sponsor: St. Jude Medical Center NCT00418314 | <u>http://clinicaltrials.gov/ct2/show/NCT00418314</u>

	<ul> <li>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</li> <li>SAFE (Silent Atrial Fibrillation Detection with Stored EGMS). Sponsor: Guidant Corporation</li> <li>Fosiniopril Drug Study. Sub-Investigator   1992 Sponsor: Bristol- Myers Squibb Company</li> <li>Supine Bike/Stress Echo (Unpublished). A.S. Abbasi, MD, FACC Long Beach, California.</li> <li>Molecular Biology/ Immunology Cell Culture, electrophoresis techniques, 1978 – 1979. Gale Granger, PhD University of California, Irvine.</li> </ul>
Current Hospital Appointments:	<ul> <li>Los Alamitos Medical Center 3751 Katella Avenue Los Alamitos, California 90720</li> <li>Long Beach Memorial Medical Center 2801 Atlantic Avenue Long Beach, California 90806</li> </ul>
Hospital Activities:	<ul> <li>Los Alamitos Medical Center</li> <li>Chairman, Pharmacy and Therapeutics, 2008 – 2014</li> <li>St. Mary Medical Center</li> <li>Vice Chief of Medicine, 2002 – 2003</li> <li>Medical Director of Cardiopulmonary Unit, 2003</li> <li>Pharmacy and Therapeutics, 2001 – 2002</li> <li>Cardiac Catheterization/Cardiac Surgery Committee, 1996 – 2003</li> <li>Cardiac Catheterization/Cardiac Surgery Committee, 1996 – 2000</li> <li>CCU/ICU Committee, 1994</li> </ul>

	MemorialCare Health System Community Hospital Long Beach • Chairman, Cardiac Advisory Board, 1996 – 1998
Professional Societies:	<ul> <li>American College of Physicians (FACP) Fellow: February 2002</li> <li>American College of Cardiology (FACC) Fellow: May 1995</li> <li>Los Angeles County Medical Association Member: 1995 – Present</li> <li>American College of Cardiology Member: 1990 – Present</li> <li>American College of Physicians Member: 1987 – Present</li> </ul>
Academic Appointments:	Assistant Clinical Professor David Geffen School of Medicine University of California, Los Angeles (UCLA) 1996 – 2018
Work History:	<ul> <li>Los Alamitos Cardiovascular Los Alamitos, California October 1993 – Present</li> <li>Cardiovascular Associates Long Beach, California July 1993 – October 1993</li> </ul>
Teaching:	<ul> <li>Cardiology Conference St. Mary Medical Center Long Beach 2007 – Present</li> <li>ICU Morning Report St. Mary Medical Center Long Beach 1993 – 2003, 2007 – 2009</li> <li>CCU/Cardiology Rounds St. Mary Medical Center Long Beach 1993 – 2003</li> </ul>

Professional Recognition:	<ul> <li>Special Recognition for Teaching Excellence St. Mary Medical Center Long Beach 2003 – 2004</li> <li>Outstanding Teaching Physician St. Mary Medical Center Long Beach 2000 – 2001</li> <li>Outstanding Teaching Physician St. Mary Medical Center Long Beach 1993 – 1994</li> </ul>
Intramural Presentations:	<ul> <li>"Differentiation of Cardiac and non Cardiac chest pain." CARDIOLOGY 2000 symposium at Long Beach, California Hyatt, May 13, 2000.</li> <li>"Transesophageal Echocardiography in the Critical care Setting." CRITICAL CARE TRIAD, St. Mary Medical Center Long Beach, January 19, 1995.</li> </ul>
Publications:	<ul> <li>Witter BA, Decristofaro D. "Muscle Bands, Tendons and Trabeculations." (Letter) Am J. Cardiol. 1992; 71:499 – 500.</li> </ul>
Education:	<ul> <li>Cardiovascular Diseases Fellowship St. Mary Medical Center Long Beach /Affiliated with UCLA School of Medicine Long Beach, California July 1990 – June 1993</li> <li>Internal Medicine Residency St. Mary Medical Center Long Beach /Affiliated with UCLA School of Medicine Long Beach, California July 1988 – June 1990</li> <li>Internal Medicine Internship St. Mary Medical Center Long Beach /Affiliated with UCLA School of Medicine Long Beach, California July 1987 – June 1988</li> <li>Medical Education Baylor College of Medicine</li> </ul>

	Houston, Texas August 1983 – June 1987
	<ul> <li>Undergraduate Education Biological Sciences University of California, Irvine (UCI) Irvine, California September 1979 – June 1983</li> </ul>
Educational Honors and Awards:	<ul> <li>Phi Beta Kappa</li> <li>Magna Cum Laude</li> <li>University of California, Irvine</li> <li>1983</li> </ul>
Foreign Language:	Medical Spanish