CURRICULUM VITAE

August 5, 2019

NAME:	Harlan F. Weisman, M.D.
CURRENT POSITIONS:	Managing Director, And-One Consulting, LLC
	Executive Chairman 3DBio Corp
	Board of Directors ControlRad Systems, Inc.
	Board of Directors Caelum Biosciences
	Board of Directors TFF Pharmaceuticals
	Founder Flame Biosciences
	Operating Partner CRG, LP
	Venture Advisor Israel Biotech Fund
	Board of Directors Center for Discovery and Innovation, Hackensack Meridian Health
OFFICE ADDRESS:	14 Canal Street New Hope PA 18938 Mobile: 908-432-5937 Fax: 267-740-2148 Email: and1consulting@gmail.com
EDUCATION:	
1971-1975	University of Maryland College Park, Maryland B.A. (with High Honors)
1975-1979	University of Maryland School of Medicine Baltimore, Maryland M.D., <i>Cum Laude</i>

1979-1982	Residency in Internal Medicine Mount Sinai Hospital New York, New York
1982-1984	Fellowship in Cardiovascular Disease Johns Hopkins Hospital Baltimore, Maryland

PRIOR POSITIONS AND APPOINTMENTS:

2010-2016	Board of Governors Patient-Centered Outcomes Research Institute (PCORI)
2013	Chairman & CEO Coronado Biosciences, Inc
2005 - 2012	Chief Science and Technology Officer Medical Devices & Diagnostics, Johnson & Johnson
2004-2005	Company Group Chairman, Research & Development, Pharmaceuticals, Johnson & Johnson
2002-2004	President, Johnson & Johnson Pharmaceutical Research and Development, L.L.C.
2001-2002	Executive Vice President, Research & Development Pharmaceuticals and President, Research & Development, Centocor
1999-2001	Senior Vice President, Research & Development Centocor, Inc.
1999-2001	Board of Directors Neuron Therapeutics, Inc.
1996-1999	Vice President, Clinical Research Centocor, Inc.
1994-1996	Vice President of Clinical Research for Cardiology and Immunology Centocor, Inc.
1993-1994	Senior Director, Cardiology Centocor, Inc.
1990-1996	ReoPro Project Team Chairperson Centocor, Inc.
1990-1992	Director, Cardiology Centocor, Inc.

1985-1990	Assistant Professor of Medicine Johns Hopkins University
1985-1990	Consultant Cardiologist Cardiology Consultation Service Johns Hopkins Hospital
1984-1990	Investigator Peter Belfer Laboratory for Myocardial Research Johns Hopkins Medical Institutions
1984-1990	Laboratory Director Experimental Cardiac Pathology Core Laboratory Cardiology Division Johns Hopkins Medical Institutions
1986-1990	Attending Physician Francis Scott Key Medical Center Baltimore, Maryland
1985-1990	Guest Researcher Gerontology Research Center National Institute on Aging National Institutes of Health
1984-1985	Assistant in Medicine Johns Hopkins University
COMMITTEES:	JOHNSON & JOHNSON (INTERNAL)
	Chairman, Worldwide Research & Development Council—2006- 2012
	Group Operating Committee - Medical Devices & Diagnostics—2005 to 2012
	Board of Directors, Johnson & Johnson Development Corporation (JJDC)—2006 to 2012
	Chairman, MD&D Research & Development Council
	Betalogics (Redscript Ventures) Scientific Advisory Board
	Cell Therapy Board—2007 to 2012
	Board of Directors Selective Nerve Stimulation (Johnson & Johnson Ventures)—2007 to 2009

Pharmaceuticals Group Operating Committee—2001to 2005

Chairman, New Product Development Committee (J&J Pharmaceutical)—2001 to 2005

Chairman, Johnson & Johnson Pharmaceutical Research & Development Management Board—2001 to 2005

Johnson & Johnson Pharmaceutical Research & Development Committee—2002 to 2005

Chairman, Centocor Research & Development Management Committee—1999 to 2005

Centocor Executive Committee—1999 to 2002

J&J Pharmaceuticals Integrated Development Committee—2001 to 2005

Council of Research Directors (CORD)-2001 to 2005

Drug Evaluation Executive Committee-2001 to 2005

Drug Commitment Committee (DCC)-1999 to 2000

EXTERNAL to J&J

Johns Hopkins University School of Medicine Institute for Basic Biomedical Sciences Advisory Council (2003present)

Memorial Sloan Kettering Cancer Center, Technology Development Fund External Review Committee (2015-present)

BioMotiv Advisory Board (2012 to present)

Teva Pharmaceutical Industries, Ltd. Therapeutic Advisory Board (October 2016-2017)

Patient-Centered Outcomes Research Institute (PCORI) Board of Governors (September 2010 to September 2016)

University of Pennsylvania – Center for Bioethics External Advisory Board (2009-2012)

Board of Directors, Fraunhofer USA (March 2008-2012)

Institute of Medicine Roundtable on Evidence Based Medicine (2006-2010)

Chief Technology Officer Advisory Board, Research

	And Technology Executive Council of the Corporate Executive Board (2007-2012)
MEDICAL LICENSES:	New Jersey, License #25MA07675900 New York, License #143738-1 Maryland, License #D27971 Pennsylvania, License #MD-041616-L Arizona, License #45580
CERTIFICATION:	National Board of Medical Examiners, July 1, 1980 American Board of Internal Medicine, September 15, 1982 American Board of Internal Medicine Cardiovascular Diseases, November 20, 1985
HONORS & AWARDS:	

1972	Phi Eta Sigma (National Freshman Honorary Society)
1973	Pi Mu Epsilon (Mathematics)
1975	Phi Beta Kappa
1975	Phi Kappa Phi
1975	Certificate of Scholarship, Annual Honors Convocation,
	University of Maryland, College Park
1976	Dean's Summer Research Fellowship,
	University of Maryland School of Medicine
1979	Alpha Omega Alpha
1979	Leonard Hummel Memorial Award for Excellence in
	Internal Medicine, University of Maryland School of Medicine
1987-1989	Clinician-Scientist Research Career Development Award
	Johns Hopkins Medical Institutions
1989-1990	Samuel J. Katcef Memorial Fellow
	American Heart Association, Maryland Affiliate
1991	Who's Who in Health and Medical Services
1991	Who's Who of Rising Young Americans
1992	Who's Who in the East
1997	Who's Who in America
2007	Distinguished Alumnus of the Year for the College of Arts and
	Humanities University of Maryland
2012	Recognition Award for Medical Device Innovation, Rutgers
	University & the University of Medicine and Dentistry of NJ

MEMBERSHIPS IN PROFESSIONAL SOCIETIES:

American College of Cardiology (Fellow) American College of Chest Physicians (Fellow) American Heart Association (Fellow) American College of Physicians

American Federation for Medical Research American Medical Association **REVIEWS, EDITORIALS, LETTERS AND BOOK CHAPTERS:**

- 1. Weisman HF, Bulkley BH: Pathophysiology of atherosclerotic heart disease. Cardiology Clinics 2(4): 555-569, 1984
- 2. Weisman HF: How to Write and Publish in the Medical Sciences. Edward J. Huth. Philadelphia: ISI Press, 1982 (Book Review). Technical Communications 31:30-31, 1984
- 3. Weisman HF, Healy B: Myocardial infarct expansion, infarct extension, and reinfarction: Pathophysiologic concepts. *Prog Cardiovasc Dis* 30(2):73-110, 1987
- Levine JH, Spear JF, Kadish AH, Weisman HF, Merillat JC, Moore EN: Cellular electrophysiology of electrical discharges. In: <u>Catheter Ablation of Cardiac Arrhythmias</u>, Melvin M. Scheinman ed. Martinus Nijhoff Publishing, Boston, pp 37-50, 1988
- 5. Weisman HF, Weisfeldt ML: Toward an understanding of the molecular basis of cardiomyopathies (editorial). *J Am Coll Cardiol* 10:1135-1138, 1987
- Becker LC, Ambrosio G, Manissi J, Weisman HF: The no-reflow phenomenon: A misnomer? In: <u>Analysis and Simulation of the Cardiac System—Ischemia</u>. Samuel Sideman and Rafael Bayer eds. CRC Press Inc., Boca Raton, p 289, 1989
- 7. Weisman HF: Pericardial Compressive Syndromes. The Johns Hopkins Medical Grand Rounds 14 (Program 3): 14-15, 1988
- 8. Weisman HF: The voltage sensitive calcium channel in the heart. *Heart Failure* 3:248-258, 1988
- 9. Wagner JA, Sax FL, Weisman HF, Porterfield J, McIntosh C, Weisfeldt ML, Snyder SH, Epstein SE: Calcium-antagonist receptors in atrial tissue of patients with hypertrophic cardiomyopathy. Letter to the editor. *N Engl J Med* 321:686-687, 1989
- 10. Weisman HF: Cholesterol Why bother? (Invited review) Preventive Cardiology reports 3:3-5, 1989
- 11. Ellis SG, Bates ER, Schaible T, Weisman HF, Pitt B, Topol EJ: Prospects for the use of antagonists to the platelet glycoprotein IIb/IIIa receptor to prevent post-angioplasty restenosis and thrombosis. *J Am Coll Cardiol* 17(6 Suppl B):89B-95B, 1991
- Coller BS, Scudder LE, Beer J, Gold HK, Folts JD, Cavagnaro J, Jordan R, Wagner C, Iuliucci J, Knight D, Ghrayeb J, Smith C, Weisman HF, Berger H: Monoclonal antibodies to platelet glycoprotein IIb/IIIa as antithrombotic agents. *Annals New York Academy of Sciences* 614:193-213, 1991
- 13. Zweier JL, Kuppusamy P, Shandelya SML, Thompson-Gorman S, Weisman HF, Fearon DT, Weisfeldt ML: Electron paramagnetic resonance measurements of free radical generation in

isolated cells and whole tissues. In: <u>Molecular Basis of Oxidative Damage by Leukocytes</u>, CRC Press Inc., Boca Raton, pp 181-201, 1992.

- 14. Weisman HF: The role of calcium channel abnormalities in syrian hamster cardiomyopathy. *Clin Immunol Immunopathol* 68:170-174, 1993
- 15. Manspeaker HP, Weisman HF, Schaible TF: Cardiovascular applications: Current status of immunoscintigraphy in the detection of myocardial necrosis using antimyosin (R11D10) and deep venous thrombosis using antifibrin (T2G1s). *Semin Nucl Med* 23(2):133-147, 1993
- Coller BS, Anderson KA, Weisman HF: Inhibitors of platelets agreggation: GPIIb/IIIa antagonists. In: <u>Heart Disease. A textbook of cardiovascular medicine</u>, Update 4, Eugene Braunwald ed. W.B. Sanders Company, Philadelphia, pp 1-10, 1995.
- 17. Coller BS, Anderson K, Weisman HF: New antiplatelet agents: Platelet GPIIb/IIIa antagonists. *Thromb Haemost* 74: 302-308, 1995
- Weisman HF, Schaible TF, Jordan RE, Cabot CF, Anderson KM: Anti-platelet monoclonal antibodies for the prevention of arterial thrombosis: Experience with ReoPro, a monoclonal antibody directed against the platelet GPIIb/IIIa receptor. *Biochem Soc Trans* 23(4):1051-1057, 1995
- Jordan RE, Wagner CL, Mascelli MA, Treacy G, Nedelman MA, Woody JN, Weisman HF, Coller BS: Preclinical development of c7E3 Fab; a mouse/human chimeric monoclonal antibody fragment that inhibits platelet function by blockade of GPIIb/IIIa receptors with observations of the immunogenicity of c7E3 fab in humans. In: <u>Adhesion Receptors as</u> <u>Therapeutic Targets</u>, CRC Press Inc., Boca Raton, pp 281-305, 1996
- Weisman HF: Clinical Development of ReoPro. *The Journal of Outcomes Management:* 6-10, 1996
- Coller BS, Anderson KM, Weisman HF. The anti-GPIIb-IIIa agents: fundamental and clinical aspects. *Haemostasis* 26 Suppl 4:285-293, 1996
- 22. Weisman HF: ReoPro Clinical Development: Future Directions and Therapeutic Approaches. *J Invas Cardiol* 8:51B-61B, 1996.
- 23. Weisman HF: Myocardial Reperfusion Injury: The case against shadow boxing (editorial). *Journal of Thrombosis and Thrombolysis*, 4:133-135, 1997
- Jordan RE, Mascelli MA, Nakada M, Weisman HF: The pharmacology and clinical development of abciximab (c7E3 Fab): A monoclonal antibody inhibitor of GPIIb/IIIa and α_vβ₃. In: New Therapeutic Agents in Thrombosis and Thrombolysis, Marcel Dekker, Inc., New York, NY, 1997
- 25. Simoons M, Weisman HF, Jordan R: Abciximab Chapter, *Therapeutic Drugs 2nd Ed*, ed. Colin Dollery, October 1997

- Anderson HV, Jordan RE, Weisman, HF: Concept and Clinical Application of Platelet Glycoprotein IIb/IIIa Inhibition with Abciximab (c7E3 Fab; ReoPro) for the Prevention of Acute Ischemic Syndromes. *Clin Appl Thromb Hemost* 3:256-266 1997
- Weisman HF: ReoPro Clinical Development: A Case Study. In: <u>Rehm/Reed Biotechnology</u> <u>Series</u>, Vol 5, 1998
- Jakubowski, J., Jordan, R.E., Weisman, H.F. Current Antiplatelet Therapy. In: <u>Handbook of Experimental Pharmacology</u>. Springer-Verlag, New York, 1998
- 29. Anderson KM, Bala MV, Weisman HF. Economics and cost-effectiveness in evaluating the value of cardiovascular therapies. An industry perspective on health economics studies. *Am Heart J* 137:S129-S132 1999
- LeClerc J, Mascelli MA, Weisman HF. Platelet glycoprotein IIb/IIIa antagonists in ischemic cerebrovascular disease. *Coronary Artery Disease*, 10:575-579, 1999.
- Farrell, CF, Barnathan, ES, Weisman HF: The Evolution of ReoPro® Clinical Development. In: <u>Novel Therapeutic Proteins: Selected Case Studies</u>, Wiley-VCH, Weinheim, Germany, pp 323-346, 2001.
- Weisman, H., Farup, C., Thomas, A., Juhn, P., Buto, K.: Broader Post-Marketing Surveillance for Insights on Risk and Effectiveness, 128. <u>The Learning Healthcare System</u>: Workshop Summary, Institute of Medicine of the National Aademies. The National Academies Press, Washington, D.C., 2007.
- Weisman, H.: Convergence and Innovation. In: <u>The 2009 Pfeiffer Annual Leadership</u> <u>Development</u>, David Dotlich, Peter Cairo, Stephen Rhinesmith, and Ron Meeks, Delta Organization & Leadership LLC, eds. Pfeiffer Publishing, San Francisco, pp 179-187, 2009.
- 34. Weisman, Harlan F: Stakeholder Perspectives on Value: Perspectives from Manufacturers. In: <u>Value in Health Care: Accounting for Cost, Quality, Safety, Outcomes, and Innovation</u>. Institute of Medicine (US) Roundtable on Value & Science-Driven Health Care; Yong PL, Olsen LA, McGinnis JM, editors. Washington (DC): National Academies Press (US), 2010.
- 35. Weisman HF: Companies Don't Innovate —People Do: Creating a Culture of Innovation to Drive Business Results. In: <u>Driving Business Value with Innovative Leadership Strategies:</u> <u>Chief Executive Officers on Building Company Success by Fostering a Creative and</u> <u>Collaborative Company Culture (Inside the Minds Series)</u>. Aspatore (Thompson Reuters), Eagan, MN, 2014

PEER REVIEW ARTICLES:

- 1. Weisman HF, Bush DE, Mannisi JA, Bulkley BH: Global cardiac remodeling after acute myocardial infarction: A study in the rat model. *J Am Coll Cardiol* 5(6): 1355-1362, 1985
- 2. Wagner JA, Reynolds IJ, Weisman HF, Dudeck P, Weisfeldt ML, Snyder SH: Calcium antagonist receptors in cardiomyopathic hamster: Selective increase in heart, muscle, brain. *Science* 232(4749): 515-518, 1986
- 3. Levine JH, Spear JF, Weisman HF, Kadish AH, Prood C, Siu CO, Moore EN: The cellular electrophysiologic changes induced by high-energy electrial ablation in canine myocardium. *Circulation* 73(4): 818-829, 1986
- 4. Ambrosio G, Becker LC, Hutchins GM, Weisman HF, Weisfeldt ML: Reduction in experimental infarct size by recombinant human superoxide dismutase: Insights into the pathophysiology of reperfusion injury. *Circulation* 74(6): 1424-1433, 1986
- 5. Levine JH, Moore EN, Weisman HF, Kadish AH, Becker LC, Spear JF: Depression of action potential characteristics and a decreased space constant are present in postischemic, reperfused myocardium. *J Clin Invest* 79(1): 107-116, 1987
- 6. Kusuoka H, Porterfield JK, Weisman HF, Weisfeldt ML, Marban E: Pathophysiology and pathogenesis of stunned myocardium: Depressed Ca²⁺-activation of contraction as a consequence of reperfusion-induced cellular calcium overload in ferret hearts. *J Clin Invest* 79(3): 950-961, 1987
- 7. Mannisi JA, Weisman HF, Bush DE, Dudeck P, Healy B: Steroid administration after myocardial infarction promotes early infarct expansion: A study in the rat. *J Clin Invest* 79(5):1431-1439, 1987
- Hausheer FH, Josephson RA, Grochow LB, Weissman D, Brinker JA, Weisman HF: Intracardiac sarcoma diagnosed by left ventricular endomyocardial biopsy. *Chest* 92(1): 177-179, 1987
- Levine JH, Merillat JC, Stern M, Weisman HF, Kadish AH, Moore EN, Spear JF, Fonger J, Guarnieri T: The cellular electrophysiologic changes induced by ablation: Comparison between argon laser photoablation and high-energy electrical ablation. *Circulation* 76(1): 217-225, 1987
- 10. Ambrosio G, Jacobus WE, Bergman CA, Weisman HF, Becker LC: Preserved high energy phosphate metabolic reserve in globally "stunned" hearts despite reduction of basal ATP content and contractility. *J Mol Cell Cardiol* 19(10): 953-964, 1987

- 11. Josephson RA, Singer I, Levine JH, Maughan L, Pyeritz RE, Gott VL, Weisman HF, Brinker J: Systolic expansion of the aortic root: An echocardiographic and angiographic sign of aortic composite graft dehiscence. *Cathet Cardiovasc Diagn* 14(2): 105-107, 1988
- 12. Kitakaze M, Weisman HF, Marban E: Contractile dysfunction and ATP depletion after transient calcium overload in perfused ferret hearts. *Circulation* 77(3): 685-695, 1988
- Weisman HF, Bush DE, Mannisi JA, Weisfeldt ML, Healy B: Cellular mechanisms of myocardial infarct expansion. *Circulation* 78(1): 186-201, 1988
- 14. Gordon GB, Bush DE, Weisman HF: Reduction of atherosclerosis by administration of dehydroepiandrosterone: A study in the hypercholesterolemic New Zealand white rabbit with aortic intimal injury. *J Clin Invest* 82(2): 712-720, 1988
- 15. Levine JH, Moore EN, Kadish AH, Weisman HF, Balke CW, Hanich RF, Spear JF: Mechanisms of depressed conduction from long-term amiodarone therapy in canine myocardium. *Circulation* 78(3): 684-691, 1988
- Nolan SE, Mannisi JA, Bush DE, Healy B, Weisman HF: Increased afterload aggravates infarct expansion after acute myocardial infarction. *J Am Coll Cardiol* 12(5): 1318-1325, 1988
- 17. Calkins H, Maughan WL, Weisman HF, Sugiura S, Sagawa K, Levine JH: Effect of acute volume load on refractoriness and arrhythmia development in isolated, chronically infarcted canine hearts. *Circulation* 79(3): 687-697, 1989
- Wagner JA, Weisman HF, Snowman AM, Reynolds IJ, Weisfeldt ML, Snyder SH: Alterations in calcium antagonist receptors and sodium-calcium exchange in cardiomyopathic hamster tissues. *Circ Res* 65(1): 205-214, 1989
- 19. Wagner JA, Sax FL, Weisman HF, Porterfield J, McIntosh C, Weisfeldt ML, Snyder SH, Epstein SE: Calcium-antagonist receptors in the atrial tissue of patients with hypertrophic cardiomyopathy. *N Engl J Med* 320(12): 755-761, 1989
- Stern MD, Weisman HF, Renlund DG, Gerstenblith G, Hano O, Lakatta EG: Laser backscatter studies of intracellular Ca²⁺ oscillations in the isolated hearts. *Am J Physiol* 257 (2 Pt 2) (Heart Circ Physiol 26): H665-H673, 1989
- 21. Ambrosio G, Weisman HF, Mannisi JA, Becker LC: Progressive impairment of regional myocardial perfusion after initial restoration of postischemic blood flow. *Circulation* 80(6): 1846-1861, 1989
- 22. Zuckerman BD, Weisman HF, Yim FC: Arterial hemodynamics in a rabbit model of atherosclerosis. *Am J Physiol* (Heart Circ Physiol) 257(3 Pt 2): H891-H897, 1989
- 23. Litt MR, Jeremy RW, Weisman HF, Winkelstein JA, Becker LC: Neutrophil depletion limited to reperfusion reduces myocardial infarct size after 90 minutes of ischemia: Evidence for neutrophil-mediated reperfusion injury. *Circulation* 80(6): 1816-1827, 1989

- 24. Kadish AH, Weisman HF, Veltri EP, Epstein AE, Slepian MJ, Levine JH: Paradoxical effects of exercise on the QT interval in patients with polymorphic ventricular tachycardia receiving type IA antiarrhythmic agents. *Circulation* 81(1): 14-19, 1990
- 25. Feldman AM, Tena RG, Kessler PD, Weisman HF, Schulman SP, Blumenthal RS, Jackson DG, Van Dop C: Diminished beta-adrenergic receptor responsiveness and cardiac dilation in hearts of myopathic Syrian hamsters (B10 53.58) are associated with a functional abnormality of the G stimulatory protein. *Circulation* 81(4): 1341-1352, 1990
- 26. Wagner JA, Weisman HF, Levine JH, Snowman AM, Snyder SH: Differential effects of amiodarone and desethylamiodarone on calcium antagonist receptors. *J Cardiovasc Pharmacol* 15(3): 501-507, 1990
- 27. Weisman HF, Bartow T, Leppo MK, Marsh HC, Jr., Carson GR, Concino MF, Boyle MP, Roux KH, Weisfeldt ML, Fearon DT: Soluble human complement receptor type 1: *In vivo* inhibitor of complement suppressing post-ischemic myocardial inflammation and necrosis. *Science* 249(4965): 146-151, 1990
- Herrington DM, Gordon GB, Achuff SC, Trejo JF, Weisman HF, Kwiterovich PO Jr., Pearson TA: Plasma dehydroepiandrosterone and dehydroepiandrosterone sulfate in patients undergoing diagnostic coronary angiography. *J Am Coll Cardiol* 16(6):862-870, 1990 (NOTE: corrected and republished with original paging, article originally printed in *J Am Coll Cardiol* 16(4): 862-870, 1990)
- 29. Weisman HF, Bartow T, Leppo MK, Boyle MP, Marsh HC, Carson GR, Roux KH, Weisfeldt ML, Fearon DT: Recombinant soluble CR1 suppresses complement activation, inflammation and necrosis associated with reperfusion of ischemic myocardium. *Trans Assoc Am Physicians* 103: 64-72, 1990
- 30. Takeda K, LaFrance ND, Weisman HF, Wagner HN Jr., Becker LC: Comparison of indium 111 antimyosin antibody and technetium 99m pyrophosphate localization in reperfused and nonreperfused myocardial infarction. *J Am Coll Cardiol* 17(2): 519-526, 1991
- Anderson HV, Revana M, Rosales O, Brannigan L, Stuart Y, Weisman H, Willerson J: Intravenous administration of monoclonal antibody to the platelet GPIIb/IIIa receptor to treat abrupt closure during coronary angioplasty. *Amer J Cardiol* 69:1373-1376, 1992
- 32. Miller DD, Rivera FJ, Garcia OJ, Palmaz JC, Berger HJ, Weisman HF: Imaging of vascular injury with 99m tc-labeled monoclonal antiplatelet antibody S12: Preliminary experience in human percutaneous transluminal angioplasty. *Circulation* 85(4): 1354-1363, 1992
- 33. Rodriguez EK, Hunter WC, Royce MJ, Leppo MK, Douglas AS, Weisman HF: A method to reconstruct myocardial sarcomere lengths and orientations at transmural sites in beating canine hearts. *Am J Physiol* 263(1 Pt 2) (Heart Circ Physiol 32): H293-H306, 1992
- 34. Kasper E, Ventura C, Weisman H, Capogrossi: Effect of a kappa opioid agonist in cardiomyopathic hamster ventricular myocytes: *Life Sci* 50: 2029-35, 1992.

- 35. Nedelman MA, Shealy DJ, Boutin R, Brunt E, Seasholtz JI, Allen IE, McCartney JE, Warren FD, Opperman H, Pang RHL, Berger HJ, Weisman HF: Rapid infarct imaging with a technetium-99m labeled antimyosin recombinant single-chain FV: Evaluation in a canine model of acute myocardial infarction. *J Nucl Med* 34: 234-241, 1993
- 36. Ellis SG, Tcheng JE, Navetta FI, Muller DW, Weisman HF, Smith C, Anderson KM, Califf RM, Topol EJ: Safety and antiplatelet effect of murine monoclonal antibody 7E3 Fab directed against platelet glycoprotein IIb/IIIa in patients undergoing elective coronary angioplasty. *Coron Artery Dis* 4(2): 167-175, 1993
- 37. Kleiman NS, Ohman ME, Califf RM, George BS, Kereiakes D, Aguirre FV, Weisman HF, Schaible TF, Topol EJ: Profound inhibition of platelet aggregation with monoclonal antibody 7E3 Fab following thrombolytic therapy: Results of the TAMI-8 pilot study. J Am Coll Cardiol 22(2): 381-389, 1993
- 38. Boyle MP, Weisman HF: Limitation of infarct expansion and ventricular remodeling by late reperfusion: Study of time course and mechanism in a rat model. *Circulation* 88(6): 2872-2883, 1993
- Kohmura C, Gold HK, Yasuda T, Holt R, Nedelman M, Guerrero JL, Weisman HF, Collen D: A chimeric murine/human antibody Fab fragment directed against the platelet GPIIb/IIIa receptor enhances and sustains arterial thrombolysis with recombinant tissue-type plasminogen activator in baboons. *Arterioscler Thromb* 13(12): 1837-1842, 1993
- 40. Simoons ML, Jan de Boer M, van den Brand M JBM, van Miltenburg AJM, Hoorntje JCA, Heyndrickx GR, van der Wieken LR, De Bono D, Rutsch W, Schaible TF, Weisman HF, Klootwijk P, Nijssen KM, Stibbe J, de Feyter PJ: Randomized trial of a IIb/IIIa platelet receptor blocker in refractory unstable angina. *Circulation* 89: 596-603, 1994
- 41. Anderson HV, Kirkeeide RL, Krishnaswami A, Weigelt LA, Revana M, Weisman HF, Willerson JT: Cyclic flow variations after coronary angioplasty in humans: Clinical and angiographic characteristics and elimination with 7E3 monoclonal antiplatelet antibody. *J Am Coll Cardiol* 23(5): 1031-1037, 1994
- 42. Topol EJ, Callif RM, Weisman HF, Ellis SG, Tcheng JE, Worley S, Ivanhoe R, George BS, Fintel D, Weston M, Sigmon K, Anderson KM, Lee KL, Willerson JT, the EPIC Investigators: Randomised trial of coronary intervention with antibody against platelet IIb/IIa integrin for reduction of clinical restenosis: Results at six months. *Lancet* 343(8902): 881-886, 1994
- 43. The EPIC Investigators: Use of a monoclonal antibody directed against the platelet glycoprotein IIb/IIIa receptor in high-risk coronary angioplasty. *N Engl J Med* 330: 956-61, 1994
- Rote WE, Nedelman MA, Mu D-X, Manley PJ, Weisman H, Cunningham MR, Lucchesi BR: Chimeric 7E3 prevents carotid thrombosis in cynomolgus monkeys. *Stroke* 25: 1223-1233, 1994

- 45. Tcheng JE, Ellis SG, George BS, Kereiakes DJ, Kleiman NS, Talley JD, Wang AL, Weisman HF, Califf RM, Topol EJ: Pharmacodynamics of chimeric glycoprotein IIb/IIIa integrin antiplatelet antibody Fab 7E3 in high risk coronary angioplasty. *Circulation* 90(4): 1757-1764, 1994
- 46. Moliterno DJ, Califf RM, Aguirre FV, Anderson K, Sigmon KN, Weisman HF, Topol EJ: Effect of platelet glycoprotein IIb/IIIa integrin blockade on activated clotting time during percutaneous transluminal coronary angioplasty or direct coronary atherectomy (The EPIC Trial). Evaluation of c7E3 fab in the prevention of ischemic complications trial. *Am J Cardiol* 75(8): 559-562, 1995
- 47. Aversano T, Zhoe W, Nedelman M, Nakada M, Weisman H: A chimeric IgG4 monoclonal antibody directed against CD18 reduces infarct size in a primate model of myocardial ischemia and reperfusion. *J Am Coll Cardiol* 25: 781-788, 1995
- 48. Aguirre FV, Topol EJ, Ferguson JJ, Anderson K, Blankenship JC, Heuser RR, Sigmon K, Taylor M, Gottlieb R, Hanovich G, Rosenberg M, Donohue TJ, Weisman HF, Califf RM for the EPIC Investigators: Bleeding complications with the chimeric antibody to platelet glycoprotein IIb/IIIa in patients undergoing percutaneous coronary intervention. *Circulation* 91: 2882-2890, 1995
- 49. Bhattacharya S, Jordan R, Machin S, Senior R, Mackie I, Smith CR, Schaible TF, Weisman HF, Lahiri A: Blockade of the human platelet GPIIb/IIIa receptor by a murine monoclonal antibody Fab fragment (7E3): Potent dose-dependent inhibition of platelet function. *Cardiovasc Drugs Ther* 9: 665-675, 1995
- 50. Kleiman NS, Raizner AE, Jordan R, Wang AL, Norton D, Mace KF, Joshi A, Coller BS, Weisman HF: Differential inhibition of platelet aggregation induced by adenosine diphosphate or a thrombin receptor-activating peptide in patients treated with bolus chimeric 7E3 fab: Implications for inhibition of the internal pool of GPIIb/IIIa receptors. *J Am Coll Cardiol* 26: 1665-1671, 1995
- 51. Knight DM, Wagner C, Jordan R, McAleer MF, DeRita R, Fass, DN, Coller BS, Weisman HF, Ghrayeb J: The immunogenicity of the 7E3 murine monoclonal fab antibody fragment variable region is dramatically reduced in humans by substitution of human for murine constant regions. *Mol Immunol* 32: 1271-1281, 1995
- 52. Coller BS, Anderson KM, Weisman HF: The anti-GPIIb/IIIa agents: Fundamental and clinical aspects. Haemostasis 26 (Suppl 4): 285-293, 1996
- 53. Lefkovits, J, Ivanhoe RJ, Califf RM, Bergelson BA, Anderson KM, Stoner GL, Weisman HF, Topol EJ for the EPIC Investigators: Effects of platelet glycoprotein IIb/IIIa receptor blockade by a chimeric monoclonal antibody (abciximab) on Acute and six-month outcomes after percutaneous transluminal coronary angioplasty for acute myocardial infarction. *Am J Cardiol* 77: 1045-1051, 1996
- 54. Wagner CL, Mascelli MA, Neblock DS, Weisman HF, Coller BS, Jordan RE: Analysis of GPIIb/IIIa receptor number by quantification of 7E3 binding to human platelets. *Blood* 88: 907: 907-914, 1996

- 55. Aguirre FV. Topol EJ, Anderson KM, Kleiman NS, Weisman HF, FitzPatrick SE, Califf RM: Clinical benefit within patient subgroups receiving c7E3 Fab (abciximab) during percutaneous coronary revascularization: Subgroup analysis from the EPIC trial, *J Invas Cardiol* 8: 21B-29B, 1996
- 56. Lefkovits J, Blankenship JC, Anderson KM, Stoner GL, Talley JD, Worley SJ, Weisman HF, Califf RM, Topol EJ: Increased risk of non Q-wave myocardial infarction after directional atherectomy is platelet-dependent: Evidence from the EPIC trial. Evaluation of c7E3 for the prevention of ischemic complications. *J Am Coll Cardiol* 28: 849-855, 1996
- 57. Lincoff AM, Tcheng JE, Califf RM, Bass T, Popma J, Teirstein PS, Kleiman NS, Hattel LJ, Anderson HV, Ferguson JJ, Cabot CF, Anderson KM, Berdan LG, Musco MH, Weisman HF, Topol EJ for the PROLOG Investigators: Standard versus low-dose weight-adjusted heparin in patients treated with the platelet glycoprotein IIb/IIIa receptor antibody fragment abciximab (c7E3 Fab) during percutaneous coronary revascularization. *Am J Cardiol* 79: 286-291, 1997
- 58. The CAPTURE Investigators: Randomized placebo-controlled trial of abciximab before and during coronary intervention in refractory unstable angina: The CAPTURE study. *Lancet* 349: 1429-1435, 1997
- 59. Topol EJ, Ferguson JJ, Weisman HF, Tcheng JE, Ellis SG, Kleiman NS, Ivanhoe RJ, Wang AL, Miller DP, Anderson KM and Califf RM for the EPIC Investigator Group: Long-term protection from myocardial ischemic events in a randomized trial of brief integrin $\alpha_2\beta_3$ blockade with percutaneous coronary intervention. *JAMA* 278: 479-484, 1997
- 60. The EPILOG Investigators: Platelet glycoprotein IIb/IIIa receptor blockade and low-dose heparin during percutaneous coronary revascularization. *N Engl J Med* 336: 1689-1696, 1997
- 61. Lincoff AM, Califf RM, Anderson KM, Weisman HF, Aguirre FV, Kleiman NS, Harrington RA, Topol EJ for the EPIC Investigators: Evidence for prevention of death and myocardial infarction with platelet membrane glycoprotein IIb/IIIa receptor blockade by abciximab (c7E3 Fab) among patients with unstable angina undergoing percutaneous coronary revascularization. *J Am Coll Cardiol* 30: 149-156, 1997
- 62. Mascelli MA, Worley S, Veriabo NJ, Lance E, Mack S, Schaible T, Weisman HF and Jordan R: Rapid assessment of platelet function using a modified whole blood aggregometer in PTCA patients receiving anti-GPII/IIIa therapy. *Circulation*, 96: 3860-3866, 1997
- 63. Khan MM, Ellis SG, Aguirre FV, Weisman HF, Wildermann NM, Califf RM, Topol EJ, Kleiman NS for the EPIC Investigators: Does intracoronary thrombus influence the outcome of high risk percutaneous transluminal coronary angioplasty? Clinical and angiographic outcomes in a large multicenter trial. *J Am Coll Cardiol* 31: 31-6, 1998
- 64. Kereiakes DJ, Lincoff AM, Miller DP, Tcheng JE, Cabot CF, Anderson KM, Weisman HF, Califf RM, Topol EJ for the EPILOG Trial Investigators: Abciximab therapy and unplanned

coronary stent deployment: Favorable effects on stent utilization, clinical outcomes and bleeding complications. *Circulation* 97: 857-864, 1998.

- 65. Kleiman NS, Lincoff AM, Kereiakes, DJ, Miller DP, Aguirre FV, Anderson K, Weisman HF, Califf RM, Topol EJ: Diabetes mellitus, glycoprotein IIb/IIIa blockade, and heparin: Evidence for a complex interaction in a multicenter trial. *Circulation*. 97: 1912-1920, 1998
- 66. Mascelli MA,Lance ET, Damaraju L, Wagner CL, Weisman HF, Jordan RE:Pharmacodynamic Profile of Short-term Abciximab Treatment Demonstrates Prolonged Platelet Inhibition With Gradual Recovery From GP IIb/IIIa Receptor Blockade. *Circulation* 97: 1680-1688, 1998
- 67. Lincoff MA, Tcheng JE, Califf RM, Kereiakes DJ, Kelly TA, Timmis GC, Kleiman NS, Booth JE, Balog C, Cabot CF, Anderson KM, Weisman HF, Topol EJ: Sustained suppression of ischemic complications of coronary intervention by platelet GP IIb/IIIa blockade with abciximab: One year outcome in the EPILOG Trial. *Circulation* 99: 1951-1958, 1999
- 68. Mascelli MA, Kleiman NS, Marciniak SJ Jr, Damaraju L, Weisman HF, Jordan RE: Therapeutic heparin concentrations augment platelet reactivity: implications for the pharmacologic assessment of the glycoprotein IIb/IIIa antagonist abciximab. *Am Heart J* 139: 696-703, 2000
- 69. Topol EJ, EM Ohman EM, Barnathan E, Califf RM, Lee KL, Lincoff AM, Scherer J, Scott R, MH Sketch MH, HF Weisman HF, Muller DWM, Grinfeld L, Cagide A Bode C, Forycki F, Lefkovits J, Steg G, Macaya C, Schultheiss HP, Eberli F: Trial of Abciximab With and Without Low-Dose Reteplase for Acute Myocardial Infarction. *Circulation*101: 2788-2794, 2000
- 70. Anderson KM, Califf RM, Stone GW, Neumann FJ, Montalescot G, Miller DP, Ferguson JJ 3rd, Willerson JT, Weisman HF, Topol EJ: Long-term mortality benefit with abciximab in patients undergoing percutaneous coronary intervention. *J Am Coll Cardiol* 15:37: 2059-65, 2001
- 71. Forsythe L, Frank L, Walker KO, Anise A, Wegener N, Weisman H, Hunt G, Beal A: Patient and clinician views on comparative effectiveness research and engagement in research. J. Comp. Eff. Res. 4: 11–25, 2015