



Transcript of Dr. Willerson's opening remarks at the 2nd Vulnerable Patient Symposium held by AEHA on March 6th in conjunction with the Annual Conference of American College of Cardiology 2004 New Orleans, LA



Thank you Dr. Naghavi. Can y'all hear me? Nice to be here with a lot of friends -- I'd ordinarily say old friends -- just conclude that we're friends. I'm going to be brief, too. I'll take five minutes. Just to remind you some numbers. We concentrate on Americans, but it really is **Europe get in SHAPE too**, even unfortunately parts of the Pacific Rim. But in the United States it's estimated there are thirteen million two-hundred thousand Americans with coronary heart disease. This comes from the National Health and Nutrition Examination Survey III, bottom of the slide, seven million, eight hundred thousand myocardial infarctions and six million, eight hundred thousand patients with angina and four million, eight hundred thousand with stroke. One in five males and females have some sort of coronary vascular disease and since 1900, cardiovascular disease has been the number one killer in the United States every year but 1918, all of you know why 1918 was different? It was the influenza epidemic. There are nearly 2600 Americans die of cardiovascular disease every day, an average of one death every 34 seconds. The CDD accounted for 38.5% of all deaths or one of every 2.6 deaths in the United States in 2001. And myocardial infarctions occur in patients with plaques with mild or moderate obstruction, more often than not, and you see the study from Ambrose

here, I see Val Fuster at the back of the room, played a role in that, Dr. Little, Dr. Nobiachi, Dr. Giroud. And then all patients and plaques that change suddenly leading to myocardial infarction, fissures or ulcerated in the far right-hand bar, less than 50% stenosis most of that's red, and it emphasizes the problem. This is familiar to all of us artery on the bottom right where it fairly open lumen and then all of a sudden, it -- this is an ulcerated plaque and develops a thrombus. This is well-known to everybody in this room the characteristics of vulnerable plaque. I'm sure we agree on some of them, if not all of them but there's a large lipid pool, there's a thin fibrous cap, there's decreased collagen content in that cap, there's macrophage and activated T-cell infiltration, there is some mast cells as well. There's a depletion of caps, smooth muscle cells and then outward remodeling, acrotic core and increased neoangiogenesis. Sometimes calcium nodules and some of these at least have temperature and pH heterogeneity. And this just summarizes it in pictorial form and you've seen it many times, most of you've drawn it. This looks at the cost in the United States. This comes from the NHLBI by Dr. Thom, billion of dollars in the United States in 2004 in cardiovascular disease and stroke, heart disease 238.6 billions of dollars; cardia heart disease 133 billions; stroke, 54 billions; hypertension disease 56 billions; congestive heart failure, 29 billions --that number's going up and it keeps going up for quite a while. And then 368 billion for total cardiovascular disease costs. And coronary atherosclerosis is ranked number one, 2001 data from the Health Care Cost and Utilization Project in cost, 31.5 billion; acute MI you see heart failure and cerebrovascular disease and dysrhythmia -- so, vulnerable plaques important and vulnerable patient is important.

I just want to add my encouragement to Dr. Naghavi's, we really do need to come together and work together and try to make more rapid progress across the spectrum of this kind of effort from the discovery of the genes and proteins that confer these risks to exact mechanism to being able to detect vulnerable plaque wherever they exist, invasively and more importantly, non-invasive in time and then finding therapies that go beyond weight loss and blood pressure control and cessation of smoking actually are prevented.

It's a pleasure to be with you. I'm going to run right out the door. I've got to give another talk about 30 minutes away in 20 minutes -- it's great to be with you. Thank you (applause).