



SHAPE Task Force Applauds Recent Urgent Calls to Overhaul CVD Prevention Guidelines

THE HEART ATTACK ERADICATION SOCIETY URGES DOCTORS TO ADOPT PERSONALIZED RISK ASSESSMENT

HOUSTON, TEXAS, October 15, 2014 – Leading preventive cardiologists and academic cardiovascular specialists from the Society for Heart Attack Prevention and Eradication (SHAPE), a non-profit organization advocating for early detection of future heart attack victims, endorse and applaud Dr. Steven Nissen's urgent call to improve upon the existing inaccurate guidelines for detection and prevention of cardiovascular disease.

"We are delighted to hear Dr. Nissen and other well established physicians in the cardiology community call for revising existing guidelines" said Dr. PK. Shah, Chairman of SHAPE Scientific Advisory Board. "As many of you know, we have raised flags repeatedly since 2005 when we announced the SHAPE Guidelines and are looking forward to the much needed overhaul".

After 10 years, as the field of cardiology anxiously awaited the NCEP IV Guidelines, the SHAPE Task Force was disappointed that several clinically important discoveries of the past decade were not incorporated in the AHA-ACC "Pooled Cohort" Guidelines. The Guidelines did not assign a proper role to the detection of subclinical atherosclerosis.

"In the past decade, a mountain of evidence has amassed supporting the superiority of screening for atherosclerosis over screening for risk factors of atherosclerosis, specially for detecting those with the highest near-term risk "the Vulnerable Patient", however, most physicians are still treating their patients based on the outdated NCEP Guidelines" said Dr. Morteza Naghavi, Founder of SHAPE and Executive Chairman of the SHAPE Task Force. "It is disappointing that while other countries started incorporating atherosclerosis testing in their diagnostic algorithms, the US, where the research was largely done, lags in this regard. It is time for the US physicians to adopt practicing detection and treatment of atherosclerosis."

The large, consistent body of evidence has demonstrated the value of using noninvasive imaging for early detection of atherosclerosis in its pre-symptomatic stage as recommended by the SHAPE Guidelines. While assessment of traditional risk factors such as high cholesterol and high blood pressure are important, it is now clear that the direct measurement of atherosclerosis, which measures the lifetime effects of known and unknown risk factors, is essential in identifying high risk individuals and improves the accuracy of their risk classification. SHAPE Guidelines focus on early detection of atherosclerosis whereas the existing guidelines focus on



epidemiological risk factors of atherosclerosis which depict the statistical probability of developing atherosclerosis. The burden of atherosclerotic plaques predicts adverse events much more accurately than risk factors of atherosclerosis, particularly near-term events.

"We need to adopt Personalized Medicine to advance our patient care" said Dr. Daniel Berman, Chief of Nuclear Cardiology at Cedars Sinai Medical Center in Los Angeles and a leading member of SHAPE Task Force. "Treating patients for atherosclerosis without knowing if they have atherosclerosis, is a blind approach. The SHAPE Guidelines is a major step toward Personalized Medicine for prevention of atherosclerotic cardiovascular disease"

In 2009, the Appropriate Use Criteria considered coronary artery calcium scoring (CAC) "appropriate" for asymptomatic adults with an "Intermediate" global risk estimate, as well as those deemed lower risk with a family history of premature coronary heart disease. In 2010, the ACC/AHA Guideline for Assessment of Cardiovascular Risk in Asymptomatic Adults followed suit, elevating CAC and carotid plaque and intima-media thickness (CIMT) to Class IIa recommendations for cardiovascular risk assessment in asymptomatic adults at intermediate (10% to 20% 10-year) risk.

"The ACC's Appropriate Use Criteria and 2010 Guidelines for Assessing Cardiovascular Risk was a big forward. Unfortunately the new 2013 AHA/ACC Guidelines reversed some progress leading to significant over-treatment, especially in female populations" said Mathew Budoff, Professor of Medicine at UCLA and a leading member of SHAPE Task Force. "Today, there is absolutely no doubt that coronary calcium imaging predicts cardiovascular events better than all risk markers put together, including Framingham Risk Score, hs-CRP, and other new biomarkers"

The new AHA-ACC "Pooled" Guideline¹, with its arbitrary change in the definition of High Risk in the primary prevention setting, is likely to result in marked overtreatment and undue "High Risk" labeling and statin therapy of many healthy women. For example, a 65year old non-smoking, non-diabetic, non-hypertensive woman with total cholesterol of 200 mg/dl and HDL of 49 mg/dl who lives an active life style would now be recommended statin therapy. In contrast, the same individual would be defined as Low Risk by the 2010 ACCF/AHA² and NCEP Guidelines. More importantly, regardless of her cholesterol levels, if this female is tested negative for atherosclerosis, (absence of coronary calcium, absence of carotid plaques, or normal carotid wall thickness), she will be truly a low-risk individual and would not need statin therapy. The use of the new Guidelines also results in overestimation of the need for medications in certain subgroups of men. On the other side of the spectrum, high-risk individuals, men and women, with normal or borderline risk factors but a significant level of atherosclerotic plaques are overlooked as they would not qualify for intensive therapy. The existing AHA-ACC Guidelines address the PROBABILITY of coronary atherosclerotic disease and do not take into account whether such an individual has any evidence of subclinical atherosclerosis.



The Guidelines should no longer blindly favor intensive cholesterol lowering independent of atherosclerosis, but instead must target intensive therapy for those individuals with the highest burden of atherosclerotic "the Vulnerable Patient" who are expected to benefit the most from aggressive cholesterol-lowering and other interventions. The heightened awareness of possible statin induced hyperglycemia (diabetes mellitus) reinforces the need for more accurate and individualized risk assessment to insure that widespread drug therapy is appropriately implemented.

SHAPE is continuing its scientific quest for innovative approaches to heart attack prevention, and ultimately, eradication. As an educational nonprofit organization, SHAPE advocates only the most scientifically proven approach, independent of specific practices or procedures. SHAPE is actively supporting the Department of Health & Human Services Million HeartsTM initiative to prevent one million heart attacks and strokes over 5 years and encourages the DHHS authorities to consider national adoption of SHAPE Guidelines which is much more like to identify and save "the Vulnerable Patient" at risk of adverse events over 5 years.

In conclusion, given the large, consistent and growing body of evidence showing that testing for subclinical atherosclerosis is a more accurate method of predicting atherosclerotic cardiovascular events than testing for risk factors of atherosclerosis, the SHAPE Task Force applauds recent calls for revision of existing guidelines and respectfully urges the authorities at the American Heart Association and American College of Cardiology and effectively incorporate screening for atherosclerosis in determining risk and correspond the intensity of therapy to the burden of atherosclerosis.

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SHAPE encourages people to watch "Widowmaker" http://www.widowmakerthemovie.com/





About the Society for Heart Attack Prevention and Eradication (SHAPE):

Originated from Houston, Texas and founded by Dr. Morteza Naghavi, SHAPE is a non-profit organization and is supported by leading cardiologists and cardiovascular researchers worldwide. The mission of SHAPE is to eradicate heart attack by championing new strategies for prevention while promoting the scientific quest for a cure such as "vaccine for atherosclerosis". The immediate focus of SHAPE is on proper risk assessment of the asymptomatic individuals who are at risk of sudden cardiovascular events. SHAPE is committed to raising public awareness about revolutionary discoveries that are opening exciting avenues to prevent and ultimately eradicate heart attacks. Through educational programs presented to both medical professionals and the community, SHAPE raises awareness for the primary prevention of atherosclerotic cardiovascular disease. The vision of SHAPE is a world free from heart attack in the 21st century. Additional information is available on the organization's website at www.shapesociety.org.

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