

INTRODUCTION

Atherosclerotic cardiovascular disease (ASCVD) is the primary cause of morbidity & mortality in the world. Despite the chronic nature of the disease, ASCVD is generally undiagnosed before onset of symptoms or complications. The first clinical presentation of more than half of the subjects with coronary artery disease (CAD) is either myocardial infarction or death (**Ardigo et al., 2007**).

This grim reality is at least in part due to the lack of markers that accurately identify active atherosclerotic disease before complications occur (**Lippy., 2002**).

In large epidemiological studies various serum markers of systemic inflammation such as C-reactive protein (CRP), fibrinogen, and interleukin 6(IL-6) have been shown to predict cardiovascular events and correlate with response to therapy (**Ridker et al., 2005**).

Although potentially useful in risk stratification, the current systemic markers of inflammation lack sufficient disease specificity to be used satisfactory as a screening tool in the diagnosis of CAD (**Pearson et al., 2003**).

The inaccuracy of current markers may reflect the fact that they are neither derived primarily from the vascular wall nor produced primarily by cells involved in the vascular inflammatory process (**Rothenbacher et al., 2006**).

Thus there remains a critical need to develop non invasive test that more accurately detect the presence and activity of ASCVD and improve our ability to predict and prevent clinical events (**Diego et al., 2007**).