

Dependable Biomarkers for Heart Ailments

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Heart Diseases have been the No. 1 cause of deaths across the globe followed by stroke. Numerous researches have been done in terms of drugs and treatment modalities, but still the leading reason for morbidity and mortality, the heart diseases are at top position world over. In America, Heart Diseases are the nation's leading causes for deaths, since 1921. Around 90 million people living in America have cardiovascular diseases. Of these around 80 million Americans have high blood pressure. If we talk about Stats of India, It still ranks top most reason for deaths in the country, with more than 1.7 million registered deaths due to heart diseases. The present letter to the editor has been written to bring the knowledge of biomarkers, which can help in early detection of damages to be caused by heart ailments to the body and which the doctors can rely upon in order to save the precious lives.

Cardiovascular diseases, or the diseases related to an important organ of the body, i.e., Heart, are one of the top most and leading cause of deaths world over. Globally more than 18 million deaths are caused by this disease and American Heart Institute predicts that more than 25 million deaths will be caused by this disease by the end of year 2030. This is an alarming figure and strategies to deal with the leading cause of morbidity and mortality shall be found out immediately. If the stats are taken into consideration for America, in whole of America, Heart diseases is the No. 1 leading cause of deaths and almost more than 90 million Americans have heart diseases. Stroke has been found the second most leading cause of death, however, in America, Stroke is the fourth leading cause of deaths.

Cardiovascular diseases have been the top most reason for deaths in America since 1921. Different strategies have been found out to reduce the morbidity and mortality related to the disease and the doctors and scientists were able to bring down the numbers, however, it still rules the apex position. Around 80 million Americans are affected by high blood pressure and it is somehow related to the cardiovascular diseases.

Understanding the serious concerns regarding human health, the present letter to editor has been written in order to draw attention towards preventive care strategies. In light with preventive care strategies, one of the strategy can be to find out the disease in first order itself with the help of biomarkers, which can help detect the disease at an early age. If the disease can be detected in the early age, then, it becomes easier for healthcare professionals in order to manage the disease and arrest the deaths which may be caused due to worsening of the conditions arising due to growing complexity of the cardiovascular diseases.

Many researchers have published papers, regarding the biomarkers detected for heart ailments. These biomarkers can be used as Diagnostic tools in order to diagnose the disease firstly itself. The diagnostic based preventive treatment and strategy seems to be the best possible strategy, as the common saying goes that, prevention is better than cure.

Healthcare professionals can use these biomarkers as diagnostic tools and can help in reducing the growing cases of morbidity and mortality due to heart ailments.

Following are the most dependable biomarkers found after effective secondary research through pubmed and science direct journals.

1. Hba1c: The glycated hemoglobin A 1 c, is one of the best biomarker for prediabetic conditions and thus dependable biomarker for further heart diseases.
2. Adrenomedullin: Adrenomedullin is one of latest found out biomarker for heart failure. Diagnostic companies can use these biomarker as diagnostic tool so that doctors can understand the disease taking its position at an early stage in the patients body.
3. Cardiac isoform of Alpha 2 Macroglobulin: Highly reliable marker for Heart diseases.
4. B-type natriuretic peptide and N – terminal pro B- type natriuretic peptide: It is the gold standard biomarker for heart ailments.

Other promising biomarkers for heart ailments are, Soluble ST2, Mid-regional pro-atrial natriuretic peptide, Galectin – 3, Highly sensitive troponin and Mid-regional pro-adrenomedullin.^[1]

All these biomarkers are highly reliable on their own and diagnostic companies and hospitals, shall make themselves upgraded to assess these biomarkers in their respective facilities, it is highly promising aspect in order to save the precious lives.

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Cite this article as: Devansh Mehta. Dependable Biomarkers for Heart Ailments. *Inventi Rapid: Cardiology & Haematology*, 2018(1):1-1, 2017.

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