

Understanding Cardiac Markers

32%

Of all global deaths are **Cardiovascular diseases (CVD)** related. Of these deaths, **85%** were due to heart attack and **stroke**.

Low and middle-income countries account for over **three-quarters** of CVD deaths. Out of the 17 million premature deaths (under the age of 70), due to non-communicable diseases in 2019, **38%** were caused by CVDs. It takes an economic toll, as well.

\$216 billion per year

Is the amount it cost the healthcare system in the US, with an additional cost of **\$147 billion** in productivity on the job.

Prevention and Treatment of Cardiovascular Diseases



Most CVDs can be prevented and properly treated by living healthy and by detection of cardiovascular disease as early as possible so that management with counseling and medicines can begin.

Cardiologists know that early detection of CVD is possible by detecting and monitoring cardiac markers in blood including myoglobin, troponin, and creatine kinase.

The most common cardiac markers are Troponin I and Troponin T, which identify heart attacks better than all the previous markers that we've had before, which makes them so important for physicians to use. These are now included in the European Society of Cardiology Recommendations and in the 2021 AHA/ACC/ASE/CHEST/SAEM/SCCT/SCMR Guidelines for the Evaluation and Diagnosis of Acute Chest Pain.

Why are Cardiac Markers Important?

Cardiac markers are important for healthcare professionals because they are able to:



Screen for risk factors



Screen for heart and vascular damage and other problems



Lead to early diagnosis of heart conditions that cause symptoms such as chest pain, angina, and shortness of breath



Monitor how well heart medications and heart surgery work.



Clinical studies indicate that new cardiac markers, **Galectin-3**, **Copeptin**, and **ST2**, alone*

***or in combination with existing ones show promise for improving traditional methods of diagnosing and managing heart failure**

In vitro diagnostic (IVD) assays for detecting cardiac markers are essential to help treat or prevent cardiovascular disease (CVD). Successfully developing and manufacturing such products relies on a consistent, long-term supply of essential raw materials—namely, cardiac marker antibodies and antigens.

How Medix Biochemica Can Help



Medix Biochemica provides the IVD industry with an extensive portfolio of **critical raw materials for your IVD assay development**, including antibodies and antigens for existing innovative markers in multiple clinical areas like cardiovascular disease.



We develop, manufacture, and supply a wide range of superior quality products like antibodies, antigens, lipoproteins, clinical chemistry enzymes, and source biospecimens for IVD companies to enable them to develop their own IVD tests and control materials.