

Special Issue

Progress in Prevention and Treatment of Cardiovascular Diseases and Arrhythmias

Message from the Guest Editor

Although cardiology has progressed dramatically, cardiovascular diseases (CVDs) and malignant arrhythmias remain the most common cause of death worldwide, and much remains to be accomplished. The next major steps should include more vigorous and widespread prevention as well as the application of the recent remarkable advances in genomics. The best way to avoid cardiovascular diseases (CVDs) and cardiac arrhythmias is to prevent their development. Recent advancements highlight the potential of naturally derived bio-products with epigenetic properties which offer protection against CVDs and cardiac arrhythmias. To reach the optimal level of protection, a multi-targeted approach directed towards more than one intracellular signaling pathway or cell type is required. One of the most studied targets are mitochondria because of their key involvement in reactive oxygen species (ROS) production facilitating chronic low-grade inflammation that predispose to CVDs and arrhythmias. On the other hand, hydrogen medicine is one of the most promising novel strategies for the prevention and/or treatment of these adverse conditions via molecular hydrogen.

Guest Editor

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