

3<sup>rd</sup> World Congress on

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## STVNa, a promising medicine for cardiac protection

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Cardiac ischemia or hypertrophy involves multiple mechanisms and may lead to heart failure. Few medicines are now available for effective treatment. STVNa, derived from Stevia, has been shown beneficial effects in protection of acute cardiac ischemia. Our recent studies demonstrated that in animals with chronically coronary occlusion, consecutive oral treatment of STVNa significantly ameliorated the deterioration of cardiac function with reduced area of infarction and apoptosis. Long-term treatment of STVNa in Transverse Aortic Constriction (TAC) rats also protected the heart from fibrosis and hypertrophy remodeling and improved both cardiac systolic and diastolic function. In isoproterenol treated ventricular myocytes, STVNa reduced hypertrophy, inhibited the increases in cytosol calcium or ROS, and preserved contractility and mitochondrial membrane potential. Proteomic analysis, cell biochemistry and electrophysiological studies indicated that STVNa protected the heart against fibrosis and remodeling of metabolite and electrophysiology during ischemia and/or reperfusion injury or hypertrophy.

### Biography

Wen Tan is a Professor and Dean at Institute of Biomedical and Pharmaceutical Sciences, Guangdong University of Technology, Guangzhou, China. He has his expertise in "Thousand Talents" plan in China (2012). Professor Tan earned his medical degree at HB Medical School in China and earned his PhD. from University of Nebraska Medical Center in USA. After post-doc trainings at Harvard Medical School, he joined Howard Hughes Institute & Columbia University in USA as an associate research scientist and research assistant professor. In late of the nineties, he returned to China as a founder of a pharmaceutical research company which has successfully registered more than ten generic & innovative drugs for China market since.

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