Appendix II (Poster Presentations)

POSTER PRESENTATION 10:

Inhibitory effect of Panax Notoginseng (PNG) extracts on the TNF-α-induced MMP-9 activity in cardiomyoblasts

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Cardiac remodeling is a compensatory physiologic response to myocardial infarction. The progression of cardiac remodeling may lead to congestive heart failure which has high mortality rate. In this progression, matrix metalloproteinases (MMPs) plays an important role in the degradation of extracellular matrix (ECM) and subsequent ventricular dilation. Therefore, new treatments targeting MMPs are suggested to reverse cardiac remodeling. Panax notoginseng (PNG) is one of the most common traditional Chinese medicines to treat cardiovascular diseases. Therefore, we hypothesized that its ingredients are benefit to the reverse of cardiac remodeling. We examined the effect of PNG extracts on the gene expression and activity of MMP-9 in tumor necrosis factor (TNF)- α -treated H9c2 cell, a rat cardiomyocyte. The results from real-time quantitative polymerase chain reaction (Q-PCR) analysis and gelatin zymography demonstrated that the PNG extracts could significantly inhibited the gene expression and the activity of MMP-9 in TNF- α -induced H9c2 cell, respectively. In summary, PNG may be a potential candidate for the treatment of cardiac remodeling.