**INCREASED M2 MACROPHAGES REDUCES PRO-INFLAMMATORY CYTOKINES IN ATHEROSCLEROSIS**

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Inflammation plays a monumental role in the development and progression of atherosclerosis (ATH) has been reported by many investigators. This is completely unknown whether infiltrated monocytes differentiate into various macrophage phenotypes, and their role in inflammation and atherosclerosis. We will demonstrate data on acute and chronic stages of inflammation and the type of infiltrated macrophages. Furthermore, these animals were treated with bone morphogenic protein (BMP-7) to determine their effects on macrophage phenoswitching, inflammatory cytokines and ultimately on atherosclerosis. Our data suggest that there was a decrease in arterial systolic velocity in a model of ATH following partial left carotid artery (PLCA) ligation. This decrease was associated with infiltration of monocytes and increased pro-inflammatory cytokines. Next, BMP-7 treatment inhibits plaque formation and increases arterial systolic velocity. Moreover, we found increase in M2 macrophage differentiation with significant increase in anti-inflammatory cytokine following BMP-7 treatment. We will present data on mechanistic action of BMP-7 in the protection of developed atherosclerosis.