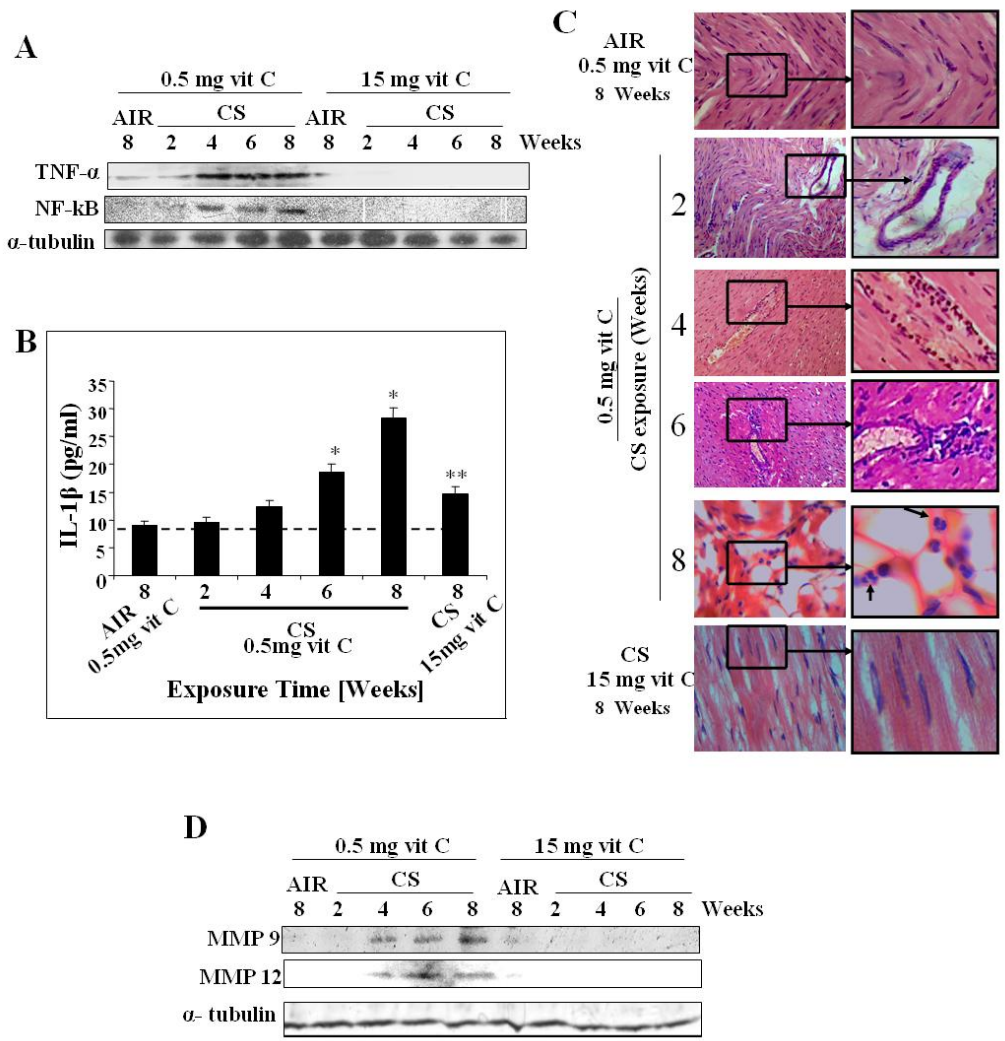
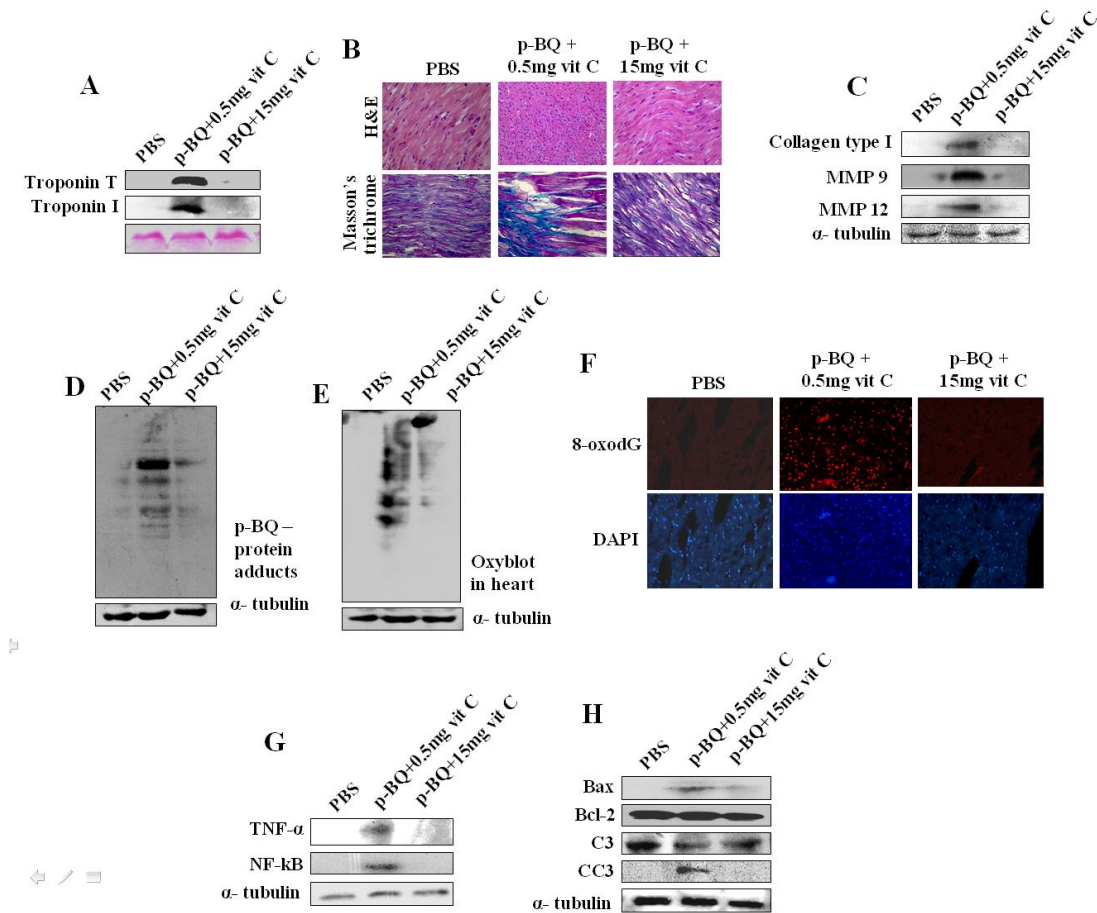


Figure 1: Progression and detection of myocardial injury in CS-exposed guinea pigs and prevention by vitamin C. (Panel A) Immunoblots of cardiac Troponin T and I in serum. (Panel B) H & E and Masson's trichrome stain showing histological changes in cardiomyocytes as well as blood vessels: FT means 'Fibrous Tissue' (magnification 400X). (Panel C) Detection of collagen type I. (Panel D) Lipid profile in serum. Bar over the respective columns represents mean \pm SD (n = 6),. * indicates significant (p<0.05) increase from AIR-exposed sham control, ** indicates significant (p<0.05) decrease in vitamin C-sufficient group. Vit C means vitamin C.



Detection of inflammatory response, neutrophil infiltration in the injured myocardium, activation of MMPs in CS-exposed guinea pigs and prevention by vitamin C. (Panel A) Immunoblots of TNF- α and NF-kB in myocardial tissue lysate. (Panel B) ELISA test indicating IL-1 β (pg/ml) level in serum. (Panel C) H&E stain showing neutrophil infiltration in the injured myocardium; (magnification 200X) (Panel D) Immunoblots of MMP-9, MMP-12 in myocardial tissue lysate. Vit C means vitamin C.



Detection of myocardial injury in p-BQ-treated guinea pigs and prevention by vitamin C. (Panel A) Cardiac Troponin T and I in the serum. (Panel B) Histology showing myocardial damage and deposition of collagen fibres (magnification 200X). (Panel C) Immunoblots of collagen type1, MMP-9 and MMP-12. (Panel D) p-BQ protein adducts in the myocardial tissue. (Panel E) Protein oxidation as evidenced by OxyblotTM. (Panel F) DNA oxidation as evidenced by the formation of 8-oxodG (red fluorescence); lower row: stained with DAPI; (magnification 200X). (Panel G) Immunoblots of TNF- α and NF-kB. (Panel H) Over expression of Bax and formation of cleaved caspase 3 (CC3). Vit C means vitamin C.