Co-administration of resveratrol with doxorubicin in young mice attenuates detrimental late-occurring cardiovascular changes

Matsumura et al. – Doxorubicin-induced cardiovascular injury and resveratrol

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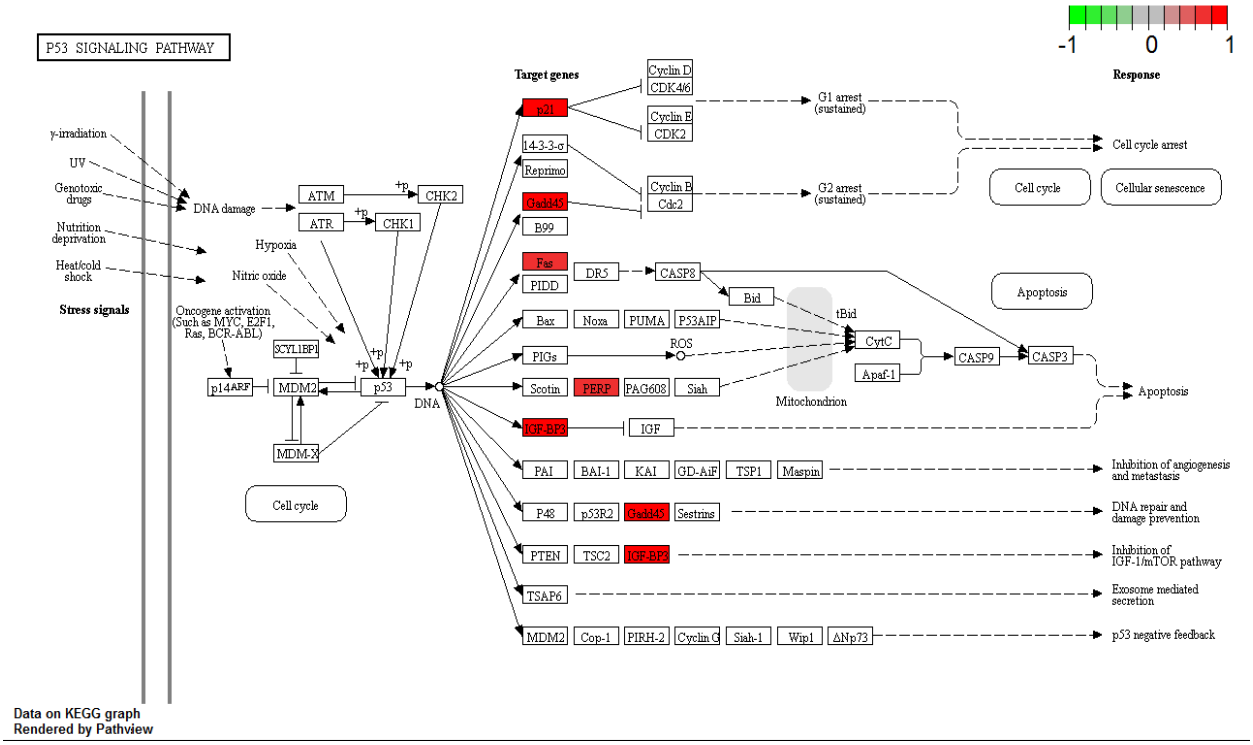
Supplemental Table 1. Cardiac function and morphology in control and DOX-treated mice after 2 Weeks of Saline or Angiotensin II infusion

	Control+Saline	DOX+Saline	Control+AngII	DOX+AngII
HR, bpm	427±30	409±23	464±43	412±23
Cardiac Function				
EF, %	57.2±2.9	53.9±1.9	58.1±2.2	56.4±2.6
FS, %	30.0±2.0	27.8±1.2	30.6±1.5	29.4±1.7
E/A ratio	2.08±0.14	1.99±0.20	1.39±0.08*#	1.60±0.09
Morphology				
IVS-diastole, mm	0.77±0.03	0.71±0.02	1.06±0.03*#	0.91±0.03*#†
IVS-systole, mm	1.30±0.06	1.12±0.05	1.57±0.06*#	1.41±0.04#
LVPW-systole, mm	1.10±0.09	1.06±0.04	1.28±0.07#	1.18±0.03
LVD-diastole, mm	4.21±0.11	4.22±0.06	4.33±0.11	3.86±0.13†
LVD-systole, mm	2.91±0.16	3.04±0.09	3.10±0.13	2.70±0.15
LVEDV, µl	79.8±4.6	79.9±2.7	85.3±5.1	65.9±5.2†
LVESV, µl	33.8±4.2	36.8±2.6	38.7±3.74	28.2±4.2

Values are mean ± SEM (n=9-14). DOX indicates doxorubicin; Ang II, angiotensin II; HR, heart rate; EF, ejection fraction; FS, fractional shortening; IVS, Intraventricular septal wall; LVPW, left ventricular (LV) posterior wall; LVD, LV dimension; LVEDV, LV end-diastolic volume; LVESV, LV end-systolic volume $^{*}p<0.05$ vs Control+Saline group, $^{\#}p<0.05$ vs DOX+Saline group, $^{\dagger}p<0.05$ vs Control+AngII group.



Supplemental Figure 1: Angiotensin II (Ang II) infusion upregulates several p53 effector genes in hearts of DOX-treated mice compared to Ang II-infused control mice. Total RNA was extracted from heart tissues and gene expression was measured by RNA sequencing. Kyoto Encyclopedia of Genes and Genomes (KEGG) pathway analysis was performed to demonstrate significant changes in the p53 pathway.