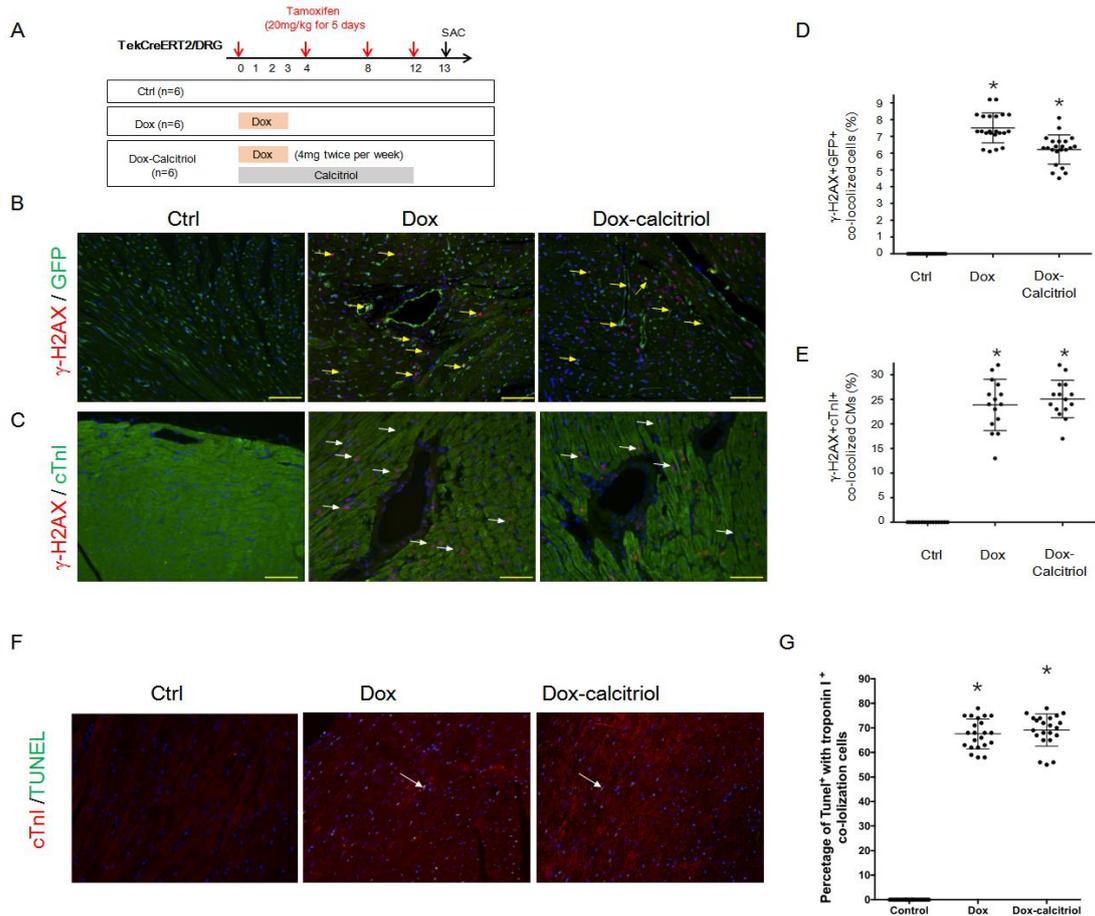


Supplemental Table S1. Primers used in this study

| Gene name | Primer sequences |
|-------------|---|
| ANP | F: 5'- TGGGTCTTGTTAGGGCTCAAACCT -3' R:5'- TGAAACTCAAGGGACACCCATCGT -3' |
| BNP | F: 5'-CTGCTGGAGCTGATAAGAGA-3' R: 5'-TGCCCAAAGCAGCTTGAGAT-3' |
| Vimentin | F: 5'-GCAAAGATTCCACTTTGCGT-3' R: 5'-GAAATTGCAGGAGGAGATGC-3' |
| Fibronectin | F: 5'- ACCGAAGCCGGGAAGAGCAA -3' R: 5'- GGTCCGTTCCCACTGCTGATTTATC-3' |
| TGF-beta1 | F: 5'- CGGAAGCGCATCGAAGCCATCC -3' R: 5'- GCAAGCGCAGCTCTGCACGG-3' |
| Beta-actin | F: 5'-CCAACCGCGAGAAGATGA-3' R: 5'-CCAGAGGCGTACAGGGATAG-3' |



Supplemental Figure S1. Calcitriol did not alter doxorubicin-induced DNA damage in endothelial cells and cardiac myocytes. (A) Schematic protocol for Dox-induced cardiomyocytes in double transgenic mice. The TekCreERT2/DRG mice were divided into 3 groups (n=6, in each group). Group 1 (sham control) received same volume of saline injection, group 2 received doxorubicin (4 mg/kg twice weekly for 4 weeks; cumulative dose-32 mg/kg) and group 3 received doxorubicin (same dose as group 2) with calcitriol (150 ng/kg/day for 12 weeks). Before the doxorubicin injection, the mice were administered tamoxifen (20 mg/kg) for 5 consecutive days monthly. The mice were sacrificed at 4 weeks (n=3 in each group) and 13 weeks (n=3 in each group) after the first dose of doxorubicin injection. (B) Representative images of double immunofluorescence staining for γ -H2AX (red) and GFP (green). The yellow arrow heads indicate positive γ -H2AX and GFP co-localized cells. Data are expressed as mean \pm SEM, and n represents the number of animals. * $p < 0.05$, \$ $p < 0.01$ (n = 3, in each group), [5 high power field (HPFs) per mouse, 15 HPFs total]. Scale bar: 200 μ m. (Upper panel, (C) Representative images of double immunofluorescence staining for γ -H2AX (red) and cardiac Troponin I (cTnI) (green). The white arrow heads indicate positive γ -H2AX and Troponin I co-localized cells. Scale bar: 200 μ m. (D) Quantification of the percentage of γ -H2AX+GFP+ co-localized cells. Data are expressed as mean \pm SEM, and n represents the number of animals. * $P < 0.05$ (n = 3 in each group), [5 high power field (HPFs) per mouse, 15 HPFs total]. (E) Quantification of the percentage of γ -H2AX+cTnI+ co-localized cells. (F) Representative images of double immunofluorescence staining for TUNEL (green) and cardiac Troponin I (cTnI) (red). The white arrow heads indicate positive TUNEL and Troponin I co-localized cells. (G) Quantification of the percentage of TUNEL and Troponin I co-localized cells. Data are expressed as mean \pm SEM, and n represents the number of animals. * $P < 0.05$ (n = 3 in each group), [5 high power field (HPFs) per mouse, 15 HPFs total].