

Figure S1. Ameliorative effect of DAS on pathological phenotype of cardiomyopathy in H9c2 cells. (A) Expression level of CYP2E1 in H9c2 cells after treatment of DAS (12 h; 100 $\mu\text{mol/l}$) and ISO (12 h; 50 $\mu\text{mol/l}$) in control, ISO, control + DAS and ISO + DAS groups, as detected via western blotting. (B) Semi-quantitative analysis using GAPDH for normalization (n=3). (C) Confocal images from calcein-AM and PI co-stained H9c2 cells after treatment of DAS and ISO. Scale bar, 250 μm . (D) Quantitative analysis of calcein-AM and PI co-stained H9c2 cells (n=3). * $P < 0.05$, *** $P < 0.001$; # $P < 0.05$, ## $P < 0.01$. DAS, diallyl sulfide; CYP2E1, cytochrome P450 family 2 subfamily E member 1; ISO, isoprenaline hydrochloride.

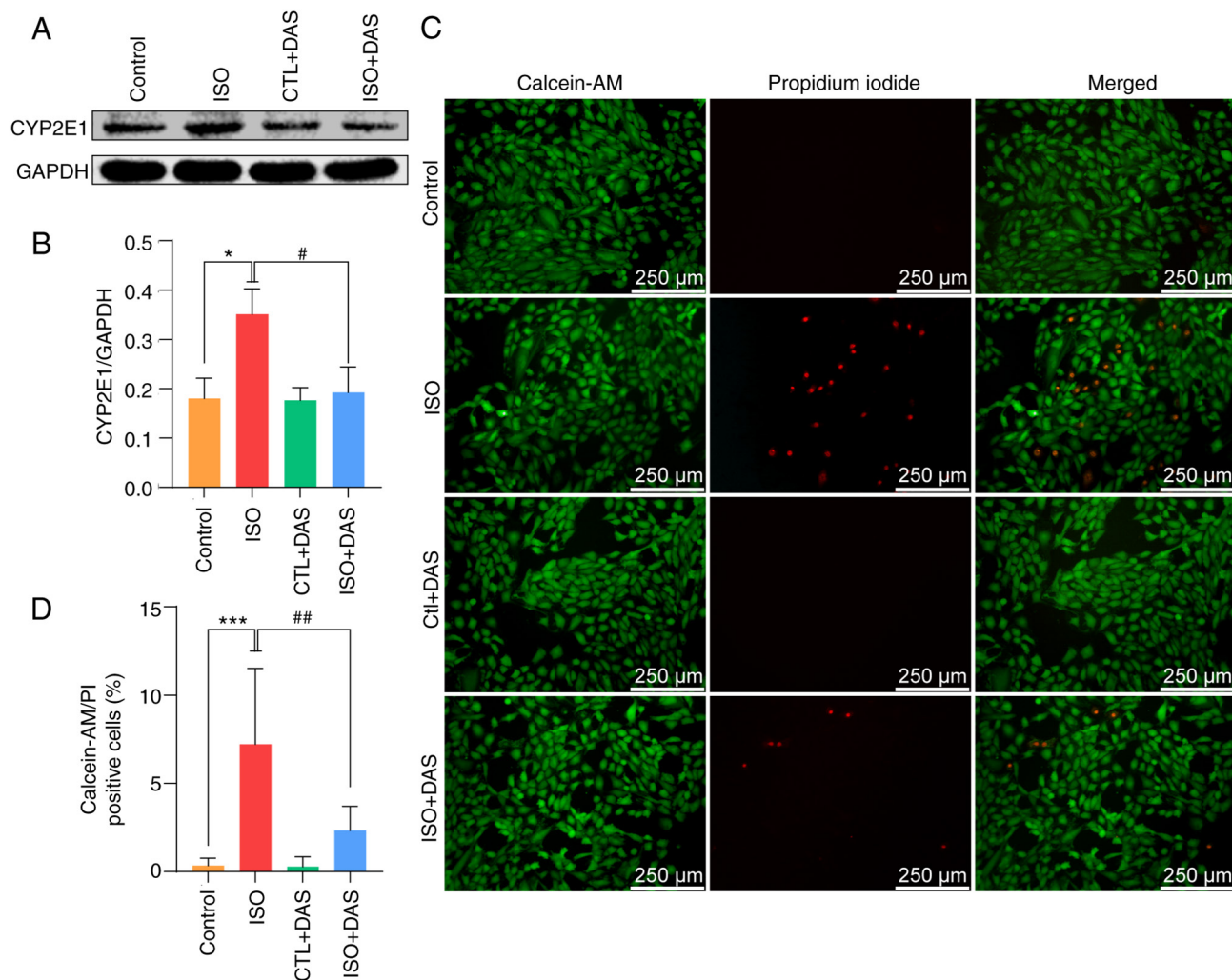


Table SI. Echocardiographic characteristics of mice treated with DAS for 2 weeks.

Characteristic	NTG (n=8)	cTnT ^{R141W} (n=7)	400 mg/kg DAS (n=8)	200 mg/kg DAS (n=9)	Enalaprilat (n=7)
LVESD, mm	3.22±0.31	4.33±0.40 ^a	3.18±0.46 ^d	3.21±0.27 ^d	3.51±0.47 ^c
LVEDD, mm	4.17±0.30	5.07±0.37 ^a	4.26±0.26 ^d	4.20±0.15 ^d	4.37±0.32 ^d
LVPWS, mm	0.76±0.05	0.61±0.08 ^a	0.72±0.06 ^c	0.72±0.06 ^c	0.75±0.07 ^d
LVPWD, mm	0.62±0.04	0.51±0.03 ^a	0.58±0.03 ^b	0.61±0.06 ^d	0.63±0.05 ^{d,e}
LVAWS, mm	0.93±0.08	0.69±0.07 ^a	0.84±0.06 ^d	0.82±0.06 ^c	0.78±0.07
LVAWD, mm	0.74±0.06	0.55±0.06 ^a	0.69±0.04 ^d	0.63±0.02 ^c	0.63±0.06 ^{b,e}
LVEF, %	48.28±3.97	30.09±2.32 ^a	43.07±9.26 ^c	47.47±7.05 ^d	40.68±11.03 ^b
LVFS, %	24.09±2.29	14.19±1.10 ^a	23.36±5.82 ^d	23.73±4.18 ^d	20.17±5.82 ^b

^aP<0.001 vs. NTG mice; ^bP<0.05, ^cP<0.01, ^dP<0.001 vs. cTnT^{R141W} mice; ^eP<0.05 vs. 400 mg/kg DAS mice. LVESD, left ventricular end-systole diameter; LVEDD, left ventricular end-diastole diameter; LVPWS, left ventricular ventricle posterior wall at end systole; LVPWD, left ventricular posterior wall at end diastole; LVAWS, left ventricular anterior wall at end systole; LVAWD, left ventricular anterior wall at end diastole; LVEF, left ventricular ejection fraction; LVFS, left ventricular fractional shortening; DAS, diallyl sulfide; NTG, non-transgenic.

Table SII. Echocardiographic characteristics of mice treated with DAS for 4 weeks.

Characteristic	NTG (n=8)	cTnT ^{R141W} (n=7)	400 mg/kg DAS (n=7)	200 mg/kg DAS (n=8)	Enalaprilat (n=7)
LVESD, mm	2.98±0.22	4.19±0.87 ^a	3.32±0.15 ^c	3.44±0.30 ^b	3.71±0.37 ^e
LVEDD, mm	3.92±0.2	5.00±0.63 ^a	4.20±0.12 ^d	4.18±0.19 ^d	4.47±0.29 ^{b,e}
LVPWS, mm	0.82±0.05	0.64±0.08 ^a	0.77±0.05 ^d	0.67±0.05	0.71±0.03 ^{b,e}
LVPWD, mm	0.62±0.05	0.57±0.07	0.62±0.06	0.61±0.05	0.59±0.07
LVAWS, mm	0.97±0.07	0.76±0.07 ^a	0.92±0.06 ^d	0.81±0.06	0.79±0.04 ^e
LVAWD, mm	0.77±0.06	0.63±0.06 ^a	0.71±0.05 ^b	0.66±0.02	0.67±0.05
LVEF, %	47.50±2.57	35.88±6.05 ^a	43.72±3.61 ^b	42.75±5.90 ^b	35.88±6.32 ^e
LVFS, %	23.51±1.50	17.23±3.23 ^a	21.50±2.07 ^b	21.02±3.45	17.10±3.49 ^e

^aP<0.001 vs. NTG mice; ^bP<0.05, ^cP<0.01, ^dP<0.001 vs. cTnT^{R141W} mice; ^eP<0.05, vs. 400 mg/kg DAS mice. LVESD, left ventricular end-systole diameter; LVEDD, left ventricular end-diastole diameter; LVPWS, left ventricular ventricle posterior wall at end systole; LVPWD, left ventricular posterior wall at end diastole; LVAWS, left ventricular anterior wall at end systole; LVAWD, left ventricular anterior wall at end diastole; LVEF, left ventricular ejection fraction; LVFS, left ventricular fractional shortening; DAS, diallyl sulfide; NTG, non-transgenic.

Table SIII. Echocardiographic characteristics of mice treated with DAS for 6 weeks.

Characteristic	NTG (n=7)	cTnTR ^{141W} (n=7)	400 mg/kg DAS (n=7)	200 mg/kg DAS (n=7)	Enalaprilat (n=7)
LVESD, mm	2.80±0.29	3.88±0.26 ^b	3.01±0.32 ^e	3.51±0.32	3.45±0.18 ^{e,f}
LVEDD, mm	3.82±0.21	4.57±0.30 ^b	3.97±0.15 ^e	4.28±0.29	4.22±0.19 ^{e,f}
LVPWS, mm	0.92±0.06	0.71±0.05 ^b	0.81±0.04 ^c	0.77±0.07	0.88±0.07 ^e
LVPWD, mm	0.72±0.11	0.61±0.07 ^a	0.63±0.05	0.64±0.03	0.74±0.08 ^{d,f}
LVAWS, mm	0.97±0.07	0.79±0.08 ^b	0.90±0.03	0.83±0.07	0.99±0.12 ^e
LVAWD, mm	0.81±0.05	0.63±0.05 ^b	0.73±0.04 ^c	0.70±0.06	0.81±0.07 ^{e,f}
LVEF, %	52.34±2.93	34.38±5.37 ^b	51.65±6.40 ^e	38.39±5.83	38.32±4.03 ^f
LVFS, %	26.54±1.78	17.10±2.83 ^b	26.24±3.98 ^e	18.50±3.25	18.49±2.17 ^f

^aP<0.05, ^bP<0.001 vs. NTG mice; ^cP<0.05, ^dP<0.01, ^eP<0.001 vs. cTnTR^{141W} mice; ^fP<0.05 vs. 400 mg/kg DAS mice. LVESD, left ventricular end-systole diameter; LVEDD, left ventricular end-diastole diameter; LVPWS, left ventricular ventricle posterior wall at end systole; LVPWD, left ventricular posterior wall at end diastole; LVAWS, left ventricular anterior wall at end systole; LVAWD, left ventricular anterior wall at end diastole; LVEF, left ventricular ejection fraction; LVFS, left ventricular fractional shortening; DAS, diallyl sulfide; NTG, non-transgenic.

Table SIV. Echocardiographic characteristics of NTG mice treated with DAS.

Characteristic	2 weeks		4 weeks		6 weeks	
	NTG (n=8)	NTG + 400 mg/kg DAS (n=10)	NTG (n=8)	NTG + 400 mg/kg DAS (n=10)	NTG (n=7)	NTG + 400 mg/kg DAS (n=10)
LVESD, mm	3.22±0.31	3.24±0.24	2.98±0.22	2.88±0.17	2.80±0.29	2.59±0.19
LVEDD, mm	4.17±0.30	4.20±0.17	3.92±0.2	3.97±0.10	3.82±0.21	3.72±0.28
LVPWS, mm	0.76±0.05	0.75±0.12	0.82±0.05	0.80±0.09	0.92±0.06	0.76±0.15
LVPWD, mm	0.62±0.04	0.61±0.10	0.62±0.05	0.59±0.09	0.72±0.11	0.65±0.13
LVAWS, mm	0.93±0.08	0.89±0.13	0.97±0.07	0.85±0.15	0.97±0.07	0.88±0.18
LVAWD, mm	0.74±0.06	0.70±0.10	0.77±0.06	0.69±0.15	0.81±0.05	0.69±0.11
LVEF, %	48.28±3.97	45.52±8.92	47.50±2.57	53.35±7.00	52.34±2.93	57.53±9.80
LVFS, %	24.09±2.29	22.62±5.28	23.51±1.50	27.24±4.43	26.54±1.78	30.03±6.58

LVESD, left ventricular end-systole diameter; LVEDD, left ventricular end-diastole diameter; LVPWS, left ventricular ventricle posterior wall at end systole; LVPWD, left ventricular posterior wall at end diastole; LVAWS, left ventricular anterior wall at end systole; LVAWD, left ventricular anterior wall at end diastole; LVEF, left ventricular ejection fraction; LVFS, left ventricular fractional shortening; DAS, diallyl sulfide; NTG, non-transgenic.