

**Table S3: Histopathology at 16 weeks of age**

**Aortic wall thickness**

<b>Genotype</b>	<b>Intervention</b>	<b>Mean</b>	<b>SD</b>	<b><i>P vs WT-NT</i></b>	<b><i>P vs DD-NT</i></b>
WT	NT	61.61	6.98		
WT	LP	57.84	10.17	1.000	
WT	LN	58.88	8.44	1.000	
WT	AP	64.91	10.34	1.000	
WT	AN	61.50	4.44	1.000	
DD	NT	77.61	5.70	<b>0.000</b>	
DD	LP	58.39	18.43	1.000	<b>0.008</b>
DD	LN	68.02	2.19	0.376	1.000
DD	AP	70.74	8.06	0.069	1.000
DD	AN	72.11	8.64	0.078	1.000
DD/ <i>Ncf1</i> -	NT	68.69	9.29	<b>0.035</b>	<b>0.007</b>
DD/ <i>Ncf1</i> -	LP	62.64	10.35	1.000	<b>0.002</b>
DD/ <i>Ncf1</i> -	LN	68.72	5.23	0.125	<b>0.031</b>
DD/ <i>Ncf1</i> -	AP	63.46	3.25	1.000	<b>0.000</b>
DD/ <i>Ncf1</i> -	AN	65.19	10.65	1.000	<b>0.022</b>

**Number of lamellar units**

<b>Genotype</b>	<b>Mean</b>	<b>SD</b>	<b><i>P vs WT-NT</i></b>
WT	7.12	0.70	
DD	8.39	1.38	<b>0.016</b>
DD/ <i>Ncf1</i> -	7.85	1.31	0.252

**% Heart weight / Body weight**

<b>Genotype</b>	<b>Intervention</b>	<b>Mean</b>	<b>SD</b>	<b><i>P vs WT-NT</i></b>	<b><i>P vs DD-NT</i></b>
WT	NT	0.56	0.11		
WT	LP	0.52	0.07	1.000	
WT	LN	0.46	0.07	0.913	
WT	AP	0.60	0.09	1.000	
WT	AN	0.54	0.11	1.000	
DD	NT	0.89	0.11	<b>0.000</b>	
DD	LP	0.65	0.09	0.716	<b>0.001</b>
DD	LN	0.54	0.04	1.000	<b>0.000</b>
DD	AP	0.69	0.09	0.145	<b>0.002</b>
DD	AN	0.73	0.02	0.291	<b>0.031</b>
DD/ <i>Ncf1</i> -	NT	0.74	0.08	<b>0.046</b>	<b>0.039</b>
DD/ <i>Ncf1</i> -	LP	0.48	0.10	0.737	<b>0.000</b>
DD/ <i>Ncf1</i> -	LN	0.56	0.07	1.000	<b>0.000</b>
DD/ <i>Ncf1</i> -	AP	0.54	0.07	1.000	<b>0.000</b>
DD/ <i>Ncf1</i> -	AN	0.61	0.16	1.000	<b>0.003</b>

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**Cross-sectional area of cardiomyocytes ( $\mu\text{m}^2$ )**

**Left Ventricle (LV)**

<b>Genotype</b>	<b>Intervention</b>	<b>Mean</b>	<b>SD</b>	<b><i>P vs WT-NT</i></b>	<b><i>P vs DD-NT</i></b>
WT	NT	240.70	17.70		
WT	LP	257.65	33.47	1.000	
WT	LN	253.04	23.61	1.000	
WT	AP	261.95	32.80	1.000	
WT	AN	260.32	33.78	1.000	
DD	NT	313.52	2.12	<b>0.000</b>	
DD	LP	260.62	26.52	0.517	<b>0.006</b>
DD	LN	271.63	29.57	0.080	<b>0.046</b>
DD	AP	267.86	23.09	0.096	<b>0.023</b>
DD	AN	266.17	24.60	0.088	<b>0.017</b>
DD/ <i>Ncf1</i> -	NT	294.38	6.17	<b>0.000</b>	<b>0.025</b>
DD/ <i>Ncf1</i> -	LP	246.33	26.87	1.000	<b>0.000</b>
DD/ <i>Ncf1</i> -	LN	261.69	15.42	0.348	<b>0.000</b>
DD/ <i>Ncf1</i> -	AP	269.80	18.48	0.069	<b>0.000</b>
DD/ <i>Ncf1</i> -	AN	261.59	9.43	0.201	<b>0.000</b>

**Right Ventricle (RV)**

<b>Genotype</b>	<b>Intervention</b>	<b>Mean</b>	<b>SD</b>	<b><i>P vs WT-NT</i></b>	<b><i>P vs DD-NT</i></b>
WT	NT	322.08	18.04		
WT	LP	315.12	25.12	1.000	
WT	LN	327.55	27.74	1.000	
WT	AP	326.17	21.67	1.000	
WT	AN	309.57	17.58	1.000	
DD	NT	433.29	20.24	<b>0.000</b>	
DD	LP	344.02	11.22	0.247	<b>0.000</b>
DD	LN	340.09	35.21	0.895	<b>0.000</b>
DD	AP	364.89	38.51	<b>0.031</b>	<b>0.002</b>
DD	AN	351.54	18.35	0.100	<b>0.000</b>
DD/ <i>Ncf1</i> -	NT	407.02	6.74	<b>0.000</b>	<b>0.039</b>
DD/ <i>Ncf1</i> -	LP	331.18	28.27	1.000	<b>0.000</b>
DD/ <i>Ncf1</i> -	LN	327.52	30.79	1.000	<b>0.000</b>
DD/ <i>Ncf1</i> -	AP	337.36	10.67	0.938	<b>0.000</b>
DD/ <i>Ncf1</i> -	AN	330.09	27.54	1.000	<b>0.000</b>