

cardiac analysis

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## Analysis of Variance Table
##
## Response: Diastolic_LV_Volume
##
Df Sum Sq Mean Sq F value Pr(>F)
## factor(Sex) 1 381.6 381.58 3.2530 0.13115
## Age 1 111.8 111.76 0.9528 0.37385
## Mass 1 178.2 178.16 1.5189 0.27258
## factor(Diet) 1 746.8 746.83 6.3669 0.05296 .
## factor(Genotype) 5 5483.3 1096.66 9.3493 0.01416 *
## factor(Sex):Age 1 131.6 131.58 1.1217 0.33801
## factor(Sex):Mass 1 28.5 28.50 0.2430 0.64295
## Age:Mass 1 0.1 0.09 0.0008 0.97905
## factor(Sex):factor(Diet) 1 5.9 5.93 0.0505 0.83105
## Mass:factor(Diet) 1 207.9 207.93 1.7726 0.24053
## factor(Sex):factor(Genotype) 3 496.6 165.54 1.4113 0.34274
## Age:factor(Genotype) 2 66.1 33.07 0.2819 0.76559
## Mass:factor(Genotype) 3 346.4 115.45 0.9843 0.47059
## factor(Sex):Age:Mass 1 246.5 246.45 2.1011 0.20688
## factor(Sex):Age:factor(Genotype) 2 126.9 63.45 0.5409 0.61284
## factor(Sex):Mass:factor(Genotype) 1 0.6 0.61 0.0052 0.94515
## Age:Mass:factor(Genotype) 1 0.0 0.00 0.0000 0.99842
## Residuals 5 586.5 117.30
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## Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

## Analysis of Variance Table
##
## Response: Systolic_LV_Volume
##
Df Sum Sq Mean Sq F value Pr(>F)
## factor(Sex) 1 379.3 379.27 11.2833 0.020128 *
## Age 1 164.3 164.32 4.8885 0.078008 .
## Mass 1 21.2 21.24 0.6319 0.462697
## factor(Diet) 1 402.4 402.44 11.9727 0.018039 *
## factor(Genotype) 5 3663.2 732.65 21.7963 0.002087 **
## factor(Sex):Age 1 76.3 76.26 2.2687 0.192363
## factor(Sex):Mass 1 97.0 97.01 2.8860 0.150104
## Age:Mass 1 0.2 0.15 0.0046 0.948569
## factor(Sex):factor(Diet) 1 13.3 13.33 0.3965 0.556532
## Mass:factor(Diet) 1 16.2 16.17 0.4811 0.518824
## factor(Sex):factor(Genotype) 3 106.7 35.55 1.0578 0.444584
## Age:factor(Genotype) 2 38.1 19.07 0.5673 0.599729
## Mass:factor(Genotype) 3 518.8 172.95 5.1452 0.054773 .
## factor(Sex):Age:Mass 1 27.2 27.15 0.8078 0.409957
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## factor(Sex):Age:factor(Genotype) 2 141.9 70.96 2.1111 0.216442
## factor(Sex):Mass:factor(Genotype) 1 3.6 3.58 0.1066 0.757314
## Age:Mass:factor(Genotype) 1 120.4 120.39 3.5817 0.116979
## Residuals 5 168.1 33.61
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## Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
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## Analysis of Variance Table
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## Response: Stroke_Volume
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	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## factor(Sex)	1	0.00	0.003	0.0000	0.9956
## Age	1	5.05	5.049	0.0494	0.8328
## Mass	1	76.37	76.369	0.7477	0.4267
## factor(Diet)	1	52.81	52.813	0.5171	0.5043
## factor(Genotype)	5	210.66	42.133	0.4125	0.8233
## factor(Sex):Age	1	7.50	7.497	0.0734	0.7973
## factor(Sex):Mass	1	20.35	20.347	0.1992	0.6740
## Age:Mass	1	0.01	0.009	0.0001	0.9929
## factor(Sex):factor(Diet)	1	1.48	1.480	0.0145	0.9089
## Mass:factor(Diet)	1	108.13	108.126	1.0587	0.3507
## factor(Sex):factor(Genotype)	3	148.29	49.430	0.4840	0.7079
## Age:factor(Genotype)	2	9.31	4.654	0.0456	0.9558
## Mass:factor(Genotype)	3	39.17	13.058	0.1279	0.9395
## factor(Sex):Age:Mass	1	110.00	109.996	1.0770	0.3469
## factor(Sex):Age:factor(Genotype)	2	11.72	5.859	0.0574	0.9449
## factor(Sex):Mass:factor(Genotype)	1	7.16	7.160	0.0701	0.8018
## Age:Mass:factor(Genotype)	1	120.89	120.888	1.1836	0.3263
## Residuals	5	510.67	102.134		

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## Response: Ejection_Fraction
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	Df	Sum Sq	Mean Sq	F value	Pr(>F)
## factor(Sex)	1	319.50	319.50	1.6690	0.2529
## Age	1	291.36	291.36	1.5220	0.2721
## Mass	1	2.18	2.18	0.0114	0.9191
## factor(Diet)	1	3.33	3.33	0.0174	0.9003
## factor(Genotype)	5	1528.93	305.79	1.5974	0.3099
## factor(Sex):Age	1	83.28	83.28	0.4351	0.5387
## factor(Sex):Mass	1	165.25	165.25	0.8632	0.3955
## Age:Mass	1	15.30	15.30	0.0799	0.7887
## factor(Sex):factor(Diet)	1	0.55	0.55	0.0029	0.9595
## Mass:factor(Diet)	1	202.42	202.42	1.0574	0.3510
## factor(Sex):factor(Genotype)	3	45.26	15.09	0.0788	0.9687
## Age:factor(Genotype)	2	28.20	14.10	0.0737	0.9300
## Mass:factor(Genotype)	3	669.09	223.03	1.1651	0.4099
## factor(Sex):Age:Mass	1	57.30	57.30	0.2993	0.6078
## factor(Sex):Age:factor(Genotype)	2	196.60	98.30	0.5135	0.6269
## factor(Sex):Mass:factor(Genotype)	1	24.58	24.58	0.1284	0.7347
## Age:Mass:factor(Genotype)	1	527.30	527.30	2.7545	0.1579
## Residuals	5	957.15	191.43		

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## Analysis of Variance Table
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## Response: Heart_Rate
##
## Df Sum Sq Mean Sq F value Pr(>F)
## factor(Sex) 1 384.8 384.8 0.1611 0.70477
## Age 1 10075.2 10075.2 4.2164 0.09523 .
## Mass 1 257.8 257.8 0.1079 0.75585
## factor(Diet) 1 0.2 0.2 0.0001 0.99249
## factor(Genotype) 5 3889.0 777.8 0.3255 0.87826
## factor(Sex):Age 1 890.8 890.8 0.3728 0.56817
## factor(Sex):Mass 1 81.4 81.4 0.0341 0.86080
## Age:Mass 1 70.0 70.0 0.0293 0.87080
## factor(Sex):factor(Diet) 1 1623.3 1623.3 0.6793 0.44733
## Mass:factor(Diet) 1 575.0 575.0 0.2406 0.64452
## factor(Sex):factor(Genotype) 3 2629.1 876.4 0.3668 0.78075
## Age:factor(Genotype) 2 2877.2 1438.6 0.6020 0.58308
## Mass:factor(Genotype) 3 2665.9 888.6 0.3719 0.77743
## factor(Sex):Age:Mass 1 8.1 8.1 0.0034 0.95579
## factor(Sex):Age:factor(Genotype) 2 3197.0 1598.5 0.6690 0.55278
## factor(Sex):Mass:factor(Genotype) 1 2.3 2.3 0.0010 0.97646
## Age:Mass:factor(Genotype) 1 171.7 171.7 0.0719 0.79936
## Residuals 5 11947.6 2389.5
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## Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

## Analysis of Variance Table
##
## Response: Cardiac_Output
##
## Df Sum Sq Mean Sq F value Pr(>F)
## factor(Sex) 1 0.002 0.0021 0.0001 0.9932
## Age 1 1.397 1.3971 0.0534 0.8264
## Mass 1 17.196 17.1957 0.6574 0.4543
## factor(Diet) 1 12.891 12.8914 0.4928 0.5140
## factor(Genotype) 5 42.932 8.5865 0.3283 0.8766
## factor(Sex):Age 1 3.191 3.1911 0.1220 0.7411
## factor(Sex):Mass 1 4.414 4.4142 0.1688 0.6982
## Age:Mass 1 0.020 0.0204 0.0008 0.9788
## factor(Sex):factor(Diet) 1 0.105 0.1054 0.0040 0.9518
## Mass:factor(Diet) 1 15.623 15.6232 0.5973 0.4745
## factor(Sex):factor(Genotype) 3 28.187 9.3956 0.3592 0.7856
## Age:factor(Genotype) 2 0.922 0.4609 0.0176 0.9826
## Mass:factor(Genotype) 3 12.297 4.0989 0.1567 0.9210
## factor(Sex):Age:Mass 1 22.119 22.1193 0.8456 0.4000
## factor(Sex):Age:factor(Genotype) 2 7.351 3.6753 0.1405 0.8722
## factor(Sex):Mass:factor(Genotype) 1 1.061 1.0609 0.0406 0.8483
## Age:Mass:factor(Genotype) 1 27.112 27.1120 1.0365 0.3553
## Residuals 5 130.788 26.1575

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