APPENDIX 2

STATISTICS

Body Weights

	Veh	Me	HMR10	HMR30	HMR100
Number of values	6	6	6	6	6
Minimum	292.0	283.0	281.0	273.0	266.0
25% Percentile	327.0	307.0	303.0	317.0	301.0
Median	343.0	320.5	311.5	327.0	314.0
75% Percentile	348.0	324.5	320.0	336.5	333.0
Maximum	356.0	328.0	342.0	348.0	349.0
Mean	333.0	312.3	311.5	321.3	313.8
Std. Deviation	24.58	18.22	20.81	26.64	30.53
Std. Error	10.04	7.437	8.496	10.87	12.46
Lower 95% CI	307.2	293.2	289.7	293.4	281.8
Upper 95% CI	358.8	331.5	333.3	349.3	345.9

Analysis of Variance

HMR, Body weights
One-way analysis of variance
P value 0.5279
P value summary ns
Are means signif. different? (P < 0.05) No
Number of groups 5
F 0.8146
R squared 0.1153

Bartlett's test for equal variances
Bartlett's statistic (corrected) 1.486
P value 0.8291
P value summary ns
Do the variances differ signif. (P < 0.05) No

ANOVA Table	SS	df	MS
Treatment (between columns)	1962	4	490.5
Residual (within columns)	15060	25	602.2
Total	17020	29	

No post tests. P > 0.05

P11.10-1999 ; test HMR
Made by: Esa Wallius
January 4, 2000

General Linear Models Procedure
Class Level Information

Class	Levels	Values
TREAT	5	HMR 10 HMR 100 HMR 30 Me Veh

Number of observations in data set = 30

Repeated Measures Analysis of Variance

Repeated Measures Level Information

Dependent Variable	BL	H1	H2	H6	H24
Level of TIME	1	2	3	4	5

Applied to Orthogonal Components:
Test for Sphericity: Mauchly's Criterion = 0.3452452
Chisquare Approximation = 24.903631 with 9 df Prob > Chisquare = 0.0031

Tests of Hypotheses for Between Subjects Effects

Source	DF	Type III SS	Mean Square	F Value	Pr > F
TREAT	4	198.73493333	49.68373333	89.15	0.0001
Error	25	13.93200000	0.55728000		

Univariate Tests of Hypotheses for Within Subject Effects

Source: TIME

DF	Type III SS	Mean Square	F Value	Pr > F	Adj Pr > F G - G	Adj Pr > F H - F
4	58.53893333	14.63473333	70.17	0.0001	0.0001	0.0001

Source: TIME*TREAT

DF	Type III SS	Mean Square	F Value	Pr > F	Adj Pr > F G - G	Adj Pr > F H - F
16	151.18240000	9.44890000	45.31	0.0001	0.0001	0.0001

Source: Error(TIME)

DF	Type III SS	Mean Square
100	20.85466667	0.20854667

Greenhouse-Geisser Epsilon = 0.6917
Huynh-Feldt Epsilon = 0.9108

P11.10-1999 ; test HMR
Made by: Esa Wallius
January 4, 2000

Diagnostics: Checking the assumption of normal distribution of residuals

Univariate Procedure

Variable=R

Moments

N	30	Sum Wgts	30
Mean	0	Sum	0
Std Dev	0.435956	Variance	0.190057
Skewness	0.20556	Kurtosis	-0.89307
USS	5.511667	CSS	5.511667
CV	.	Std Mean	0.079594
T:Mean=0	0	Pr>|T|	1.0000
Num ^= 0	30	Num > 0	14
M(Sign)	-1	Pr>=|M|	0.8555
Sgn Rank	-5	Pr>=|S|	0.9201
W:Normal	0.953591	Pr<W	0.2444

Quantiles(Def=5)

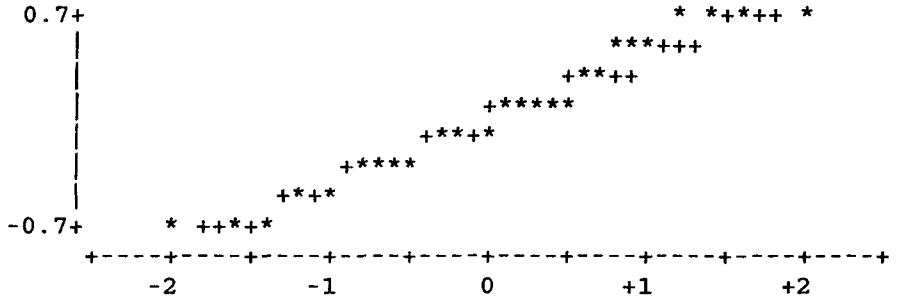
100%	Max	0.766667	99%	0.766667
75%	Q3	0.35	95%	0.75
50%	Med	-0.06667	90%	0.65
25%	Q1	-0.33333	10%	-0.625
0%	Min	-0.7	5%	-0.65
			1%	-0.7
Range		1.466667		
Q3-Q1		0.683333		
Mode		-0.45		

Extremes

Lowest	Obs	Highest	Obs
-0.7(	12)	0.55(	13)
-0.65(	29)	0.6(	8)
-0.65(	18)	0.7(	7)
-0.6(	11)	0.75(	15)
-0.45(	30)	0.766667(	20)

```
Stem Leaf                     #             Boxplot
   6 0057                     4                |
   4 585                      3                |
   2 55                       2             +-----+
   0 55708                    5             |  +  |
  -0 32203                    5             *-----*
  -2 33522                    5             +-----+
  -4 55                       2                |
  -6 0550                     4                |
     ----+----+----+----+
Multiply Stem.Leaf by 10**-1
```

Normal Probability Plot



P11.10-1999 ; test HMR
Medetomidine excluded from the data set
Made by: Esa Wallius
January 4, 2000

Due to the time*treatment interaction medetomidine excluded from the data set

General Linear Models Procedure
Class Level Information

Class	Levels	Values
TREAT	4	HMR 10 HMR 100 HMR 30 Veh

Number of observations in data set = 24

Repeated Measures Analysis of Variance

Applied to Orthogonal Components:
Test for Sphericity: Mauchly's Criterion = 0.5065539
Chisquare Approximation = 12.525626 with 9 df Prob > Chisquare = 0.1853

Tests of Hypotheses for Between Subjects Effects

Source	DF	Type III SS	Mean Square	F Value	Pr > F
TREAT	3	0.81966667	0.27322222	0.56	0.6490
Error	20	9.79733333	0.48986667		

Univariate Tests of Hypotheses for Within Subject Effects

Source: TIME

DF	Type III SS	Mean Square	F Value	Pr > F	Adj Pr > F G - G	Adj Pr > F H - F
4	3.48466667	0.87116667	6.13	0.0002	0.0010	0.0002

Source: TIME*TREAT

DF	Type III SS	Mean Square	F Value	Pr > F	Adj Pr > F G - G	Adj Pr > F H - F
12	0.49533333	0.04127778	0.29	0.9894	0.9754	0.9894

Source: Error(TIME)

DF	Type III SS	Mean Square
80	11.37600000	0.14220000

Greenhouse-Geisser Epsilon = 0.7560
Huynh-Feldt Epsilon = 1.0393

P11.10-1999 ; test HMR
Medetomidine excluded
Made by: Esa Wallius
January 4, 2000

Diagnostics: Checking the assumption of normal distribution of residuals

Univariate Procedure

Variable=R

Moments

N	24	Sum Wgts	24
Mean	0	Sum	0
Std Dev	0.471968	Variance	0.222754
Skewness	0.164871	Kurtosis	-1.13535
USS	5.123333	CSS	5.123333
CV	.	Std Mean	0.09634
T:Mean=0	0	Pr>|T|	1.0000
Num ^= 0	24	Num > 0	12
M(Sign)	0	Pr>=|M|	1.0000
Sgn Rank	1	Pr>=|S|	0.9779
W:Normal	0.943132	Pr<W	0.1970

Quantiles(Def=5)

100% Max	0.766667	99%	0.766667
75% Q3	0.4	95%	0.75
50% Med	0.008333	90%	0.7
25% Q1	-0.39167	10%	-0.65
0% Min	-0.7	5%	-0.65
		1%	-0.7
Range	1.466667		
Q3-Q1	0.791667		
Mode	-0.65		

Extremes

Lowest	Obs	Highest	Obs
-0.7(	6)	0.55(	7)
-0.65(	23)	0.6(	2)
-0.65(	12)	0.7(	1)
-0.6(	5)	0.75(	9)
-0.45(	11)	0.766667(	14)

```
Stem Leaf                     #             Boxplot
   6 0057                     4                |
   4 55                       2             +-----+
   2 55                       2             |     |
   0 5570                     4             *--+--*
  -0 303                      3             |     |
  -2 335                      3             +-----+
  -4 55                       2                |
  -6 0550                     4                |
     ----+----+----+----+
 Multiply Stem.Leaf by 10**-1
```

```
                    Normal Probability Plot
 0.7+                                    * *++*+  *
    |                                  * *+++
    |                                **++
    |                            +****
    |                        +***
    |                    ++***
    |                ++** *
-0.7+       *  +*++
     +----+----+----+----+----+----+----+----+----+----+
         -2        -1         0         +1        +2
```