APPENDIX 2

STATISTICS

Body weights
Column statistics

	Veh	Tamoxifen	HMR
Number of values	6	6	6
Minimum	295.0	346.0	316.0
25% Percentile	344.0	369.5	350.5
Median	363.0	384.0	380.5
75% Percentile	376.5	393.0	389.5
Maximum	398.0	406.0	399.0
Mean	355.7	379.5	365.8
Std. Deviation	38.61	22.59	36.10
Std. Error	15.76	9.222	14.74
Lower 95% CI	315.1	355.8	328.0
Upper 95% CI	396.2	403.2	403.7
Normality Test			
KS distance	0.2216	0.1790	0.2776
P value	P > 0.10	P > 0.10	P > 0.10
Passed normality test (*=0.05)?		Yes	Yes Yes
P value summary		ns	ns ns

Table Analyzed
Weights HTS-101

One-way analysis of variance
P value 0.4765
P value summary ns

Are means signif. different? (P < 0.05) No
Number of groups 3
F 0.7791
R squared 0.09411

Bartlett's test for equal variances
Bartlett's statistic (corrected) 1.371
P value 0.5039
P value summary ns
Do the variances differ signif. (P < 0.05) No

ANOVA Table	SS	df	MS
Treatment (between columns)	1716	2	858.2
Residual (within columns)	16520	15	1101
Total	18240	17	

No post tests. P > 0.05

P11.2-1999, test HMR, HR baseline
Made by: Esa Wallius
Date 03MAY00

General Linear Models Procedure
Class Level Information

Class	Levels	Values
TREAT	3	HMR Tamoxifen Vehicle

Number of observations in data set = 18

Analysis of variance

General Linear Models Procedure

Dependent Variable: HR

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	3231.47607	1615.73803	3.41	0.0602
Error	15	7109.67699	473.97847		
Corrected Total	17	10341.15306			

R-Square	C.V.	Root MSE	HR Mean
0.312487	6.038020	21.7710	360.566

Source	DF	Type III SS	Mean Square	F Value	Pr > F
TREAT	2	3231.47607	1615.73803	3.41	0.0602

General Linear Models Procedure

Level of TREAT	N	HR Mean	HR SD
HMR	6	354.226607	19.4604384
Tamoxifen	6	348.271275	15.3656329
Vehicle	6	379.200140	28.4099289

Diagnostics: Checking the assumption of normal distribution of residuals

Univariate Procedure

Variable=RSTUDENT

Moments

N	18	Sum Wgts	18
Mean	-0.01407	Sum	-0.25324
Std Dev	1.117458	Variance	1.248712
Skewness	-0.52418	Kurtosis	1.184978
USS	21.23167	CSS	21.2281
CV	-7942.75	Std Mean	0.263387
T:Mean=0	-0.05342	Pr>|T|	0.9580
Num ^= 0	18	Num > 0	8
M(Sign)	-1	Pr>=|M|	0.8145
Sgn Rank	2.5	Pr>=|S|	0.9323
W:Normal	0.958425	Pr<W	0.5657

Quantiles(Def=5)

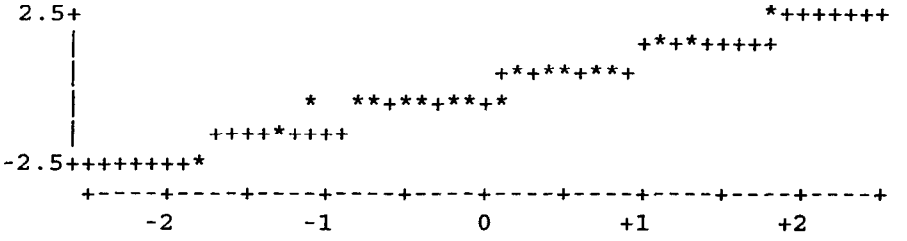
100% Max	2.03555	99%	2.03555
75% Q3	0.709038	95%	2.03555
50% Med	-0.11407	90%	1.358338
25% Q1	-0.6989	10%	-1.06318
0% Min	-2.82665	5%	-2.82665
		1%	-2.82665
Range	4.862205		
Q3-Q1	1.407942		
Mode	-2.82665		

Extremes

Lowest	Obs	Highest	Obs
-2.82665(	2)	0.709038(	10)
-1.06318(	14)	0.823522(	5)
-0.85183(	15)	1.130013(	7)
-0.80018(	8)	1.358338(	18)
-0.6989(	12)	2.03555(	6)

```
Stem Leaf                     #             Boxplot
   2 0                        1                |
   1 14                       2                |
   0 45778                    5             +-----+
  -0 98776211                 8             *--+--*
  -1 1                        1                |
  -2 8                        1                0
     ----+----+----+----+
```

Normal Probability Plot



P11.2-1999 , test HMR

P11.2-1999, HR, test HMR
Made by: Esa Wallius
December 21, 1999

General Linear Models Procedure
Class Level Information

Class	Levels	Values
TREAT	3	HMR Tamoxifen Vehicle

Number of observations in data set = 18

NOTE: Observations with missing values will not be included in this analysis. Thus, only 12 observations can be used in this analysis.

General Linear Models Procedure
Repeated Measures Analysis of Variance
Repeated Measures Level Information

Dependent Variable	I_10M	I_30M	II_10M	II_30M	III_10M	III_30M
Level of TIME	1	2	3	4	5	6

Applied to Orthogonal Components:
Test for Sphericity: Mauchly's Criterion = 0.0052383
Chisquare Approximation = 42.539173 with 14 df Prob > Chisquare = 0.0001

Repeated Measures Analysis of Variance
Tests of Hypotheses for Between Subjects Effects

Source	DF	Type III SS	Mean Square	F Value	Pr> F
TREAT	1	696.88888889	696.88888889	0.56	0.4720
Error	10	12473.11111111	1247.31111111		

General Linear Models Procedure
Repeated Measures Analysis of Variance
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
5	5243.16666667	1048.63333333	2.20	0.0691	**0.1542**	0.1423

Source: TIME*TREAT

DF	Type III SS	Mean Square	F Value	Pr > F	Adj Pr > F G - G	Adj Pr > F H - F
5	1991.61111111	398.32222222	0.84	0.5311	**0.4196**	0.4404

Source: Error(TIME)

DF	Type III SS	Mean Square
50	23849.22222222	476.98444444

Greenhouse-Geisser Epsilon = 0.2941
Huynh-Feldt Epsilon = 0.3668

P11.2-1999, HR, test HMR
Made by: Esa Wallius
December 21, 1999

Diagnostics: Checking the assumption of normal distribution of residuals

Univariate Procedure

Variable=RESIDUAL

Moments

N	12	Sum Wgts	12
Mean	0	Sum	0
Std Dev	18.14128	Variance	329.1061
Skewness	-1.05055	Kurtosis	2.262961
USS	3620.167	CSS	3620.167
CV	.	Std Mean	5.236937
T:Mean=0	0	Pr>|T|	1.0000
Num ^= 0	12	Num > 0	5
M(Sign)	-1	Pr>=|M|	0.7744
Sgn Rank	2	Pr>=|S|	0.8945
W:Normal	0.895332	Pr<W	0.1320

Quantiles(Def=5)

100% Max	23.16667	99%	23.16667
75% Q3	14.16667	95%	23.16667
50% Med	-2.83333	90%	21.66667
25% Q1	-6.33333	10%	-11.8333
0% Min	-43.8333	5%	-43.8333
		1%	-43.8333
Range	67		
Q3-Q1	20.5		
Mode	-3.33333		

Extremes

Lowest	Obs	Highest	Obs
-43.8333(	15)	4.166667(	18)
-11.8333(	17)	11.16667(	16)
-8.33333(	6)	17.16667(	13)
-4.33333(	4)	21.66667(	2)
-3.33333(	3)	23.16667(	14)

Missing Value	.
Count	6
% Count/Nobs	33.33

```
Stem Leaf                     #             Boxplot
   2 23                       2                |
   1 17                       2             +-----+
   0 4                        1             |  +  |
  -0 84332                    5             *-----*
  -1 2                        1                |
  -2
  -3
  -4 4                        1                0
     ----+----+----+----+
 Multiply Stem.Leaf by 10**+1
```

Univariate Procedure

Variable=RESIDUAL

Normal Probability Plot

```
 25+                                        *++++*
   |                                  *++*+++
   |                             +++*++
   |                     *  *+*++ *
   |                  *+++++
   |             +++++
   |      ++++++
-45++++        *
    +----+----+----+----+----+----+----+----+----+----+
        -2        -1         0        +1        +2
```

P11.2-1999, HR, test HMR
Third dose excluded from the analysis
Made by: Esa Wallius
December 21, 1999

General Linear Models Procedure
Class Level Information

Class	Levels	Values
TREAT	3	HMR Tamoxifen Vehicle

Number of observations in data set = 18

General Linear Models Procedure
Repeated Measures Analysis of Variance
Repeated Measures Level Information

Dependent Variable	I_10M	I_30M	II_10M	II_30M
Level of TIME	1	2	3	4

Applied to Orthogonal Components:
Test for Sphericity: Mauchly's Criterion = 0.1870184
Chisquare Approximation = 23.005965 with 5 df Prob > Chisquare = 0.0003

General Linear Models Procedure
Repeated Measures Analysis of Variance
Tests of Hypotheses for Between Subjects Effects

Source	DF	Type III SS	Mean Square	F Value	Pr > F
TREAT	2	245.77777778	122.88888889	0.36	0.7014
Error	15	5076.33333333	338.42222222		

General Linear Models Procedure
Repeated Measures Analysis of Variance
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
3	2330.11111111	776.70370370	2.88	0.0465	**0.0863**	0.0726

Source: TIME*TREAT

DF	Type III SS	Mean Square	F Value	Pr > F	Adj Pr > F G - G	Adj Pr > F H - F
6	2398.88888889	399.81481481	1.48	0.2067	**0.2444**	0.2335

Source: Error(TIME)

DF	Type III SS	Mean Square
45	12156.00000000	270.13333333

Greenhouse-Geisser Epsilon = 0.5292
Huynh-Feldt Epsilon = 0.6605

Diagnostics: Checking the assumption of normal distribution of residuals

Univariate Procedure

Variable=RESIDUAL

Moments

N	18	Sum Wgts	18
Mean	0	Sum	0
Std Dev	14.82479	Variance	219.7745
Skewness	-1.16926	Kurtosis	3.904036
USS	3736.167	CSS	3736.167
CV	.	Std Mean	3.494237
T:Mean=0	0	Pr>|T|	1.0000
Num ^= 0	18	Num > 0	8
M(Sign)	-1	Pr>=|M|	0.8145
Sgn Rank	0	Pr>=|S|	1.0000
W:Normal	0.877115	Pr<W	0.0224

Quantiles(Def=5)

100%	Max	23.16667	99%	23.16667
75%	Q3	6	95%	23.16667
50%	Med	-1.66667	90%	21.66667
25%	Q1	-5	10%	-11.8333
0%	Min	-43.8333	5%	-43.8333
			1%	-43.8333
Range		67		
Q3-Q1		11		
Mode		-3.33333		

Extremes

Lowest	Obs	Highest	Obs
-43.8333(	15)	6(	7)
-11.8333(	17)	11.16667(	16)
-8.33333(	6)	17.16667(	13)
-6(	8)	21.66667(	2)
-5(	9)	23.16667(	14)

```
                P11.2-1999, HR, test HMR
            Third dose excluded from the analysis
               Made by: Esa Wallius
                                  December 21, 1999

 Stem Leaf                     #             Boxplot
    2 23                       2                0
    1 17                       2                |
    0 3346                     4             +--+--+
   -0 86543321                 8             *-----*
   -1 2                        1                |
   -2
   -3
   -4 4                        1                *
      ----+----+----+----+
  Multiply Stem.Leaf by 10**+1


                  Normal Probability Plot
 25+                                        *++++*++
   |                                  +*++*++
   |                            ++*+**+*
   |                *  **+**++* *
   |              *++++++
   |      +++++++
   |+++++
-45+       *
    +----+----+----+----+----+----+----+----+----+----+
        -2        -1         0        +1        +2
```

P11.2-1999, test HMR, MAP at baseline
Made by: Esa Wallius
Date 03MAY00

General Linear Models Procedure
Class Level Information

Class	Levels	Values
TREAT	3	HMR Tamoxifen Vehicle

Number of observations in data set = 18

Analysis of variance
General Linear Models Procedure

Dependent Variable: MAP

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	33.1276014	16.5638007	0.47	0.6327
Error	15	526.3601572	35.0906771		
Corrected Total	17	559.4877586			

R-Square	C.V.	Root MSE	MAP Mean
0.059211	6.530573	5.92374	90.7078

Source	DF	Type III SS	Mean Square	F Value	Pr > F
TREAT	2	33.1276014	16.5638007	0.47	0.6327

General Linear Models Procedure

Level of TREAT	N	MAP Mean	MAP SD
HMR	6	90.6386650	5.32089842
Tamoxifen	6	89.0819133	4.43087962
Vehicle	6	92.4027867	7.57148448

Diagnostics: Checking the assumption of normal distribution of residuals

Univariate Procedure

Variable=RSTUDENT

Moments

N	18	Sum Wgts	18
Mean	-0.00918	Sum	-0.1652
Std Dev	1.057663	Variance	1.11865
Skewness	-0.29235	Kurtosis	-1.17972
USS	19.01857	CSS	19.01706
CV	-11524.4	Std Mean	0.249293
T:Mean=0	-0.03681	Pr>|T|	0.9711
Num ^= 0	18	Num > 0	9
M(Sign)	0	Pr>=|M|	1.0000
Sgn Rank	-1.5	Pr>=|S|	0.9661
W:Normal	0.937976	Pr<W	0.2720

P11.2-1999, test HMR, MAP at baseline
Made by: Esa Wallius
Date 03MAY00

Quantiles(Def=5)

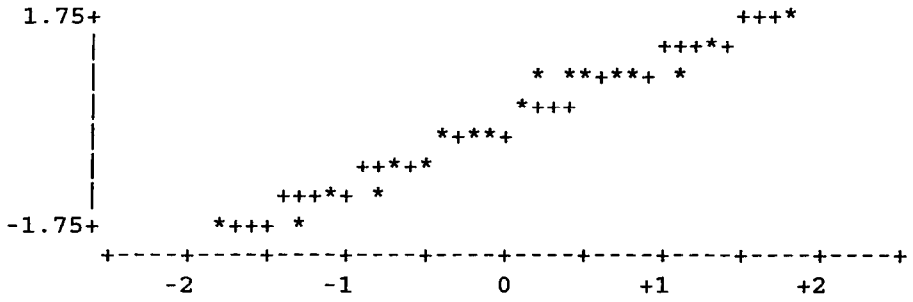
100% Max	1.504111	99%	1.504111
75% Q3	0.864835	95%	1.504111
50% Med	0.087978	90%	1.368154
25% Q1	-0.87761	10%	-1.70253
0% Min	-1.86738	5%	-1.86738
		1%	-1.86738
Range	3.371489		
Q3-Q1	1.742441		
Mode	-1.86738		

Extremes

Lowest	Obs	Highest	Obs
-1.86738(	3)	0.864835(	13)
-1.70253(	18)	0.956174(	4)
-1.1299(	6)	0.988274(	7)
-1.06921(	11)	1.368154(	5)
-0.87761(	1)	1.504111(	2)

```
Stem Leaf                     #             Boxplot
   1 5                        1                |
   1 004                      3                |
   0 6799                     4             +-----+
   0 2                        1             *-----*
  -0 30                       2             |  +  |
  -0 985                      3             +-----+
  -1 11                       2                |
  -1 97                       2                |
     ----+----+----+----+
```

Normal Probability Plot



P11.2-1999, MAP, test HMR
Made by: Esa Wallius
December 21,1999

General Linear Models Procedure
Class Level Information

Class	Levels	Values
TREAT	3	HMR Tamoxifen Vehicle

Number of observations in data set = 18
P11.2-1999, MAP, test HMR
Made by: Esa Wallius
December 21,1999

NOTE: Observations with missing values will not be included in this analysis. Thus, only 12 observations can be used in this analysis.

General Linear Models Procedure
Repeated Measures Analysis of Variance
Repeated Measures Level Information

Dependent Variable	I_10M	I_30M	II_10M	II_30M	III_10M	III_30M
Level of TIME	1	2	3	4	5	6

Applied to Orthogonal Components:
Test for Sphericity: Mauchly's Criterion = 0.0041447
Chisquare Approximation = 44.435912 with 14 df Prob > Chisquare = 0.0001

General Linear Models Procedure
Repeated Measures Analysis of Variance
Tests of Hypotheses for Between Subjects Effects

Source	DF	Type III SS	Mean Square	F Value	Pr > F
TREAT	1	80.22222222	80.22222222	0.35	0.5691
Error	10	2314.94444444	231.49444444		

General Linear Models Procedure

Repeated Measures Analysis of Variance
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
5	432.83333333	86.56666667	2.55	0.0395	**0.1086**	0.0884

Source: TIME*TREAT

DF	Type III SS	Mean Square	F Value	Pr > F	Adj Pr > F G - G	Adj Pr > F H - F
5	718.44444444	143.68888889	4.23	0.0028	**0.0332**	0.0200

Source: Error(TIME)

DF	Type III SS	Mean Square
50	1699.05555556	33.98111111

Greenhouse-Geisser Epsilon = 0.3699
Huynh-Feldt Epsilon = 0.4956

Diagnostics: Checking the assumption of normal distribution of residuals

Univariate Procedure

Variable=RESIDUAL

Moments

N	12	Sum Wgts	12
Mean	0	Sum	0
Std Dev	6.191392	Variance	38.33333
Skewness	0.604486	Kurtosis	1.453982
USS	421.6667	CSS	421.6667
CV	.	Std Mean	1.787301
T:Mean=0	0	Pr>|T|	1.0000
Num ^= 0	12	Num > 0	5
M(Sign)	-1	Pr>=|M|	0.7744
Sgn Rank	-3	Pr>=|S|	0.8501
W:Normal	0.960021	Pr<W	0.7291

Quantiles(Def=5)

100% Max	13.83333	99%	13.83333
75% Q3	3.333333	95%	13.83333
50% Med	-0.16667	90%	4.833333
25% Q1	-3.66667	10%	-7.16667
0% Min	-10.1667	5%	-10.1667
		1%	-10.1667
Range	24		
Q3-Q1	7		
Mode	-10.1667		

Extremes

Lowest	Obs	Highest	Obs
-10.1667(	6)	0.833333(	1)
-7.16667(	2)	2.833333(	4)
-4.16667(	13)	3.833333(	18)
-3.16667(	17)	4.833333(	15)
-1.16667(	16)	13.83333(	3)

Missing Value	.
Count	6
% Count/Nobs	33.33

```
Stem Leaf                     #             Boxplot
   1 4                        1                |
   0 5                        1                |
   0 134                      3             +--+--+
  -0 43100                    5             *-----*
  -0 7                        1                |
  -1 0                        1                |
     ----+----+----+----+
 Multiply Stem.Leaf by 10**+1
```

P11.2-1999, MAP, test HMR
Made by: Esa Wallius
December 21,1999

Univariate Procedure

Variable=RESIDUAL

Normal Probability Plot

```
 12.5+                                          *++++++++
     |                                   ++++++++
     |                          +++*+*++*  *
     |                  *++*+*+* *
     |          +++++*++
-12.5+ ++++++++*
      +----+----+----+----+----+----+----+----+----+----+
          -2        -1         0        +1        +2
```

P11.2-1999, MAP, test HMR
Third dose excluded from the analysis
Made by: Esa Wallius
December 21,1999

General Linear Models Procedure
Class Level Information

Class	Levels	Values
TREAT	3	HMR Tamoxifen Vehicle

Number of observations in data set = 18

General Linear Models Procedure
Repeated Measures Analysis of Variance
Repeated Measures Level Information

Dependent Variable	I_10M	I_30M	II_10M	II_30M
Level of TIME	1	2	3	4

Applied to Orthogonal Components:
Test for Sphericity: Mauchly's Criterion = 0.5446451
Chisquare Approximation = 8.3379085 with 5 df Prob > Chisquare = 0.1386

General Linear Models Procedure
Repeated Measures Analysis of Variance
Tests of Hypotheses for Between Subjects Effects

Source	DF	Type III SS	Mean Square	F Value	Pr > F
TREAT	2	58.33333333	29.16666667	0.21	0.8128
Error	15	2082.16666667	138.81111111		

P11.2-1999, MAP, test HMR
Third dose excluded from the analysis
Made by: Esa Wallius
December 21,1999

General Linear Models Procedure
Repeated Measures Analysis of Variance
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
3	694.27777778	231.42592593	7.77	**0.0003**	0.0015	0.0004

Source: TIME*TREAT

DF	Type III SS	Mean Square	F Value	Pr > F	Adj Pr > F G - G	Adj Pr > F H - F
6	259.22222222	43.20370370	1.45	**0.2166**	0.2382	0.2209

Source: Error(TIME)

DF	Type III SS	Mean Square
45	1339.50000000	29.76666667

Greenhouse-Geisser Epsilon = 0.7100
Huynh-Feldt Epsilon = 0.9413

Diagnostics: Checking the assumption of normal distribution of residuals
Univariate Procedure

Variable=RESIDUAL

Moments

N	18	Sum Wgts	18
Mean	0	Sum	0
Std Dev	5.316456	Variance	28.26471
Skewness	0.497934	Kurtosis	1.923226
USS	480.5	CSS	480.5
CV	.	Std Mean	1.253101
T:Mean=0	0	Pr>|T|	1.0000
Num ^= 0	18	Num > 0	8
M(Sign)	-1	Pr>=|M|	0.8145
Sgn Rank	-3.5	Pr>=|S|	0.8900
W:Normal	0.94717	Pr<W	0.3847

Quantiles(Def=5)

100% Max	13.83333	99%	13.83333
75% Q3	2.833333	95%	13.83333
50% Med	-0.16667	90%	4.833333
25% Q1	-3.16667	10%	-7.16667
0% Min	-10.1667	5%	-10.1667
		1%	-10.1667
Range	24		
Q3-Q1	6		
Mode	2.833333		

Extremes

Lowest	Obs	Highest	Obs
-10.1667(	6)	2.833333(	9)
-7.16667(	2)	2.833333(	10)
-6.16667(	12)	3.833333(	18)
-4.16667(	13)	4.833333(	15)
-3.16667(	17)	13.83333(	3)

```
  Stem Leaf                     #             Boxplot
     1 4                        1                0
     0 5                        1                |
     0 123334                   6             +--+--+
    -0 4311000                  7             *-----*
    -0 76                       2                |
    -1 0                        1                |
       ----+----+----+----+
   Multiply Stem.Leaf by 10**+1
```

Normal Probability Plot

```
 12.5+                                                *+++++++
     |                                        +++++++++
     |                              ++*+**++*+ * *
     |                    +**+**+**
     |          +++++*+*+
-12.5++++++++*
      +----+----+----+----+----+----+----+----+----+----+
          -2        -1         0        +1        +2
```