Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 15 minutes
Checking Residuals for Study 6 at The Minutes Specified

---------- TREAT=Placebo ----------

The UNIVARIATE Procedure
Variable: Resid

Tests for Normality

Test	--Statistic---		-----p Value------	
Shapiro-Wilk	W	0.920461	Pr < W	0.1716
Kolmogorov-Smirnov	D	0.153268	Pr > D	>0.1500
Cramer-von Mises	W-Sq	0.066814	Pr > W-Sq	>0.2500
Anderson-Darling	A-Sq	0.447395	Pr > A-Sq	0.2475

Quantiles (Definition 5)

Quantile	Estimate
100% Max	0.1338563
99%	0.1338563
95%	0.1338563
90%	0.1140537
75% Q3	0.0748498
50% Median	0.0176211
25% Q1	-0.0974301
10%	-0.1295092
5%	-0.1333087
1%	-0.1333087
0% Min	-0.1333087

Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 15 minutes
Checking Residuals for Study 6 at The Minutes Specified

---------- TREAT=Placebo ----------

The UNIVARIATE Procedure
Variable: Resid

Extreme Observations

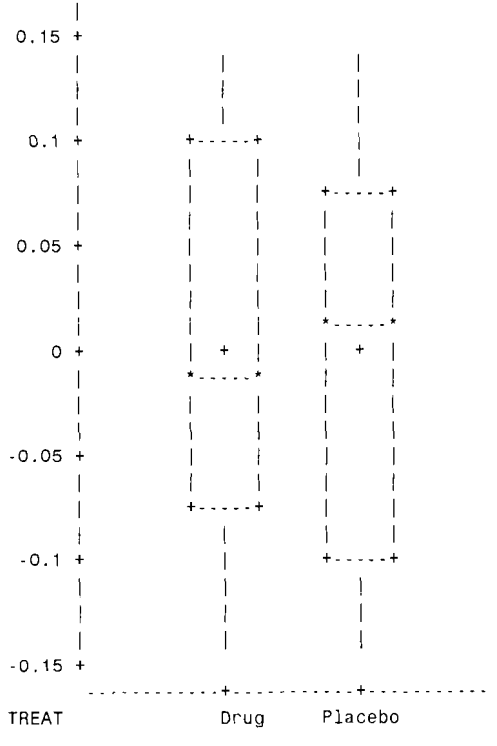
Lowest			Highest		
Value	PATIENT	Obs	Value	PATIENT	Obs
-0.1333087	6040	12	0.0580928	6034	11
-0.1295092	6046	15	0.0916067	6008	4
-0.1140416	6031	10	0.1078550	6017	7
-0.1030906	6041	13	0.1140537	6003	2
-0.0917696	6005	3	0.1338563	6013	6

```
Stem Leaf                     #             Boxplot                                  Normal Probability Plot
   1 113                      3                |                  0.125+                                  *++*+++ *
   0 69                       2             +-----+                    |                              *+*++
   0 01334                    5             *--+--*                    |                       **+**+*+
  -0                                        |     |                    |                    +*+++
  -0 95                       2             |     |                    |               ++++*
  -1 3310                     4             +-----+              -0.125+       * +++*++* *
     ----+----+----+----+                                           +----+----+----+----+----+----+----+----+----+----+
 Multiply Stem.Leaf by 10**-1                                            -2        -1         0        +1        +2
```

Appendix 2
Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 15 minutes
Checking Residuals for Study 6 at The Minutes Specified

The UNIVARIATE Procedure
Variable: Resid

Schematic Plots



Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 30 minutes

---------- TIME=30 minutes ----------

The Mixed Procedure

Model Information

Data Set	WORK.ALL
Dependent Variable	LNCHANGE
Covariance Structure	Diagonal
Estimation Method	REML
Residual Variance Method	Profile
Fixed Effects SE Method	Model-Based
Degrees of Freedom Method	Residual

Class Level Information

Class	Levels	Values
TREAT	2	Drug Placebo
PATIENT	16	6001 6003 6005 6008 6010 6013 6017 6023 6026 6031 6034 6040 6041 6044 6046 6048

Dimensions

Covariance Parameters	1
Columns in X	20
Columns in Z	0
Subjects	1
Max Obs Per Subject	32
Observations Used	32
Observations Not Used	0
Total Observations	32

Appendix 2
Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 30 minutes

---------- TIME=30 minutes ----------

The Mixed Procedure

Covariance Parameter
Estimates

Cov Parm	Estimate
Residual	0.03591

Fit Statistics

-2 Res Log Likelihood	13.1
AIC (smaller is better)	15.1
AICC (smaller is better)	15.5
BIC (smaller is better)	15.8

Type 3 Tests of Fixed Effects

Effect	Num DF	Den DF	F Value	Pr > F
BASELINE	1	14	0.30	0.5918
PATIENT	15	14	1.24	0.3441
TREAT	1	14	0.11	0.7433

Appendix 2
Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 30 minutes

---------- TIME=30 minutes ----------

The Mixed Procedure

Least Squares Means

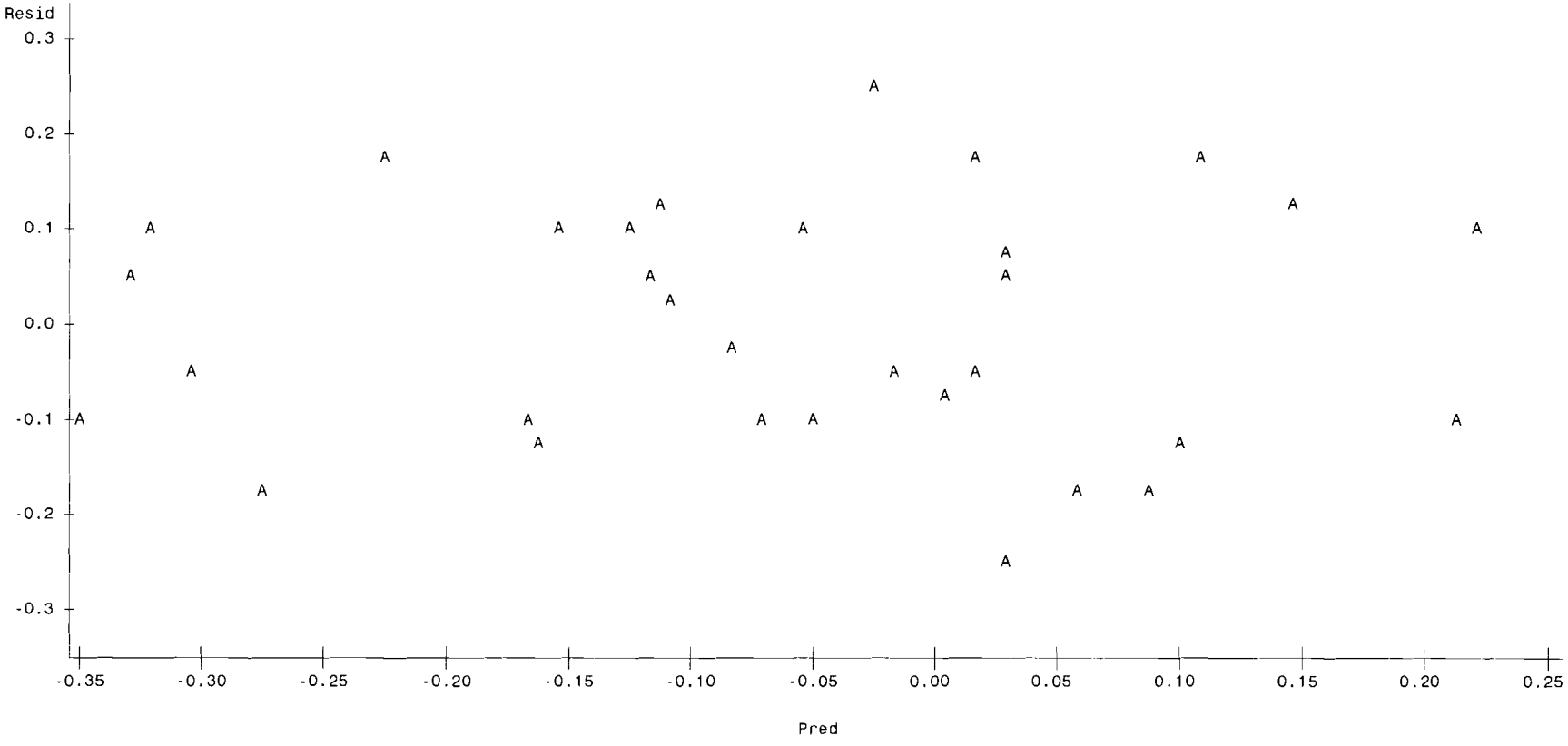
Effect	TREAT	Estimate	Standard Error	DF	t Value	Pr > |t|	Alpha	Lower	Upper
TREAT	Drug	-0.05086	0.04744	14	-1.07	0.3018	0.05	-0.1526	0.05089
TREAT	Placebo	-0.07330	0.04744	14	-1.55	0.1446	0.05	-0.1750	0.02845

Differences of Least Squares Means

Effect	TREAT	TREAT	Estimate	Standard Error	DF	t Value	Pr > |t|	Alpha	Lower	Upper
TREAT	Drug	Placebo	0.02244	0.06718	14	0.33	0.7433	0.05	-0.1216	0.1665

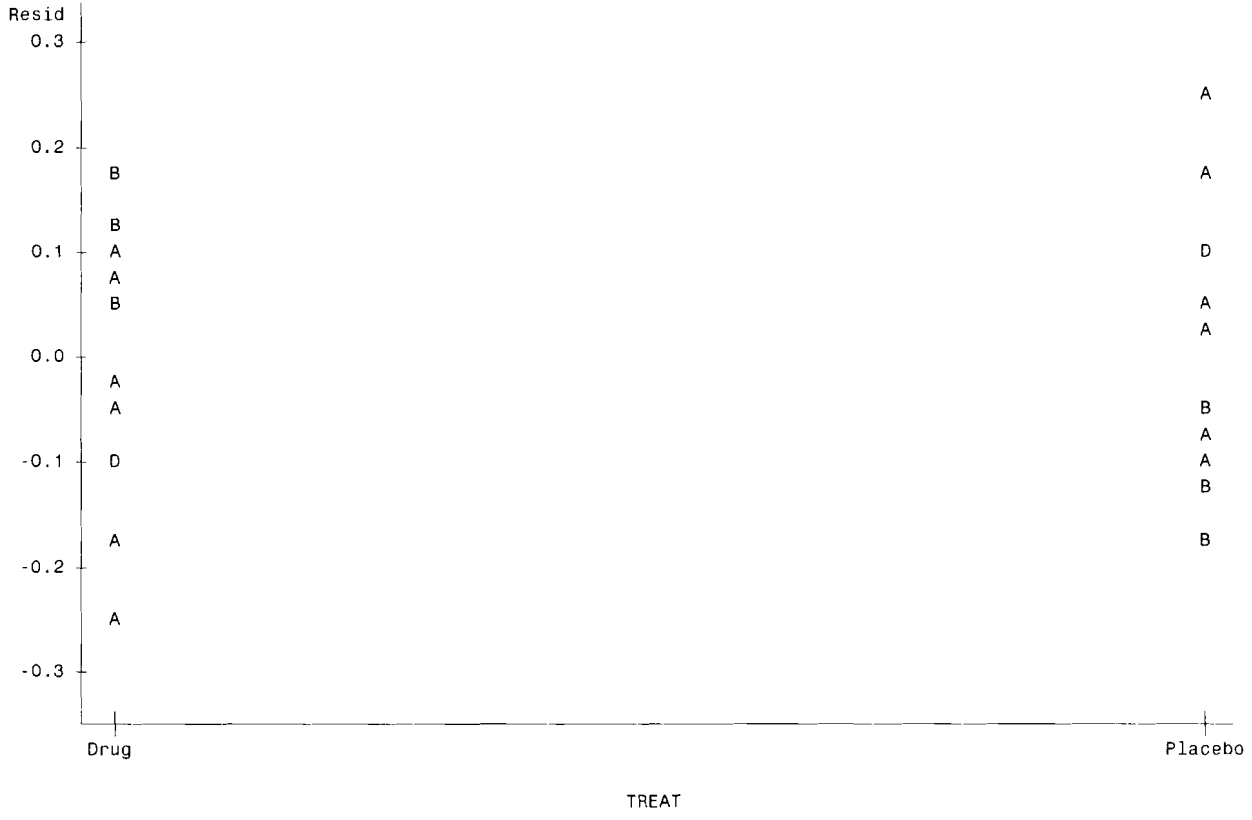
Appendix 2
Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 30 minutes

Plot of Resid*Pred. Legend: A = 1 obs, B = 2 obs, etc.



Appendix 2
Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 30 minutes

Plot of Resid*TREAT. Legend: A = 1 obs, B = 2 obs, etc.



Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 30 minutes
Checking Residuals for Study 6 at The Minutes Specified

---------- TREAT=Drug ----------

The UNIVARIATE Procedure
Variable: Resid

Moments

N	16	Sum Weights	16
Mean	0	Sum Observations	0
Std Deviation	0.12945923	Variance	0.01675969
Skewness	-0.1735297	Kurtosis	-1.0284727
Uncorrected SS	0.25139538	Corrected SS	0.25139538
Coeff Variation	.	Std Error Mean	0.03236481

Basic Statistical Measures

Location		Variability	
Mean	0.000000	Std Deviation	0.12946
Median	0.010681	Variance	0.01676
Mode	.	Range	0.42509
		Interquartile Range	0.20817

Tests for Location: Mu0=0

Test	-Statistic-		-----p Value------	
Student's t	t	0	Pr > |t|	1.0000
Sign	M	0	Pr >= |M|	1.0000
Signed Rank	S	4	Pr >= |S|	0.8603

Appendix 2
Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 30 minutes
Checking Residuals for Study 6 at The Minutes Specified

---------- TREAT=Drug ----------

The UNIVARIATE Procedure
Variable: Resid

Tests for Normality

Test	--Statistic---		-----p Value------	
Shapiro-Wilk	W	0.947935	Pr < W	0.4577
Kolmogorov-Smirnov	D	0.164762	Pr > D	>0.1500
Cramer-von Mises	W-Sq	0.06344	Pr > W-Sq	>0.2500
Anderson-Darling	A-Sq	0.35675	Pr > A-Sq	>0.2500

Quantiles (Definition 5)

Quantile	Estimate
100% Max	0.1854942
99%	0.1854942
95%	0.1854942
90%	0.1826181
75% Q3	0.1104651
50% Median	0.0106810
25% Q1	-0.0977098
10%	-0.1729587
5%	-0.2395917
1%	-0.2395917
0% Min	-0.2395917

Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 30 minutes
Checking Residuals for Study 6 at The Minutes Specified

---------- TREAT=Drug ----------

The UNIVARIATE Procedure
Variable: Resid

Extreme Observations

----------Lowest----------			----------Highest----------		
Value	PATIENT	Obs	Value	PATIENT	Obs
-0.2395917	6008	4	0.0965318	6041	13
-0.1729587	6013	6	0.1243984	6040	12
-0.1094509	6044	14	0.1308433	6005	3
-0.1019955	6001	1	0.1826181	6023	8
-0.0934241	6003	2	0.1854942	6031	10

```
Stem Leaf                    #             Boxplot                                  Normal Probability Plot
   1 89                      2                |                  0.175+                                      +*++  *
   1 023                     3             +-----+                    |                                 *+*+
   0 666                     3             |     |                    |                          ** *+*+
   0                                       *--+--*                    |                         ++++
  -0 3                       1             |     |              -0.025+                      ++*
  -0 995                     3             |     |                    |                  +*+* *
  -1 10                      2             +-----+                    |              +*+*
  -1 7                       1                |                       |          ++*+
  -2 4                       1                |                 -0.225+      +*++
     ----+----+----+----+                                            +----+----+----+----+----+----+----+----+----+----+
 Multiply Stem.Leaf by 10**-1                                            -2        -1         0        +1        +2
```

Appendix 2
Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 30 minutes
Checking Residuals for Study 6 at The Minutes Specified

---------- TREAT=Placebo ----------

The UNIVARIATE Procedure
Variable: Resid

Moments

N	16	Sum Weights	16
Mean	0	Sum Observations	0
Std Deviation	0.12945923	Variance	0.01675969
Skewness	0.17352966	Kurtosis	-1.0284727
Uncorrected SS	0.25139538	Corrected SS	0.25139538
Coeff Variation	.	Std Error Mean	0.03236481

Basic Statistical Measures

Location		Variability	
Mean	0.00000	Std Deviation	0.12946
Median	-0.01068	Variance	0.01676
Mode	.	Range	0.42509
		Interquartile Range	0.20817

Tests for Location: Mu0=0

Test	-Statistic-		-----p Value------	
Student's t	t	0	Pr > |t|	1.0000
Sign	M	0	Pr >= |M|	1.0000
Signed Rank	S	-4	Pr >= |S|	0.8603

Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 30 minutes
Checking Residuals for Study 6 at The Minutes Specified

---------- TREAT=Placebo ----------

The UNIVARIATE Procedure
Variable: Resid

Tests for Normality

Test	--Statistic---		-----p Value------	
Shapiro-Wilk	W	0.947935	Pr < W	0.4577
Kolmogorov-Smirnov	D	0.164762	Pr > D	>0.1500
Cramer-von Mises	W-Sq	0.06344	Pr > W-Sq	>0.2500
Anderson-Darling	A-Sq	0.35675	Pr > A-Sq	>0.2500

Quantiles (Definition 5)

Quantile	Estimate
100% Max	0.2395917
99%	0.2395917
95%	0.2395917
90%	0.1729587
75% Q3	0.0977098
50% Median	-0.0106810
25% Q1	-0.1104651
10%	-0.1826181
5%	-0.1854942
1%	-0.1854942
0% Min	-0.1854942

Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 30 minutes
Checking Residuals for Study 6 at The Minutes Specified

---------- TREAT=Placebo ----------

The UNIVARIATE Procedure
Variable: Resid

Extreme Observations

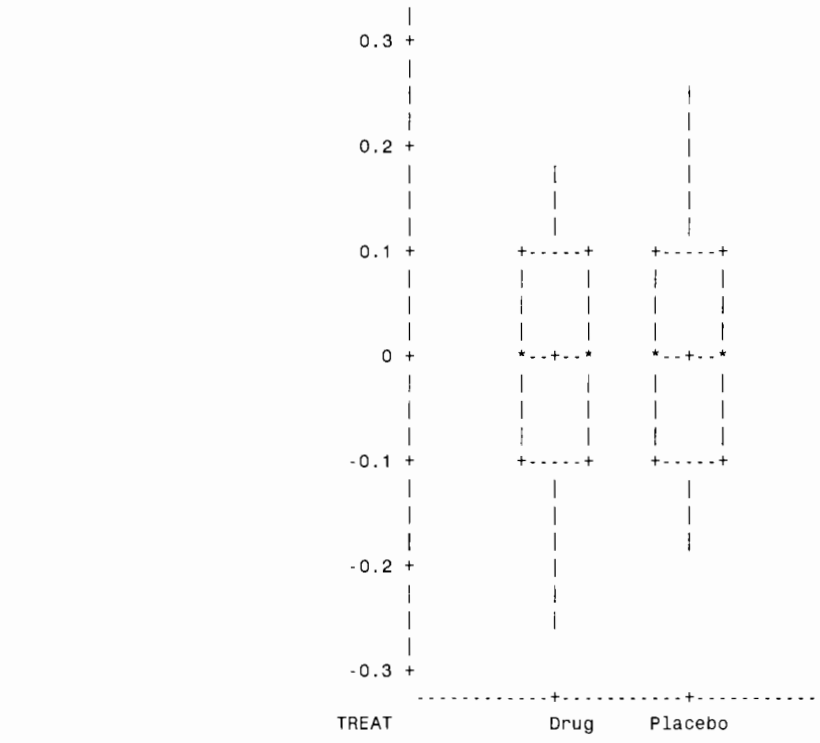
----------Lowest----------			----------Highest----------		
Value	PATIENT	Obs	Value	PATIENT	Obs
-0.1854942	6031	10	0.0934241	6003	2
-0.1826181	6023	8	0.1019955	6001	1
-0.1308433	6005	3	0.1094509	6044	14
-0.1243984	6040	12	0.1729587	6013	6
-0.0965318	6041	13	0.2395917	6008	4

```
Stem Leaf                     #             Boxplot                                  Normal Probability Plot
   2 4                        1                |                  0.225+                                          ++*+
   1 7                        1                |                       |                                      +*++
   1 01                       2             +-----+                    |                                  *+*+
   0 599                      3             |     |                    |                            * *+*+
   0 3                        1             |  +  |                0.025+                          +*++
  -0                                       *-----*                    |                       +++
  -0 666                      3             |     |                    |                   +*+* **
  -1 320                      3             +-----+                    |               +*+*
  -1 98                       2                |                 -0.175+       *  ++*+
     ----+----+----+----+                                              +----+----+----+----+----+----+----+----+----+----+
 Multiply Stem.Leaf by 10**-1                                                -2        -1         0        +1        +2
```

Appendix 2
Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 30 minutes
Checking Residuals for Study 6 at The Minutes Specified

The UNIVARIATE Procedure
Variable: Resid

Schematic Plots



Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 45 minutes

---------- TIME=45 minutes ----------

The Mixed Procedure

Model Information

Data Set	WORK.ALL
Dependent Variable	LNCHANGE
Covariance Structure	Diagonal
Estimation Method	REML
Residual Variance Method	Profile
Fixed Effects SE Method	Model-Based
Degrees of Freedom Method	Residual

Class Level Information

Class	Levels	Values
TREAT	2	Drug Placebo
PATIENT	16	6001 6003 6005 6008 6010 6013 6017 6023 6026 6031 6034 6040 6041 6044 6046 6048

Dimensions

Covariance Parameters	1
Columns in X	20
Columns in Z	0
Subjects	1
Max Obs Per Subject	32
Observations Used	32
Observations Not Used	0
Total Observations	32

Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 45 minutes

---------- TIME=45 minutes ----------

The Mixed Procedure

Covariance Parameter
Estimates

Cov Parm	Estimate
Residual	0.02439

Fit Statistics

-2 Res Log Likelihood	7.7
AIC (smaller is better)	9.7
AICC (smaller is better)	10.0
BIC (smaller is better)	10.3

Type 3 Tests of Fixed Effects

Effect	Num DF	Den DF	F Value	Pr > F
BASELINE	1	14	4.77	0.0464
PATIENT	15	14	1.87	0.1239
TREAT	1	14	1.12	0.3086

Appendix 2
Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 45 minutes

---------- TIME=45 minutes ----------

The Mixed Procedure

Least Squares Means

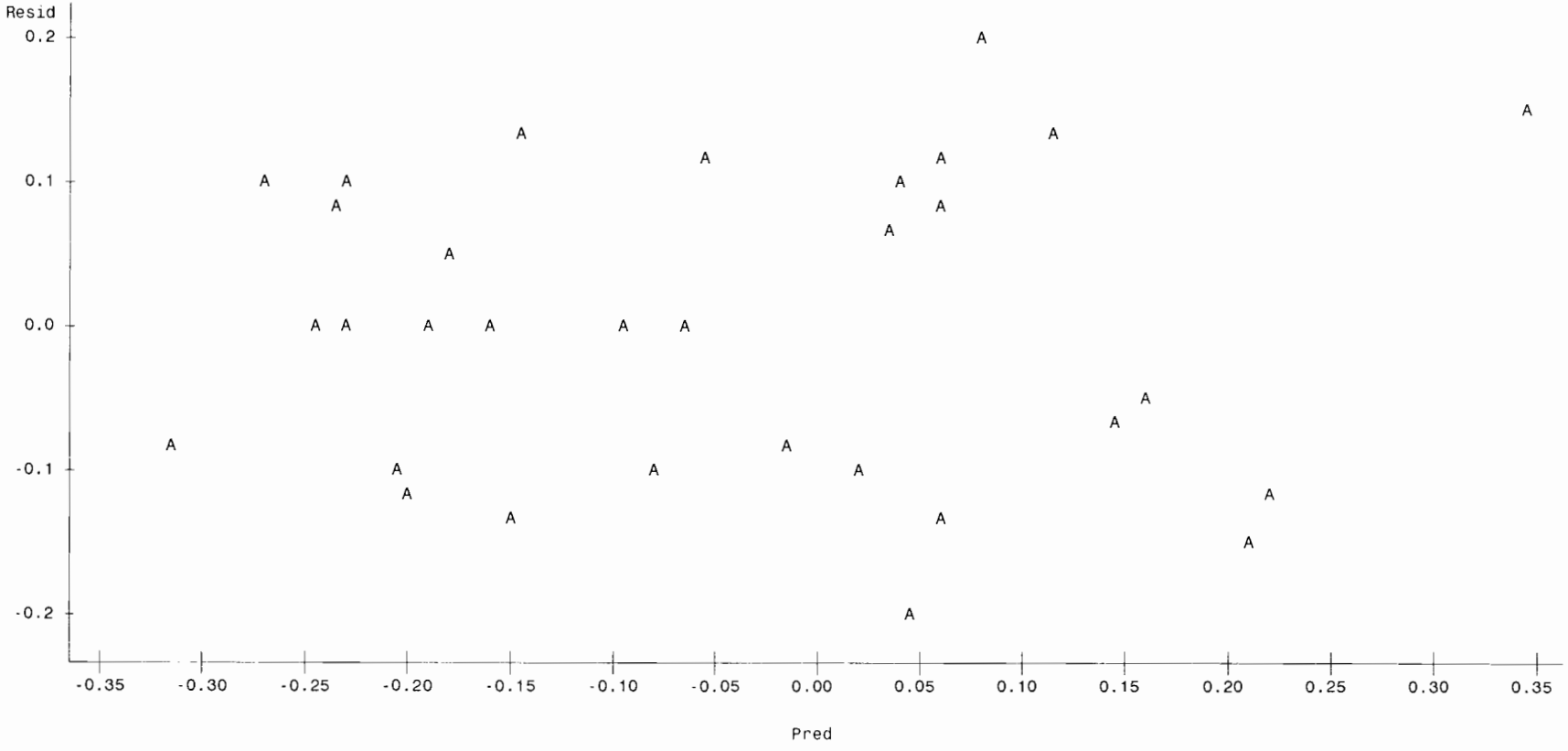
Effect	TREAT	Estimate	Standard Error	DF	t Value	Pr > |t|	Alpha	Lower	Upper
TREAT	Drug	-0.01722	0.03910	14	-0.44	0.6664	0.05	-0.1011	0.06663
TREAT	Placebo	-0.07571	0.03910	14	-1.94	0.0732	0.05	-0.1596	0.008139

Differences of Least Squares Means

Effect	TREAT	TREAT	Estimate	Standard Error	DF	t Value	Pr > |t|	Alpha	Lower	Upper
TREAT	Drug	Placebo	0.05850	0.05536	14	1.06	0.3086	0.05	-0.06024	0.1772

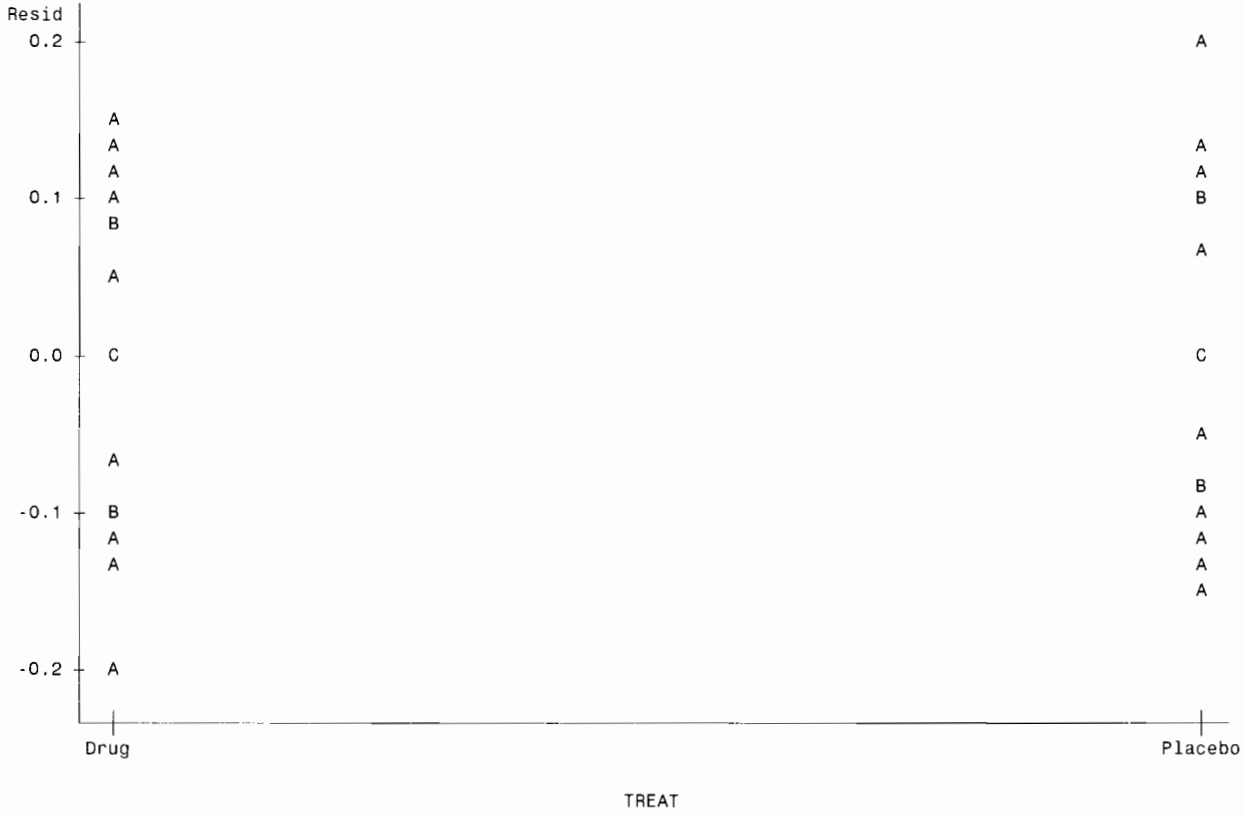
Appendix 2
Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 45 minutes

Plot of Resid*Pred. Legend: A = 1 obs, B = 2 obs, etc.



Appendix 2
Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 45 minutes

Plot of Resid*TREAT. Legend: A = 1 obs, B = 2 obs, etc.



Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 45 minutes
Checking Residuals for Study 6 at The Minutes Specified

---------- TREAT=Drug ----------

The UNIVARIATE Procedure
Variable: Resid

Moments

N	16	Sum Weights	16
Mean	0	Sum Observations	0
Std Deviation	0.10669216	Variance	0.01138322
Skewness	-0.2592461	Kurtosis	-1.1515895
Uncorrected SS	0.17074824	Corrected SS	0.17074824
Coeff Variation	.	Std Error Mean	0.02667304

Basic Statistical Measures

Location		Variability	
Mean	0.00000	Std Deviation	0.10669
Median	-0.00429	Variance	0.01138
Mode	.	Range	0.34641
		Interquartile Range	0.18529

Tests for Location: Mu0=0

Test	-Statistic-		-----p Value------	
Student's t	t	0	Pr > |t|	1.0000
Sign	M	-1	Pr >= |M|	0.8036
Signed Rank	S	-2	Pr >= |S|	0.9399

Appendix 2
Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 45 minutes
Checking Residuals for Study 6 at The Minutes Specified

---------- TREAT=Drug ----------

The UNIVARIATE Procedure
Variable: Resid

Tests for Normality

Test	--Statistic---		-----p Value------	
Shapiro-Wilk	W	0.942577	Pr < W	0.3818
Kolmogorov-Smirnov	D	0.156823	Pr > D	>0.1500
Cramer-von Mises	W-Sq	0.060935	Pr > W-Sq	>0.2500
Anderson-Darling	A-Sq	0.375061	Pr > A-Sq	>0.2500

Quantiles (Definition 5)

Quantile	Estimate
100% Max	0.14965403
99%	0.14965403
95%	0.14965403
90%	0.13160728
75% Q3	0.09050981
50% Median	-0.00428862
25% Q1	-0.09477690
10%	-0.12673819
5%	-0.19675624
1%	-0.19675624
0% Min	-0.19675624

Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 45 minutes
Checking Residuals for Study 6 at The Minutes Specified

---------- TREAT=Drug ----------

The UNIVARIATE Procedure
Variable: Resid

Extreme Observations

----------Lowest----------			----------Highest----------		
Value	PATIENT	Obs	Value	PATIENT	Obs
-0.1967562	6044	14	0.0885268	6034	11
-0.1267382	6001	1	0.0924928	6046	15
-0.1234601	6008	4	0.1139420	6040	12
-0.0971814	6017	7	0.1316073	6023	8
-0.0923724	6031	10	0.1496540	6005	3

```
Stem Leaf                     #             Boxplot                                  Normal Probability Plot
   1 5                        1                |                  0.175+                                        ++++
   1 13                       2                |                       |                                  *++*+   *
   0 5899                     4             +-----+                    |                           * *+*+*+
   0                                        |  +  |                    |                         +++++
  -0 110                      3             *-----*              -0.025+                     ++** *
  -0 96                       2             +-----+                    |                +*+*+*
  -1 320                      3                |                       |           +*++*
  -1                                           |                       |       *+++
  -2 0                        1                |                  -0.225+  +++++
     ----+----+----+----+                                              +----+----+----+----+----+----+----+----+----+----+
 Multiply Stem.Leaf by 10**-1                                              -2        -1         0        +1        +2
```

Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 45 minutes
Checking Residuals for Study 6 at The Minutes Specified

---------- TREAT=Placebo ----------

The UNIVARIATE Procedure
Variable: Resid

Moments

N	16	Sum Weights	16
Mean	0	Sum Observations	0
Std Deviation	0.10669216	Variance	0.01138322
Skewness	0.25924609	Kurtosis	-1.1515895
Uncorrected SS	0.17074824	Corrected SS	0.17074824
Coeff Variation	.	Std Error Mean	0.02667304

Basic Statistical Measures

Location		Variability	
Mean	0.000000	Std Deviation	0.10669
Median	0.004289	Variance	0.01138
Mode	.	Range	0.34641
		Interquartile Range	0.18529

Tests for Location: Mu0=0

Test	-Statistic-		-----p Value------	
Student's t	t	0	Pr > |t|	1.0000
Sign	M	1	Pr >= |M|	0.8036
Signed Rank	S	2	Pr >= |S|	0.9399

Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 45 minutes
Checking Residuals for Study 6 at The Minutes Specified

---------- TREAT=Placebo ----------

The UNIVARIATE Procedure
Variable: Resid

Tests for Normality

Test	--Statistic---		-----p Value------	
Shapiro-Wilk	W	0.942577	Pr < W	0.3818
Kolmogorov-Smirnov	D	0.156823	Pr > D	>0.1500
Cramer-von Mises	W-Sq	0.060935	Pr > W-Sq	>0.2500
Anderson-Darling	A-Sq	0.375061	Pr > A-Sq	>0.2500

Quantiles (Definition 5)

Quantile	Estimate
100% Max	0.19675624
99%	0.19675624
95%	0.19675624
90%	0.12673819
75% Q3	0.09477690
50% Median	0.00428862
25% Q1	-0.09050981
10%	-0.13160728
5%	-0.14965403
1%	-0.14965403
0% Min	-0.14965403

Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 45 minutes
Checking Residuals for Study 6 at The Minutes Specified

---------- TREAT=Placebo ----------

The UNIVARIATE Procedure
Variable: Resid

Extreme Observations

----------Lowest----------			----------Highest----------		
Value	PATIENT	Obs	Value	PATIENT	Obs
-0.1496540	6005	3	0.0923724	6031	10
-0.1316073	6023	8	0.0971814	6017	7
-0.1139420	6040	12	0.1234601	6008	4
-0.0924928	6046	15	0.1267382	6001	1
-0.0885268	6034	11	0.1967562	6044	14

```
Stem Leaf                     #             Boxplot                                  Normal Probability Plot
   2 0                        1                |                  0.225+                                                +++++
   1                                           |                       |                                          +++*
   1 023                      3                |                       |                                     *++*+
   0 69                       2             +-----+                    |                               *+*+*+
   0 011                      3             *--+--*               0.025+                         *+**++
  -0                                        |     |                    |                      ++++
  -0 9985                     4             +-----+                    |                 +*+*+* *
  -1 31                       2                |                       |       *   +*++*
  -1 5                        1                |                 -0.175+       ++++
     ----+----+----+----+                                             +----+----+----+----+----+----+----+----+----+----+
 Multiply Stem.Leaf by 10**-1                                              -2        -1         0        +1        +2
```

Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 45 minutes
Checking Residuals for Study 6 at The Minutes Specified

The UNIVARIATE Procedure
Variable: Resid

Schematic Plots

```
          |
     0.2 +                        |
          |                        |
          |            |           |
          |            |           |
     0.1 +         +-----+     +-----+
          |         |     |     |     |
          |         |     |     |     |
          |         |     |     |     |
       0 +         *--+--*     *--+--*
          |         |     |     |     |
          |         |     |     |     |
          |         |     |     |     |
    -0.1 +         +-----+     +-----+
          |            |           |
          |            |           |
          |            |
    -0.2 +            |
           ------------+-----------+-----------
    TREAT              Drug     Placebo
```

Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 60 minutes

---------- TIME=60 minutes ----------

The Mixed Procedure

Model Information

Data Set	WORK.ALL
Dependent Variable	LNCHANGE
Covariance Structure	Diagonal
Estimation Method	REML
Residual Variance Method	Profile
Fixed Effects SE Method	Model-Based
Degrees of Freedom Method	Residual

Class Level Information

Class	Levels	Values
TREAT	2	Drug Placebo
PATIENT	16	6001 6003 6005 6008 6010 6013 6017 6023 6026 6031 6034 6040 6041 6044 6046 6048

Dimensions

Covariance Parameters	1
Columns in X	20
Columns in Z	0
Subjects	1
Max Obs Per Subject	32
Observations Used	32
Observations Not Used	0
Total Observations	32

Appendix 2
Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 60 minutes

---------- TIME=60 minutes ----------

The Mixed Procedure

Covariance Parameter
Estimates

Cov Parm	Estimate
Residual	0.05396

Fit Statistics

-2 Res Log Likelihood	18.8
AIC (smaller is better)	20.8
AICC (smaller is better)	21.2
BIC (smaller is better)	21.5

Type 3 Tests of Fixed Effects

Effect	Num DF	Den DF	F Value	Pr > F
BASELINE	1	14	6.91	0.0198
PATIENT	15	14	1.33	0.2986
TREAT	1	14	0.19	0.6705

Appendix 2
Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 60 minutes

---------- TIME=60 minutes ----------

The Mixed Procedure

Least Squares Means

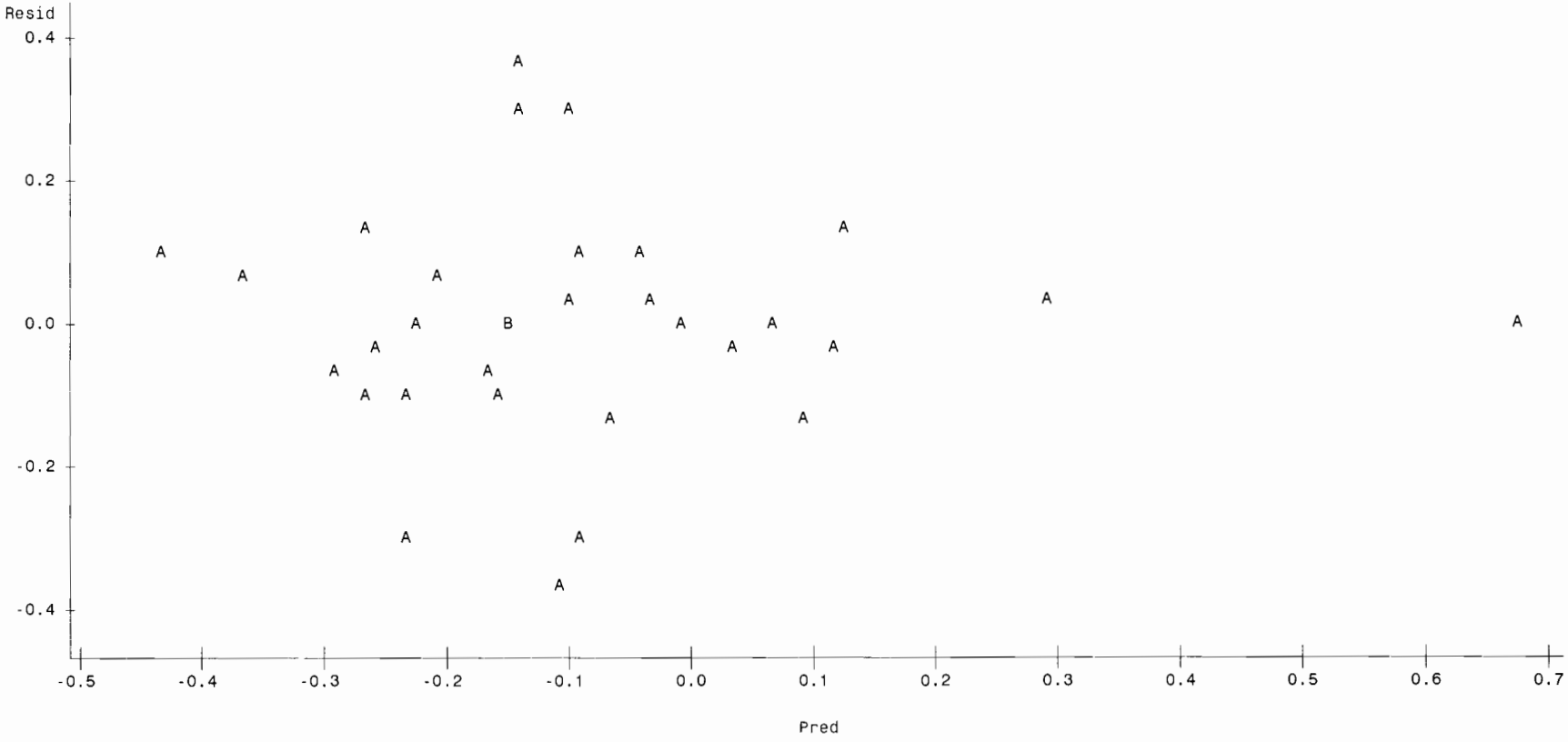
Effect	TREAT	Estimate	Standard Error	DF	t Value	Pr > |t|	Alpha	Lower	Upper
TREAT	Drug	-0.07296	0.05815	14	-1.25	0.2301	0.05	-0.1977	0.05176
TREAT	Placebo	-0.1087	0.05815	14	-1.87	0.0825	0.05	-0.2334	0.01598

Differences of Least Squares Means

Effect	TREAT	TREAT	Estimate	Standard Error	DF	t Value	Pr > |t|	Alpha	Lower	Upper
TREAT	Drug	Placebo	0.03578	0.08234	14	0.43	0.6705	0.05	-0.1408	0.2124

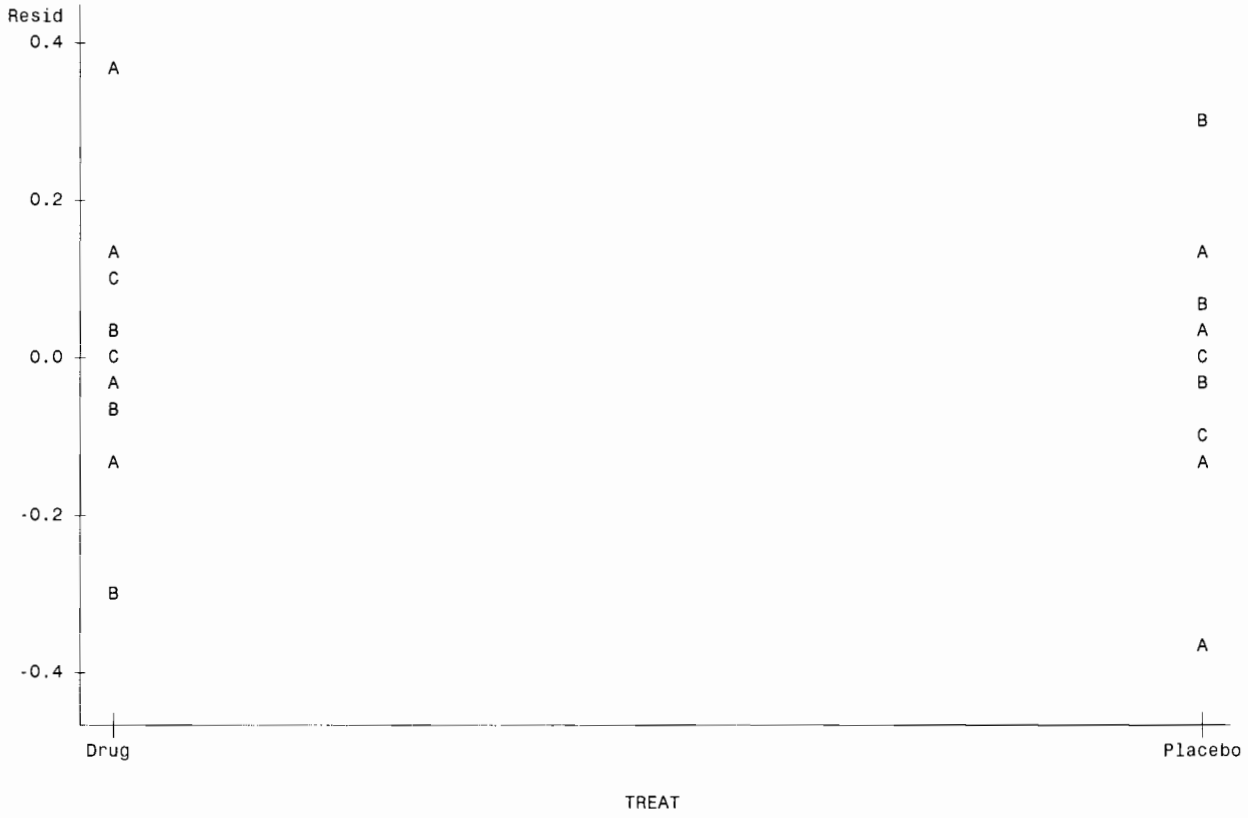
Appendix 2
Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 60 minutes

Plot of Resid*Pred. Legend: A = 1 obs, B = 2 obs, etc.



Appendix 2
Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 60 minutes

Plot of Resid*TREAT. Legend: A = 1 obs, B = 2 obs, etc.



Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 60 minutes
Checking Residuals for Study 6 at The Minutes Specified

---------- TREAT=Drug ----------

The UNIVARIATE Procedure
Variable: Resid

Moments

N	16	Sum Weights	16
Mean	0	Sum Observations	0
Std Deviation	0.15868156	Variance	0.02517984
Skewness	-0.0744457	Kurtosis	1.36012507
Uncorrected SS	0.37769757	Corrected SS	0.37769757
Coeff Variation	.	Std Error Mean	0.03967039

Basic Statistical Measures

Location		Variability	
Mean	0.000000	Std Deviation	0.15868
Median	0.010921	Variance	0.02518
Mode	.	Range	0.65388
		Interquartile Range	0.15538

Tests for Location: Mu0=0

Test	-Statistic-		-----p Value------	
Student's t	t	0	Pr > |t|	1.0000
Sign	M	1	Pr >= |M|	0.8036
Signed Rank	S	4	Pr >= |S|	0.8603

Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 60 minutes
Checking Residuals for Study 6 at The Minutes Specified

---------- TREAT=Drug ----------

The UNIVARIATE Procedure
Variable: Resid

Tests for Normality

Test	--Statistic---		-----p Value------	
Shapiro-Wilk	W	0.931035	Pr < W	0.2532
Kolmogorov-Smirnov	D	0.171958	Pr > D	>0.1500
Cramer-von Mises	W-Sq	0.075338	Pr > W-Sq	0.2283
Anderson-Darling	A-Sq	0.508909	Pr > A-Sq	0.1761

Quantiles (Definition 5)

Quantile	Estimate
100% Max	0.3563760
99%	0.3563760
95%	0.3563760
90%	0.1228083
75% Q3	0.0997197
50% Median	0.0109214
25% Q1	-0.0556636
10%	-0.2930907
5%	-0.2975080
1%	-0.2975080
0% Min	-0.2975080

Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 60 minutes
Checking Residuals for Study 6 at The Minutes Specified

---------- TREAT=Drug ----------

The UNIVARIATE Procedure
Variable: Resid

Extreme Observations

----------Lowest----------			----------Highest----------		
Value	PATIENT	Obs	Value	PATIENT	Obs
-0.2975080	6044	14	0.0979898	6040	12
-0.2930907	6017	7	0.1014496	6034	11
-0.1347848	6031	10	0.1063900	6003	2
-0.0571107	6010	5	0.1228083	6023	8
-0.0542166	6041	13	0.3563760	6046	15

```
Stem Leaf                     #             Boxplot                                  Normal Probability Plot
   3 6                        1                0                  0.35+                                          *+++++++
   2                                                                  |                                    ++++++
   1 0012                     4             +-----+                   |                              +*+*++*
   0 1235                     4             *--+--*                   |                       *+**+*+*
  -0 6541                     4             +-----+                   |                 * *+*+*+
  -1 3                        1                |                      |             ++*+++
  -2 9                        1                0                      |       *+++++*
  -3 0                        1                0                 -0.35++++++++
     ----+----+----+----+                                                +----+----+----+----+----+----+----+----+----+----+
 Multiply Stem.Leaf by 10**-1                                                -2        -1         0        +1        +2
```

Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 60 minutes
Checking Residuals for Study 6 at The Minutes Specified

---------- TREAT=Placebo ----------

The UNIVARIATE Procedure
Variable: Resid

Moments

N	16	Sum Weights	16
Mean	0	Sum Observations	0
Std Deviation	0.15868156	Variance	0.02517984
Skewness	0.07444573	Kurtosis	1.36012507
Uncorrected SS	0.37769757	Corrected SS	0.37769757
Coeff Variation	.	Std Error Mean	0.03967039

Basic Statistical Measures

Location		Variability	
Mean	0.00000	Std Deviation	0.15868
Median	-0.01092	Variance	0.02518
Mode	.	Range	0.65388
		Interquartile Range	0.15538

Tests for Location: Mu0=0

Test	-Statistic-		-----p Value------	
Student's t	t	0	Pr > |t|	1.0000
Sign	M	-1	Pr >= |M|	0.8036
Signed Rank	S	-4	Pr >= |S|	0.8603

Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 60 minutes
Checking Residuals for Study 6 at The Minutes Specified

---------- TREAT=Placebo ----------

The UNIVARIATE Procedure
Variable: Resid

Tests for Normality

Test	--Statistic---		-----p Value------	
Shapiro-Wilk	W	0.931035	Pr < W	0.2532
Kolmogorov-Smirnov	D	0.171958	Pr > D	>0.1500
Cramer-von Mises	W-Sq	0.075338	Pr > W-Sq	0.2283
Anderson-Darling	A-Sq	0.508909	Pr > A-Sq	0.1761

Quantiles (Definition 5)

Quantile	Estimate
100% Max	0.2975080
99%	0.2975080
95%	0.2975080
90%	0.2930907
75% Q3	0.0556636
50% Median	-0.0109214
25% Q1	-0.0997197
10%	-0.1228083
5%	-0.3563760
1%	-0.3563760
0% Min	-0.3563760

Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 60 minutes
Checking Residuals for Study 6 at The Minutes Specified

---------- TREAT=Placebo ----------

The UNIVARIATE Procedure
Variable: Resid

Extreme Observations

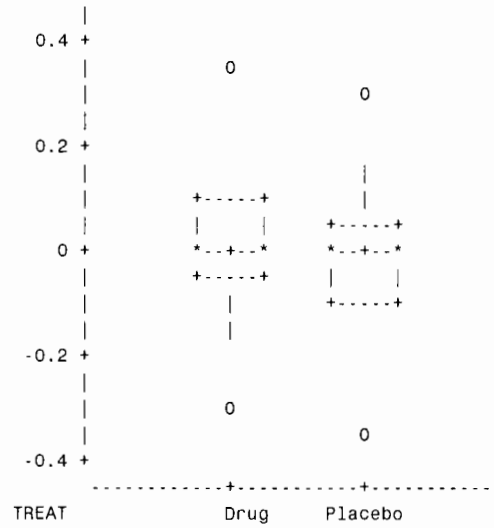
----------Lowest----------			----------Highest----------		
Value	PATIENT	Obs	Value	PATIENT	Obs
-0.3563760	6046	15	0.0542166	6041	13
-0.1228083	6023	8	0.0571107	6010	5
-0.1063900	6003	2	0.1347848	6031	10
-0.1014496	6034	11	0.2930907	6017	7
-0.0979898	6040	12	0.2975080	6044	14

```
Stem Leaf                     #             Boxplot                                  Normal Probability Plot
   3 0                        1                0                  0.35+                                                +++++++
   2 9                        1                0                      |                                        *++++*
   1 3                        1                |                      |                                  +++*++
   0 1456                     4             +--+--+                   |                          ++*+*+* *
  -0 5321                     4             *-----*                   |                     *+*+** *
  -1 2100                     4             +-----+                   |              *++*+*+
  -2                                                                  |        ++++++
  -3 6                        1                0                 -0.35++++++++*
     ----+----+----+----+                                                +----+----+----+----+----+----+----+----+----+----+
 Multiply Stem.Leaf by 10**-1                                                -2        -1         0        +1        +2
```

Appendix 2
Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 60 minutes
Checking Residuals for Study 6 at The Minutes Specified

The UNIVARIATE Procedure
Variable: Resid

Schematic Plots



Appendix 2
Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 90 minutes

---------- TIME=90 minutes ----------

The Mixed Procedure

Model Information

Data Set	WORK.ALL
Dependent Variable	LNCHANGE
Covariance Structure	Diagonal
Estimation Method	REML
Residual Variance Method	Profile
Fixed Effects SE Method	Model-Based
Degrees of Freedom Method	Residual

Class Level Information

Class	Levels	Values
TREAT	2	Drug Placebo
PATIENT	16	6001 6003 6005 6008 6010 6013 6017 6023 6026 6031 6034 6040 6041 6044 6046 6048

Dimensions

Covariance Parameters	1
Columns in X	20
Columns in Z	0
Subjects	1
Max Obs Per Subject	32
Observations Used	32
Observations Not Used	0
Total Observations	32

Appendix 2
Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 90 minutes

---------- TIME=90 minutes ----------

The Mixed Procedure

Covariance Parameter
Estimates

Cov Parm	Estimate
Residual	0.04018

Fit Statistics

-2 Res Log Likelihood	14.7
AIC (smaller is better)	16.7
AICC (smaller is better)	17.0
BIC (smaller is better)	17.3

Type 3 Tests of Fixed Effects

Effect	Num DF	Den DF	F Value	Pr > F
BASELINE	1	14	9.58	0.0079
PATIENT	15	14	2.26	0.0680
TREAT	1	14	0.11	0.7401

Appendix 2
Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 90 minutes

---------- TIME=90 minutes ----------

The Mixed Procedure

Least Squares Means

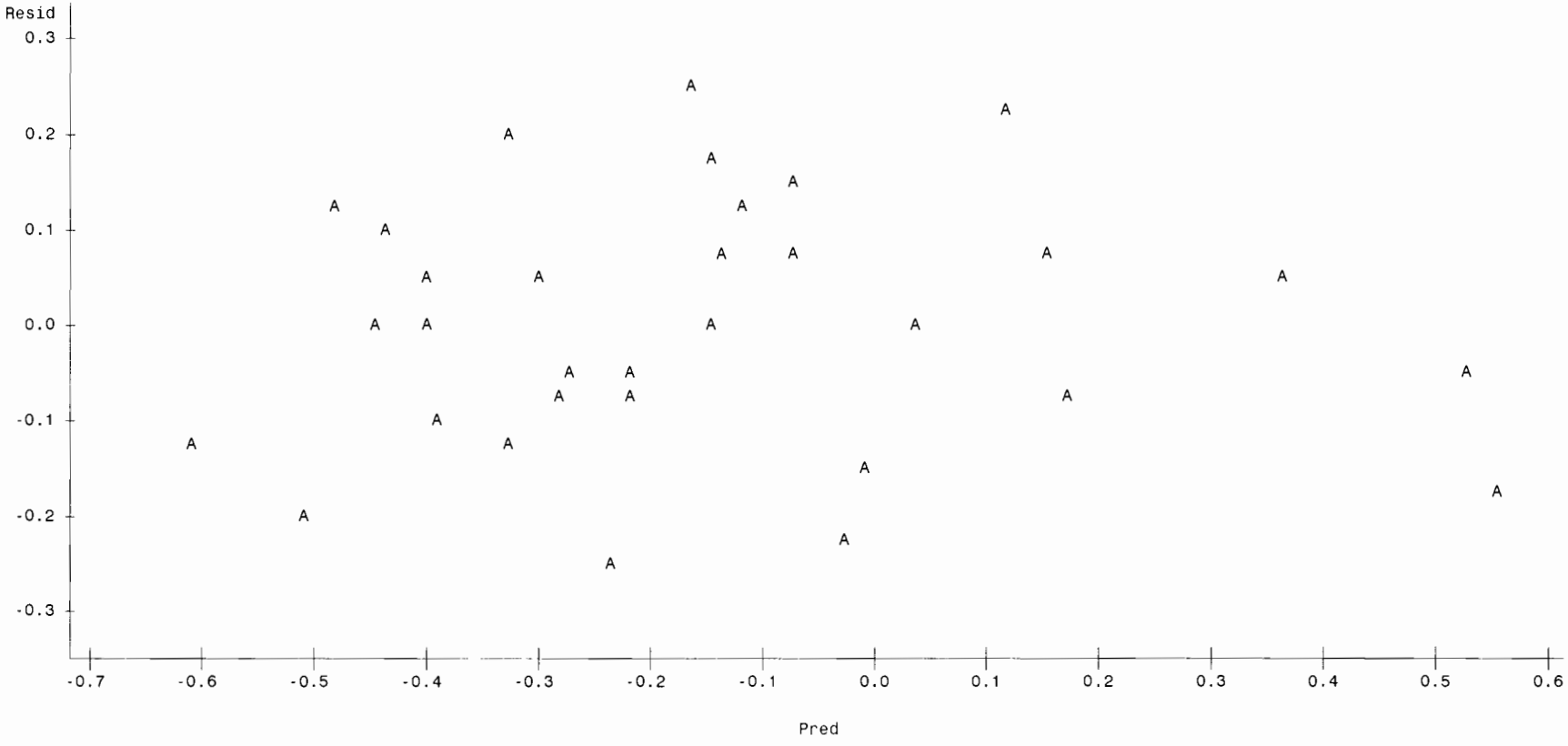
Effect	TREAT	Estimate	Standard Error	DF	t Value	Pr > |t|	Alpha	Lower	Upper
TREAT	Drug	-0.1387	0.05018	14	-2.76	0.0152	0.05	-0.2463	-0.03105
TREAT	Placebo	-0.1627	0.05018	14	-3.24	0.0059	0.05	-0.2703	-0.05509

Differences of Least Squares Means

Effect	TREAT	TREAT	Estimate	Standard Error	DF	t Value	Pr > |t|	Alpha	Lower	Upper
TREAT	Drug	Placebo	0.02404	0.07105	14	0.34	0.7401	0.05	-0.1284	0.1764

Appendix 2
Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 90 minutes

Plot of Resid*Pred. Legend: A = 1 obs, B = 2 obs, etc.



Appendix 2
Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 90 minutes

Plot of Resid*TREAT. Legend: A = 1 obs, B = 2 obs, etc.

Appendix 2
Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 90 minutes
Checking Residuals for Study 6 at The Minutes Specified

---------- TREAT=Drug ----------

The UNIVARIATE Procedure
Variable: Resid

Moments

N	16	Sum Weights	16
Mean	0	Sum Observations	0
Std Deviation	0.13693086	Variance	0.01875006
Skewness	0.10607353	Kurtosis	-0.4954361
Uncorrected SS	0.28125092	Corrected SS	0.28125092
Coeff Variation	.	Std Error Mean	0.03423272

Basic Statistical Measures

Location		Variability	
Mean	0.00000	Std Deviation	0.13693
Median	-0.02409	Variance	0.01875
Mode	.	Range	0.49655
		Interquartile Range	0.19128

Tests for Location: Mu0=0

Test	-Statistic-		-----p Value------	
Student's t	t	0	Pr > |t|	1.0000
Sign	M	-1	Pr >= |M|	0.8036
Signed Rank	S	-1	Pr >= |S|	0.9799

Appendix 2
Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 90 minutes
Checking Residuals for Study 6 at The Minutes Specified

---------- TREAT=Drug ----------

The UNIVARIATE Procedure
Variable: Resid

Tests for Normality

Test	--Statistic---		-----p Value------	
Shapiro-Wilk	W	0.976655	Pr < W	0.9315
Kolmogorov-Smirnov	D	0.119923	Pr > D	>0.1500
Cramer-von Mises	W-Sq	0.037931	Pr > W-Sq	>0.2500
Anderson-Darling	A-Sq	0.211706	Pr > A-Sq	>0.2500

Quantiles (Definition 5)

Quantile	Estimate
100% Max	0.2599844
99%	0.2599844
95%	0.2599844
90%	0.1689958
75% Q3	0.1175338
50% Median	-0.0240856
25% Q1	-0.0737441
10%	-0.2001107
5%	-0.2365620
1%	-0.2365620
0% Min	-0.2365620

Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 90 minutes
Checking Residuals for Study 6 at The Minutes Specified

---------- TREAT=Drug ----------

The UNIVARIATE Procedure
Variable: Resid

Extreme Observations

----------Lowest----------			----------Highest----------		
Value	PATIENT	Obs	Value	PATIENT	Obs
-0.2365620	6044	14	0.107147	6046	15
-0.2001107	6003	2	0.127920	6013	6
-0.1378417	6034	11	0.136667	6008	4
-0.0818007	6023	8	0.168996	6026	9
-0.0656874	6001	1	0.259984	6041	13

```
Stem Leaf                     #             Boxplot                                  Normal Probability Plot
   2 6                        1                |                  0.25+                                          +++*+++
   1 1347                     4             +-----+                    |                                 * *+*++*+
   0 07                       2             |  +  |                    |                          ++*+*+++
  -0 876541                   6             *-----*                    |                  *+*+*+** *
  -1 4                        1                |                       |            ++++*++
  -2 40                       2                |                 -0.25+    +++*+++ *
     ----+----+----+----+                                                +----+----+----+----+----+----+----+----+----+----+
 Multiply Stem.Leaf by 10**-1                                                -2        -1         0        +1        +2
```

Appendix 2
Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 90 minutes
Checking Residuals for Study 6 at The Minutes Specified

---------- TREAT=Placebo ----------

The UNIVARIATE Procedure
Variable: Resid

Moments

N	16	Sum Weights	16
Mean	0	Sum Observations	0
Std Deviation	0.13693086	Variance	0.01875006
Skewness	-0.1060735	Kurtosis	-0.4954361
Uncorrected SS	0.28125092	Corrected SS	0.28125092
Coeff Variation	.	Std Error Mean	0.03423272

Basic Statistical Measures

Location		Variability	
Mean	0.000000	Std Deviation	0.13693
Median	0.024086	Variance	0.01875
Mode	.	Range	0.49655
		Interquartile Range	0.19128

Tests for Location: Mu0=0

Test	-Statistic-		-----p Value------	
Student's t	t	0	Pr > |t|	1.0000
Sign	M	1	Pr >= |M|	0.8036
Signed Rank	S	1	Pr >= |S|	0.9799

Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 90 minutes
Checking Residuals for Study 6 at The Minutes Specified

---------- TREAT=Placebo ----------

The UNIVARIATE Procedure
Variable: Resid

Tests for Normality

Test	--Statistic---		-----p Value------	
Shapiro-Wilk	W	0.976655	Pr < W	0.9315
Kolmogorov-Smirnov	D	0.119923	Pr > D	>0.1500
Cramer-von Mises	W-Sq	0.037931	Pr > W-Sq	>0.2500
Anderson-Darling	A-Sq	0.211706	Pr > A-Sq	>0.2500

Quantiles (Definition 5)

Quantile	Estimate
100% Max	0.2365620
99%	0.2365620
95%	0.2365620
90%	0.2001107
75% Q3	0.0737441
50% Median	0.0240856
25% Q1	-0.1175338
10%	-0.1689958
5%	-0.2599844
1%	-0.2599844
0% Min	-0.2599844

Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 90 minutes
Checking Residuals for Study 6 at The Minutes Specified

---------- TREAT=Placebo ----------

The UNIVARIATE Procedure
Variable: Resid

Extreme Observations

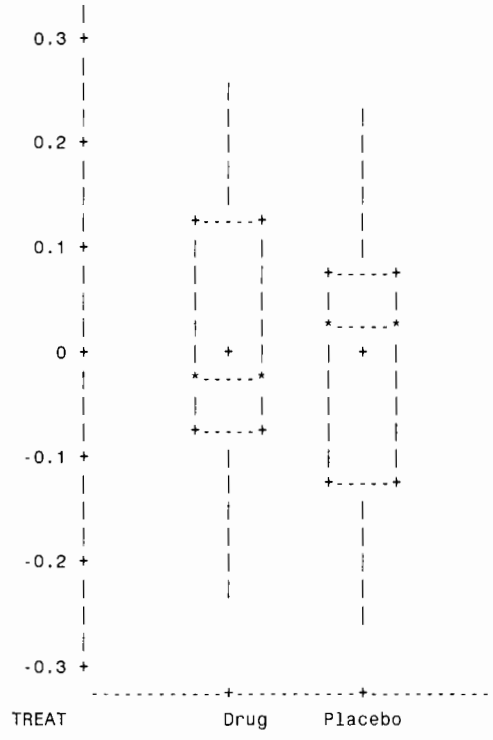
----------Lowest----------			----------Highest----------		
Value	PATIENT	Obs	Value	PATIENT	Obs
-0.259984	6041	13	0.0656874	6001	1
-0.168996	6026	9	0.0818007	6023	8
-0.136667	6008	4	0.1378417	6034	11
-0.127920	6013	6	0.2001107	6003	2
-0.107147	6046	15	0.2365620	6044	14

```
Stem Leaf                     #             Boxplot                                  Normal Probability Plot
   2 04                       2                |                   0.25+                                      * +++*+++
   1 4                        1                |                       |                                 ++*++++
   0 145678                   6             +--+--+                    |                        *+**+*+*+*
  -0 70                       2             |     |                    |                  +++*+*+
  -1 7431                     4             +-----+                    |            +*++*+* *
  -2 6                        1                |                  -0.25+    +++*+++
     ----+----+----+----+                                            +----+----+----+----+----+----+----+----+----+----+
 Multiply Stem.Leaf by 10**-1                                            -2        -1         0        +1        +2
```

Appendix 2
Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 90 minutes
Checking Residuals for Study 6 at The Minutes Specified

The UNIVARIATE Procedure
Variable: Resid

Schematic Plots



Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 120 minutes

---------- TIME=120 minutes ----------

The Mixed Procedure

Model Information

Data Set	WORK.ALL
Dependent Variable	LNCHANGE
Covariance Structure	Diagonal
Estimation Method	REML
Residual Variance Method	Profile
Fixed Effects SE Method	Model-Based
Degrees of Freedom Method	Residual

Class Level Information

Class	Levels	Values
TREAT	2	Drug Placebo
PATIENT	16	6001 6003 6005 6008 6010 6013 6017 6023 6026 6031 6034 6040 6041 6044 6046 6048

Dimensions

Covariance Parameters	1
Columns in X	20
Columns in Z	0
Subjects	1
Max Obs Per Subject	32
Observations Used	32
Observations Not Used	0
Total Observations	32

Appendix 2
Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 120 minutes

---------- TIME=120 minutes ----------

The Mixed Procedure

Covariance Parameter
Estimates

Cov Parm	Estimate
Residual	0.1288

Fit Statistics

-2 Res Log Likelihood	31.0
AIC (smaller is better)	33.0
AICC (smaller is better)	33.3
BIC (smaller is better)	33.6

Type 3 Tests of Fixed Effects

Effect	Num DF	Den DF	F Value	Pr > F
BASELINE	1	14	13.68	0.0024
PATIENT	15	14	1.75	0.1516
TREAT	1	14	1.57	0.2304

Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 120 minutes

---------- TIME=120 minutes ----------

The Mixed Procedure

Least Squares Means

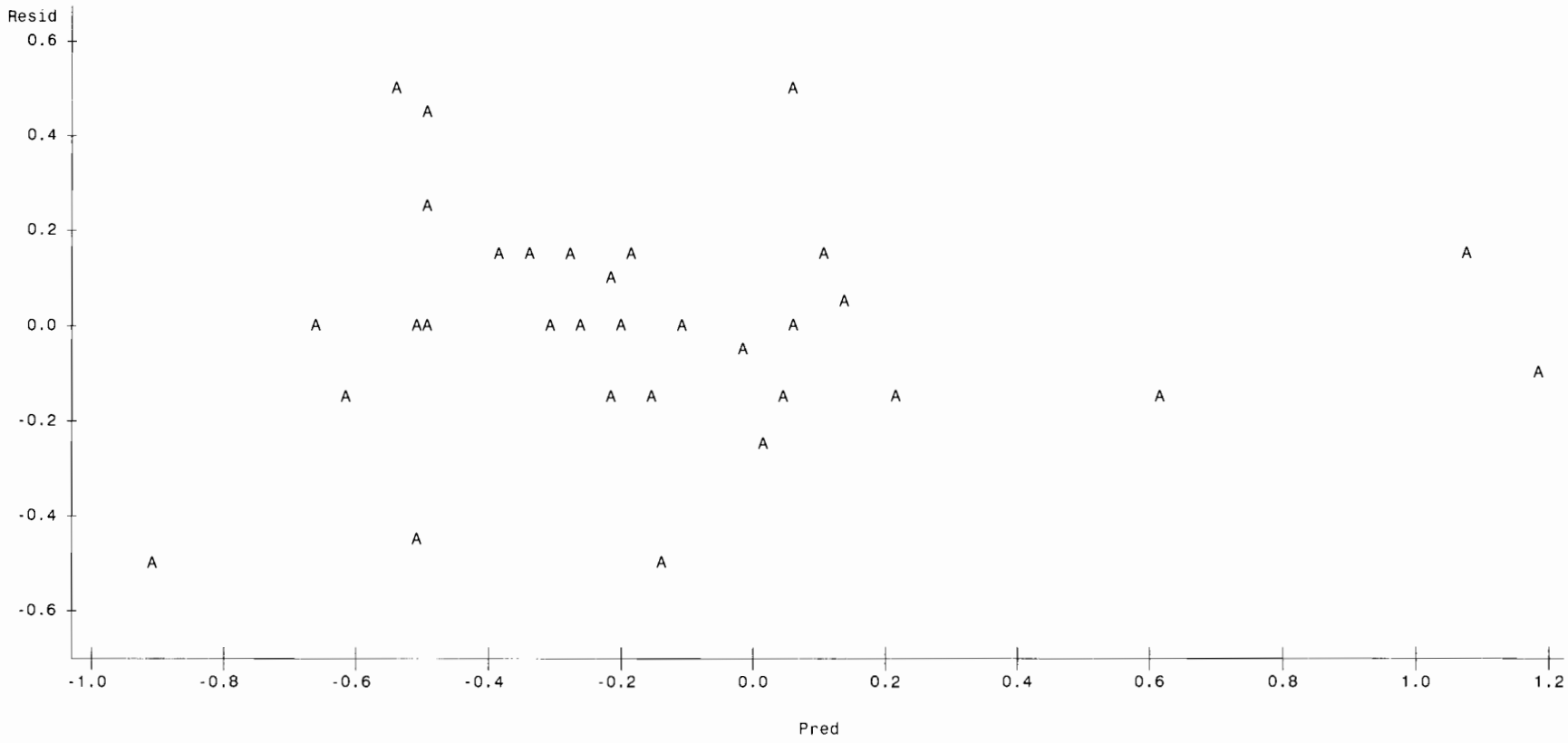
Effect	TREAT	Estimate	Standard Error	DF	t Value	Pr > |t|	Alpha	Lower	Upper
TREAT	Drug	-0.05939	0.08983	14	-0.66	0.5193	0.05	-0.2520	0.1333
TREAT	Placebo	-0.2189	0.08983	14	-2.44	0.0288	0.05	-0.4116	-0.02624

Differences of Least Squares Means

Effect	TREAT	TREAT	Estimate	Standard Error	DF	t Value	Pr > |t|	Alpha	Lower	Upper
TREAT	Drug	Placebo	0.1595	0.1272	14	1.25	0.2304	0.05	-0.1133	0.4323

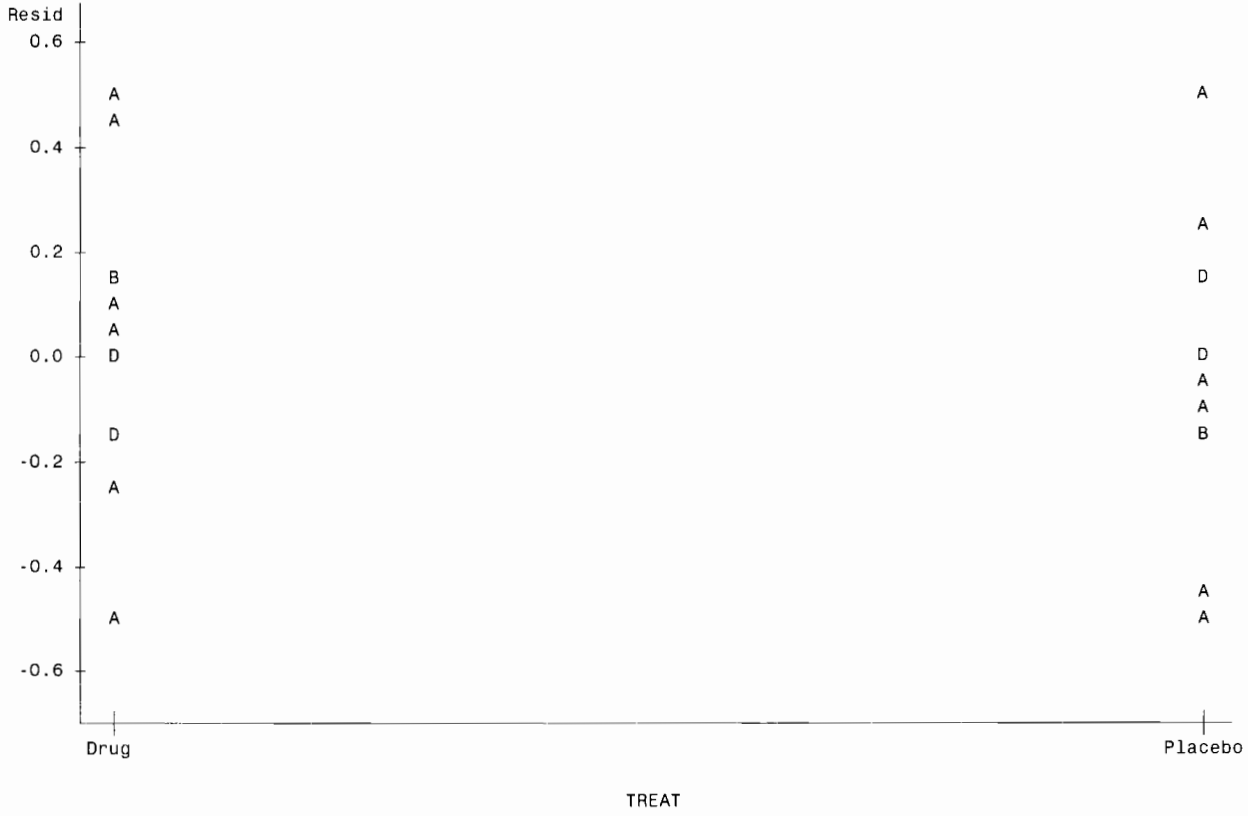
Appendix 2
Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 120 minutes

Plot of Resid*Pred. Legend: A = 1 obs, B = 2 obs, etc.



Appendix 2
Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 120 minutes

Plot of Resid*TREAT. Legend: A = 1 obs, B = 2 obs, etc.



Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 120 minutes
Checking Residuals for Study 6 at The Minutes Specified

---------- TREAT=Drug ----------

The UNIVARIATE Procedure
Variable: Resid

Moments

N	16	Sum Weights	16
Mean	0	Sum Observations	0
Std Deviation	0.24513117	Variance	0.06008929
Skewness	0.42205389	Kurtosis	0.75842174
Uncorrected SS	0.90133939	Corrected SS	0.90133939
Coeff Variation	.	Std Error Mean	0.06128279

Basic Statistical Measures

Location		Variability	
Mean	0.00000	Std Deviation	0.24513
Median	-0.00433	Variance	0.06009
Mode	.	Range	0.96374
		Interquartile Range	0.29321

Tests for Location: Mu0=0

Test	-Statistic-		-----p Value------	
Student's t	t	0	Pr > |t|	1.0000
Sign	M	0	Pr >= |M|	1.0000
Signed Rank	S	-9	Pr >= |S|	0.6685

Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 120 minutes
Checking Residuals for Study 6 at The Minutes Specified

---------- TREAT=Drug ----------

The UNIVARIATE Procedure
Variable: Resid

Tests for Normality

Test	--Statistic---		-----p Value------	
Shapiro-Wilk	W	0.937753	Pr < W	0.3224
Kolmogorov-Smirnov	D	0.140973	Pr > D	>0.1500
Cramer-von Mises	W-Sq	0.06917	Pr > W-Sq	>0.2500
Anderson-Darling	A-Sq	0.471477	Pr > A-Sq	0.2195

Quantiles (Definition 5)

Quantile	Estimate
100% Max	0.48357186
99%	0.48357186
95%	0.48357186
90%	0.46638073
75% Q3	0.12595562
50% Median	-0.00433421
25% Q1	-0.16725735
10%	-0.22521284
5%	-0.48016339
1%	-0.48016339
0% Min	-0.48016339

Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 120 minutes
Checking Residuals for Study 6 at The Minutes Specified

---------- TREAT=Drug ----------

The UNIVARIATE Procedure
Variable: Resid

Extreme Observations

----------Lowest----------			----------Highest----------		
Value	PATIENT	Obs	Value	PATIENT	Obs
-0.480163	6044	14	0.115262	6026	9
-0.225213	6031	10	0.136649	6005	3
-0.173877	6010	5	0.153217	6041	13
-0.171130	6040	12	0.466381	6046	15
-0.163385	6034	11	0.483572	6013	6

```
Stem Leaf                     #             Boxplot                                  Normal Probability Plot
   4 78                       2                |                    0.5+                                        *   +*++++++
   2                                           |                       |                                  ++++++++
   0 113245                   6             +--+--+                    |                         +**+*+*+* *
  -0 776622                   6             *-----*                    |                * *+*+*+**
  -2 3                        1                |                       |         +++*++++
  -4 8                        1                |                   -0.5+ +++++++*+
     ----+----+----+----+                                                +----+----+----+----+----+----+----+----+----+----+
 Multiply Stem.Leaf by 10**-1                                                -2        -1         0        +1        +2
```

Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 120 minutes
Checking Residuals for Study 6 at The Minutes Specified

---------- TREAT=Placebo ----------

The UNIVARIATE Procedure
Variable: Resid

Moments

N	16	Sum Weights	16
Mean	0	Sum Observations	0
Std Deviation	0.24513117	Variance	0.06008929
Skewness	-0.4220539	Kurtosis	0.75842174
Uncorrected SS	0.90133939	Corrected SS	0.90133939
Coeff Variation	.	Std Error Mean	0.06128279

Basic Statistical Measures

Location		Variability	
Mean	0.000000	Std Deviation	0.24513
Median	0.004334	Variance	0.06009
Mode	.	Range	0.96374
		Interquartile Range	0.29321

Tests for Location: Mu0=0

Test	-Statistic-		-----p Value------	
Student's t	t	0	Pr > |t|	1.0000
Sign	M	0	Pr >= |M|	1.0000
Signed Rank	S	9	Pr >= |S|	0.6685

Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 120 minutes
Checking Residuals for Study 6 at The Minutes Specified

---------- TREAT=Placebo ----------

The UNIVARIATE Procedure
Variable: Resid

Tests for Normality

Test	--Statistic---		-----p Value------	
Shapiro-Wilk	W	0.937753	Pr < W	0.3224
Kolmogorov-Smirnov	D	0.140973	Pr > D	>0.1500
Cramer-von Mises	W-Sq	0.06917	Pr > W-Sq	>0.2500
Anderson-Darling	A-Sq	0.471477	Pr > A-Sq	0.2195

Quantiles (Definition 5)

Quantile	Estimate
100% Max	0.48016339
99%	0.48016339
95%	0.48016339
90%	0.22521284
75% Q3	0.16725735
50% Median	0.00433421
25% Q1	-0.12595562
10%	-0.46638073
5%	-0.48357186
1%	-0.48357186
0% Min	-0.48357186

Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 120 minutes
Checking Residuals for Study 6 at The Minutes Specified

---------- TREAT=Placebo ----------

The UNIVARIATE Procedure
Variable: Resid

Extreme Observations

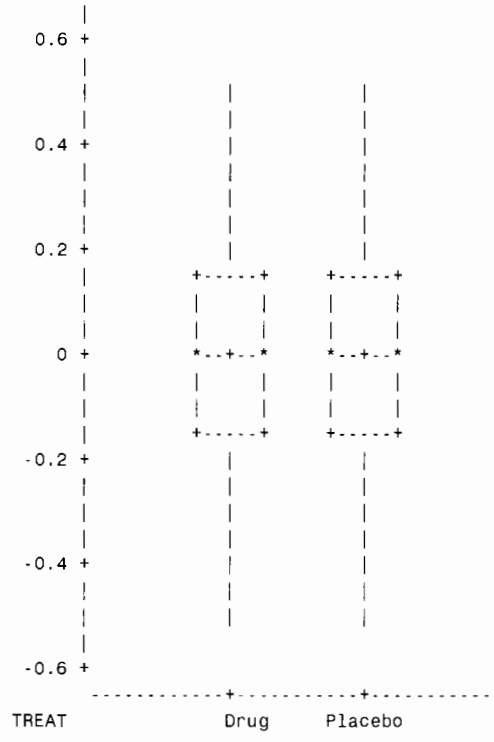
----------Lowest----------			----------Highest----------		
Value	PATIENT	Obs	Value	PATIENT	Obs
-0.483572	6013	6	0.163385	6034	11
-0.466381	6046	15	0.171130	6040	12
-0.153217	6041	13	0.173877	6010	5
-0.136649	6005	3	0.225213	6031	10
-0.115262	6026	9	0.480163	6044	14

```
Stem Leaf                     #             Boxplot                                  Normal Probability Plot
   4 8                        1                |                    0.5+                                          +*++++++
   2 3                        1                |                       |                                  ++++*+++
   0 226677                   6             +--+--+                    |                          +**+*+*+* *
  -0 542311                   6             +-----+                    |                 * *+*+*+**
  -2                                           |                       |          ++++++++
  -4 B7                       2                |                   -0.5+ +++++++*+   *
     ----+----+----+----+                                                +----+----+----+----+----+----+----+----+----+----+
 Multiply Stem.Leaf by 10**-1                                                -2        -1         0        +1        +2
```

Appendix 2
Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 120 minutes
Checking Residuals for Study 6 at The Minutes Specified

The UNIVARIATE Procedure
Variable: Resid

Schematic Plots



Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 180 minutes

---------- TIME=180 minutes ----------

The Mixed Procedure

Model Information

Data Set	WORK.ALL
Dependent Variable	LNCHANGE
Covariance Structure	Diagonal
Estimation Method	REML
Residual Variance Method	Profile
Fixed Effects SE Method	Model-Based
Degrees of Freedom Method	Residual

Class Level Information

Class	Levels	Values
TREAT	2	Drug Placebo
PATIENT	16	6001 6003 6005 6008 6010 6013 6017 6023 6026 6031 6034 6040 6041 6044 6046 6048

Dimensions

Covariance Parameters	1
Columns in X	20
Columns in Z	0
Subjects	1
Max Obs Per Subject	32
Observations Used	32
Observations Not Used	0
Total Observations	32

Appendix 2
Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 180 minutes

---------- TIME=180 minutes ----------

The Mixed Procedure

Covariance Parameter
Estimates

Cov Parm	Estimate
Residual	0.08291

Fit Statistics

-2 Res Log Likelihood	24.8
AIC (smaller is better)	26.8
AICC (smaller is better)	27.2
BIC (smaller is better)	27.5

Type 3 Tests of Fixed Effects

Effect	Num DF	Den DF	F Value	Pr > F
BASELINE	1	14	22.39	0.0003
PATIENT	15	14	3.67	0.0098
TREAT	1	14	0.91	0.3570

Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 180 minutes

---------- TIME=180 minutes ----------

The Mixed Procedure

Least Squares Means

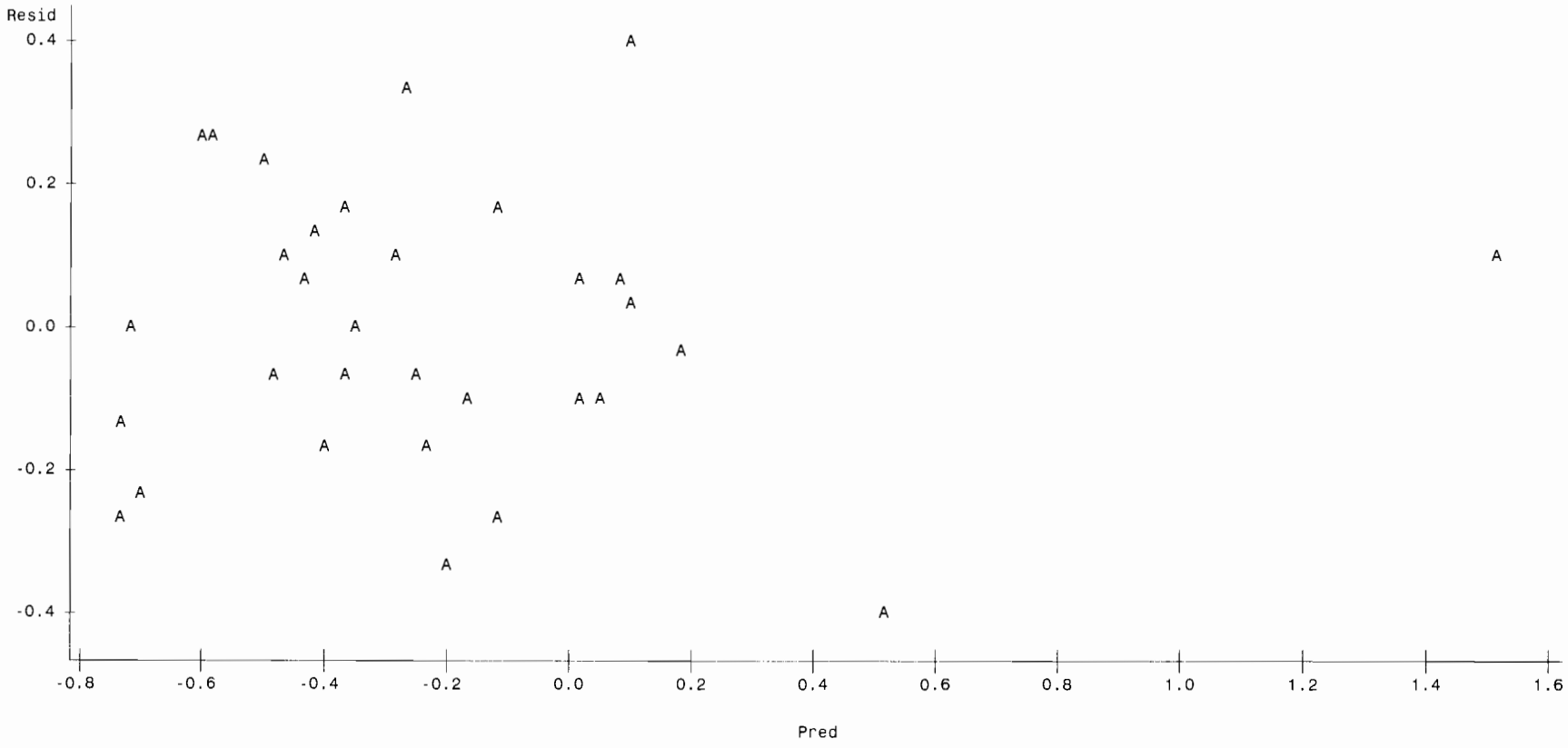
Effect	TREAT	Estimate	Standard Error	DF	t Value	Pr > |t|	Alpha	Lower	Upper
TREAT	Drug	-0.1678	0.07208	14	-2.33	0.0354	0.05	-0.3224	-0.01319
TREAT	Placebo	-0.2650	0.07208	14	-3.68	0.0025	0.05	-0.4196	-0.1104

Differences of Least Squares Means

Effect	TREAT	TREAT	Estimate	Standard Error	DF	t Value	Pr > |t|	Alpha	Lower	Upper
TREAT	Drug	Placebo	0.09722	0.1021	14	0.95	0.3570	0.05	-0.1217	0.3161

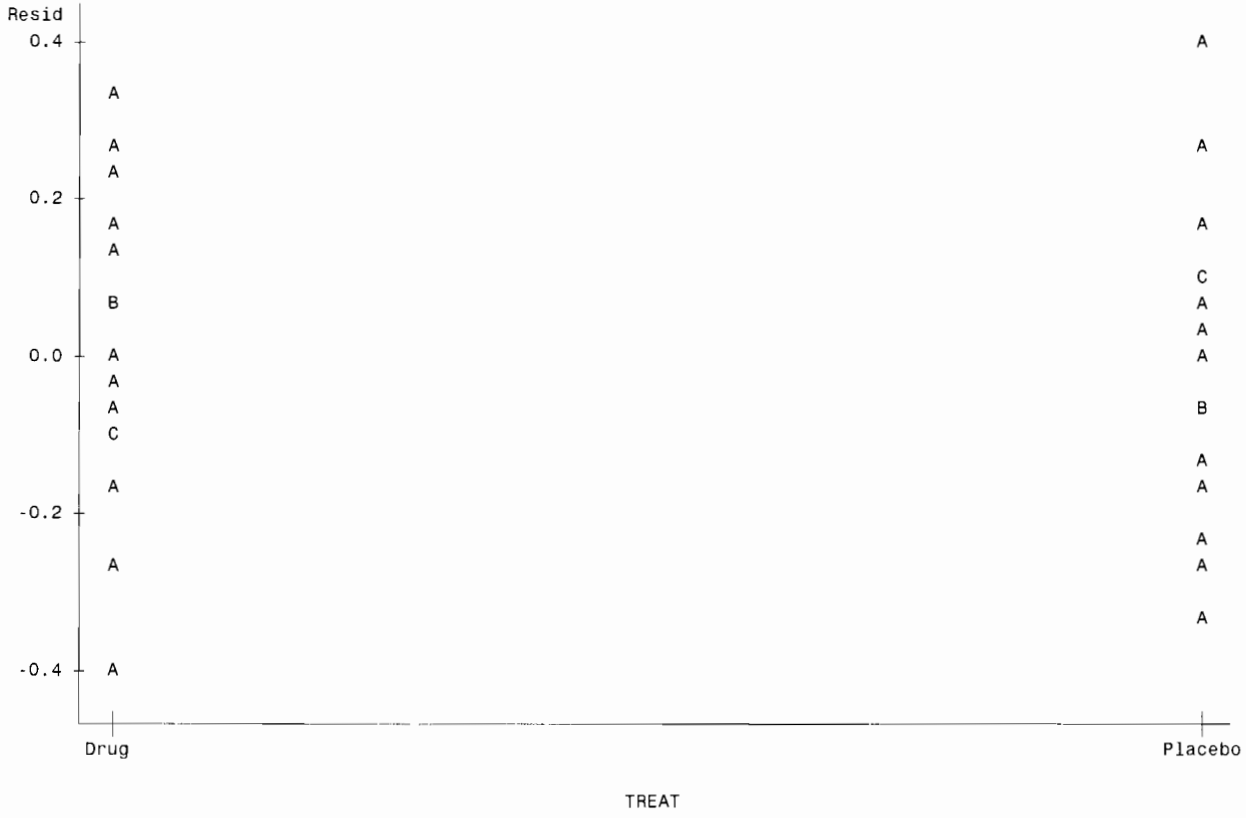
Appendix 2
Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 180 minutes

Plot of Resid*Pred. Legend: A = 1 obs, B = 2 obs, etc.



Appendix 2
Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 180 minutes

Plot of Resid*TREAT. Legend: A = 1 obs, B = 2 obs, etc.



Appendix 2
Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 180 minutes
Checking Residuals for Study 6 at The Minutes Specified

---------- TREAT=Drug ----------

The UNIVARIATE Procedure
Variable: Resid

Moments

N	16	Sum Weights	16
Mean	0	Sum Observations	0
Std Deviation	0.19670441	Variance	0.03869263
Skewness	-0.1473187	Kurtosis	-0.344228
Uncorrected SS	0.58038939	Corrected SS	0.58038939
Coeff Variation	.	Std Error Mean	0.0491761

Basic Statistical Measures

Location		Variability	
Mean	0.00000	Std Deviation	0.19670
Median	-0.02199	Variance	0.03869
Mode	.	Range	0.72050
		Interquartile Range	0.25453

Tests for Location: Mu0=0

Test	-Statistic-		-----p Value------	
Student's t	t	0	Pr > |t|	1.0000
Sign	M	-1	Pr >= |M|	0.8036
Signed Rank	S	-1	Pr >= |S|	0.9799

Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 180 minutes
Checking Residuals for Study 6 at The Minutes Specified

---------- TREAT=Drug ----------

The UNIVARIATE Procedure
Variable: Resid

Tests for Normality

Test	--Statistic---		-----p Value------	
Shapiro-Wilk	W	0.981662	Pr < W	0.9754
Kolmogorov-Smirnov	D	0.102495	Pr > D	>0.1500
Cramer-von Mises	W-Sq	0.023012	Pr > W-Sq	>0.2500
Anderson-Darling	A-Sq	0.154389	Pr > A-Sq	>0.2500

Quantiles (Definition 5)

Quantile	Estimate
100% Max	0.3286654
99%	0.3286654
95%	0.3286654
90%	0.2590689
75% Q3	0.1459728
50% Median	-0.0219905
25% Q1	-0.1085532
10%	-0.2660993
5%	-0.3918360
1%	-0.3918360
0% Min	-0.3918360

Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 180 minutes
Checking Residuals for Study 6 at The Minutes Specified

---------- TREAT=Drug ----------

The UNIVARIATE Procedure
Variable: Resid

Extreme Observations

----------Lowest----------			----------Highest----------		
Value	PATIENT	Obs	Value	PATIENT	Obs
-0.391836	6005	3	0.140989	6013	6
-0.266099	6031	10	0.150957	6001	1
-0.181092	6044	14	0.241458	6041	13
-0.108856	6026	9	0.259069	6017	7
-0.108250	6048	16	0.328665	6046	15

```
Stem Leaf                     #             Boxplot                                  Normal Probability Plot
   3 3                        1                |                   0.35+                                          ++*++
   2 46                       2                |                       |                                   *++*++
   1 45                       2             +-----+                    |                               *+*++
   0 67                       2             |  +  |                    |                         ++*+*+
  -0 9740                     4             *-----*                    |                     +*+** *
  -1 811                      3             +-----+                    |               *+*+*
  -2 7                        1                |                       |          ++*++
  -3 9                        1                |                  -0.35+     ++*++
     ----+----+----+----+                                                +----+----+----+----+----+----+----+----+----+----+
 Multiply Stem.Leaf by 10**-1                                                -2        -1         0        +1        +2
```

Appendix 2
Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 180 minutes
Checking Residuals for Study 6 at The Minutes Specified

---------- TREAT=Placebo ----------

The UNIVARIATE Procedure
Variable: Resid

Moments

N	16	Sum Weights	16
Mean	0	Sum Observations	0
Std Deviation	0.19670441	Variance	0.03869263
Skewness	0.14731867	Kurtosis	-0.344228
Uncorrected SS	0.58038939	Corrected SS	0.58038939
Coeff Variation	.	Std Error Mean	0.0491761

Basic Statistical Measures

Location		Variability	
Mean	0.000000	Std Deviation	0.19670
Median	0.021991	Variance	0.03869
Mode	.	Range	0.72050
		Interquartile Range	0.25453

Tests for Location: Mu0=0

Test	-Statistic-		-----p Value------	
Student's t	t	0	Pr > |t|	1.0000
Sign	M	1	Pr >= |M|	0.8036
Signed Rank	S	1	Pr >= |S|	0.9799

Appendix 2
Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 180 minutes
Checking Residuals for Study 6 at The Minutes Specified

---------- TREAT=Placebo ----------

The UNIVARIATE Procedure
Variable: Resid

Tests for Normality

Test	--Statistic---		-----p Value------	
Shapiro-Wilk	W	0.981662	Pr < W	0.9754
Kolmogorov-Smirnov	D	0.102495	Pr > D	>0.1500
Cramer-von Mises	W-Sq	0.023012	Pr > W-Sq	>0.2500
Anderson-Darling	A-Sq	0.154389	Pr > A-Sq	>0.2500

Quantiles (Definition 5)

Quantile	Estimate
100% Max	0.3918360
99%	0.3918360
95%	0.3918360
90%	0.2660993
75% Q3	0.1085532
50% Median	0.0219905
25% Q1	-0.1459728
10%	-0.2590689
5%	-0.3286654
1%	-0.3286654
0% Min	-0.3286654

Appendix 2
Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 180 minutes
Checking Residuals for Study 6 at The Minutes Specified

---------- TREAT=Placebo ----------

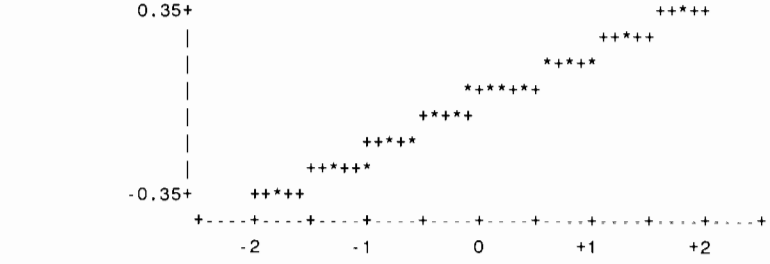
The UNIVARIATE Procedure
Variable: Resid

Extreme Observations

----------Lowest----------			----------Highest---------		
Value	PATIENT	Obs	Value	PATIENT	Obs
-0.328665	6046	15	0.108250	6048	16
-0.259069	6017	7	0.108856	6026	9
-0.241458	6041	13	0.181092	6044	14
-0.150957	6001	1	0.266099	6031	10
-0.140989	6013	6	0.391836	6005	3

```
Stem Leaf                     #             Boxplot
   3 9                        1                |
   2 7                        1                |
   1 118                      3             +-----+
   0 0479                     4             *--+--*
  -0 76                       2             |     |
  -1 54                       2             +-----+
  -2 64                       2                |
  -3 3                        1                |
     ----+----+----+----+
 Multiply Stem.Leaf by 10**-1
```

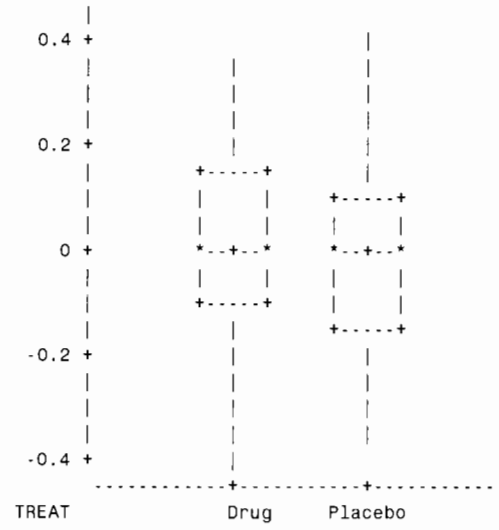
Normal Probability Plot



Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 180 minutes
Checking Residuals for Study 6 at The Minutes Specified

The UNIVARIATE Procedure
Variable: Resid

Schematic Plots



Appendix 2
Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 240 minutes

---------- TIME=240 minutes ----------

The Mixed Procedure

Model Information

Data Set	WORK.ALL
Dependent Variable	LNCHANGE
Covariance Structure	Diagonal
Estimation Method	REML
Residual Variance Method	Profile
Fixed Effects SE Method	Model-Based
Degrees of Freedom Method	Residual

Class Level Information

Class	Levels	Values
TREAT	2	Drug Placebo
PATIENT	16	6001 6003 6005 6008 6010 6013 6017 6023 6026 6031 6034 6040 6041 6044 6046 6048

Dimensions

Covariance Parameters	1
Columns in X	20
Columns in Z	0
Subjects	1
Max Obs Per Subject	32
Observations Used	32
Observations Not Used	0
Total Observations	32

Appendix 2
Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 240 minutes

---------- TIME=240 minutes ----------

The Mixed Procedure

Covariance Parameter
Estimates

Cov Parm	Estimate
Residual	0.09963

Fit Statistics

-2 Res Log Likelihood	27.4
AIC (smaller is better)	29.4
AICC (smaller is better)	29.7
BIC (smaller is better)	30.0

Type 3 Tests of Fixed Effects

Effect	Num DF	Den DF	F Value	Pr > F
BASELINE	1	14	24.60	0.0002
PATIENT	15	14	4.34	0.0045
TREAT	1	14	0.69	0.4208

Appendix 2
Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / 8aseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 240 minutes

---------- TIME=240 minutes ----------

The Mixed Procedure

Least Squares Means

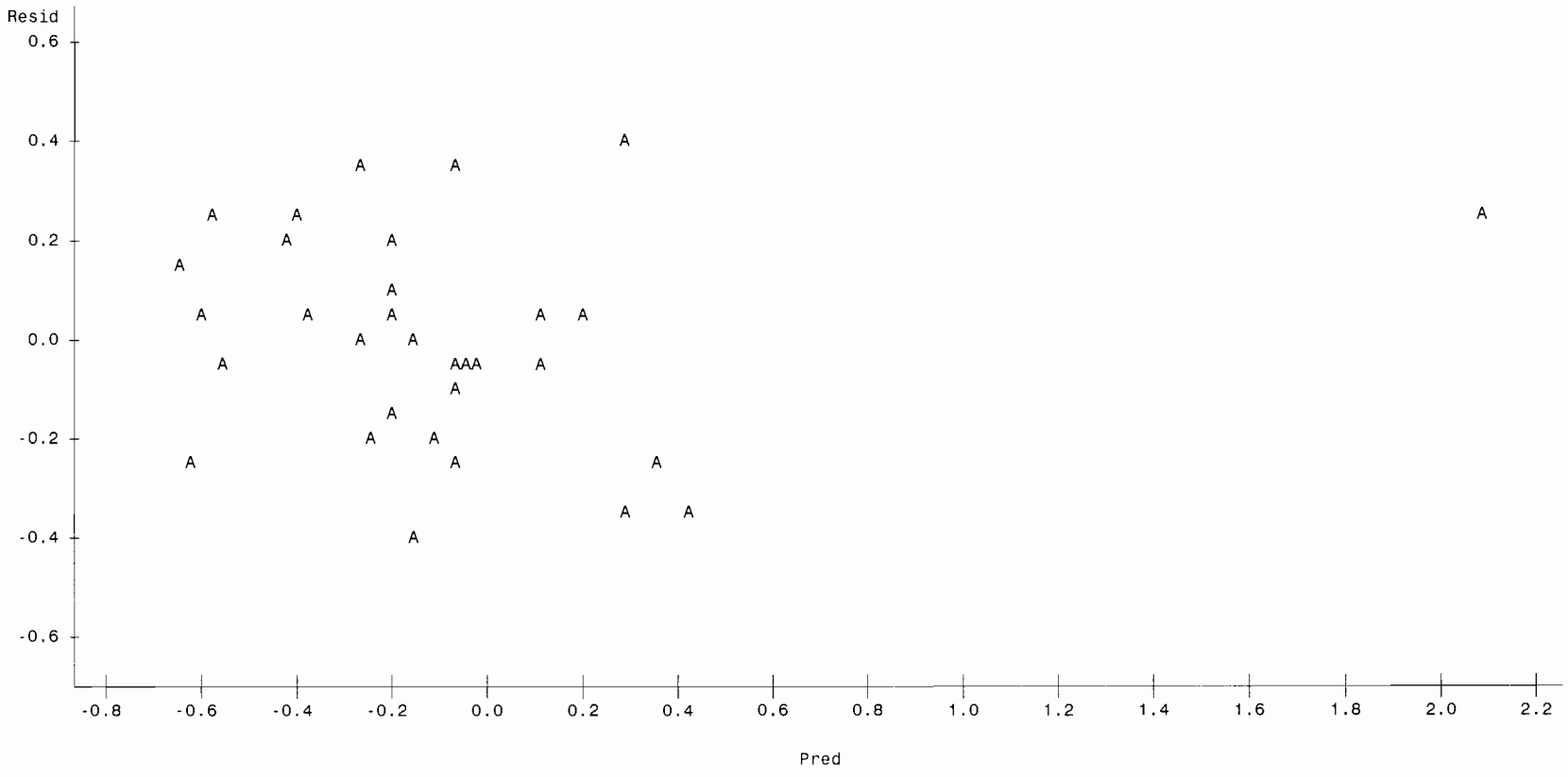
Effect	TREAT	Estimate	Standard Error	DF	t Value	Pr > |t|	Alpha	Lower	Upper
TREAT	Drug	-0.03861	0.07901	14	-0.49	0.6326	0.05	-0.2081	0.1309
TREAT	Placebo	-0.1314	0.07901	14	-1.66	0.1185	0.05	-0.3009	0.03806

Differences of Least Squares Means

Effect	TREAT	TREAT	Estimate	Standard Error	DF	t Value	Pr > |t|	Alpha	Lower	Upper
TREAT	Drug	Placebo	0.09279	0.1119	14	0.83	0.4208	0.05	-0.1472	0.3328

Appendix 2
Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 240 minutes

Plot of Resid*Pred. Legend: A = 1 obs, B = 2 obs, etc.



Appendix 2
Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 240 minutes

Plot of Resid*TREAT. Legend: A = 1 obs, B = 2 obs, etc.

Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 240 minutes
Checking Residuals for Study 6 at The Minutes Specified

---------- TREAT=Drug ----------

The UNIVARIATE Procedure
Variable: Resid

Moments

N	16	Sum Weights	16
Mean	0	Sum Observations	0
Std Deviation	0.2156244	Variance	0.04649388
Skewness	-0.0113583	Kurtosis	-0.5464536
Uncorrected SS	0.6974082	Corrected SS	0.6974082
Coeff Variation	.	Std Error Mean	0.0539061

Basic Statistical Measures

Location		Variability	
Mean	0.000000	Std Deviation	0.21562
Median	0.038205	Variance	0.04649
Mode	.	Range	0.74646
		Interquartile Range	0.34625

Tests for Location: Mu0=0

Test	-Statistic-		-----p Value------	
Student's t	t	0	Pr > |t|	1.0000
Sign	M	1	Pr >= |M|	0.8036
Signed Rank	S	0	Pr >= |S|	1.0000

Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 240 minutes
Checking Residuals for Study 6 at The Minutes Specified

---------- TREAT=Drug ----------

The UNIVARIATE Procedure
Variable: Resid

Tests for Normality

Test	--Statistic---		-----p Value------	
Shapiro-Wilk	W	0.9582	Pr < W	0.6293
Kolmogorov-Smirnov	D	0.124152	Pr > D	>0.1500
Cramer-von Mises	W-Sq	0.041538	Pr > W-Sq	>0.2500
Anderson-Darling	A-Sq	0.277239	Pr > A-Sq	>0.2500

Quantiles (Definition 5)

Quantile	Estimate
100% Max	0.4171320
99%	0.4171320
95%	0.4171320
90%	0.2308939
75% Q3	0.1672094
50% Median	0.0382053
25% Q1	-0.1790439
10%	-0.3286303
5%	-0.3293288
1%	-0.3293288
0% Min	-0.3293288

Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 240 minutes
Checking Residuals for Study 6 at The Minutes Specified

---------- TREAT=Drug ----------

The UNIVARIATE Procedure
Variable: Resid

Extreme Observations

----------Lowest----------			----------Highest----------		
Value	PATIENT	Obs	Value	PATIENT	Obs
-0.329329	6040	12	0.148856	6003	2
-0.328630	6008	4	0.185562	6046	15
-0.269254	6031	10	0.209003	6001	1
-0.233241	6026	9	0.230894	6041	13
-0.124846	6017	7	0.417132	6005	3

```
Stem Leaf                     #             Boxplot                                  Normal Probability Plot
   4 2                        1                |                   0.45+                                          *+++++
   3                                           |                       |                                      +++++
   2 13                       2                |                       |                                  *+++
   1 59                       2             +-----+                    |                              +*+*+
   0 3455                     4             *--+--*                0.05+                        *+***+*
  -0 52                       2             |     |                    |                     *+*+
  -1 2                        1             +-----+                    |                +++*+
  -2 73                       2                |                       |            +++* *
  -3 33                       2                |                  -0.35+       *+++++*
     ----+----+----+----+                                                +----+----+----+----+----+----+----+----+----+----+
 Multiply Stem.Leaf by 10**-1                                                -2        -1         0        +1        +2
```

Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 240 minutes
Checking Residuals for Study 6 at The Minutes Specified

---------- TREAT=Placebo ----------

The UNIVARIATE Procedure
Variable: Resid

Moments

N	16	Sum Weights	16
Mean	0	Sum Observations	0
Std Deviation	0.2156244	Variance	0.04649388
Skewness	0.01135831	Kurtosis	-0.5464536
Uncorrected SS	0.6974082	Corrected SS	0.6974082
Coeff Variation	.	Std Error Mean	0.0539061

Basic Statistical Measures

Location		Variability	
Mean	0.00000	Std Deviation	0.21562
Median	-0.03821	Variance	0.04649
Mode	.	Range	0.74646
		Interquartile Range	0.34625

Tests for Location: Mu0=0

Test	-Statistic-		-----p Value------	
Student's t	t	0	Pr > |t|	1.0000
Sign	M	-1	Pr >= |M|	0.8036
Signed Rank	S	0	Pr >= |S|	1.0000

Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 240 minutes
Checking Residuals for Study 6 at The Minutes Specified

---------- TREAT=Placebo ----------

The UNIVARIATE Procedure
Variable: Resid

Tests for Normality

Test	--Statistic---		-----p Value------	
Shapiro-Wilk	W	0.9582	Pr < W	0.6293
Kolmogorov-Smirnov	D	0.124152	Pr > D	>0.1500
Cramer-von Mises	W-Sq	0.041538	Pr > W-Sq	>0.2500
Anderson-Darling	A-Sq	0.277239	Pr > A-Sq	>0.2500

Quantiles (Definition 5)

Quantile	Estimate
100% Max	0.3293288
99%	0.3293288
95%	0.3293288
90%	0.3286303
75% Q3	0.1790439
50% Median	-0.0382053
25% Q1	-0.1672094
10%	-0.2308939
5%	-0.4171320
1%	-0.4171320
0% Min	-0.4171320

Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 240 minutes
Checking Residuals for Study 6 at The Minutes Specified

---------- TREAT=Placebo ----------

The UNIVARIATE Procedure
Variable: Resid

Extreme Observations

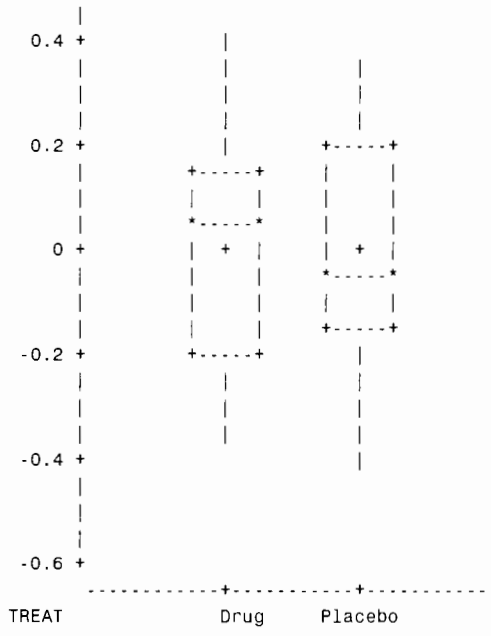
----------Lowest----------			----------Highest----------		
Value	PATIENT	Obs	Value	PATIENT	Obs
-0.417132	6005	3	0.124846	6017	7
-0.230894	6041	13	0.233241	6026	9
-0.209003	6001	1	0.269254	6031	10
-0.185562	6046	15	0.328630	6008	4
-0.148856	6003	2	0.329329	6040	12

```
Stem Leaf                     #             Boxplot                                  Normal Probability Plot
   3 33                       2                |                   0.35+                                        *+++++*
   2 37                       2                |                       |                                  * *+++
   1 2                        1             +-----+                    |                               +*+++
   0 25                       2             |  +  |                    |                          ++*+*
  -0 5543                     4             *-----*               -0.05+                     *+** *
  -1 95                       2             +-----+                    |                 +*+*+
  -2 31                       2                |                       |             *+++*
  -3                                           |                       |        +++++
  -4 2                        1                |                  -0.45+  +++++*
     ----+----+----+----+                                                +----+----+----+----+----+----+----+----+----+----+
 Multiply Stem.Leaf by 10**-1                                                -2        -1         0        +1        +2
```

Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 6: Huntington Study No. 1
Time = 240 minutes
Checking Residuals for Study 6 at The Minutes Specified

The UNIVARIATE Procedure
Variable: Resid

Schematic Plots



Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 7: Huntington Study No. 2
Time = 15 minutes

---------- TIME=15 minutes ----------

The Mixed Procedure

Model Information

Data Set	WORK.ALL
Dependent Variable	LNCHANGE
Covariance Structure	Diagonal
Estimation Method	REML
Residual Variance Method	Profile
Fixed Effects SE Method	Model-Based
Degrees of Freedom Method	Residual

Class Level Information

Class	Levels	Values
TREAT	2	Drug Placebo
PATIENT	25	7001 7002 7003 7007 7008 7010 7014 7016 7017 7018 7020 7021 7025 7027 7028 7030 7031 7033 7034 7036 7041 7042 7044 7048 7050

Dimensions

Covariance Parameters	1
Columns in X	29
Columns in Z	0
Subjects	1
Max Obs Per Subject	50
Observations Used	50

Appendix 2
Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 7: Huntington Study No. 2
Time = 15 minutes

---------- TIME=15 minutes ----------

The Mixed Procedure

Dimensions

Observations Not Used	0
Total Observations	50

Covariance Parameter Estimates

Cov Parm	Estimate
Residual	0.01383

Fit Statistics

-2 Res Log Likelihood	-6.7
AIC (smaller is better)	-4.7
AICC (smaller is better)	-4.5
BIC (smaller is better)	-3.6

Type 3 Tests of Fixed Effects

Effect	Num DF	Den DF	F Value	Pr > F
BASELINE	1	23	0.10	0.7506
PATIENT	24	23	3.02	0.0050
TREAT	1	23	0.79	0.3829

Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 7: Huntington Study No. 2
Time = 15 minutes

---------- TIME=15 minutes ----------

The Mixed Procedure

Least Squares Means

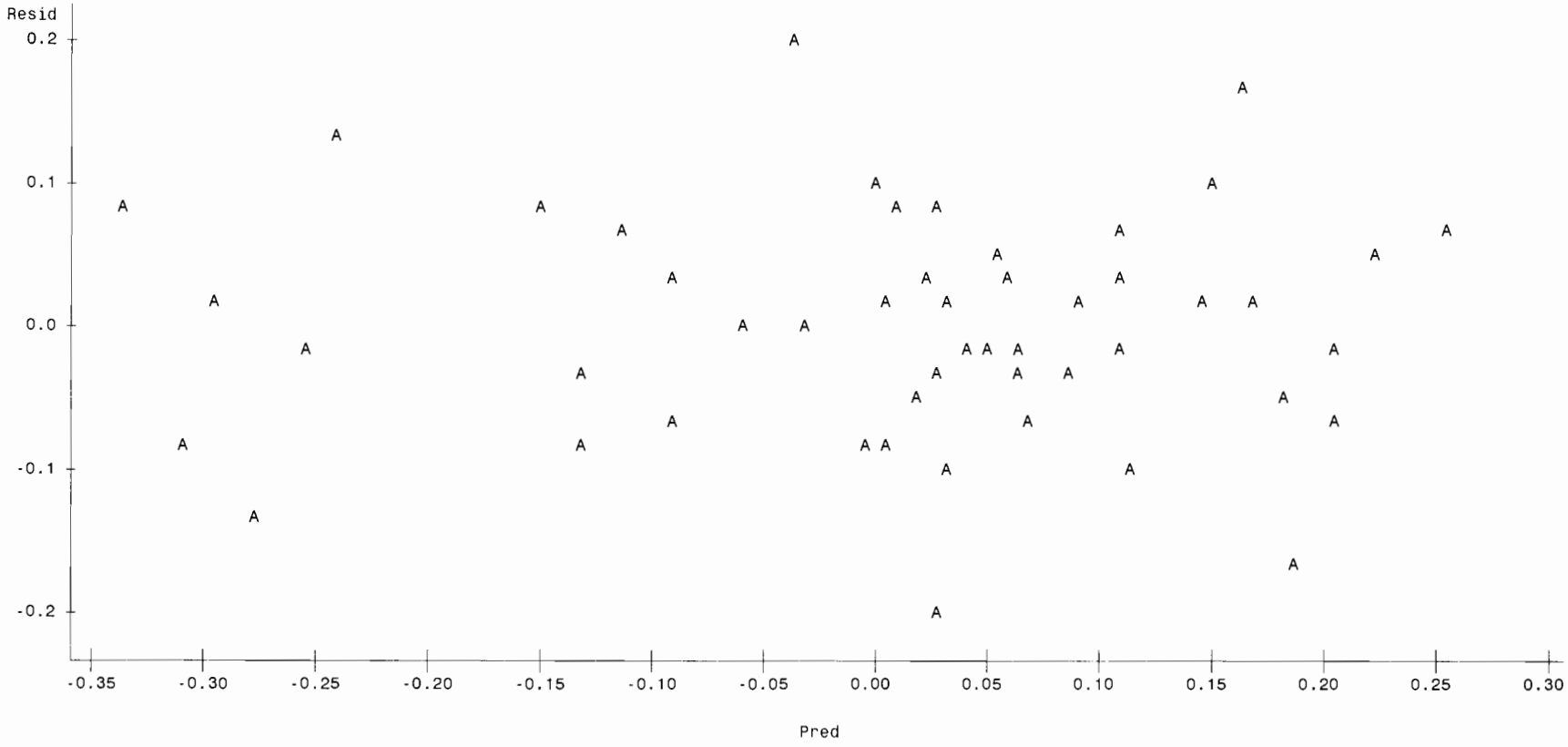
Effect	TREAT	Estimate	Standard Error	DF	t Value	Pr > |t|	Alpha	Lower	Upper
TREAT	Drug	0.02590	0.02386	23	1.09	0.2890	0.05	-0.02346	0.07527
TREAT	Placebo	-0.00454	0.02386	23	-0.19	0.8508	0.05	-0.05390	0.04482

Differences of Least Squares Means

Effect	TREAT	TREAT	Estimate	Standard Error	DF	t Value	Pr > |t|	Alpha	Lower	Upper
TREAT	Drug	Placebo	0.03044	0.03422	23	0.89	0.3829	0.05	-0.04035	0.1012

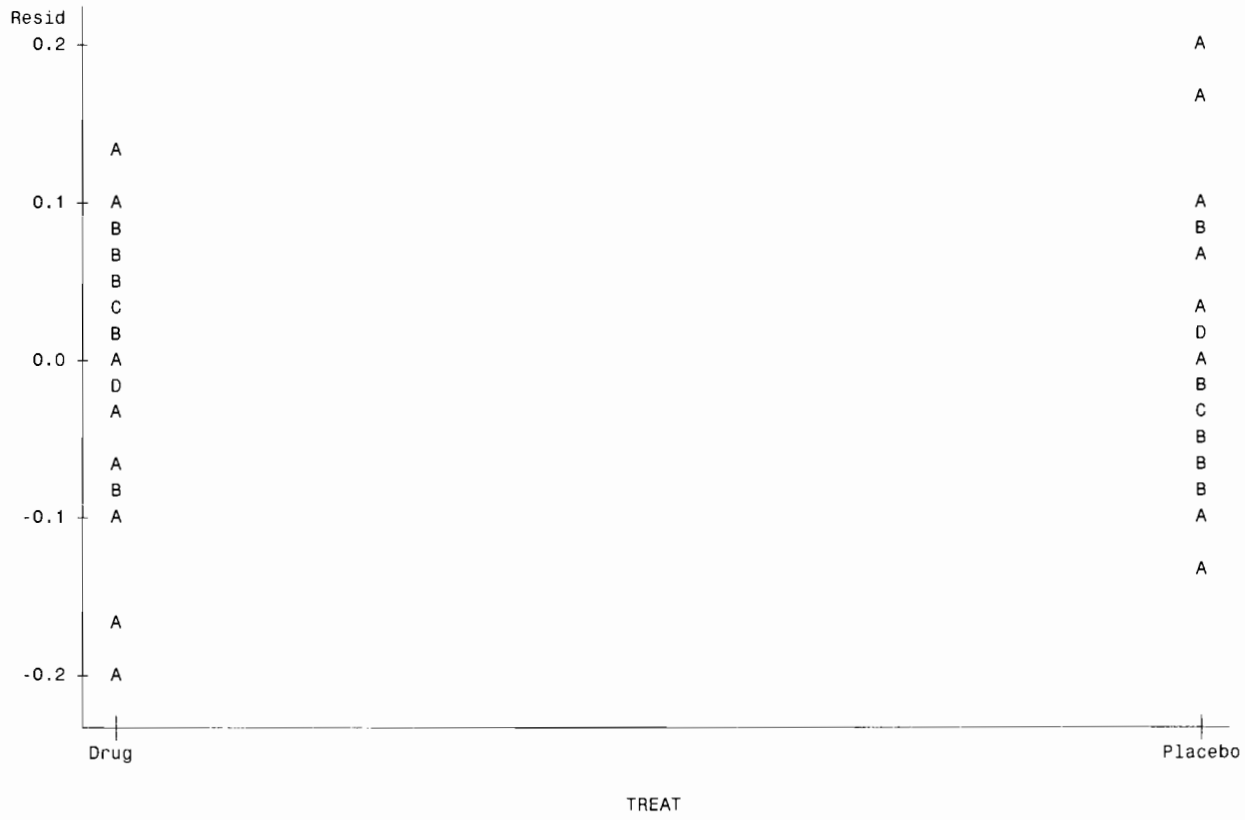
Appendix 2
Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 7: Huntington Study No. 2
Time = 15 minutes

Plot of Resid*Pred. Legend: A = 1 obs, B = 2 obs, etc.



Appendix 2
Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 7: Huntington Study No. 2
Time = 15 minutes

Plot of Resid*TREAT. Legend: A = 1 obs, B = 2 obs, etc.



Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 7: Huntington Study No. 2
Time = 15 minutes
Checking Residuals for Study 7 at The Minutes Specified

---------- TREAT=Drug ----------

The UNIVARIATE Procedure
Variable: Resid

Moments

N	25	Sum Weights	25
Mean	0	Sum Observations	0
Std Deviation	0.08141286	Variance	0.00662805
Skewness	-0.7742553	Kurtosis	0.44102893
Uncorrected SS	0.15907329	Corrected SS	0.15907329
Coeff Variation	.	Std Error Mean	0.01628257

Basic Statistical Measures

Location		Variability	
Mean	0.000000	Std Deviation	0.08141
Median	0.013640	Variance	0.00663
Mode	.	Range	0.33685
		Interquartile Range	0.08275

Tests for Location: Mu0=0

Test	-Statistic-		-----p Value------	
Student's t	t	0	Pr > |t|	1.0000
Sign	M	1.5	Pr >= |M|	0.6900
Signed Rank	S	14.5	Pr >= |S|	0.7048

Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 7: Huntington Study No. 2
Time = 15 minutes
Checking Residuals for Study 7 at The Minutes Specified

---------- TREAT=Drug ----------

The UNIVARIATE Procedure
Variable: Resid

Tests for Normality

Test	--Statistic---		-----p Value------	
Shapiro-Wilk	W	0.952088	Pr < W	0.2793
Kolmogorov-Smirnov	D	0.135543	Pr > D	>0.1500
Cramer-von Mises	W-Sq	0.06953	Pr > W-Sq	>0.2500
Anderson-Darling	A-Sq	0.44186	Pr > A-Sq	>0.2500

Quantiles (Definition 5)

Quantile	Estimate
100% Max	0.1365019
99%	0.1365019
95%	0.1026751
90%	0.0776251
75% Q3	0.0569253
50% Median	0.0136403
25% Q1	-0.0258247
10%	-0.0940195
5%	-0.1650431
1%	-0.2003522
0% Min	-0.2003522

Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 7: Huntington Study No. 2
Time = 15 minutes
Checking Residuals for Study 7 at The Minutes Specified

---------- TREAT=Drug ----------

The UNIVARIATE Procedure
Variable: Resid

Extreme Observations

----------Lowest----------			----------Highest----------		
Value	PATIENT	Obs	Value	PATIENT	Obs
-0.2003522	7017	9	0.0746066	7018	10
-0.1650431	7028	15	0.0775675	7016	8
-0.0940195	7025	13	0.0776251	7007	4
-0.0896945	7030	16	0.1026751	7021	12
-0.0763434	7041	21	0.1365019	7014	7

```
Stem Leaf                    #             Boxplot                                  Normal Probability Plot
   1 04                      2                |                  0.125+                                        ++*+++ *
   0 567788                  6             +-----+                    |                                *+**+*+*
   0 011444                  6             *--+--*                    |                         *******+
  -0 32211                   5             +-----+                    |                    *****+
  -0 9987                    4                |                       |            *+*+**+
  -1                                                                 |       ++++++
  -1 7                       1                0                       | ++++++   *
  -2 0                       1                0                 -0.225++    *
     ----+----+----+----+                                                +----+----+----+----+----+----+----+----+----+----+
 Multiply Stem.Leaf by 10**-1                                                -2        -1         0        +1        +2
```

Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 7: Huntington Study No. 2
Time = 15 minutes
Checking Residuals for Study 7 at The Minutes Specified

---------- TREAT=Placebo ----------

The UNIVARIATE Procedure
Variable: Resid

Moments

N	25	Sum Weights	25
Mean	0	Sum Observations	0
Std Deviation	0.08141286	Variance	0.00662805
Skewness	0.77425531	Kurtosis	0.44102893
Uncorrected SS	0.15907329	Corrected SS	0.15907329
Coeff Variation	.	Std Error Mean	0.01628257

Basic Statistical Measures

Location		Variability	
Mean	0.00000	Std Deviation	0.08141
Median	-0.01364	Variance	0.00663
Mode	.	Range	0.33685
		Interquartile Range	0.08275

Tests for Location: Mu0=0

Test	-Statistic-		-----p Value------	
Student's t	t	0	Pr > |t|	1.0000
Sign	M	-1.5	Pr >= |M|	0.6900
Signed Rank	S	-14.5	Pr >= |S|	0.7048

Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 7: Huntington Study No. 2
Time = 15 minutes
Checking Residuals for Study 7 at The Minutes Specified

---------- TREAT=Placebo ----------

The UNIVARIATE Procedure
Variable: Resid

Tests for Normality

Test	--Statistic---		-----p Value------	
Shapiro-Wilk	W	0.952088	Pr < W	0.2793
Kolmogorov-Smirnov	D	0.135543	Pr > D	>0.1500
Cramer-von Mises	W-Sq	0.06953	Pr > W-Sq	>0.2500
Anderson-Darling	A-Sq	0.44186	Pr > A-Sq	>0.2500

Quantiles (Definition 5)

Quantile	Estimate
100% Max	0.2003522
99%	0.2003522
95%	0.1650431
90%	0.0940195
75% Q3	0.0258247
50% Median	-0.0136403
25% Q1	-0.0569253
10%	-0.0776251
5%	-0.1026751
1%	-0.1365019
0% Min	-0.1365019

Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 7: Huntington Study No. 2
Time = 15 minutes
Checking Residuals for Study 7 at The Minutes Specified

---------- TREAT=Placebo ----------

The UNIVARIATE Procedure
Variable: Resid

Extreme Observations

----------Lowest----------			----------Highest----------		
Value	PATIENT	Obs	Value	PATIENT	Obs
-0.1365019	7014	7	0.0763434	7041	21
-0.1026751	7021	12	0.0896945	7030	16
-0.0776251	7007	4	0.0940195	7025	13
-0.0775675	7016	8	0.1650431	7028	15
-0.0746066	7018	10	0.2003522	7017	9

```
Stem Leaf                     #             Boxplot                                  Normal Probability Plot
   2 0                        1                0                  0.225+                                                  *    +
   1 7                        1                0                       |                                          *   ++++++
   1                                                                   |                                        ++++++
   0 7899                     4                |                       |                                  +**+*+*
   0 11223                    5             +--+--+                    |                          ++*****
  -0 444110                   6             *-----*                    |                    +*******
  -0 887765                   6             +-----+                    |             *+*+*+*
  -1 40                       2                |                 -0.125+     * +++*++
     ----+----+----+----+                                                +----+----+----+----+----+----+----+----+----+----+
 Multiply Stem.Leaf by 10**-1                                                -2        -1         0        +1        +2
```

Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 7: Huntington Study No. 2
Time = 15 minutes
Checking Residuals for Study 7 at The Minutes Specified

The UNIVARIATE Procedure
Variable: Resid

Schematic Plots

```
        |
    0.2 +                       0
        |                       0
        |
        |           |
    0.1 +           |           |
        |           |           |
        |        +-----+        |
        |        *-----*     +-----+
      0 +        |  +  |     |  +  |
        |        +-----+     *-----*
        |           |        +-----+
        |           |           |
   -0.1 +           |           |
        |                       |
        |
        |           0
   -0.2 +           0
         ------------+-----------+-----------
   TREAT             Drug     Placebo
```

Phenylephrine vs. Placebo
LN-Ratio (Post-baseline Nasal Airflow Resistance / Baseline Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 7: Huntington Study No. 2
Time = 30 minutes

---------- TIME=30 minutes ----------

The Mixed Procedure

Model Information

Data Set	WORK.ALL
Dependent Variable	LNCHANGE
Covariance Structure	Diagonal
Estimation Method	REML
Residual Variance Method	Profile
Fixed Effects SE Method	Model-Based
Degrees of Freedom Method	Residual

Class Level Information

Class	Levels	Values
TREAT	2	Drug Placebo
PATIENT	25	7001 7002 7003 7007 7008 7010 7014 7016 7017 7018 7020 7021 7025 7027 7028 7030 7031 7033 7034 7036 7041 7042 7044 7048 7050

Dimensions

Covariance Parameters	1
Columns in X	29
Columns in Z	0
Subjects	1
Max Obs Per Subject	50
Observations Used	50