Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 3: Cintest Study No. 1
Time = 60 minutes
Checking Residuals for Study 3 at The Minutes Specified

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

The UNIVARIATE Procedure
Variable: Resid

Tests for Normality

Test		--Statistic---		-----p Value------
Shapiro-Wilk	W	0.965014	Pr < W	0.7528
Kolmogorov-Smirnov	D	0.123739	Pr > D	>0.1500
Cramer-von Mises	W-Sq	0.048451	Pr > W-Sq	>0.2500
Anderson-Darling	A-Sq	0.301045	Pr > A-Sq	>0.2500

Quantiles (Definition 5)

Quantile	Estimate
100% Max	7.270572
99%	7.270572
95%	7.270572
90%	5.058339
75% Q3	1.974004
50% Median	0.664387
25% Q1	-1.900448
10%	-6.991185
5%	-8.328080
1%	-8.328080
0% Min	-8.328080

Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 3: Cintest Study No. 1
Time = 60 minutes
Checking Residuals for Study 3 at The Minutes Specified

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

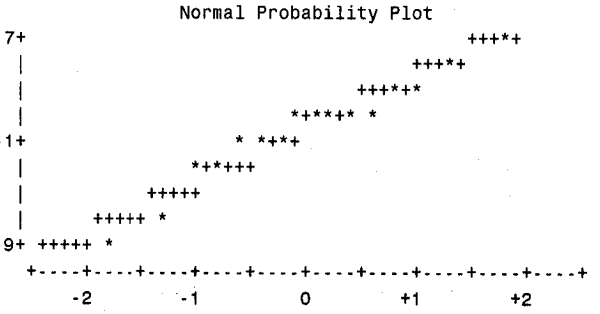
The UNIVARIATE Procedure
Variable: Resid

Extreme Observations

----------Lowest----------			----------Highest----------		
Value	PATIENT	Obs	Value	PATIENT	Obs
-8.32808	3001	1	1.85791	3048	16
-6.99118	3026	9	2.09010	3046	15
-3.38819	3005	3	3.39685	3041	13
-2.50171	3032	10	5.05834	3044	14
-1.29918	3003	2	7.27057	3018	7

Stem	Leaf	#	Boxplot
6	3	1	
4	1	1	
2	14	2	+-----+
0	58789	5	*--+--*
-0	319	3	+-----+
-2	45	2	
-4			
-6	0	1	
-8	3	1	

----+----+----+----+



Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 3: Cintest Study No. 1
Time = 60 minutes
Checking Residuals for Study 3 at The Minutes Specified

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

The UNIVARIATE Procedure
Variable: Resid

Moments

N	16	Sum Weights	16
Mean	0	Sum Observations	0
Std Deviation	4.03513802	Variance	16.2823388
Skewness	0.46218825	Kurtosis	0.42754977
Uncorrected SS	244.235083	Corrected SS	244.235083
Coeff Variation	.	Std Error Mean	1.00878451

Basic Statistical Measures

Location		Variability	
Mean	0.00000	Std Deviation	4.03514
Median	-0.66439	Variance	16.28234
Mode	.	Range	15.59865
		Interquartile Range	3.87445

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	-5	Pr >= |S|	0.8209

Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 3: Cintest Study No. 1
Time = 60 minutes
Checking Residuals for Study 3 at The Minutes Specified

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

The UNIVARIATE Procedure
Variable: Resid

Tests for Normality

Test		--Statistic---		-----p Value------	
Shapiro-Wilk	W	0.965014	Pr < W		0.7528
Kolmogorov-Smirnov	D	0.123739	Pr > D		>0.1500
Cramer-von Mises	W-Sq	0.048451	Pr > W-Sq		>0.2500
Anderson-Darling	A-Sq	0.301045	Pr > A-Sq		>0.2500

Quantiles (Definition 5)

Quantile	Estimate
100% Max	8.328080
99%	8.328080
95%	8.328080
90%	6.991185
75% Q3	1.900448
50% Median	-0.664387
25% Q1	-1.974004
10%	-5.058339
5%	-7.270572
1%	-7.270572
0% Min	-7.270572

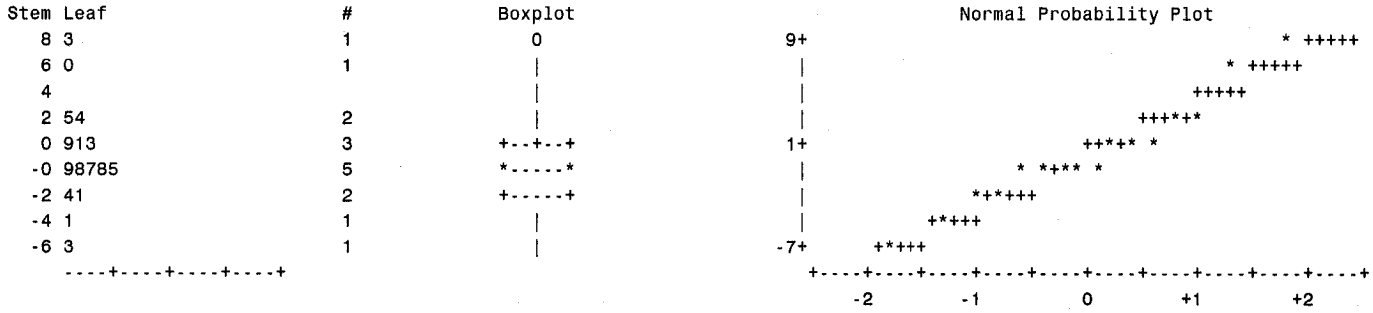
Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 3: Cintest Study No. 1
Time = 60 minutes
Checking Residuals for Study 3 at The Minutes Specified

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

The UNIVARIATE Procedure
Variable: Resid

Extreme Observations

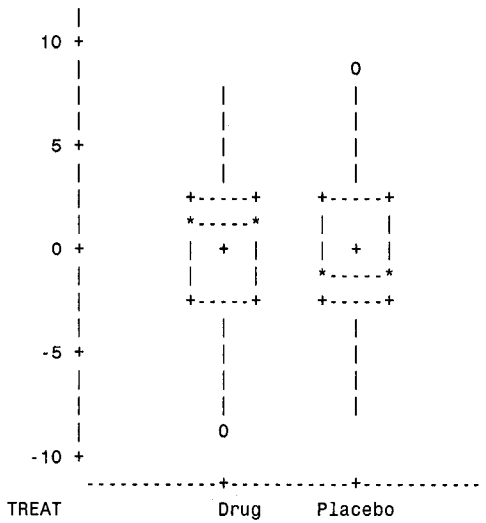
----------Lowest----------			----------Highest----------		
Value	PATIENT	Obs	Value	PATIENT	Obs
-7.27057	3018	7	1.29918	3003	2
-5.05834	3044	14	2.50171	3032	10
-3.39685	3041	13	3.38819	3005	3
-2.09010	3046	15	6.99118	3026	9
-1.85791	3048	16	8.32808	3001	1



Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 3: Cintest Study No. 1
Time = 60 minutes
Checking Residuals for Study 3 at The Minutes Specified

The UNIVARIATE Procedure
Variable: Resid

Schematic Plots



Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 3: Cintest Study No. 1
Time = 90 minutes

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

The Mixed Procedure

Model Information

Data Set	WORK.ALL
Dependent Variable	CHANGE
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	3001 3003 3005 3008 3009 3015 3018 3023 3026 3032 3036 3039 3041 3044 3046 3048

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
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 3: Cintest Study No. 1
Time = 90 minutes

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

The Mixed Procedure

Covariance Parameter Estimates

Cov Parm	Estimate
Residual	38.9653

Fit Statistics

-2 Res Log Likelihood	110.9
AIC (smaller is better)	112.9
AICC (smaller is better)	113.2
BIC (smaller is better)	113.5

Type 3 Tests of Fixed Effects

Effect	Num DF	Den DF	F Value	Pr > F
BASELINE	1	14	1.74	0.2079
PATIENT	15	14	0.69	0.7599
TREAT	1	14	4.35	0.0559

Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 3: Cintest Study No. 1
Time = 90 minutes

TIME=90 minutes

The Mixed Procedure

Least Squares Means

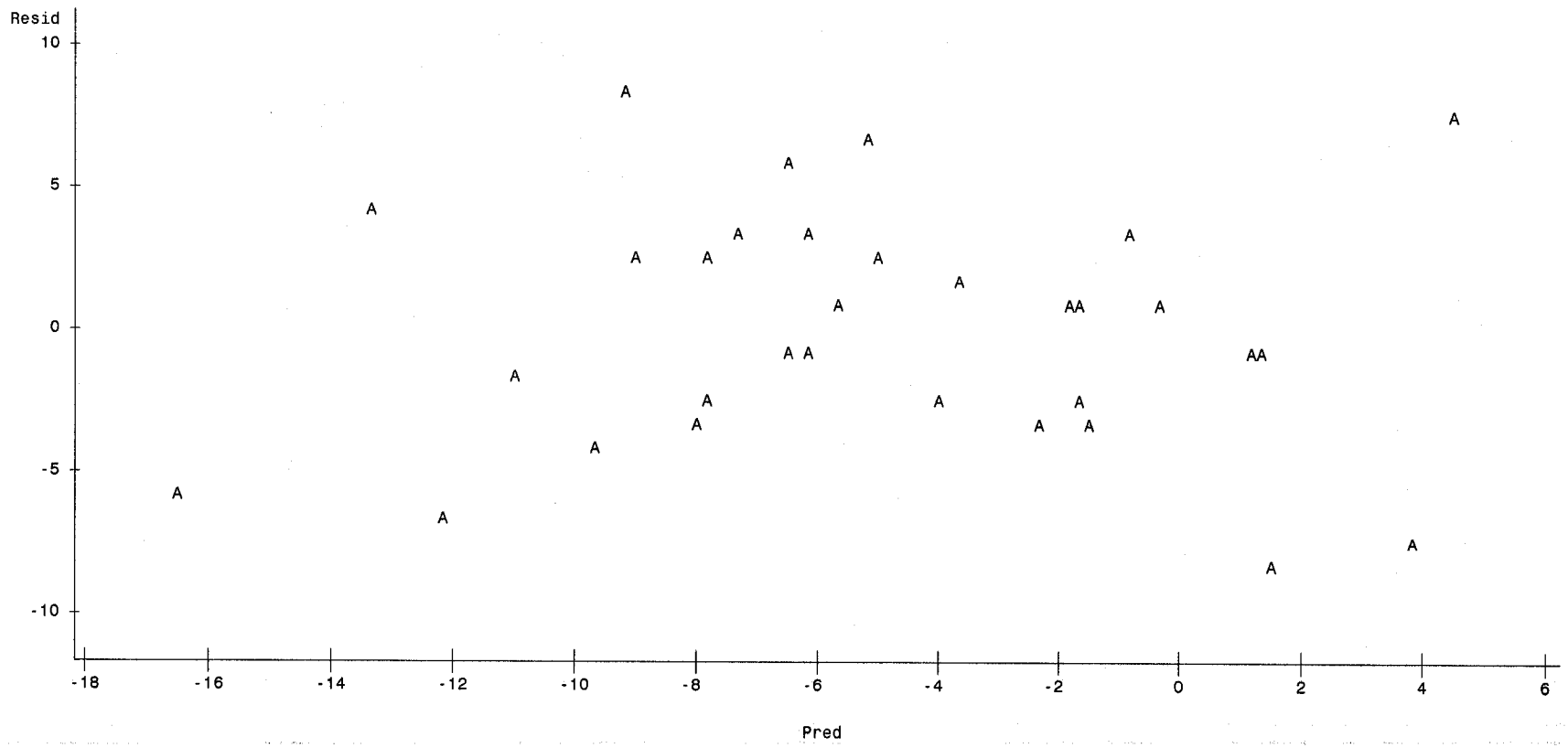
Effect	TREAT	Estimate	Standard Error	DF	t Value	Pr > |t|	Alpha	Lower	Upper
TREAT	Drug	-7.2847	1.5714	14	-4.64	0.0004	0.05	-10.6551	-3.9143
TREAT	Placebo	-2.6200	1.5714	14	-1.67	0.1177	0.05	-5.9904	0.7504

Differences of Least Squares Means

Effect	TREAT	TREAT	Estimate	Standard Error	DF	t Value	Pr > |t|	Alpha	Lower	Upper
TREAT	Drug	Placebo	-4.6647	2.2377	14	-2.08	0.0559	0.05	-9.4640	0.1346

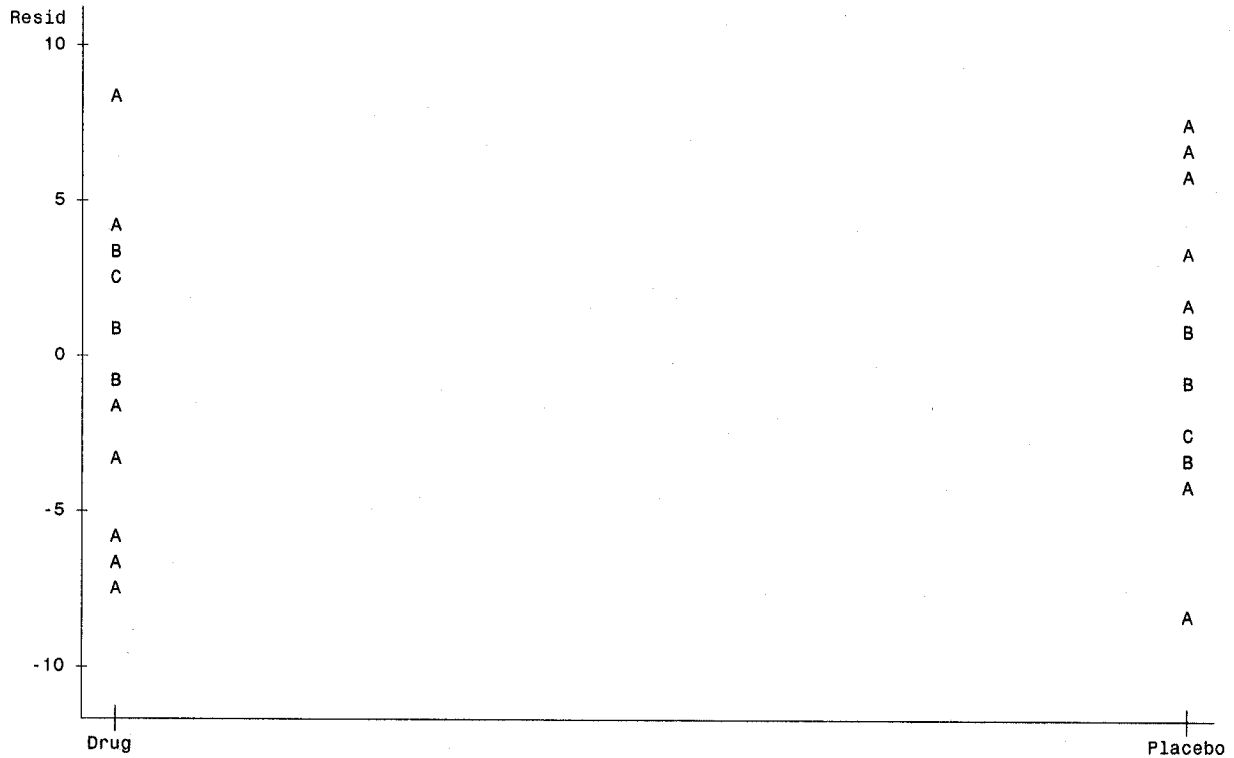
Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 3: Cintest Study No. 1
Time = 90 minutes

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



Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 3: Cintest Study No. 1
Time = 90 minutes

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



Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 3: Cintest Study No. 1
Time = 90 minutes
Checking Residuals for Study 3 at The Minutes Specified

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

The UNIVARIATE Procedure
Variable: Resid

Moments

N	16	Sum Weights	16
Mean	0	Sum Observations	0
Std Deviation	4.2642451	Variance	18.1837863
Skewness	-0.2057103	Kurtosis	-0.2826711
Uncorrected SS	272.756795	Corrected SS	272.756795
Coeff Variation	.	Std Error Mean	1.06606128

Basic Statistical Measures

Location		Variability	
Mean	0.000000	Std Deviation	4.26425
Median	0.620980	Variance	18.18379
Mode	.	Range	15.45559
		Interquartile Range	5.34696

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	3	Pr >= |S|	0.8999

Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 3: Cintest Study No. 1
Time = 90 minutes
Checking Residuals for Study 3 at The Minutes Specified

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

The UNIVARIATE Procedure
Variable: Resid

Tests for Normality

Test		--Statistic---		-----p Value------
Shapiro-Wilk	W	0.957682	Pr < W	0.6200
Kolmogorov-Smirnov	D	0.126177	Pr > D	>0.1500
Cramer-von Mises	W-Sq	0.048757	Pr > W-Sq	>0.2500
Anderson-Darling	A-Sq	0.323091	Pr > A-Sq	>0.2500

Quantiles (Definition 5)

Quantile	Estimate
100% Max	8.18888
99%	8.18888
95%	8.18888
90%	4.48916
75% Q3	2.67185
50% Median	0.62098
25% Q1	-2.67511
10%	-6.50173
5%	-7.26671
1%	-7.26671
0% Min	-7.26671

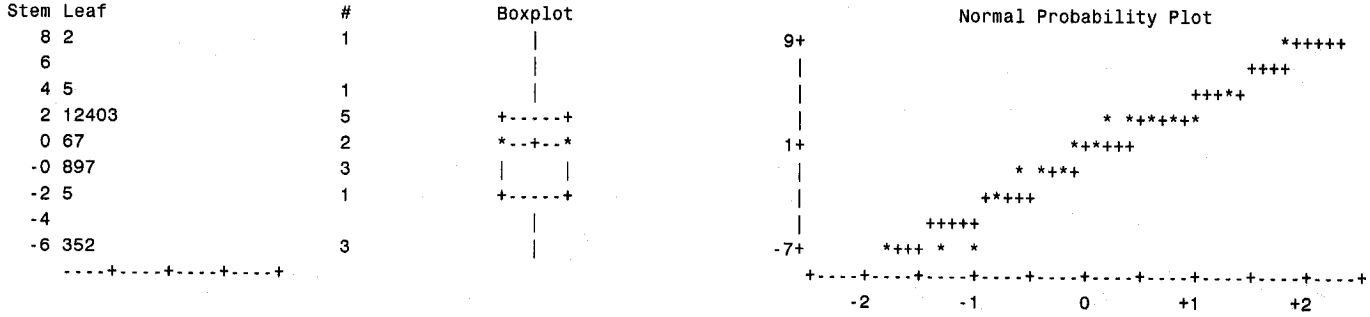
Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 3: Cintest Study No. 1
Time = 90 minutes
Checking Residuals for Study 3 at The Minutes Specified

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

The UNIVARIATE Procedure
Variable: Resid

Extreme Observations

----------Lowest----------			---------Highest---------		
Value	PATIENT	Obs	Value	PATIENT	Obs
-7.26671	3026	9	2.37856	3046	15
-6.50173	3005	3	2.96514	3009	5
-6.17301	3001	1	3.31485	3048	16
-3.53473	3039	12	4.48916	3044	14
-1.81548	3036	11	8.18888	3018	7



Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 3: Cintest Study No. 1
Time = 90 minutes
Checking Residuals for Study 3 at The Minutes Specified

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

The UNIVARIATE Procedure
Variable: Resid

Moments

N	16	Sum Weights	16
Mean	0	Sum Observations	0
Std Deviation	4.2642451	Variance	18.1837863
Skewness	0.20571028	Kurtosis	-0.2826711
Uncorrected SS	272.756795	Corrected SS	272.756795
Coeff Variation	.	Std Error Mean	1.06606128

Basic Statistical Measures

Location		Variability	
Mean	0.00000	Std Deviation	4.26425
Median	-0.62098	Variance	18.18379
Mode	.	Range	15.45559
		Interquartile Range	5.34696

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	-3	Pr >= |S|	0.8999

Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 3: Cintest Study No. 1
Time = 90 minutes
Checking Residuals for Study 3 at The Minutes Specified

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

The UNIVARIATE Procedure
Variable: Resid

Tests for Normality

Test		--Statistic---		-----p Value------
Shapiro-Wilk	W	0.957682	Pr < W	0.6200
Kolmogorov-Smirnov	D	0.126177	Pr > D	>0.1500
Cramer-von Mises	W-Sq	0.048757	Pr > W-Sq	>0.2500
Anderson-Darling	A-Sq	0.323091	Pr > A-Sq	>0.2500

Quantiles (Definition 5)

Quantile	Estimate
100% Max	7.26671
99%	7.26671
95%	7.26671
90%	6.50173
75% Q3	2.67511
50% Median	-0.62098
25% Q1	-2.67185
10%	-4.48916
5%	-8.18888
1%	-8.18888
0% Min	-8.18888

Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 3: Cintest Study No. 1
Time = 90 minutes
Checking Residuals for Study 3 at The Minutes Specified

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

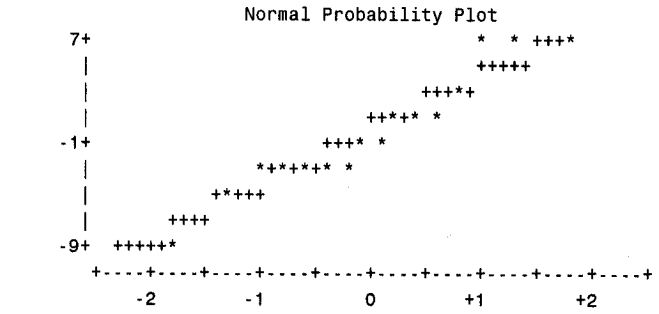
The UNIVARIATE Procedure
Variable: Resid

Extreme Observations

----------Lowest----------			---------Highest---------		
Value	PATIENT	Obs	Value	PATIENT	Obs
-8.18888	3018	7	1.81548	3036	11
-4.48916	3044	14	3.53473	3039	12
-3.31485	3048	16	6.17301	3001	1
-2.96514	3009	5	6.50173	3005	3
-2.37856	3046	15	7.26671	3026	9

Stem	Leaf	#	Boxplot
6	253	3	
4			
2	5	1	+-----+
0	798	3	| + |
-0	76	2	*-----*
-2	30421	5	+-----+
-4	5	1	
-6			
-8	2	1	

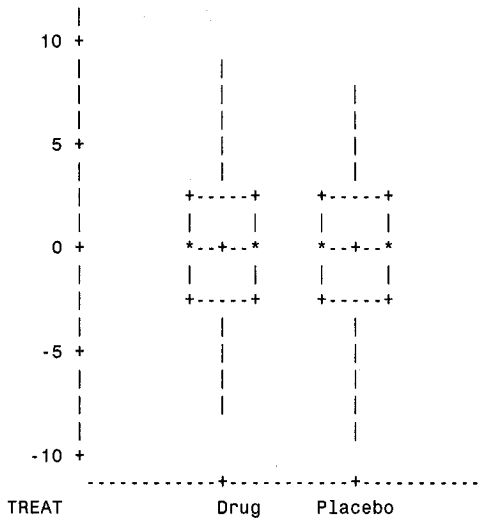
----+----+----+----+



Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 3: Cintest Study No. 1
Time = 90 minutes
Checking Residuals for Study 3 at The Minutes Specified

The UNIVARIATE Procedure
Variable: Resid

Schematic Plots



Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 3: Cintest Study No. 1
Time = 120 minutes

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

The Mixed Procedure

Model Information

Data Set	WORK.ALL
Dependent Variable	CHANGE
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	3001 3003 3005 3008 3009 3015 3018 3023 3026 3032 3036 3039 3041 3044 3046 3048

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
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 3: Cintest Study No. 1
Time = 120 minutes

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

The Mixed Procedure

Covariance Parameter Estimates

Cov Parm	Estimate
Residual	34.2613

Fit Statistics

-2 Res Log Likelihood	109.1
AIC (smaller is better)	111.1
AICC (smaller is better)	111.4
BIC (smaller is better)	111.7

Type 3 Tests of Fixed Effects

Effect	Num DF	Den DF	F Value	Pr > F
BASELINE	1	14	8.80	0.0102
PATIENT	15	14	0.72	0.7351
TREAT	1	14	4.91	0.0437

Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 3: Cintest Study No. 1
Time = 120 minutes

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

The Mixed Procedure

Least Squares Means

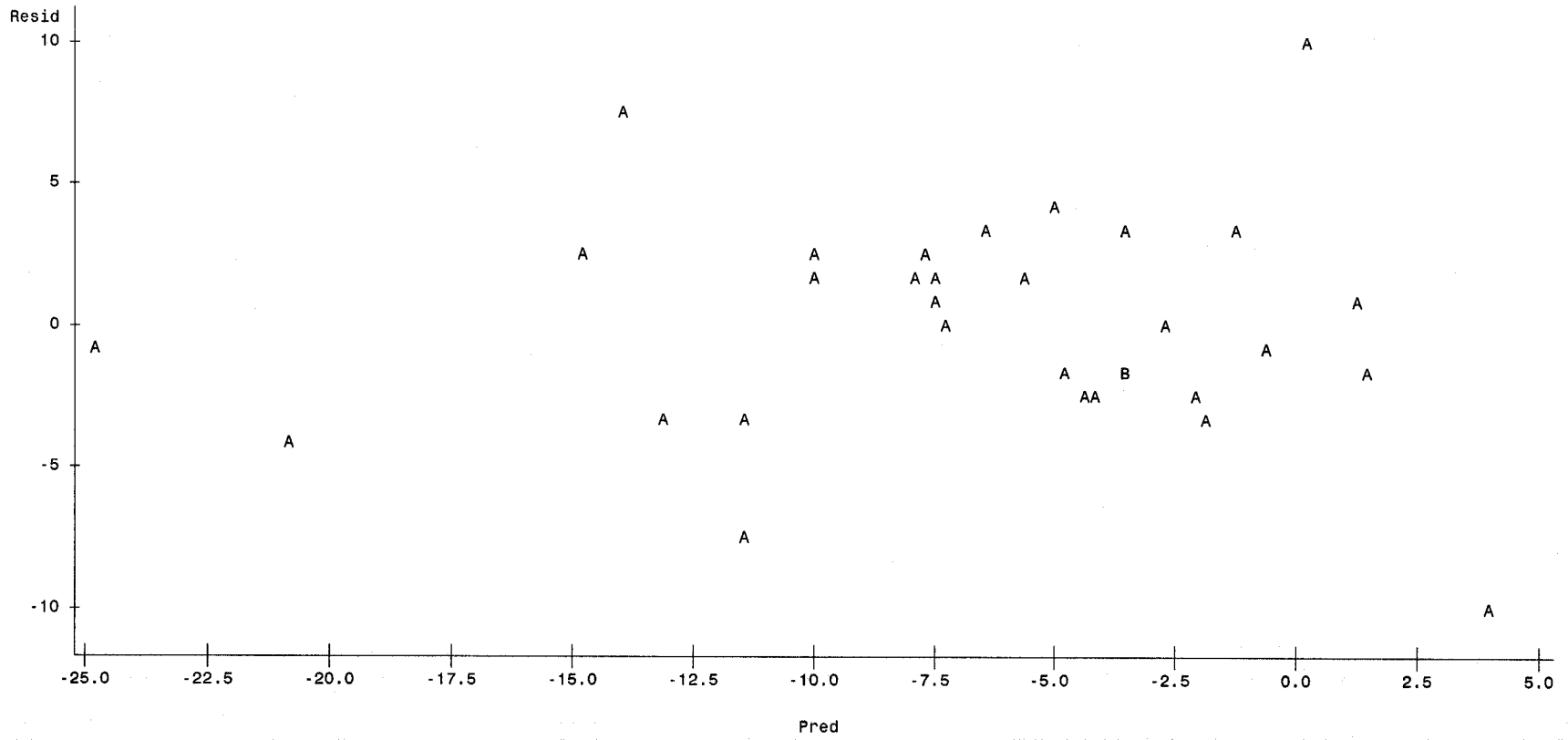
Effect	TREAT	Estimate	Standard Error	DF	t Value	Pr > |t|	Alpha	Lower	Upper
TREAT	Drug	-8.9066	1.4735	14	-6.04	<.0001	0.05	-12.0670	-5.7461
TREAT	Placebo	-4.2554	1.4735	14	-2.89	0.0119	0.05	-7.4159	-1.0950

Differences of Least Squares Means

Effect	TREAT	TREAT	Estimate	Standard Error	DF	t Value	Pr > |t|	Alpha	Lower	Upper
TREAT	Drug	Placebo	-4.6511	2.0982	14	-2.22	0.0437	0.05	-9.1514	-0.1509

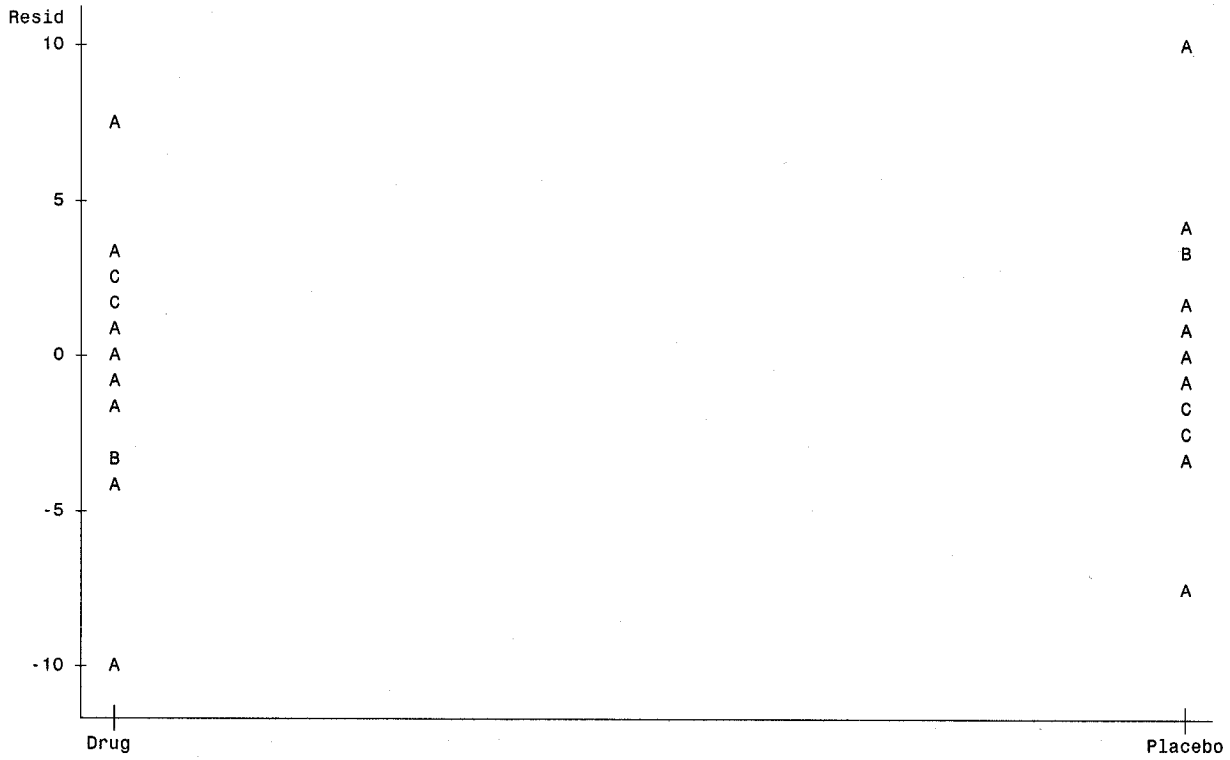
Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 3: Cintest Study No. 1
Time = 120 minutes

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



Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 3: Cintest Study No. 1
Time = 120 minutes

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



Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 3: Cintest Study No. 1
Time = 120 minutes
Checking Residuals for Study 3 at The Minutes Specified

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

The UNIVARIATE Procedure
Variable: Resid

Moments

N	16	Sum Weights	16
Mean	0	Sum Observations	0
Std Deviation	3.9985769	Variance	15.9886173
Skewness	-0.7279806	Kurtosis	1.50215292
Uncorrected SS	239.829259	Corrected SS	239.829259
Coeff Variation	.	Std Error Mean	0.99964423

Basic Statistical Measures

Location		Variability	
Mean	0.000000	Std Deviation	3.99858
Median	1.016788	Variance	15.98862
Mode	.	Range	17.24301
		Interquartile Range	4.95808

Tests for Location: Mu0=0

Test	-Statistic-		-----p Value------	
Student's t	t	0	Pr > |t|	1.0000
Sign	M	2	Pr >= |M|	0.4545
Signed Rank	S	5	Pr >= |S|	0.8209

Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 3: Cintest Study No. 1
Time = 120 minutes
Checking Residuals for Study 3 at The Minutes Specified

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

The UNIVARIATE Procedure
Variable: Resid

Tests for Normality

Test		--Statistic---		-----p Value------
Shapiro-Wilk	W	0.94678	Pr < W	0.4405
Kolmogorov-Smirnov	D	0.138245	Pr > D	>0.1500
Cramer-von Mises	W-Sq	0.069635	Pr > W-Sq	>0.2500
Anderson-Darling	A-Sq	0.420435	Pr > A-Sq	>0.2500

Quantiles (Definition 5)

Quantile	Estimate
100% Max	7.43183
99%	7.43183
95%	7.43183
90%	3.70107
75% Q3	2.44136
50% Median	1.01679
25% Q1	-2.51672
10%	-4.40652
5%	-9.81118
1%	-9.81118
0% Min	-9.81118

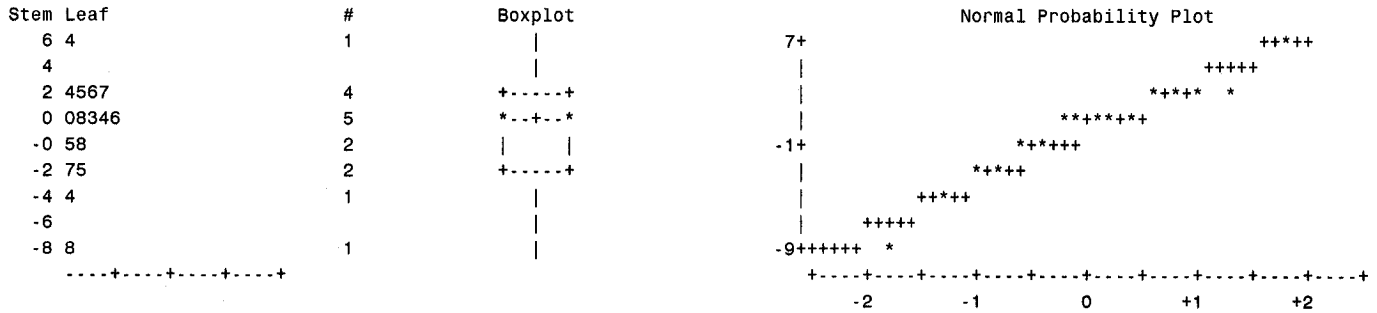
Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 3: Cintest Study No. 1
Time = 120 minutes
Checking Residuals for Study 3 at The Minutes Specified

TREAT=Drug

The UNIVARIATE Procedure
Variable: Resid

Extreme Observations

Lowest			Highest		
Value	PATIENT	Obs	Value	PATIENT	Obs
-9.81118	3026	9	2.36984	3041	13
-4.40652	3001	1	2.51288	3036	11
-3.74087	3039	12	2.64839	3009	5
-3.51188	3005	3	3.70107	3048	16
-1.52155	3008	4	7.43183	3044	14



Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 3: Cintest Study No. 1
Time = 120 minutes
Checking Residuals for Study 3 at The Minutes Specified

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

The UNIVARIATE Procedure
Variable: Resid

Moments

N	16	Sum Weights	16
Mean	0	Sum Observations	0
Std Deviation	3.9985769	Variance	15.9886173
Skewness	0.7279806	Kurtosis	1.50215292
Uncorrected SS	239.829259	Corrected SS	239.829259
Coeff Variation	.	Std Error Mean	0.99964423

Basic Statistical Measures

Location		Variability	
Mean	0.00000	Std Deviation	3.99858
Median	-1.01679	Variance	15.98862
Mode	.	Range	17.24301
		Interquartile Range	4.95808

Tests for Location: Mu0=0

Test	-Statistic-		-----p Value------	
Student's t	t	0	Pr > |t|	1.0000
Sign	M	-2	Pr >= |M|	0.4545
Signed Rank	S	-5	Pr >= |S|	0.8209

Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 3: Cintest Study No. 1
Time = 120 Minutes
Checking Residuals for Study 3 at The Minutes Specified

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

The UNIVARIATE Procedure
Variable: Resid

Tests for Normality

Test		--Statistic---		-----p Value------
Shapiro-Wilk	W	0.94678	Pr < W	0.4405
Kolmogorov-Smirnov	D	0.138245	Pr > D	>0.1500
Cramer-von Mises	W-Sq	0.069635	Pr > W-Sq	>0.2500
Anderson-Darling	A-Sq	0.420435	Pr > A-Sq	>0.2500

Quantiles (Definition 5)

Quantile	Estimate
100% Max	9.81118
99%	9.81118
95%	9.81118
90%	4.40652
75% Q3	2.51672
50% Median	-1.01679
25% Q1	-2.44136
10%	-3.70107
5%	-7.43183
1%	-7.43183
0% Min	-7.43183

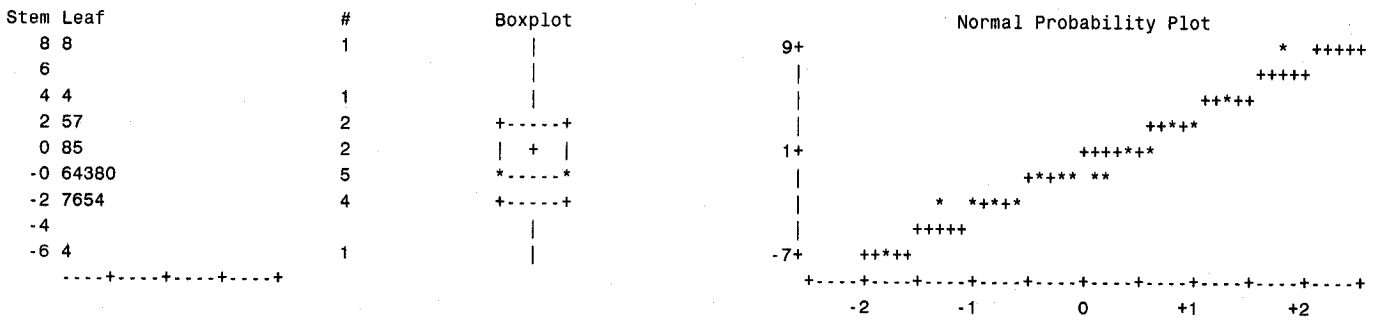
Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 3: Cintest Study No. 1
Time = 120 minutes
Checking Residuals for Study 3 at The Minutes Specified

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

The UNIVARIATE Procedure
Variable: Resid

Extreme Observations

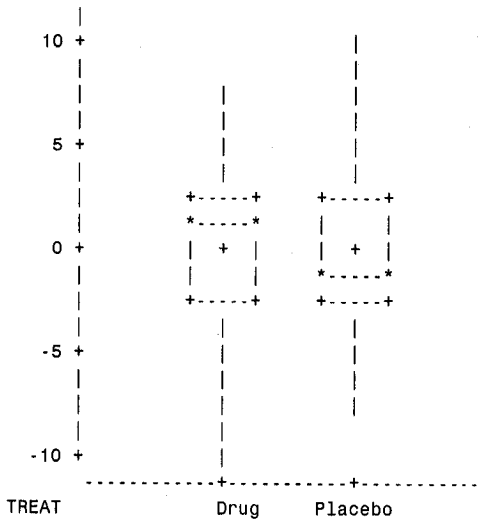
----------Lowest----------			----------Highest----------		
Value	PATIENT	Obs	Value	PATIENT	Obs
-7.43183	3044	14	1.52155	3008	4
-3.70107	3048	16	3.51188	3005	3
-2.64839	3009	5	3.74087	3039	12
-2.51288	3036	11	4.40652	3001	1
-2.36984	3041	13	9.81118	3026	9



Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 3: Cintest Study No. 1
Time = 120 minutes
Checking Residuals for Study 3 at The Minutes Specified

The UNIVARIATE Procedure
Variable: Resid

Schematic Plots



Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 3: Cintest Study No. 1
Time = 180 minutes

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

The Mixed Procedure

Model Information

Data Set	WORK.ALL
Dependent Variable	CHANGE
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	3001 3003 3005 3008 3009 3015 3018 3023 3026 3032 3036 3039 3041 3044 3046 3048

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
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 3: Cintest Study No. 1
Time = 180 Minutes

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

The Mixed Procedure

Covariance Parameter Estimates

Cov Parm	Estimate
Residual	43.2472

Fit Statistics

-2 Res Log Likelihood	112.3
AIC (smaller is better)	114.3
AICC (smaller is better)	114.7
BIC (smaller is better)	115.0

Type 3 Tests of Fixed Effects

Effect	Num DF	Den DF	F Value	Pr > F
BASELINE	1	14	8.14	0.0128
PATIENT	15	14	0.62	0.8120
TREAT	1	14	7.75	0.0146

Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 3: Cintest 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	-9.4565	1.6555	14	-5.71	<.0001	0.05	-13.0073	-5.9057
TREAT	Placebo	-2.8919	1.6555	14	-1.75	0.1026	0.05	-6.4427	0.6589

Differences of Least Squares Means

Effect	TREAT	TREAT	Estimate	Standard Error	DF	t Value	Pr > |t|	Alpha	Lower	Upper
TREAT	Drug	Placebo	-6.5646	2.3574	14	-2.78	0.0146	0.05	-11.6207	-1.5085

Phenylephrine vs. Placebo

Change From Baseline NAR (Nasal Airflow Resistance)

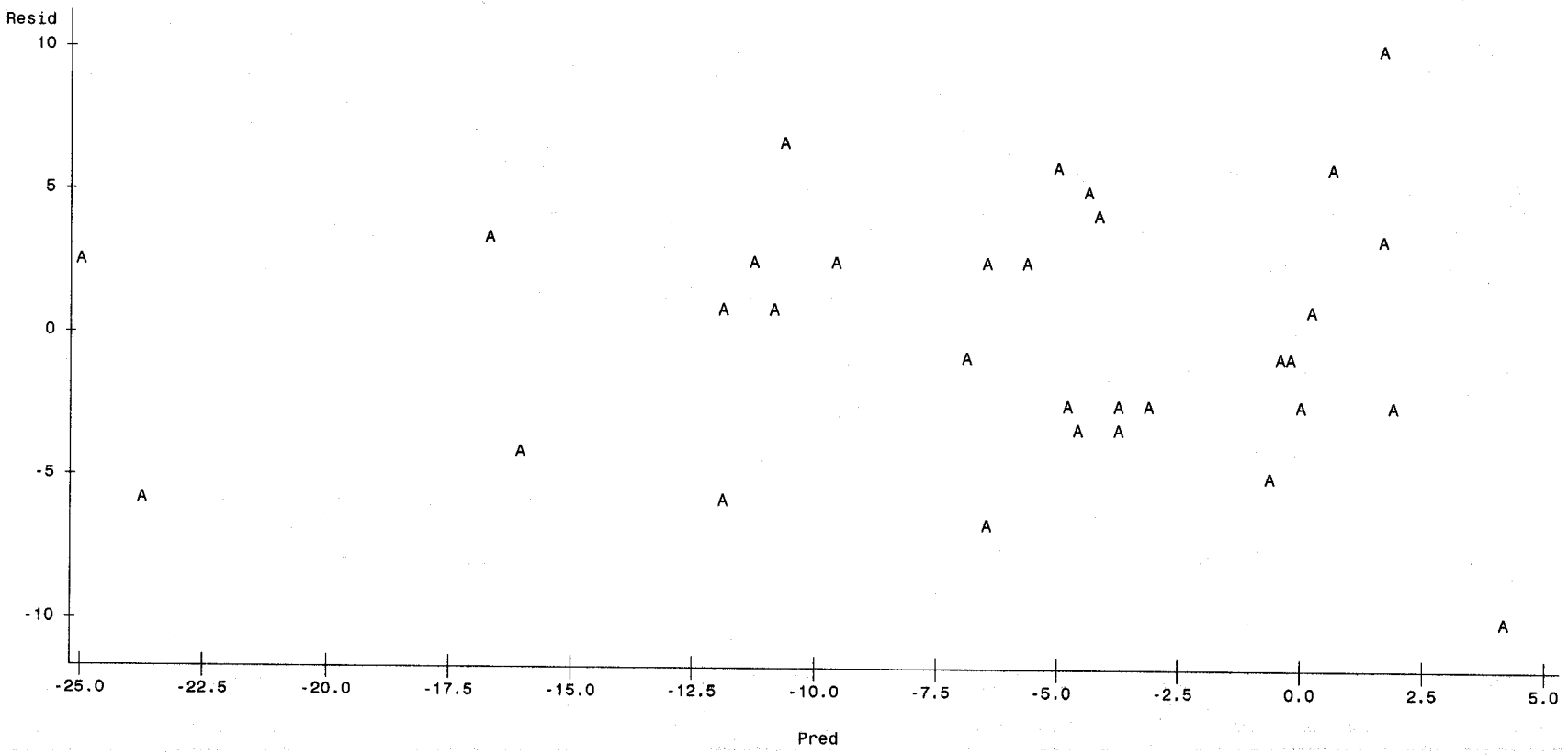
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR

Patient Is Fixed

Study 3: Cintest Study No. 1

Time = 180 minutes

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



Phenylephrine vs. Placebo

Change From Baseline NAR (Nasal Airflow Resistance)

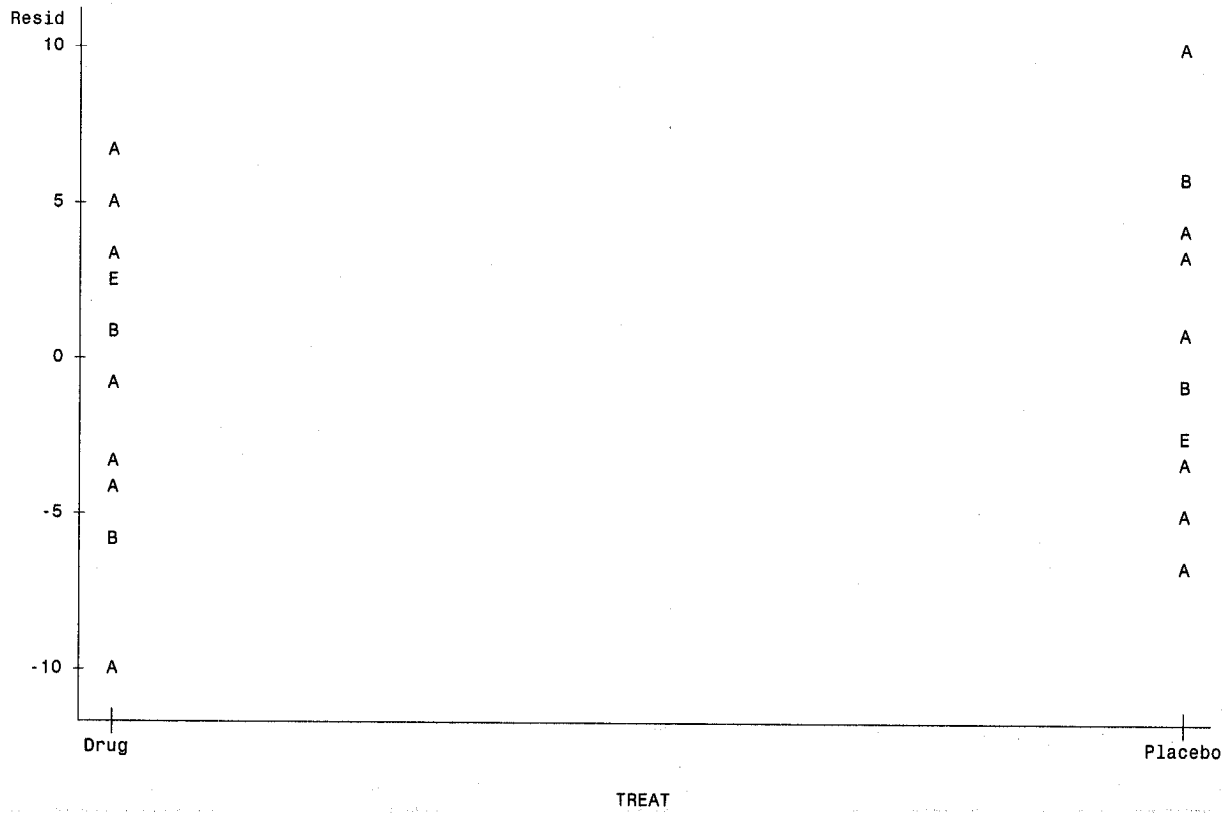
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR

Patient Is Fixed

Study 3: Cintest Study No. 1

Time = 180 minutes

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



Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 3: Cintest Study No. 1
Time = 180 minutes
Checking Residuals for Study 3 at The Minutes Specified

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

The UNIVARIATE Procedure
Variable: Resid

Moments

N	16	Sum Weights	16
Mean	0	Sum Observations	0
Std Deviation	4.49244214	Variance	20.1820363
Skewness	-0.8004797	Kurtosis	0.15233848
Uncorrected SS	302.730545	Corrected SS	302.730545
Coeff Variation	.	Std Error Mean	1.12311053

Basic Statistical Measures

Location		Variability	
Mean	0.000000	Std Deviation	4.49244
Median	1.650394	Variance	20.18204
Mode	.	Range	16.90488
		Interquartile Range	6.10517

Tests for Location: Mu0=0

Test	-Statistic-		-----p Value------	
Student's t	t	0	Pr > |t|	1.0000
Sign	M	2	Pr >= |M|	0.4545
Signed Rank	S	4	Pr >= |S|	0.8603

Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 3: Cintest Study No. 1
Time = [redacted] Minutes
Checking Residuals for Study 3 at The Minutes Specified

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

The UNIVARIATE Procedure
Variable: Resid

Tests for Normality

Test		--Statistic---		-----p Value------	
Shapiro-Wilk	W	0.929795	Pr < W	0.2420
Kolmogorov-Smirnov	D	0.196801	Pr > D	0.0947
Cramer-von Mises	W-Sq	0.108906	Pr > W-Sq	0.0811
Anderson-Darling	A-Sq	0.562066	Pr > A-Sq	0.1269

Quantiles (Definition 5)

Quantile	Estimate
100% Max	6.79324
99%	6.79324
95%	6.79324
90%	4.69511
75% Q3	2.64598
50% Median	1.65039
25% Q1	-3.45919
10%	-5.81362
5%	-10.11164
1%	-10.11164
0% Min	-10.11164

Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 3: Cintest Study No. 1
Time = 180 minutes
Checking Residuals for Study 3 at The Minutes Specified

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

The UNIVARIATE Procedure
Variable: Resid

Extreme Observations

----------Lowest----------			----------Highest----------		
Value	PATIENT	Obs	Value	PATIENT	Obs
-10.11164	3026	9	2.47328	3009	5
-5.81362	3039	12	2.81867	3041	13
-5.50998	3001	1	3.51184	3036	11
-3.95503	3005	3	4.69511	3046	15
-2.96336	3003	2	6.79324	3044	14

```
Stem Leaf                    #             Boxplot                                  Normal Probability Plot
   6 8                       1                |                      7+                                        ++++*
   4 7                       1                |                       |                                  ++++*
   2 123585                  6             +-----+                    |                          ** *+*+* *
   0 82                      2             *--+--*                   1+                       **+++++
  -0 6                       1             |     |                    |                     *+++
  -2 0                       1             +-----+                    |                  *+*+
  -4 850                     3                |                     -5+            *++*+
  -6                                          |                       |        ++++
  -8                                          |                       |   +++++
 -10 1                       1                |                    -11++++    *
     ----+----+----+----+                                              +----+----+----+----+----+----+----+----+----+----+
                                                                            -2        -1         0        +1        +2
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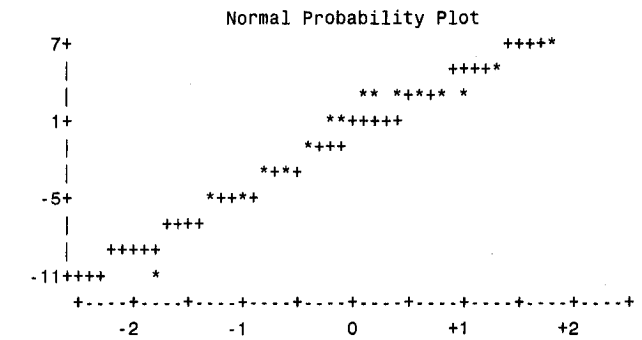


Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 3: Cintest Study No. 1
Time = 180 minutes
Checking Residuals for Study 3 at The Minutes Specified

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

The UNIVARIATE Procedure
Variable: Resid

Moments

N	16	Sum Weights	16
Mean	0	Sum Observations	0
Std Deviation	4.49244214	Variance	20.1820363
Skewness	0.80047969	Kurtosis	0.15233848
Uncorrected SS	302.730545	Corrected SS	302.730545
Coeff Variation	.	Std Error Mean	1.12311053

Basic Statistical Measures

Location		Variability	
Mean	0.00000	Std Deviation	4.49244
Median	-1.65039	Variance	20.18204
Mode	.	Range	16.90488
		Interquartile Range	6.10517

Tests for Location: Mu0=0

Test	-Statistic-		-----p Value------	
Student's t	t	0	Pr > |t|	1.0000
Sign	M	-2	Pr >= |M|	0.4545
Signed Rank	S	-4	Pr >= |S|	0.8603

Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 3: Cintest Study No. 1
Time = 180 minutes
Checking Residuals for Study 3 at The Minutes Specified

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

The UNIVARIATE Procedure
Variable: Resid

Tests for Normality

Test		--Statistic---		-----p Value------	
Shapiro-Wilk	W	0.929795	Pr < W	0.2420
Kolmogorov-Smirnov	D	0.196801	Pr > D	0.0947
Cramer-von Mises	W-Sq	0.108906	Pr > W-Sq	0.0811
Anderson-Darling	A-Sq	0.562066	Pr > A-Sq	0.1269

Quantiles (Definition 5)

Quantile	Estimate
100% Max	10.11164
99%	10.11164
95%	10.11164
90%	5.81362
75% Q3	3.45919
50% Median	-1.65039
25% Q1	-2.64598
10%	-4.69511
5%	-6.79324
1%	-6.79324
0% Min	-6.79324

Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 3: Cintest Study No. 1
Time = LBD minutes
Checking Residuals for Study 3 at The Minutes Specified

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

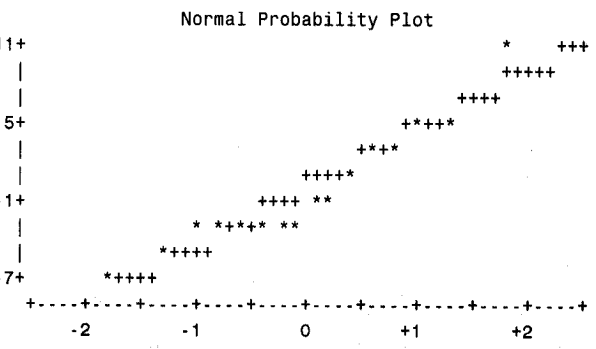
The UNIVARIATE Procedure
Variable: Resid

Extreme Observations

----------Lowest----------			----------Highest----------		
Value	PATIENT	Obs	Value	PATIENT	Obs
-6.79324	3044	14	2.96336	3003	2
-4.69511	3046	15	3.95503	3005	3
-3.51184	3036	11	5.50998	3001	1
-2.81867	3041	13	5.81362	3039	12
-2.47328	3009	5	10.11164	3026	9

Stem	Leaf	#	Boxplot
10	1	1	|
8			|
6			|
4	058	3	|
2	0	1	+-----+
0	6	1	| + |
-0	28	2	*-----*
-2	585321	6	+-----+
-4	7	1	|
-6	8	1	|

----+----+----+----+



Phenylephrine vs. Placebo

Change From Baseline NAR (Nasal Airflow Resistance)

Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR

Patient Is Fixed

Study 3: Cintest Study No. 1

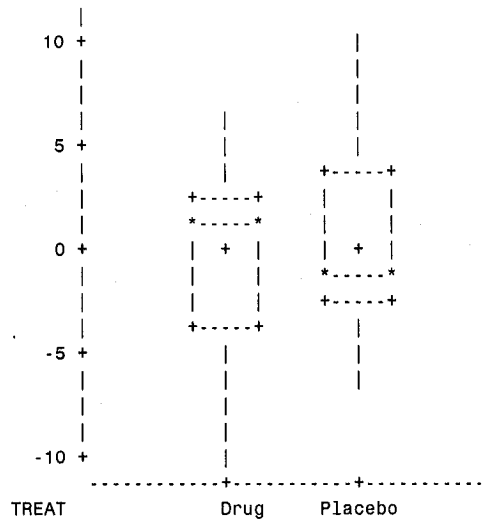
Time = 180 minutes

Checking Residuals for Study 3 at The Minutes Specified

The UNIVARIATE Procedure

Variable: Resid

Schematic Plots



Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 3: Cintest Study No. 1
Time = 240 minutes

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

The Mixed Procedure

Model Information

Data Set	WORK.ALL
Dependent Variable	CHANGE
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	3001 3003 3005 3008 3009 3015 3018 3023 3026 3032 3036 3039 3041 3044 3046 3048

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
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 3: Cintest Study No. 1
Time = 240 minutes

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

The Mixed Procedure

Covariance Parameter Estimates

Cov Parm	Estimate
Residual	58.1022

Fit Statistics

-2 Res Log Likelihood	116.5
AIC (smaller is better)	118.5
AICC (smaller is better)	118.8
BIC (smaller is better)	119.1

Type 3 Tests of Fixed Effects

Effect	Num DF	Den DF	F Value	Pr > F
BASELINE	1	14	11.77	0.0041
PATIENT	15	14	1.54	0.2127
TREAT	1	14	5.57	0.0334

Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 3: Cintest Study No. 1
Time = 240 minutes

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

The Mixed Procedure

Least Squares Means

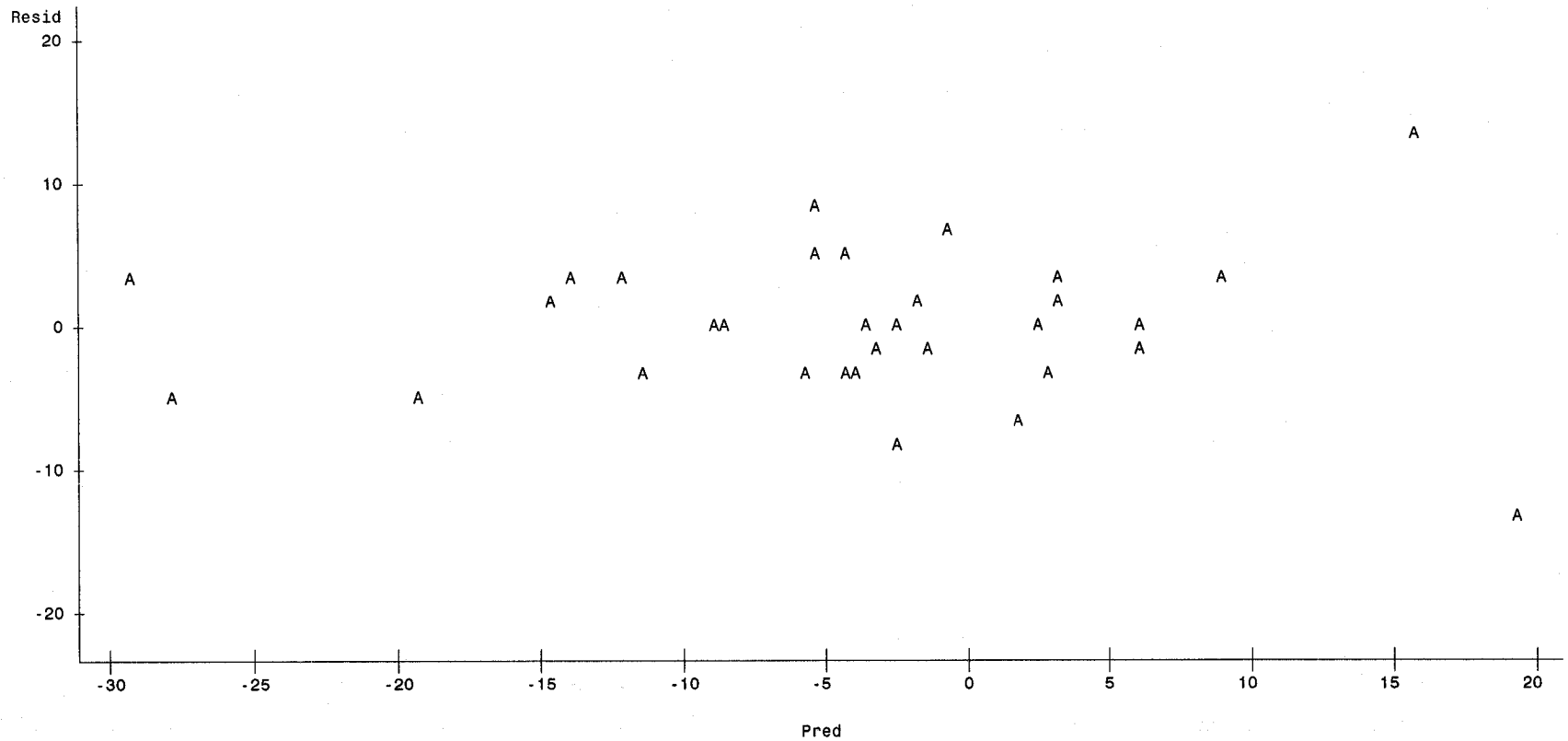
Effect	TREAT	Estimate	Standard Error	DF	t Value	Pr > |t|	Alpha	Lower	Upper
TREAT	Drug	-7.0401	1.9189	14	-3.67	0.0025	0.05	-11.1558	-2.9245
TREAT	Placebo	-0.5933	1.9189	14	-0.31	0.7617	0.05	-4.7090	3.5224

Differences of Least Squares Means

Effect	TREAT	TREAT	Estimate	Standard Error	DF	t Value	Pr > |t|	Alpha	Lower	Upper
TREAT	Drug	Placebo	-6.4468	2.7324	14	-2.36	0.0334	0.05	-12.3073	-0.5863

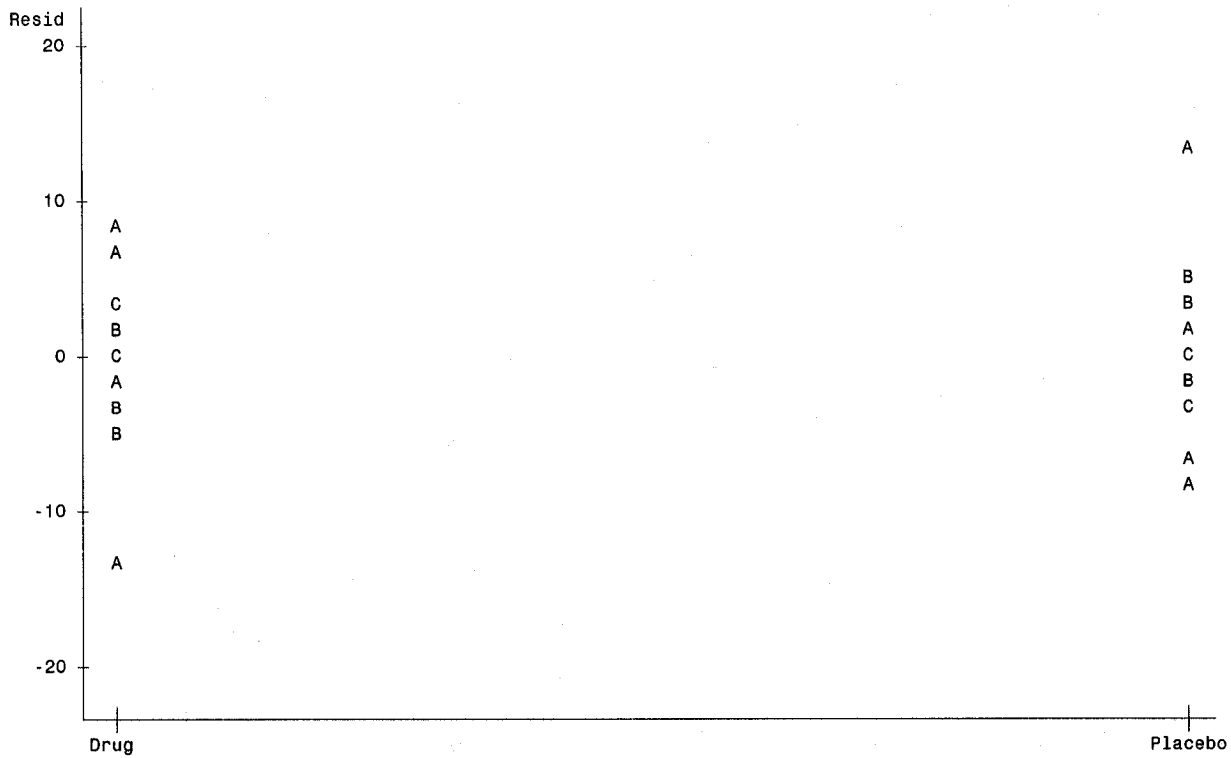
Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 3: Cintest Study No. 1
Time = 240 minutes

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



Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 3: Cintest Study No. 1
Time = 240 minutes

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



Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 3: Cintest Study No. 1
Time = 240 minutes
Checking Residuals for Study 3 at The Minutes Specified

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

The UNIVARIATE Procedure
Variable: Resid

Moments

N	16	Sum Weights	16
Mean	0	Sum Observations	0
Std Deviation	5.20714378	Variance	27.1143464
Skewness	-0.7146071	Kurtosis	1.58177529
Uncorrected SS	406.715195	Corrected SS	406.715195
Coeff Variation	.	Std Error Mean	1.30178595

Basic Statistical Measures

Location		Variability	
Mean	0.000000	Std Deviation	5.20714
Median	0.453442	Variance	27.11435
Mode	.	Range	22.14120
		Interquartile Range	6.39205

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	5	Pr >= |S|	0.8209

Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 3: Cintest Study No. 1
Time = 240 minutes
Checking Residuals for Study 3 at The Minutes Specified

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

The UNIVARIATE Procedure
Variable: Resid

Tests for Normality

Test	--Statistic---		-----p Value------	
Shapiro-Wilk	W	0.963724	Pr < W	0.7296
Kolmogorov-Smirnov	D	0.099873	Pr > D	>0.1500
Cramer-von Mises	W-Sq	0.030152	Pr > W-Sq	>0.2500
Anderson-Darling	A-Sq	0.242106	Pr > A-Sq	>0.2500

Quantiles (Definition 5)

Quantile	Estimate
100% Max	9.138384
99%	9.138384
95%	9.138384
90%	6.244101
75% Q3	3.472280
50% Median	0.453442
25% Q1	-2.919768
10%	-5.345908
5%	-13.002819
1%	-13.002819
0% Min	-13.002819

Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 3: Cintest Study No. 1
Time = 240 minutes
Checking Residuals for Study 3 at The Minutes Specified

TREAT=Drug

The UNIVARIATE Procedure
Variable: Resid

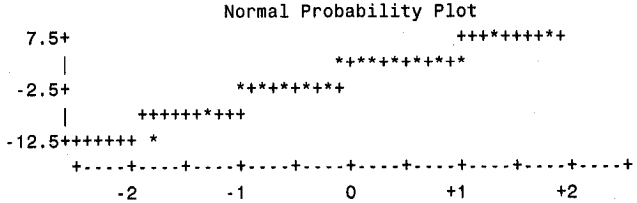
Extreme Observations

Lowest			Highest		
Value	PATIENT	Obs	Value	PATIENT	Obs
-13.00282	3023	8	3.31578	3018	7
-5.34591	3005	3	3.62878	3009	5
-4.45487	3001	1	4.11640	3026	9
-2.96793	3039	12	6.24410	3046	15
-2.87161	3008	4	9.13838	3044	14

Stem	Leaf	#	Boxplot
0	69	2	|
0	0122344	7	+--+--+
-0	43320	5	+-----+
-0	5	1	|
-1	3	1	0

----+----+----+----+
Multiply Stem.Leaf by 10**+1

Normal Probability Plot



Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 3: Cintest Study No. 1
Time = 240 minutes
Checking Residuals for Study 3 at The Minutes Specified

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

The UNIVARIATE Procedure
Variable: Resid

Moments

N	16	Sum Weights	16
Mean	0	Sum Observations	0
Std Deviation	5.20714378	Variance	27.1143464
Skewness	0.71460706	Kurtosis	1.58177529
Uncorrected SS	406.715195	Corrected SS	406.715195
Coeff Variation	.	Std Error Mean	1.30178595

Basic Statistical Measures

Location		Variability	
Mean	0.00000	Std Deviation	5.20714
Median	-0.45344	Variance	27.11435
Mode	.	Range	22.14120
		Interquartile Range	6.39205

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	-5	Pr >= |S|	0.8209

Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 3: Cintest Study No. 1
Time = 240 minutes
Checking Residuals for Study 3 at The Minutes Specified

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

The UNIVARIATE Procedure
Variable: Resid

Tests for Normality

Test		--Statistic---		-----p Value------
Shapiro-Wilk	W	0.963724	Pr < W	0.7296
Kolmogorov-Smirnov	D	0.099873	Pr > D	>0.1500
Cramer-von Mises	W-Sq	0.030152	Pr > W-Sq	>0.2500
Anderson-Darling	A-Sq	0.242106	Pr > A-Sq	>0.2500

Quantiles (Definition 5)

Quantile	Estimate
100% Max	13.002819
99%	13.002819
95%	13.002819
90%	5.345908
75% Q3	2.919768
50% Median	-0.453442
25% Q1	-3.472280
10%	-6.244101
5%	-9.138384
1%	-9.138384
0% Min	-9.138384

Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 3: Cintest Study No. 1
Time = 240 minutes
Checking Residuals for Study 3 at The Minutes Specified

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

The UNIVARIATE Procedure
Variable: Resid

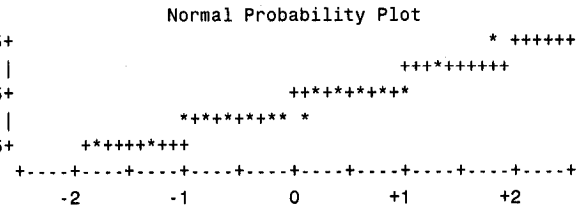
Extreme Observations

----------Lowest----------			----------Highest----------		
Value	PATIENT	Obs	Value	PATIENT	Obs
-9.13838	3044	14	2.87161	3008	4
-6.24410	3046	15	2.96793	3039	12
-4.11640	3026	9	4.45487	3001	1
-3.62878	3009	5	5.34591	3005	3
-3.31578	3018	7	13.00282	3023	8

Stem	Leaf	#	Boxplot
1	3	1	0
0	5	1	|
0	02334	5	+--+--+
-0	4432210	7	*-----*
-0	96	2	|

----+----+----+----+

Multiply Stem.Leaf by 10**+1



Phenylephrine vs. Placebo

Change From Baseline NAR (Nasal Airflow Resistance)

Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR

Patient Is Fixed

Study 3: Cintest Study No. 1

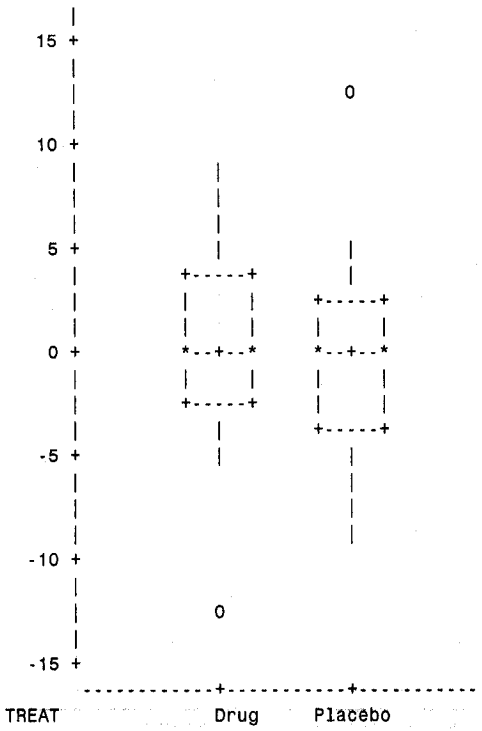
Time = 240 minutes

Checking Residuals for Study 3 at The Minutes Specified

The UNIVARIATE Procedure

Variable: Resid

Schematic Plots



Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 4: Cintest Study No. 2
Time = 15 minutes

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

The Mixed Procedure

Model Information

Data Set	WORK.ALL
Dependent Variable	CHANGE
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	15	4001 4003 4007 4010 4012 4017 4024 4026 4027 4030 4032 4034 4037 4039 4044

Dimensions

Covariance Parameters	1
Columns in X	19
Columns in Z	0
Subjects	1
Max Obs Per Subject	30
Observations Used	30
Observations Not Used	0
Total Observations	30

Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 4: Cintest Study No. 2
Time = 15 minutes

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

The Mixed Procedure

Covariance Parameter Estimates

Cov Parm	Estimate
Residual	3.2621

Fit Statistics

-2 Res Log Likelihood	70.4
AIC (smaller is better)	72.4
AICC (smaller is better)	72.8
BIC (smaller is better)	73.0

Type 3 Tests of Fixed Effects

Effect	Num DF	Den DF	F Value	Pr > F
BASELINE	1	13	6.38	0.0253
PATIENT	14	13	4.85	0.0036
TREAT	1	13	0.09	0.7745

Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 4: Cintest 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	-0.6196	0.4711	13	-1.32	0.2111	0.05	-1.6373	0.3980
TREAT	Placebo	-0.8164	0.4711	13	-1.73	0.1067	0.05	-1.8341	0.2012

Differences of Least Squares Means

Effect	TREAT	TREAT	Estimate	Standard Error	DF	t Value	Pr > |t|	Alpha	Lower	Upper
TREAT	Drug	Placebo	0.1968	0.6728	13	0.29	0.7745	0.05	-1.2566	1.6502

Phenylephrine vs. Placebo

Change From Baseline NAR (Nasal Airflow Resistance)

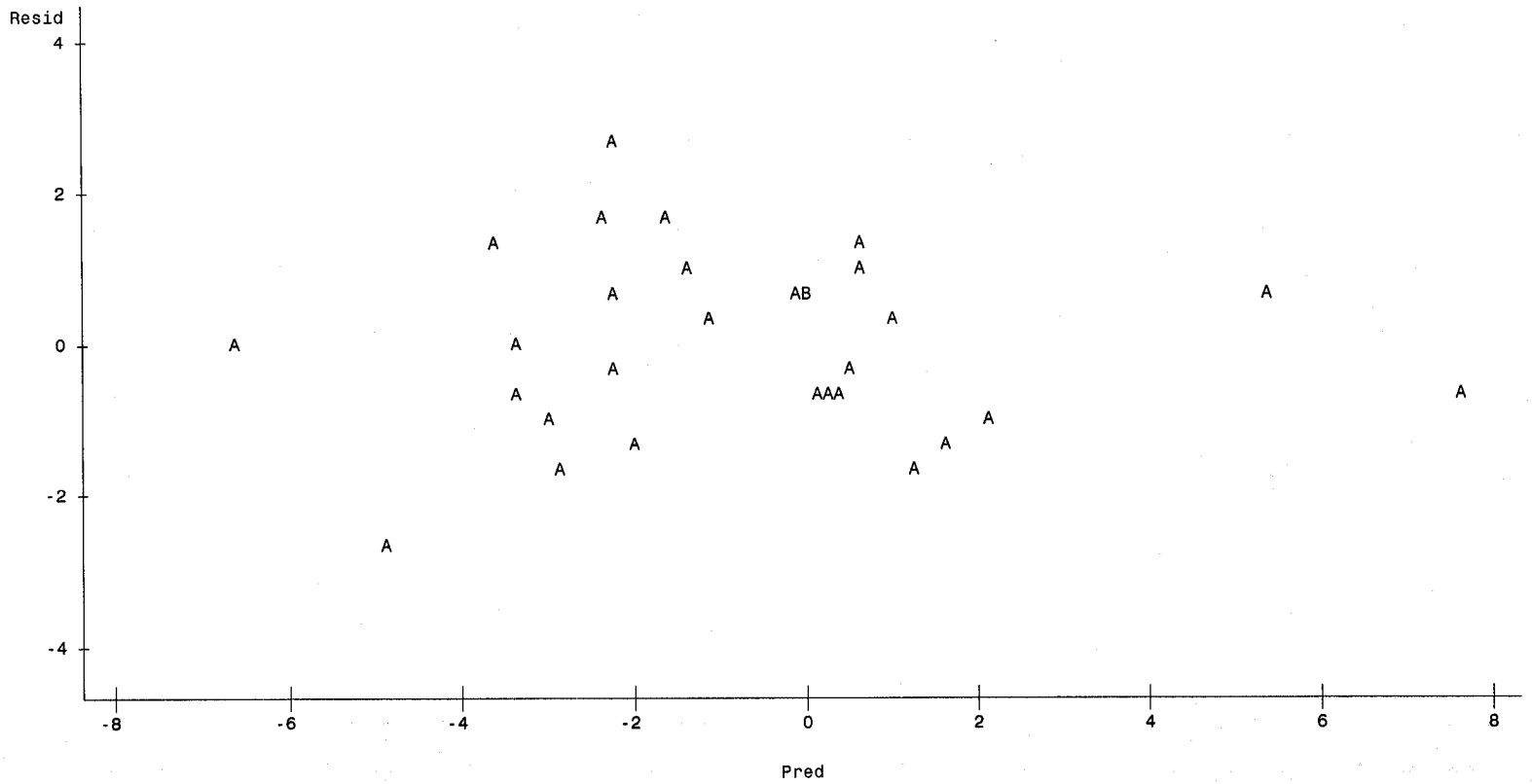
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR

Patient Is Fixed

Study 4: Cintest Study No. 2

Time = 15 minutes

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



Phenylephrine vs. Placebo

Change From Baseline NAR (Nasal Airflow Resistance)

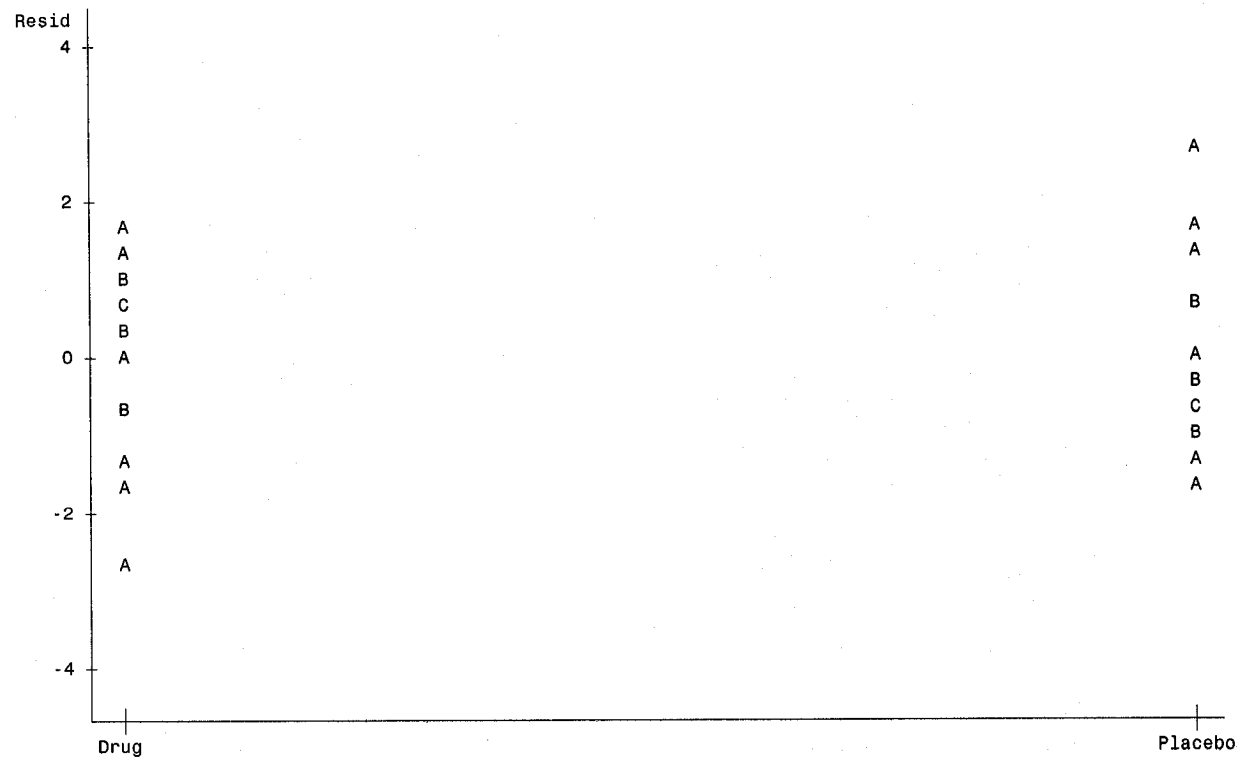
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR

Patient Is Fixed

Study 4: Cintest Study No. 2

Time = 15 minutes

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



Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 4: Cintest Study No. 2
Time = 15 minutes
Checking Residuals for Study 4 at The Minutes Specified

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

The UNIVARIATE Procedure
Variable: Resid

Moments

N	15	Sum Weights	15
Mean	0	Sum Observations	0
Std Deviation	1.23066705	Variance	1.51454138
Skewness	-0.783208	Kurtosis	0.12531225
Uncorrected SS	21.2035793	Corrected SS	21.2035793
Coeff Variation	.	Std Error Mean	0.31775686

Basic Statistical Measures

Location		Variability	
Mean	0.000000	Std Deviation	1.23067
Median	0.246841	Variance	1.51454
Mode	.	Range	4.48934
		Interquartile Range	1.68864

Tests for Location: Mu0=0

Test	-Statistic-		-----p Value------	
Student's t	t	0	Pr > |t|	1.0000
Sign	M	1.5	Pr >= |M|	0.6072
Signed Rank	S	5	Pr >= |S|	0.8040

Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 4: Cintest Study No. 2
Time = 15 minutes
Checking Residuals for Study 4 at The Minutes Specified

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

The UNIVARIATE Procedure
Variable: Resid

Tests for Normality

Test		--Statistic---		-----p Value------
Shapiro-Wilk	W	0.945846	Pr < W	0.4615
Kolmogorov-Smirnov	D	0.15768	Pr > D	>0.1500
Cramer-von Mises	W-Sq	0.062548	Pr > W-Sq	>0.2500
Anderson-Darling	A-Sq	0.362838	Pr > A-Sq	>0.2500

Quantiles (Definition 5)

Quantile	Estimate
100% Max	1.763341
99%	1.763341
95%	1.763341
90%	1.282427
75% Q3	0.927035
50% Median	0.246841
25% Q1	-0.761610
10%	-1.595270
5%	-2.726003
1%	-2.726003
0% Min	-2.726003

Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 4: Cintest Study No. 2
Time = 15 minutes
Checking Residuals for Study 4 at The Minutes Specified

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

The UNIVARIATE Procedure
Variable: Resid

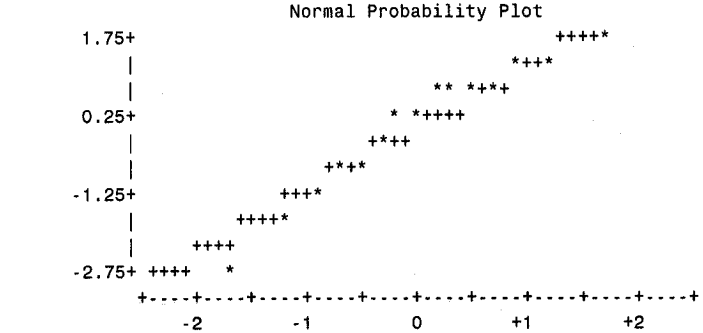
Extreme Observations

----------Lowest----------			----------Highest----------		
Value	PATIENT	Obs	Value	PATIENT	Obs
-2.726003	4026	8	0.741399	4034	12
-1.595270	4001	1	0.927035	4044	15
-1.428787	4030	10	1.027113	4024	7
-0.761610	4010	4	1.282427	4027	9
-0.729556	4012	5	1.763341	4032	11

Stem	Leaf	#	Boxplot
1	8	1	
1	03	2	
0	6679	4	+-----+
0	22	2	*--+--*
-0	1	1	| |
-0	87	2	+-----+
-1	4	1	
-1	6	1	
-2			
-2	7	1	

----+----+----+----+

Normal Probability Plot



Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 4: Cintest Study No. 2
Time = 15 minutes
Checking Residuals for Study 4 at The Minutes Specified

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

The UNIVARIATE Procedure
Variable: Resid

Moments

N	15	Sum Weights	15
Mean	0	Sum Observations	0
Std Deviation	1.23066705	Variance	1.51454138
Skewness	0.78320797	Kurtosis	0.12531225
Uncorrected SS	21.2035793	Corrected SS	21.2035793
Coeff Variation	.	Std Error Mean	0.31775686

Basic Statistical Measures

Location		Variability	
Mean	0.00000	Std Deviation	1.23067
Median	-0.24684	Variance	1.51454
Mode	.	Range	4.48934
		Interquartile Range	1.68864

Tests for Location: Mu0=0

Test	-Statistic-		-----p Value------	
Student's t	t	0	Pr > |t|	1.0000
Sign	M	-1.5	Pr >= |M|	0.6072
Signed Rank	S	-5	Pr >= |S|	0.8040

Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 4: Cintest Study No. 2
Time = 15 minutes
Checking Residuals for Study 4 at The Minutes Specified

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

The UNIVARIATE Procedure
Variable: Resid

Tests for Normality

Test		--Statistic---		-----p Value------
Shapiro-Wilk	W	0.945846	Pr < W	0.4615
Kolmogorov-Smirnov	D	0.15768	Pr > D	>0.1500
Cramer-von Mises	W-Sq	0.062548	Pr > W-Sq	>0.2500
Anderson-Darling	A-Sq	0.362838	Pr > A-Sq	>0.2500

Quantiles (Definition 5)

Quantile	Estimate
100% Max	2.726003
99%	2.726003
95%	2.726003
90%	1.595270
75% Q3	0.761610
50% Median	-0.246841
25% Q1	-0.927035
10%	-1.282427
5%	-1.763341
1%	-1.763341
0% Min	-1.763341

Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 4: Cintest Study No. 2
Time = 15 minutes
Checking Residuals for Study 4 at The Minutes Specified

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

The UNIVARIATE Procedure
Variable: Resid

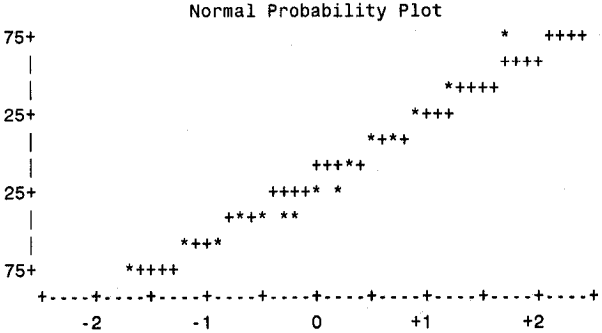
Extreme Observations

----------Lowest----------			----------Highest----------		
Value	PATIENT	Obs	Value	PATIENT	Obs
-1.763341	4032	11	0.729556	4012	5
-1.282427	4027	9	0.761610	4010	4
-1.027113	4024	7	1.428787	4030	10
-0.927035	4044	15	1.595270	4001	1
-0.741399	4034	12	2.726003	4026	8

Stem	Leaf	#	Boxplot
2	7	1	
2			
1	6	1	
1	4	1	
0	78	2	
0	1	1	
-0	22	2	
-0	9766	4	
-1	30	2	
-1	8	1	

----+----+----+----+

Normal Probability Plot



Phenylephrine vs. Placebo

Change From Baseline NAR (Nasal Airflow Resistance)

Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR

Patient Is Fixed

Study 4: Cintest Study No. 2

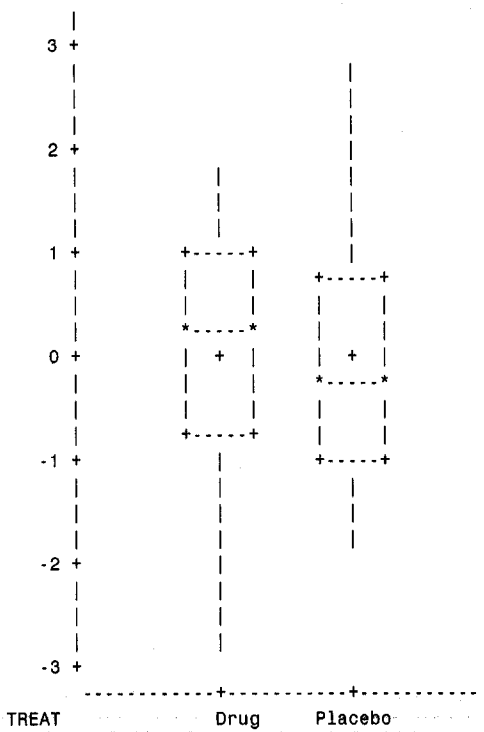
Time = 15 minutes

Checking Residuals for Study 4 at The Minutes Specified

The UNIVARIATE Procedure

Variable: Resid

Schematic Plots



Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 4: Cintest Study No. 2
Time = 30 minutes

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

The Mixed Procedure

Model Information

Data Set	WORK.ALL
Dependent Variable	CHANGE
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	15	4001 4003 4007 4010 4012 4017 4024 4026 4027 4030 4032 4034 4037 4039 4044

Dimensions

Covariance Parameters	1
Columns in X	19
Columns in Z	0
Subjects	1
Max Obs Per Subject	30
Observations Used	30
Observations Not Used	0
Total Observations	30

Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 4: Cintest Study No. 2
Time = 30 minutes

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

The Mixed Procedure

Covariance Parameter Estimates

Cov Parm	Estimate
Residual	3.4163

Fit Statistics

-2 Res Log Likelihood	71.0
AIC (smaller is better)	73.0
AICC (smaller is better)	73.4
BIC (smaller is better)	73.6

Type 3 Tests of Fixed Effects

Effect	Num DF	Den DF	F Value	Pr > F
BASELINE	1	13	4.71	0.0492
PATIENT	14	13	2.77	0.0375
TREAT	1	13	0.84	0.3772

Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 4: Cintest Study No. 2
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	-1.1894	0.4821	13	-2.47	0.0283	0.05	-2.2308	-0.1480
TREAT	Placebo	-1.8189	0.4821	13	-3.77	0.0023	0.05	-2.8603	-0.7774

Differences of Least Squares Means

Effect	TREAT	TREAT	Estimate	Standard Error	DF	t Value	Pr > |t|	Alpha	Lower	Upper
TREAT	Drug	Placebo	0.6294	0.6885	13	0.91	0.3772	0.05	-0.8580	2.1168

Phenylephrine vs. Placebo

Change From Baseline NAR (Nasal Airflow Resistance)

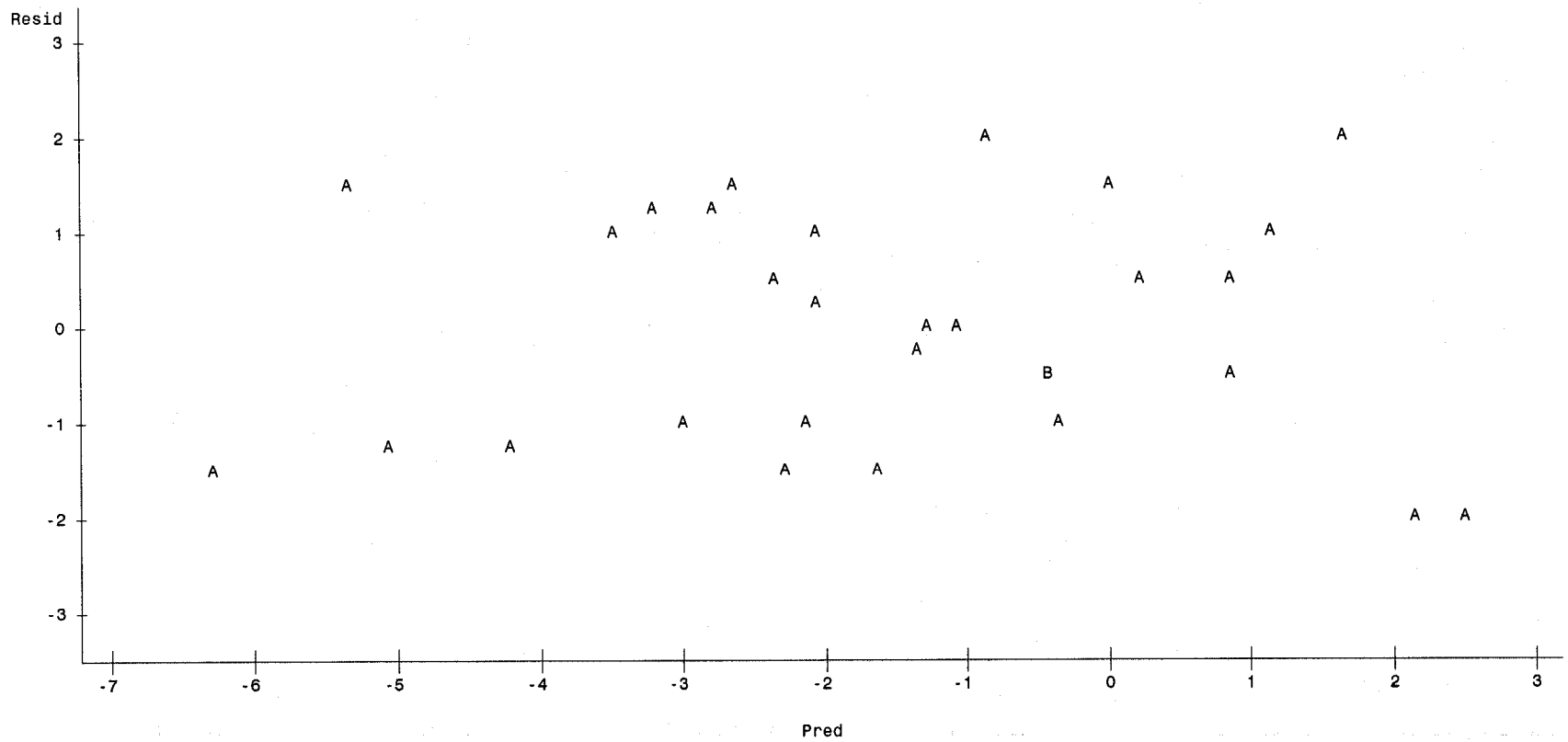
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR

Patient Is Fixed

Study 4: Cintest Study No. 2

Time = 30 minutes

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



Phenylephrine vs. Placebo

Change From Baseline NAR (Nasal Airflow Resistance)

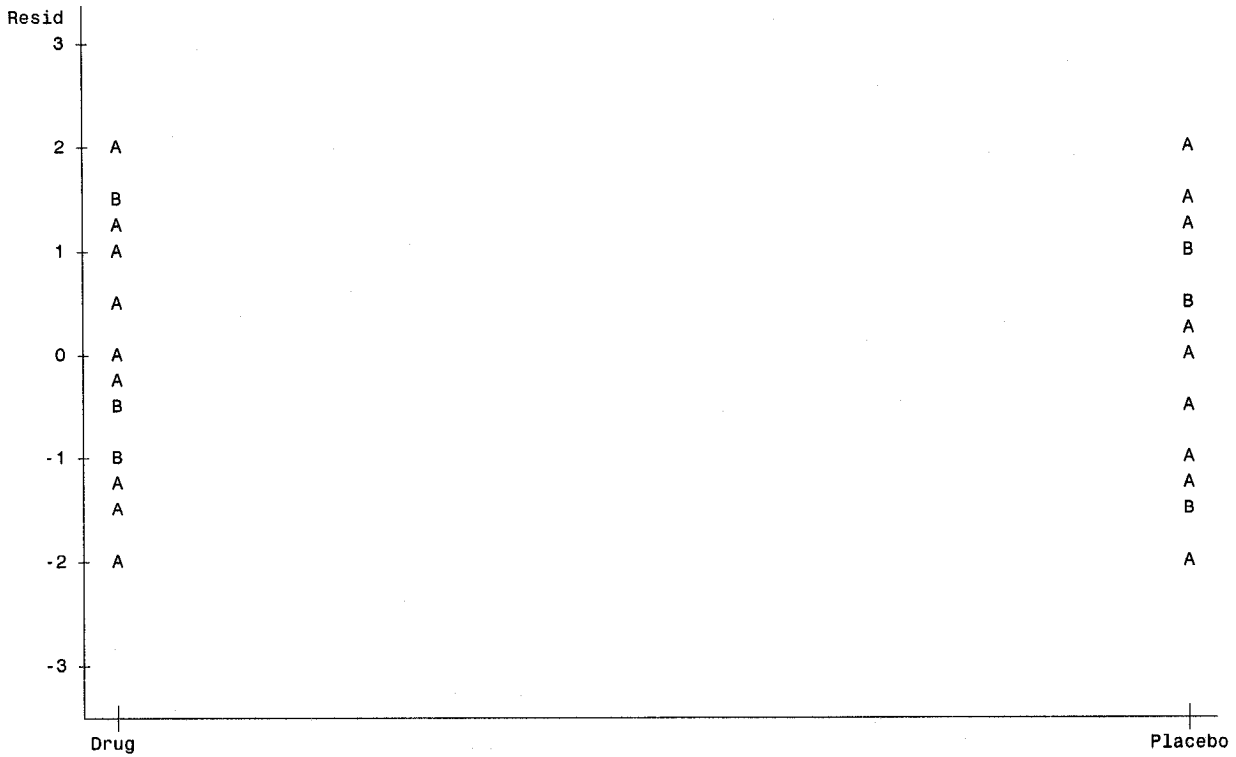
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR

Patient Is Fixed

Study 4: Cintest Study No. 2

Time = 30 minutes

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



Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 4: Cintest Study No. 2
Time = 30 minutes
Checking Residuals for Study 4 at The Minutes Specified

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

The UNIVARIATE Procedure
Variable: Resid

Moments

N	15	Sum Weights	15
Mean	0	Sum Observations	0
Std Deviation	1.25942325	Variance	1.58614691
Skewness	0.10873091	Kurtosis	-1.0525742
Uncorrected SS	22.2060568	Corrected SS	22.2060568
Coeff Variation	.	Std Error Mean	0.32518168

Basic Statistical Measures

Location		Variability	
Mean	0.00000	Std Deviation	1.25942
Median	-0.15767	Variance	1.58615
Mode	.	Range	4.23862
		Interquartile Range	2.24040

Tests for Location: Mu0=0

Test	-Statistic-		-----p Value------	
Student's t	t	0	Pr > |t|	1.0000
Sign	M	-0.5	Pr >= |M|	1.0000
Signed Rank	S	2	Pr >= |S|	0.9341

Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 4: Cintest Study No. 2
Time = 30 minutes
Checking Residuals for Study 4 at The Minutes Specified

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

The UNIVARIATE Procedure
Variable: Resid

Tests for Normality

Test		--Statistic---		-----p Value------
Shapiro-Wilk	W	0.963944	Pr < W	0.7605
Kolmogorov-Smirnov	D	0.133609	Pr > D	>0.1500
Cramer-von Mises	W-Sq	0.03802	Pr > W-Sq	>0.2500
Anderson-Darling	A-Sq	0.246666	Pr > A-Sq	>0.2500

Quantiles (Definition 5)

Quantile	Estimate
100% Max	2.124476
99%	2.124476
95%	2.124476
90%	1.483696
75% Q3	1.240498
50% Median	-0.157668
25% Q1	-0.999902
10%	-1.408118
5%	-2.114145
1%	-2.114145
0% Min	-2.114145

Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 4: Cintest Study No. 2
Time = 30 minutes
Checking Residuals for Study 4 at The Minutes Specified

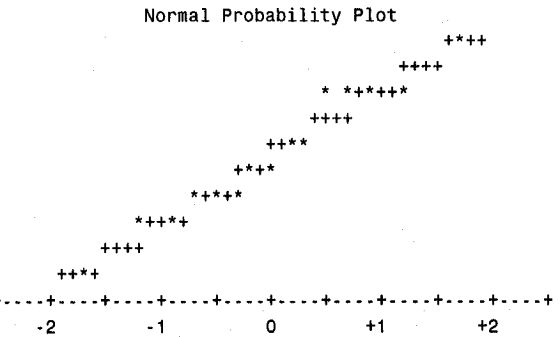
TREAT=Drug

The UNIVARIATE Procedure
Variable: Resid

Extreme Observations

Lowest			Highest		
Value	PATIENT	Obs	Value	PATIENT	Obs
-2.114145	4001	1	1.06120	4003	2
-1.408118	4037	13	1.24050	4034	12
-1.324129	4026	8	1.46238	4027	9
-0.999902	4007	3	1.48370	4032	11
-0.888552	4039	14	2.12448	4024	7

Stem	Leaf	#	Boxplot
2	1	1	
1	55	2	
1	12	2	
0			
0	14	2	
-0	42	2	
-0	96	2	
-1	430	3	
-1			
-2	1	1	



Phenylephrine vs. Placebo

Change From Baseline NAR (Nasal Airflow Resistance)

Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR

Patient Is Fixed

Study 4: Cintest Study No. 2

Time = 30 minutes

Checking Residuals for Study 4 at The Minutes Specified

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

The UNIVARIATE Procedure
Variable: Resid

Moments

N	15	Sum Weights	15
Mean	0	Sum Observations	0
Std Deviation	1.25942325	Variance	1.58614691
Skewness	-0.1087309	Kurtosis	-1.0525742
Uncorrected SS	22.2060568	Corrected SS	22.2060568
Coeff Variation	.	Std Error Mean	0.32518168

Basic Statistical Measures

Location		Variability	
Mean	0.000000	Std Deviation	1.25942
Median	0.157668	Variance	1.58615
Mode	.	Range	4.23862
		Interquartile Range	2.24040

Tests for Location: Mu0=0

Test	-Statistic-		-----p Value------	
Student's t	t	0	Pr > |t|	1.0000
Sign	M	0.5	Pr >= |M|	1.0000
Signed Rank	S	-2	Pr >= |S|	0.9341

Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 4: Clintest Study No. 2
Time = 30 minutes
Checking Residuals for Study 4 at The Minutes Specified

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

The UNIVARIATE Procedure
Variable: Resid

Tests for Normality

Test		--Statistic---		-----p Value------
Shapiro-Wilk	W	0.963944	Pr < W	0.7605
Kolmogorov-Smirnov	D	0.133609	Pr > D	>0.1500
Cramer-von Mises	W-Sq	0.03802	Pr > W-Sq	>0.2500
Anderson-Darling	A-Sq	0.246666	Pr > A-Sq	>0.2500

Quantiles (Definition 5)

Quantile	Estimate
100% Max	2.114145
99%	2.114145
95%	2.114145
90%	1.408118
75% Q3	0.999902
50% Median	0.157668
25% Q1	-1.240498
10%	-1.483696
5%	-2.124476
1%	-2.124476
0% Min	-2.124476

Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 4: Cintest Study No. 2
Time = 30 minutes
Checking Residuals for Study 4 at The Minutes Specified

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

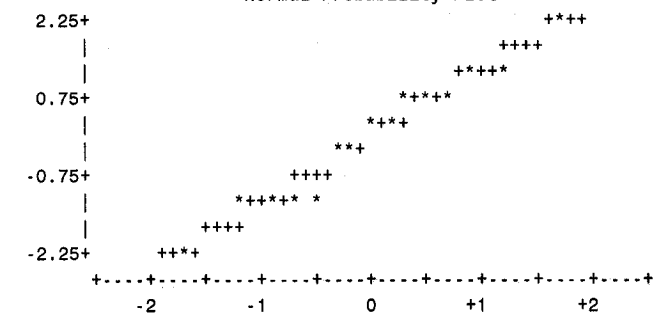
The UNIVARIATE Procedure
Variable: Resid

Extreme Observations

----------Lowest----------			----------Highest----------		
Value	PATIENT	Obs	Value	PATIENT	Obs
-2.12448	4024	7	0.888552	4039	14
-1.48370	4032	11	0.999902	4007	3
-1.46238	4027	9	1.324129	4026	8
-1.24050	4034	12	1.408118	4037	13
-1.06120	4003	2	2.114145	4001	1

Stem	Leaf	#	Boxplot
2	1	1	
1			
1	034	3	
0	69	2	
0	24	2	
-0	41	2	
-0			
-1	21	2	
-1	55	2	
-2	1	1	

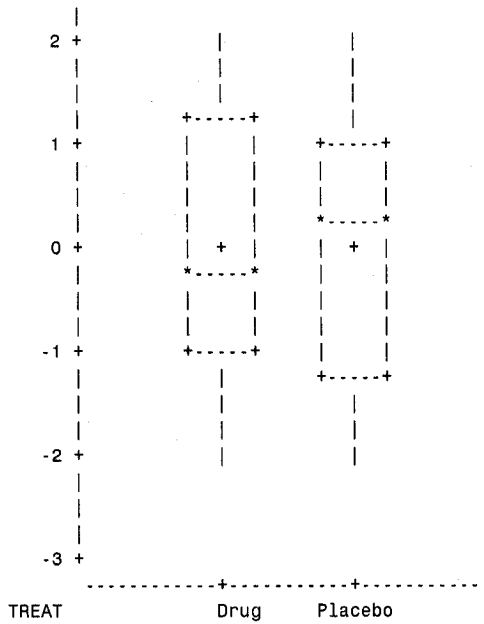
Normal Probability Plot



Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 4: Cintest Study No. 2
Time = 30 minutes
Checking Residuals for Study 4 at The Minutes Specified

The UNIVARIATE Procedure
Variable: Resid

Schematic Plots



Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 4: Cintest Study No. 2
Time = 45 minutes

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

The Mixed Procedure

Model Information

Data Set	WORK.ALL
Dependent Variable	CHANGE
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	15	4001 4003 4007 4010 4012 4017 4024 4026 4027 4030 4032 4034 4037 4039 4044

Dimensions

Covariance Parameters	1
Columns in X	19
Columns in Z	0
Subjects	1
Max Obs Per Subject	30
Observations Used	30
Observations Not Used	0
Total Observations	30

Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 4: Clintest Study No. 2
Time = 45 minutes

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

The Mixed Procedure

Covariance Parameter Estimates

Cov Parm	Estimate
Residual	8.7244

Fit Statistics

-2 Res Log Likelihood	83.2
AIC (smaller is better)	85.2
AICC (smaller is better)	85.6
BIC (smaller is better)	85.8

Type 3 Tests of Fixed Effects

Effect	Num DF	Den DF	F Value	Pr > F
BASELINE	1	13	2.87	0.1140
PATIENT	14	13	1.82	0.1448
TREAT	1	13	0.28	0.6047

Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 4: Cintest Study No. 2
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	-1.9019	0.7704	13	-2.47	0.0282	0.05	-3.5661	-0.2376
TREAT	Placebo	-2.4856	0.7704	13	-3.23	0.0066	0.05	-4.1499	-0.8214

Differences of Least Squares Means

Effect	TREAT	TREAT	Estimate	Standard Error	DF	t Value	Pr > |t|	Alpha	Lower	Upper
TREAT	Drug	Placebo	0.5838	1.1002	13	0.53	0.6047	0.05	-1.7932	2.9607

Phenylephrine vs. Placebo

Change From Baseline NAR (Nasal Airflow Resistance)

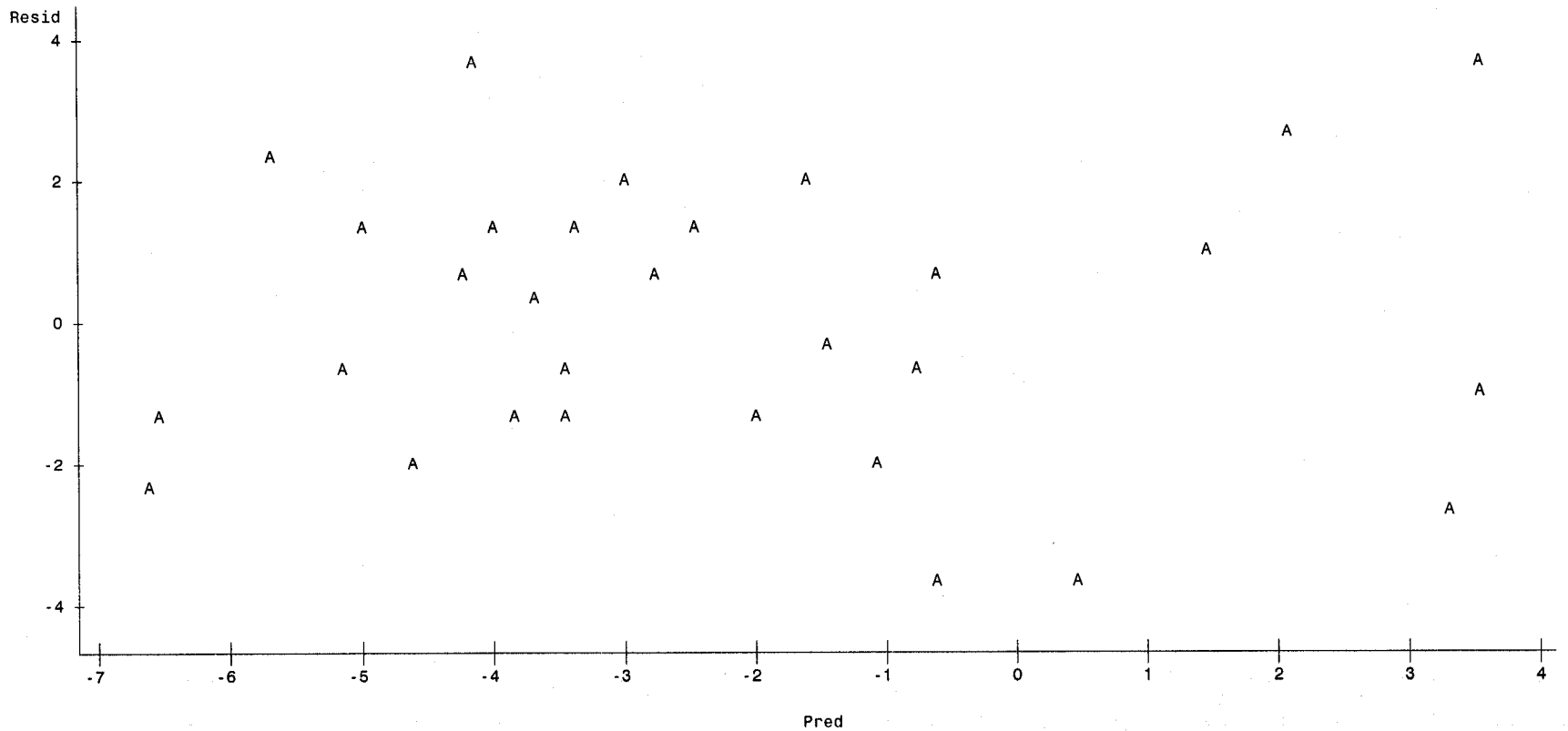
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR

Patient Is Fixed

Study 4: Cintest Study No. 2

Time = 45 minutes

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



Phenylephrine vs. Placebo

Change From Baseline NAR (Nasal Airflow Resistance)

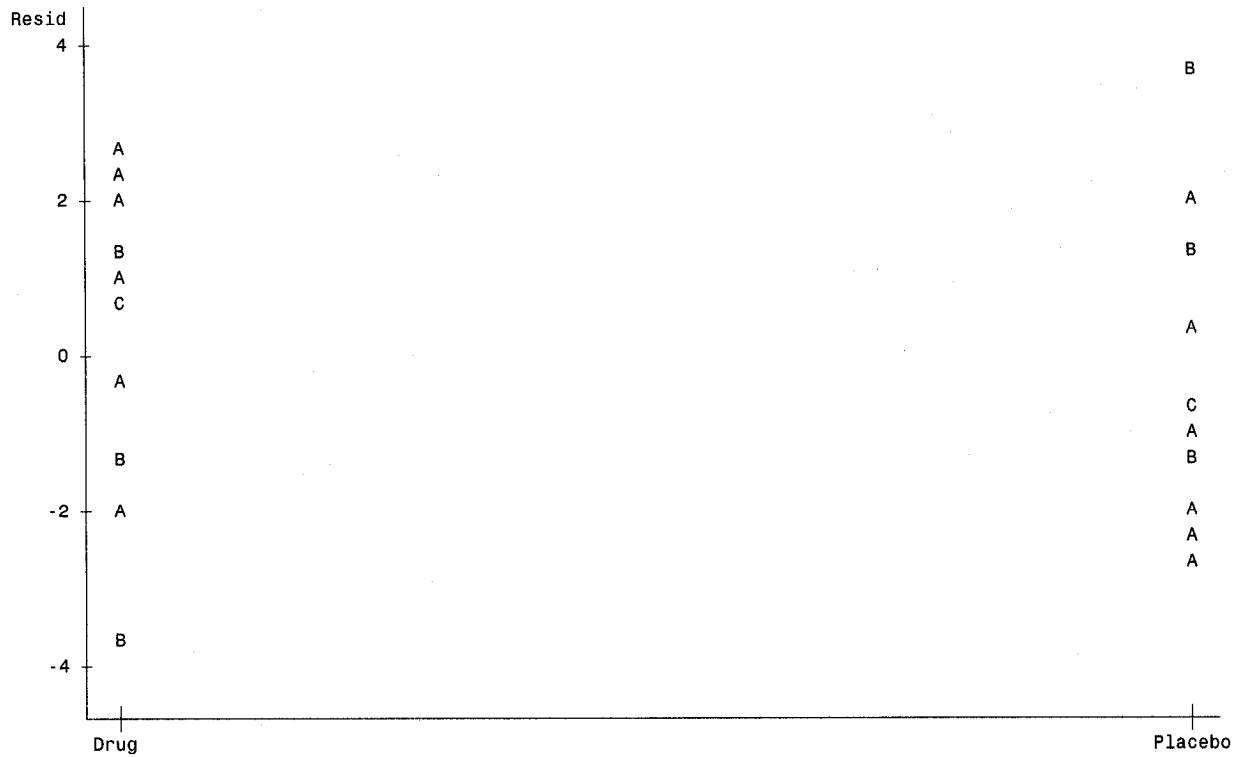
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR

Patient Is Fixed

Study 4: Cintest Study No. 2

Time = 45 minutes

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



Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 4: Cintest Study No. 2
Time = 45 minutes
Checking Residuals for Study 4 at The Minutes Specified

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

The UNIVARIATE Procedure
Variable: Resid

Moments

N	15	Sum Weights	15
Mean	0	Sum Observations	0
Std Deviation	2.01260927	Variance	4.05059607
Skewness	-0.7543852	Kurtosis	-0.2924411
Uncorrected SS	56.7083449	Corrected SS	56.7083449
Coeff Variation	.	Std Error Mean	0.51965348

Basic Statistical Measures

Location		Variability	
Mean	0.000000	Std Deviation	2.01261
Median	0.634542	Variance	4.05060
Mode	.	Range	6.39323
		Interquartile Range	2.62094

Tests for Location: Mu0=0

Test	-Statistic-		-----p Value------	
Student's t	t	0	Pr > |t|	1.0000
Sign	M	1.5	Pr >= |M|	0.6072
Signed Rank	S	4	Pr >= |S|	0.8469

Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 4: Cintest Study No. 2
Time = 45 minutes
Checking Residuals for Study 4 at The Minutes Specified

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

The UNIVARIATE Procedure
Variable: Resid

Tests for Normality

Test		--Statistic---		-----p Value------	
Shapiro-Wilk	W	0.915229	Pr < W		0.1629
Kolmogorov-Smirnov	D	0.211261	Pr > D		0.0714
Cramer-von Mises	W-Sq	0.078499	Pr > W-Sq		0.2081
Anderson-Darling	A-Sq	0.484909	Pr > A-Sq		0.2016

Quantiles (Definition 5)

Quantile	Estimate
100% Max	2.568809
99%	2.568809
95%	2.568809
90%	2.387277
75% Q3	1.296020
50% Median	0.634542
25% Q1	-1.324925
10%	-3.714150
5%	-3.824424
1%	-3.824424
0% Min	-3.824424

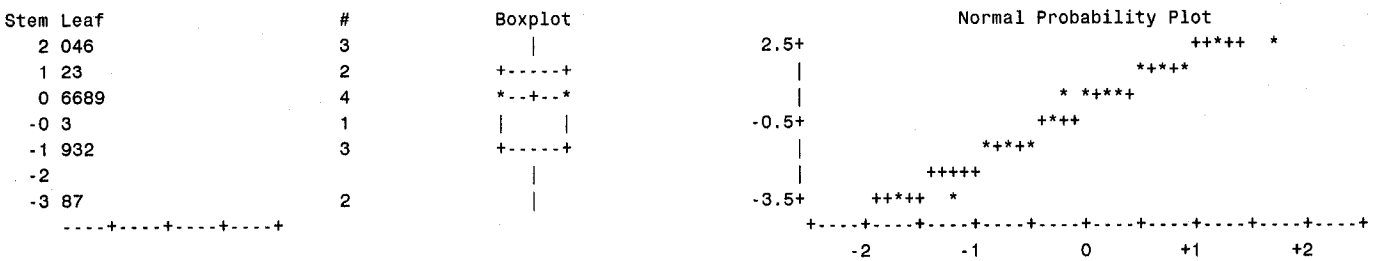
Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 4: Cintest Study No. 2
Time = 45 minutes
Checking Residuals for Study 4 at The Minutes Specified

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

The UNIVARIATE Procedure
Variable: Resid

Extreme Observations

----------Lowest----------			----------Highest----------		
Value	PATIENT	Obs	Value	PATIENT	Obs
-3.82442	4037	13	1.18786	4030	10
-3.71415	4001	1	1.29602	4027	9
-1.90335	4010	4	1.95064	4034	12
-1.32493	4026	8	2.38728	4032	11
-1.19275	4039	14	2.56881	4024	7



Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 4: Cintest Study No. 2
Time = 45 minutes
Checking Residuals for Study 4 at The Minutes Specified

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

The UNIVARIATE Procedure
Variable: Resid

Moments

N	15	Sum Weights	15
Mean	0	Sum Observations	0
Std Deviation	2.01260927	Variance	4.05059607
Skewness	0.7543852	Kurtosis	-0.2924411
Uncorrected SS	56.7083449	Corrected SS	56.7083449
Coeff Variation	.	Std Error Mean	0.51965348

Basic Statistical Measures

Location		Variability	
Mean	0.00000	Std Deviation	2.01261
Median	-0.63454	Variance	4.05060
Mode	.	Range	6.39323
		Interquartile Range	2.62094

Tests for Location: Mu0=0

Test	-Statistic-		-----p Value------	
Student's t	t	0	Pr > |t|	1.0000
Sign	M	-1.5	Pr >= |M|	0.6072
Signed Rank	S	-4	Pr >= |S|	0.8469

Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 4: Cintest Study No. 2
Time = 45 minutes
Checking Residuals for Study 4 at The Minutes Specified

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

The UNIVARIATE Procedure
Variable: Resid

Tests for Normality

Test		--Statistic---		-----p Value------
Shapiro-Wilk	W	0.915229	Pr < W	0.1629
Kolmogorov-Smirnov	D	0.211261	Pr > D	0.0714
Cramer-von Mises	W-Sq	0.078499	Pr > W-Sq	0.2081
Anderson-Darling	A-Sq	0.484909	Pr > A-Sq	0.2016

Quantiles (Definition 5)

Quantile	Estimate
100% Max	3.824424
99%	3.824424
95%	3.824424
90%	3.714150
75% Q3	1.324925
50% Median	-0.634542
25% Q1	-1.296020
10%	-2.387277
5%	-2.568809
1%	-2.568809
0% Min	-2.568809

Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 4: Cintest Study No. 2
Time = 45 minutes
Checking Residuals for Study 4 at The Minutes Specified

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

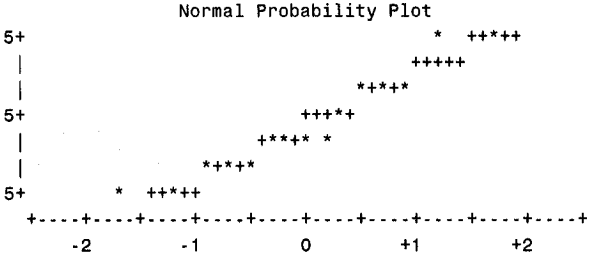
The UNIVARIATE Procedure
Variable: Resid

Extreme Observations

----------Lowest----------			----------Highest----------		
Value	PATIENT	Obs	Value	PATIENT	Obs
-2.56881	4024	7	1.19275	4039	14
-2.38728	4032	11	1.32493	4026	8
-1.95064	4034	12	1.90335	4010	4
-1.29602	4027	9	3.71415	4001	1
-1.18786	4030	10	3.82442	4037	13

Stem	Leaf	#	Boxplot
3	78	2	
2			
1	239	3	
0	3	1	
-0	9866	4	
-1	32	2	
-2	640	3	

Normal Probability Plot



Phenylephrine vs. Placebo

Change From Baseline NAR (Nasal Airflow Resistance)

Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR

Patient Is Fixed

Study 4: Cintest Study No. 2

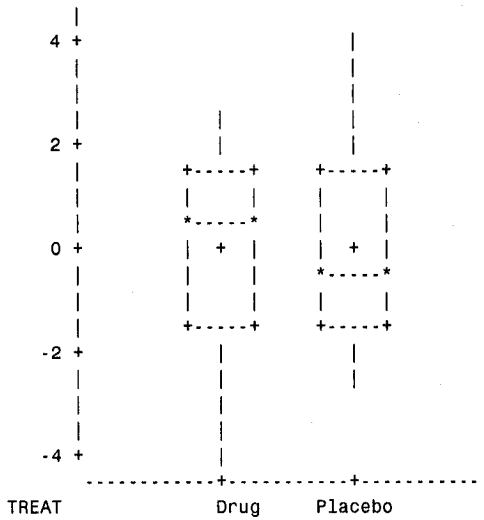
Time = 45 minutes

Checking Residuals for Study 4 at The Minutes Specified

The UNIVARIATE Procedure

Variable: Resid

Schematic Plots



Phenylephrine vs. Placebo

Change From Baseline NAR (Nasal Airflow Resistance)

Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR

Patient Is Fixed

Study 4: Cintest Study No. 2

Time = 60 minutes

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

The Mixed Procedure

Model Information

Data Set	WORK.ALL
Dependent Variable	CHANGE
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	15	4001 4003 4007 4010 4012 4017 4024 4026 4027 4030 4032 4034 4037 4039 4044

Dimensions

Covariance Parameters	1
Columns in X	19
Columns in Z	0
Subjects	1
Max Obs Per Subject	30
Observations Used	30
Observations Not Used	0
Total Observations	30

Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 4: Cintest Study No. 2
Time = 60 minutes

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

The Mixed Procedure

Covariance Parameter Estimates

Cov Parm	Estimate
Residual	15.7894

Fit Statistics

-2 Res Log Likelihood	90.9
AIC (smaller is better)	92.9
AICC (smaller is better)	93.3
BIC (smaller is better)	93.5

Type 3 Tests of Fixed Effects

Effect	Num DF	Den DF	F Value	Pr > F
BASELINE	1	13	3.79	0.0737
PATIENT	14	13	1.15	0.4034
TREAT	1	13	0.75	0.4029

Phenylephrine vs. Placebo

Change From Baseline NAR (Nasal Airflow Resistance)

Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR

Patient Is Fixed

Study 4: Cintest Study No. 2

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	-3.7029	1.0363	13	-3.57	0.0034	0.05	-5.9418	-1.4640
TREAT	Placebo	-2.4231	1.0363	13	-2.34	0.0360	0.05	-4.6620	-0.1842

Differences of Least Squares Means

Effect	TREAT	TREAT	Estimate	Standard Error	DF	t Value	Pr > |t|	Alpha	Lower	Upper
TREAT	Drug	Placebo	-1.2798	1.4801	13	-0.86	0.4029	0.05	-4.4774	1.9179

Phenylephrine vs. Placebo

Change From Baseline NAR (Nasal Airflow Resistance)

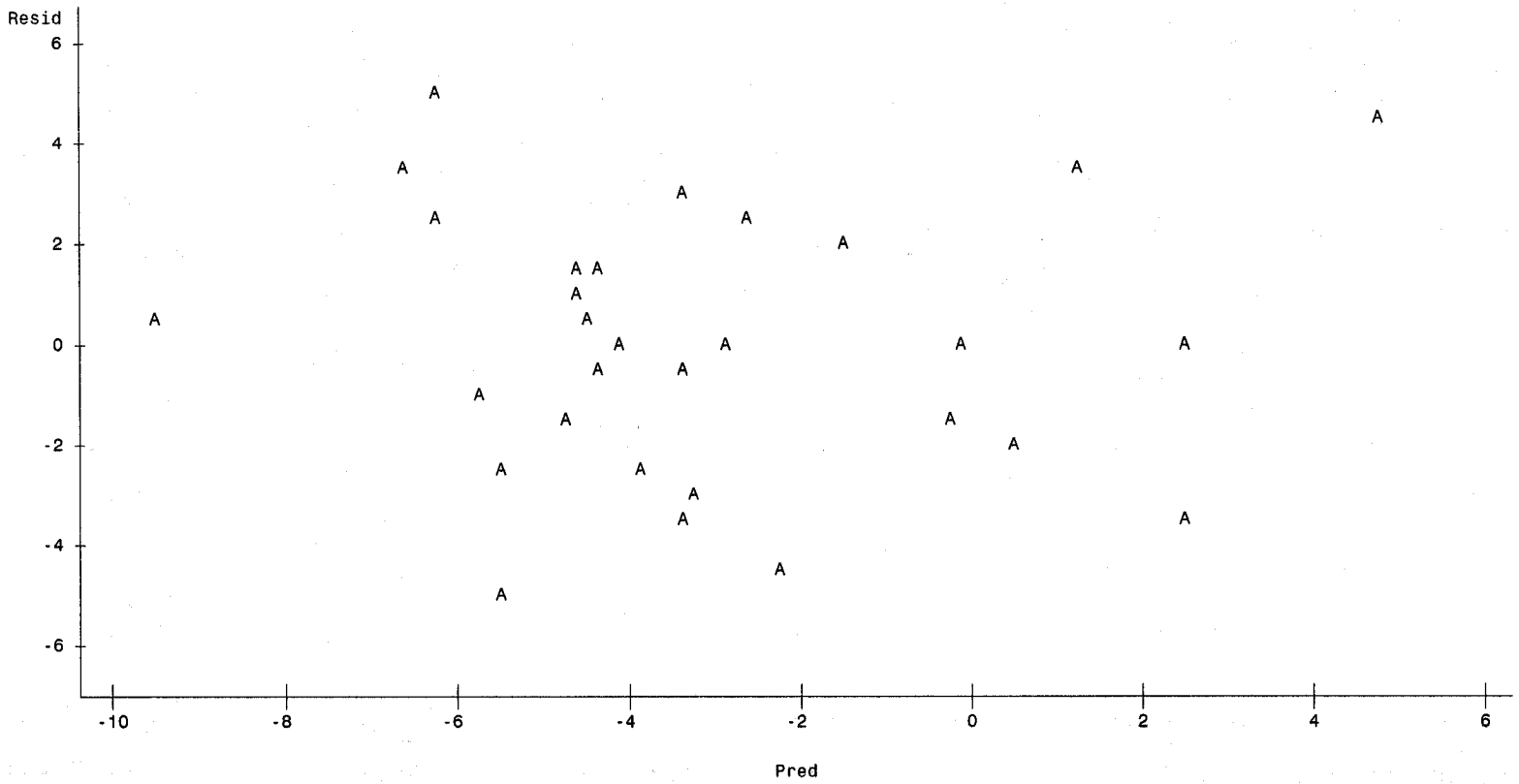
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR

Patient Is Fixed

Study 4: Cintest Study No. 2

Time = 60 minutes

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



Phenylephrine vs. Placebo

Change From Baseline NAR (Nasal Airflow Resistance)

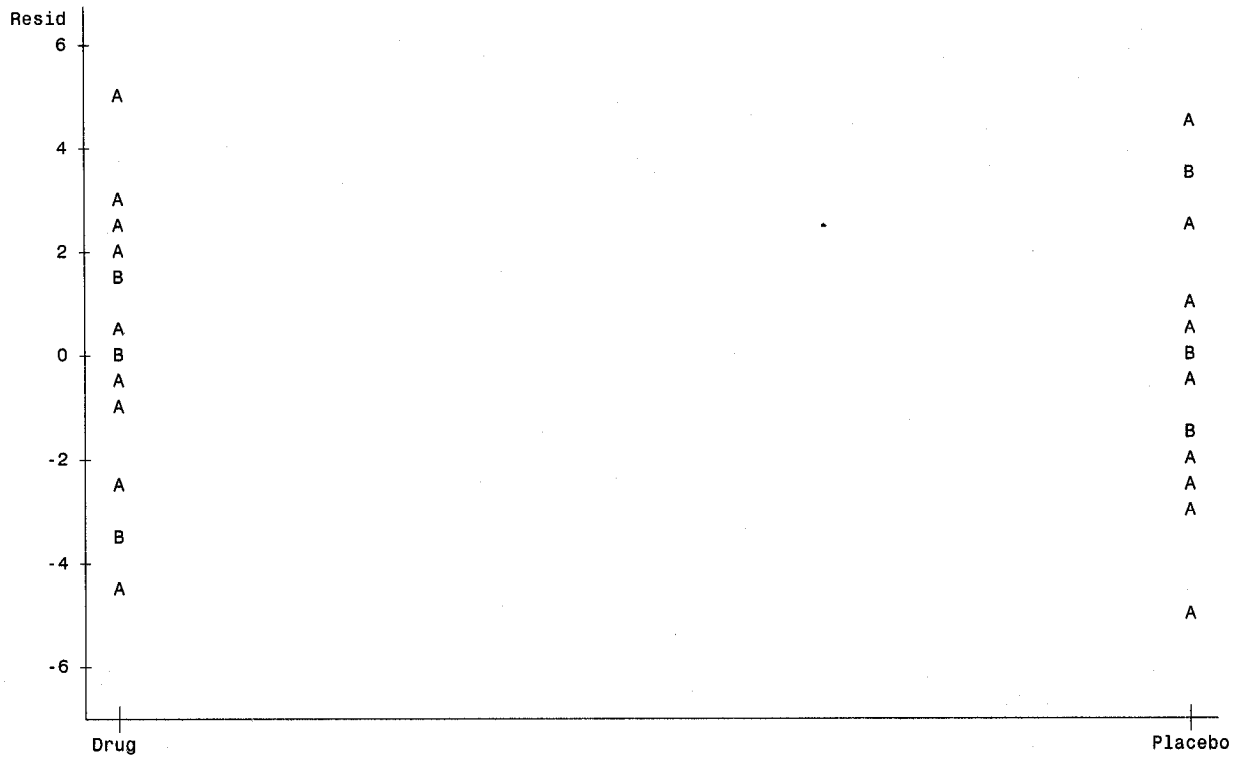
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR

Patient Is Fixed

Study 4: Cintest Study No. 2

Time = 60 minutes

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



Phenylephrine vs. Placebo

Change From Baseline NAR (Nasal Airflow Resistance)

Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR

Patient Is Fixed

Study 4: Cintest Study No. 2

Time = 60 minutes

Checking Residuals for Study 4 at The Minutes Specified

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

The UNIVARIATE Procedure
Variable: Resid

Moments

N	15	Sum Weights	15
Mean	0	Sum Observations	0
Std Deviation	2.70754455	Variance	7.33079748
Skewness	-0.1198539	Kurtosis	-0.5502805
Uncorrected SS	102.631165	Corrected SS	102.631165
Coeff Variation	.	Std Error Mean	0.699085

Basic Statistical Measures

Location		Variability	
Mean	0.000000	Std Deviation	2.70754
Median	0.149700	Variance	7.33080
Mode	.	Range	9.52828
		Interquartile Range	4.52102

Tests for Location: Mu0=0

Test	-Statistic-		-----p Value------	
Student's t	t	0	Pr > |t|	1.0000
Sign	M	0.5	Pr >= |M|	1.0000
Signed Rank	S	1	Pr >= |S|	0.9780

Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 4: Cintest Study No. 2
Time = 60 minutes
Checking Residuals for Study 4 at the Minutes Specified

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

The UNIVARIATE Procedure
Variable: Resid

Tests for Normality

Test		--Statistic---		-----p Value------	
Shapiro-Wilk	W	0.963703	Pr < W		0.7564
Kolmogorov-Smirnov	D	0.121278	Pr > D		>0.1500
Cramer-von Mises	W-Sq	0.039621	Pr > W-Sq		>0.2500
Anderson-Darling	A-Sq	0.264277	Pr > A-Sq		>0.2500

Quantiles (Definition 5)

Quantile	Estimate
100% Max	5.03420
99%	5.03420
95%	5.03420
90%	2.78501
75% Q3	1.93058
50% Median	0.14970
25% Q1	-2.59044
10%	-3.73177
5%	-4.49408
1%	-4.49408
0% Min	-4.49408

Phenylephrine vs. Placebo

Change From Baseline NAR (Nasal Airflow Resistance)

Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR

Patient Is Fixed

Study 4: Cintest Study No. 2

Time = 60 minutes

Checking Residuals for Study 4 at The Minutes Specified

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

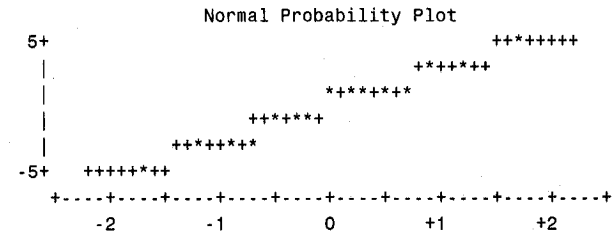
The UNIVARIATE Procedure
Variable: Resid

Extreme Observations

----------Lowest----------			----------Highest----------		
Value	PATIENT	Obs	Value	PATIENT	Obs
-4.494077	4037	13	1.67517	4034	12
-3.731768	4001	1	1.93058	4017	6
-3.586532	4044	15	2.35970	4003	2
-2.590441	4010	4	2.78501	4030	10
-0.770782	4012	5	5.03420	4032	11

Stem	Leaf	#	Boxplot
4	0	1	
2	48	2	
0	14679	5	+--+--+
-0	871	3	| |
-2	766	3	+-----+
-4	5	1	

----+----+----+----+



Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 4: Cintest Study No. 2
Time = 60 minutes
Checking Residuals for Study 4 at the Minutes Specified

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

The UNIVARIATE Procedure
Variable: Resid

Moments

N	15	Sum Weights	15
Mean	0	Sum Observations	0
Std Deviation	2.70754455	Variance	7.33079748
Skewness	0.11985388	Kurtosis	-0.5502805
Uncorrected SS	102.631165	Corrected SS	102.631165
Coeff Variation	.	Std Error Mean	0.699085

Basic Statistical Measures

Location		Variability	
Mean	0.00000	Std Deviation	2.70754
Median	-0.14970	Variance	7.33080
Mode	.	Range	9.52828
		Interquartile Range	4.52102

Tests for Location: Mu0=0

Test	-Statistic-		-----p Value------	
Student's t	t	0	Pr > |t|	1.0000
Sign	M	-0.5	Pr >= |M|	1.0000
Signed Rank	S	-1	Pr >= |S|	0.9780

Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 4: Cintest Study No. 2
Time = 60 minutes
Checking Residuals for Study 4 at The Minutes Specified

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

The UNIVARIATE Procedure
Variable: Resid

Tests for Normality

Test		--Statistic---		-----p Value------
Shapiro-Wilk	W	0.963703	Pr < W	0.7564
Kolmogorov-Smirnov	D	0.121278	Pr > D	>0.1500
Cramer-von Mises	W-Sq	0.039621	Pr > W-Sq	>0.2500
Anderson-Darling	A-Sq	0.264277	Pr > A-Sq	>0.2500

Quantiles (Definition 5)

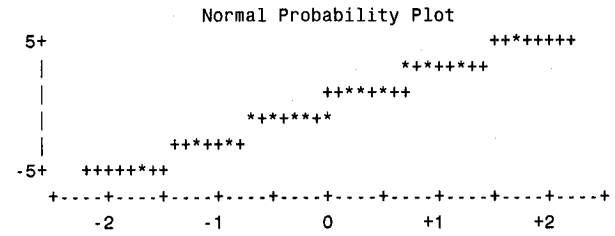
Quantile	Estimate
100% Max	4.49408
99%	4.49408
95%	4.49408
90%	3.73177
75% Q3	2.59044
50% Median	-0.14970
25% Q1	-1.93058
10%	-2.78501
5%	-5.03420
1%	-5.03420
0% Min	-5.03420

Phenylephrine vs. Placebo
Change From Baseline NAR (Nasal Airflow Resistance)
Performing Analysis of Covariance by Study and Time Point, Adjusting for Baseline NAR
Patient Is Fixed
Study 4: Cintest Study No. 2
Time = 60 minutes
Checking Residuals for Study 4 at The Minutes Specified

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

The UNIVARIATE Procedure
Variable: Resid

Extreme Observations

----------Lowest----------			----------Highest----------		
Value	PATIENT	Obs	Value	PATIENT	Obs
-5.03420	4032	11	0.770782	4012	5
-2.78501	4030	10	2.590441	4010	4
-2.35970	4003	2	3.586532	4044	15
-1.93058	4017	6	3.731768	4001	1
-1.67517	4034	12	4.494077	4037	13

Stem	Leaf	#	Boxplot
4	5	1	
2	667	3	+-----+
0	178	3	| + |
-0	97641	5	*-----*
-2	84	2	
-4	0	1	
	----+----+----+----+