The CONTENTS Procedure

Data Set Name	WORK.DATA	**Observations**	10
Member Type	DATA	**Variables**	5
Engine	V9	**Indexes**	0
Created	10/06/2025 14:35:52	**Observation Length**	40
Last Modified	10/06/2025 14:35:52	**Deleted Observations**	0
Protection		**Compressed**	NO
Data Set Type		**Sorted**	NO
Label			
Data Representation	SOLARIS_X86_64, LINUX_X86_64, ALPHA_TRU64, LINUX_IA64		
Encoding	utf-8 Unicode (UTF-8)		

Engine/Host Dependent Information	
Data Set Page Size	131072
Number of Data Set Pages	1
First Data Page	1
Max Obs per Page	3265
Obs in First Data Page	10
Number of Data Set Repairs	0
Filename	/saswork/SAS_workB0460000EF6F_odaws02-apse1.oda.sas.com/SAS_work09B90000EF6F_odaws02-apse1.oda.sas.com/data.sas7bdat
Release Created	9.0401M8
Host Created	Linux
Inode Number	536873510
Access Permission	rw-r--r--
Owner Name	u64294500
File Size	256KB
File Size (bytes)	262144

Alphabetic List of Variables and Attributes			
#	**Variable**	**Type**	**Len**
2	DOSE	Num	8
4	LIVER_WT	Num	8
3	REACT	Num	8
5	SPLEEN	Num	8
1	SUBJECT	Num	8

The UNIVARIATE Procedure
Variable: REACT

Moments			
N	10	**Sum Weights**	10
Mean	7.91	**Sum Observations**	79.1
Std Deviation	4.87589308	**Variance**	23.7743333
Skewness	1.74686564	**Kurtosis**	1.6177214
Uncorrected SS	839.65	**Corrected SS**	213.969
Coeff Variation	61.6421376	**Std Error Mean**	1.54189278

Basic Statistical Measures			
Location		**Variability**	
Mean	7.910000	**Std Deviation**	4.87589

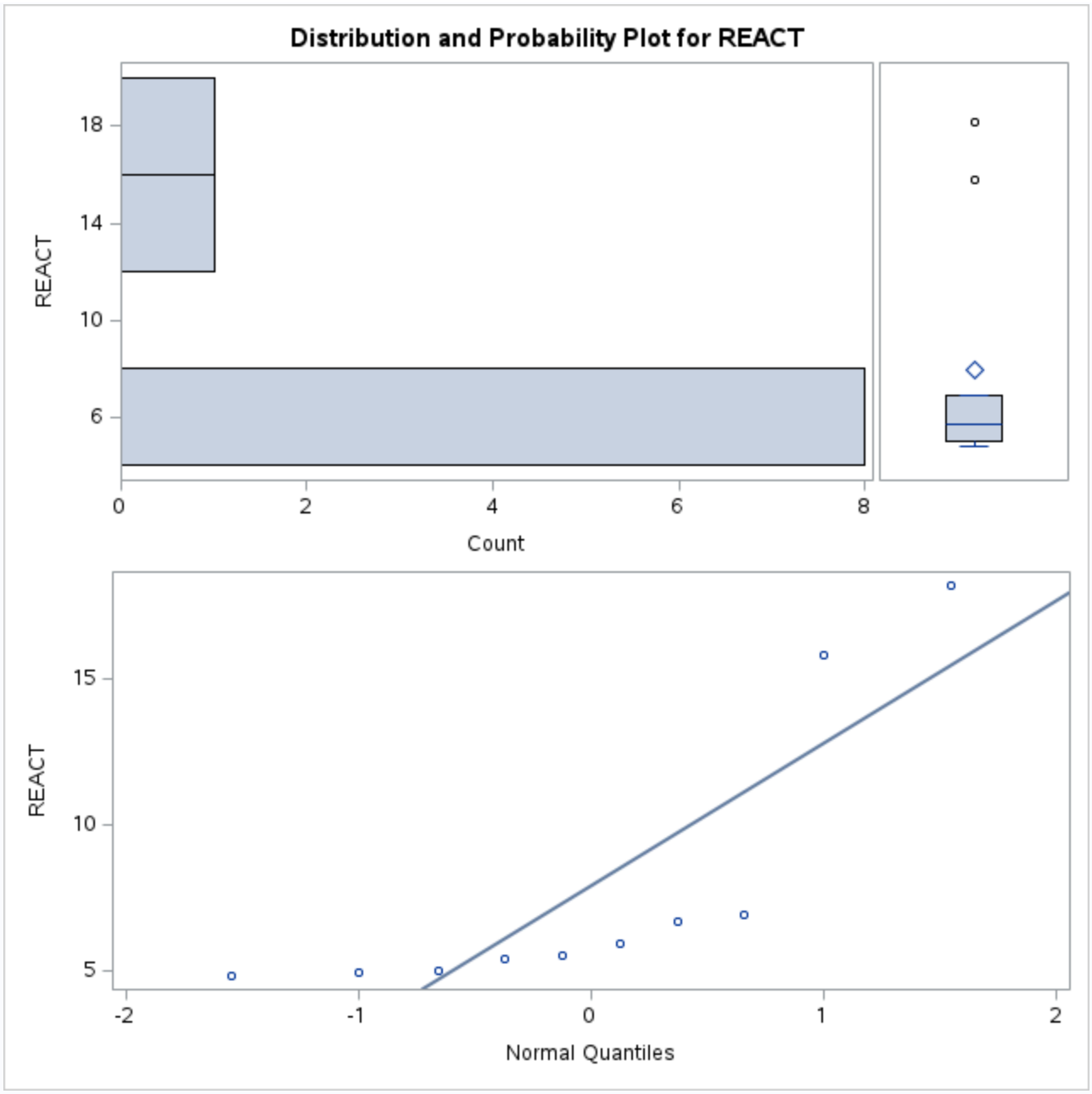
Basic Statistical Measures			
Location		Variability	
Median	5.700000	Variance	23.77433
Mode	.	Range	13.40000
		Interquartile Range	1.90000

Tests for Location: Mu0=0				
Test	Statistic		p Value	
Student's t	t	5.130058	Pr > |t|	0.0006
Sign	M	5	Pr >= |M|	0.0020
Signed Rank	S	27.5	Pr >= |S|	0.0020

Tests for Normality				
Test	Statistic		p Value	
Shapiro-Wilk	W	0.656993	Pr < W	0.0003
Kolmogorov-Smirnov	D	0.38205	Pr > D	<0.0100
Cramer-von Mises	W-Sq	0.315825	Pr > W-Sq	<0.0050
Anderson-Darling	A-Sq	1.628355	Pr > A-Sq	<0.0050

Quantiles (Definition 5)	
Level	Quantile
100% Max	18.20
99%	18.20
95%	18.20
90%	17.00
75% Q3	6.90
50% Median	5.70
25% Q1	5.00
10%	4.85
5%	4.80
1%	4.80
0% Min	4.80

Extreme Observations			
Lowest		Highest	
Value	Obs	Value	Obs
4.8	3	5.9	2
4.9	6	6.7	8
5.0	7	6.9	4
5.4	1	15.8	5
5.5	10	18.2	9



The UNIVARIATE Procedure
Variable: LIVER_WT

Moments			
N	10	**Sum Weights**	10
Mean	11.3	**Sum Observations**	113
Std Deviation	1.26403235	**Variance**	1.59777778
Skewness	0.61974656	**Kurtosis**	0.01693006
Uncorrected SS	1291.28	**Corrected SS**	14.38
Coeff Variation	11.186127	**Std Error Mean**	0.39972213

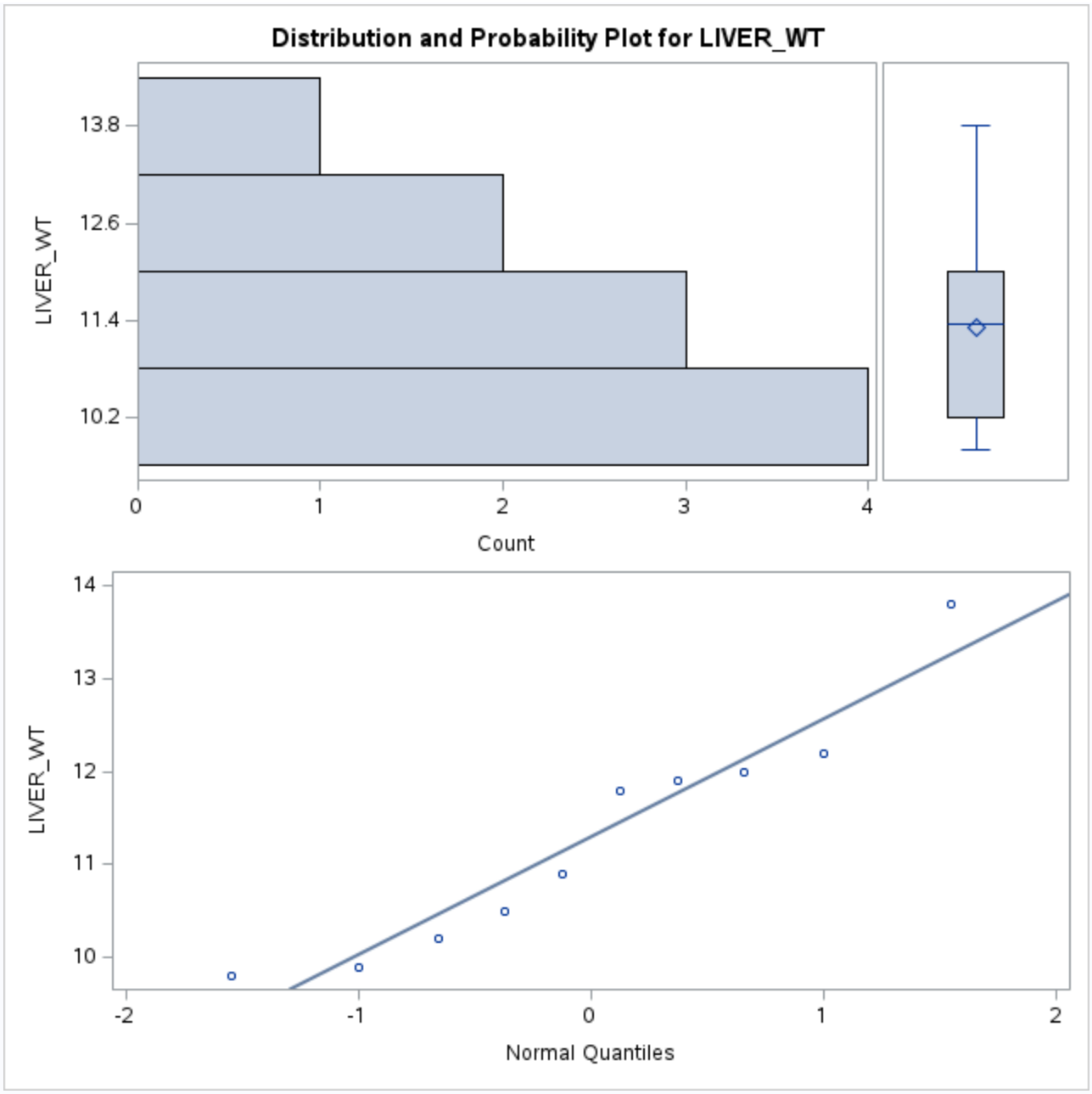
Basic Statistical Measures			
Location		**Variability**	
Mean	11.30000	**Std Deviation**	1.26403
Median	11.35000	**Variance**	1.59778
Mode	.	**Range**	4.00000
		Interquartile Range	1.80000

Tests for Location: Mu0=0				
Test	Statistic		p Value	
Student's t	t	28.26964	Pr > |t|	<.0001
Sign	M	5	Pr >= |M|	0.0020
Signed Rank	S	27.5	Pr >= |S|	0.0020

Tests for Normality				
Test	Statistic		p Value	
Shapiro-Wilk	W	0.924078	Pr < W	0.3922
Kolmogorov-Smirnov	D	0.153785	Pr > D	>0.1500
Cramer-von Mises	W-Sq	0.051401	Pr > W-Sq	>0.2500
Anderson-Darling	A-Sq	0.341284	Pr > A-Sq	>0.2500

Quantiles (Definition 5)	
Level	Quantile
100% Max	13.80
99%	13.80
95%	13.80
90%	13.00
75% Q3	12.00
50% Median	11.35
25% Q1	10.20
10%	9.85
5%	9.80
1%	9.80
0% Min	9.80

Extreme Observations			
Lowest		Highest	
Value	Obs	Value	Obs
9.8	2	11.8	4
9.9	10	11.9	9
10.2	1	12.0	7
10.5	8	12.2	3
10.9	5	13.8	6



The UNIVARIATE Procedure
Variable: SPLEEN

Moments			
N	10	**Sum Weights**	10
Mean	8.16	**Sum Observations**	81.6
Std Deviation	0.95939796	**Variance**	0.92044444
Skewness	-0.5557112	**Kurtosis**	-1.3710424
Uncorrected SS	674.14	**Corrected SS**	8.284
Coeff Variation	11.7573279	**Std Error Mean**	0.30338827

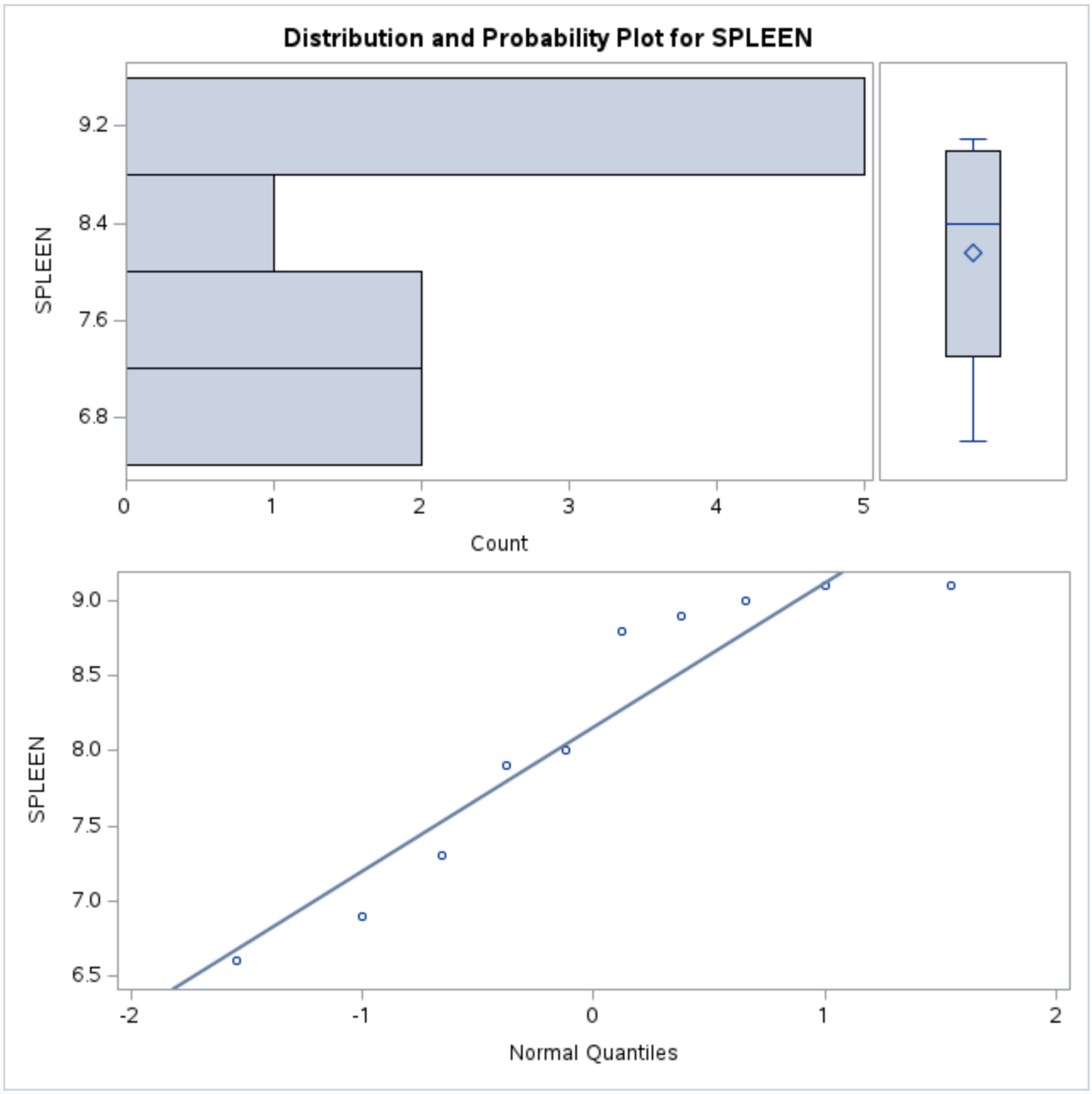
Basic Statistical Measures			
Location		**Variability**	
Mean	8.160000	**Std Deviation**	0.95940
Median	8.400000	**Variance**	0.92044
Mode	9.100000	**Range**	2.50000
		Interquartile Range	1.70000

Tests for Location: Mu0=0				
Test	Statistic		p Value	
Student's t	t	26.89623	Pr > |t|	<.0001
Sign	M	5	Pr >= |M|	0.0020
Signed Rank	S	27.5	Pr >= |S|	0.0020

Tests for Normality				
Test	Statistic		p Value	
Shapiro-Wilk	W	0.865259	Pr < W	0.0880
Kolmogorov-Smirnov	D	0.247641	Pr > D	0.0814
Cramer-von Mises	W-Sq	0.090272	Pr > W-Sq	0.1354
Anderson-Darling	A-Sq	0.559109	Pr > A-Sq	0.1124

Quantiles (Definition 5)	
Level	Quantile
100% Max	9.10
99%	9.10
95%	9.10
90%	9.10
75% Q3	9.00
50% Median	8.40
25% Q1	7.30
10%	6.75
5%	6.60
1%	6.60
0% Min	6.60

Extreme Observations			
Lowest		Highest	
Value	Obs	Value	Obs
6.6	6	8.8	4
6.9	9	8.9	1
7.3	2	9.0	5
7.9	7	9.1	3
8.0	8	9.1	10



The UNIVARIATE Procedure
Variable: REACT

DOSE=1

Moments			
N	5	**Sum Weights**	5
Mean	7.76	**Sum Observations**	38.8
Std Deviation	4.55993421	**Variance**	20.793
Skewness	2.08111585	**Kurtosis**	4.42873197
Uncorrected SS	384.26	**Corrected SS**	83.172
Coeff Variation	58.7620388	**Std Error Mean**	2.03926457

Basic Statistical Measures			
Location		**Variability**	
Mean	7.760000	**Std Deviation**	4.55993
Median	5.900000	**Variance**	20.79300
Mode	.	**Range**	11.00000

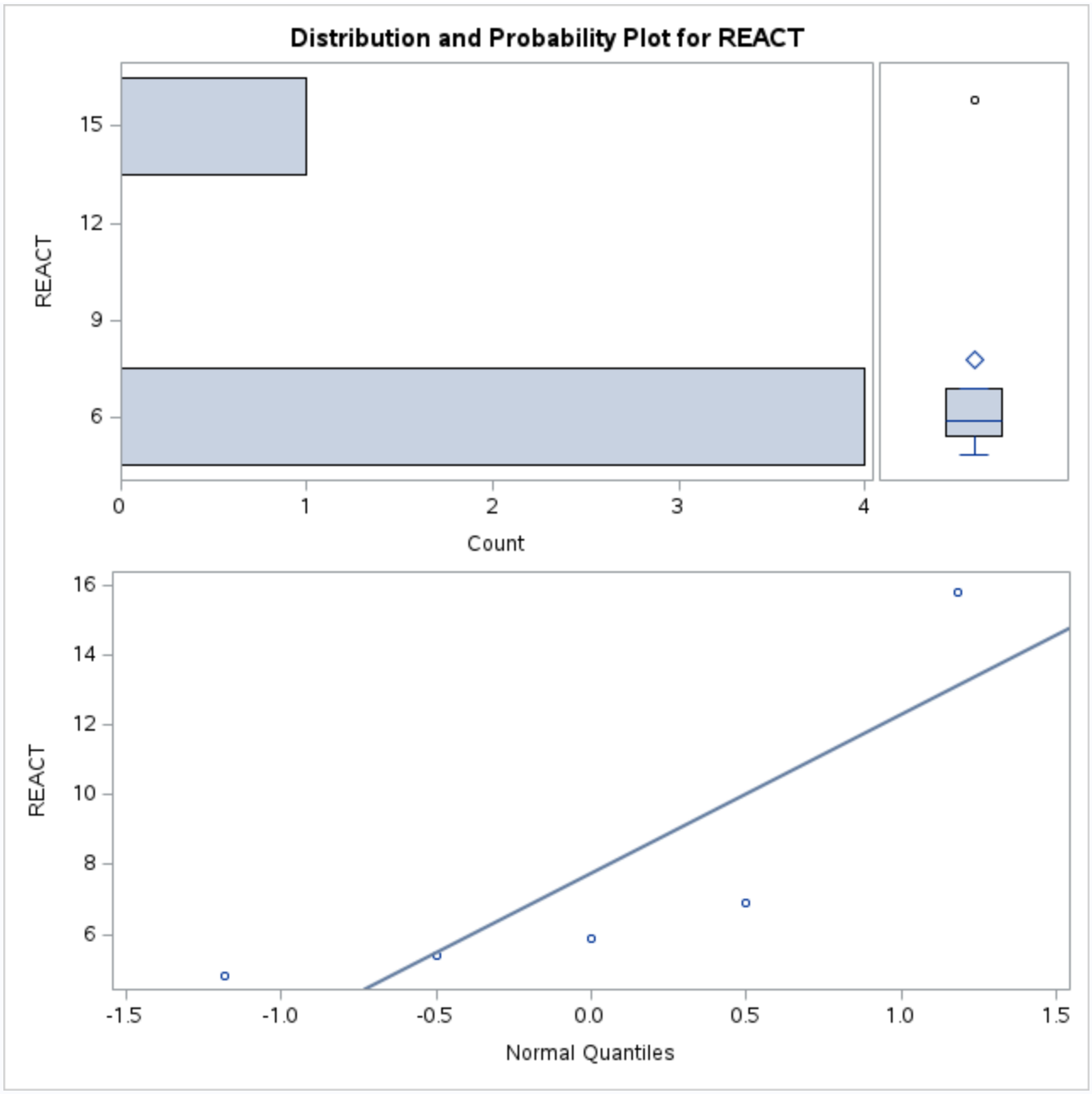
Basic Statistical Measures			
Location		Variability	
		Interquartile Range	1.50000

Tests for Location: Mu0=0				
Test	Statistic		p Value	
Student's t	t	3.805293	Pr > |t|	0.0190
Sign	M	2.5	Pr >= |M|	0.0625
Signed Rank	S	7.5	Pr >= |S|	0.0625

Tests for Normality				
Test	Statistic		p Value	
Shapiro-Wilk	W	0.707883	Pr < W	0.0116
Kolmogorov-Smirnov	D	0.374797	Pr > D	0.0209
Cramer-von Mises	W-Sq	0.145986	Pr > W-Sq	0.0187
Anderson-Darling	A-Sq	0.772171	Pr > A-Sq	0.0172

Quantiles (Definition 5)	
Level	Quantile
100% Max	15.8
99%	15.8
95%	15.8
90%	15.8
75% Q3	6.9
50% Median	5.9
25% Q1	5.4
10%	4.8
5%	4.8
1%	4.8
0% Min	4.8

Extreme Observations			
Lowest		Highest	
Value	Obs	Value	Obs
4.8	3	4.8	3
5.4	1	5.4	1
5.9	2	5.9	2
6.9	4	6.9	4
15.8	5	15.8	5



The UNIVARIATE Procedure
Variable: LIVER_WT

DOSE=1

Moments			
N	5	**Sum Weights**	5
Mean	10.98	**Sum Observations**	54.9
Std Deviation	1.02078401	**Variance**	1.042
Skewness	0.09758786	**Kurtosis**	-2.270825
Uncorrected SS	606.97	**Corrected SS**	4.168
Coeff Variation	9.29675785	**Std Error Mean**	0.45650849

Basic Statistical Measures			
Location		**Variability**	
Mean	10.98000	**Std Deviation**	1.02078
Median	10.90000	**Variance**	1.04200
Mode	.	**Range**	2.40000

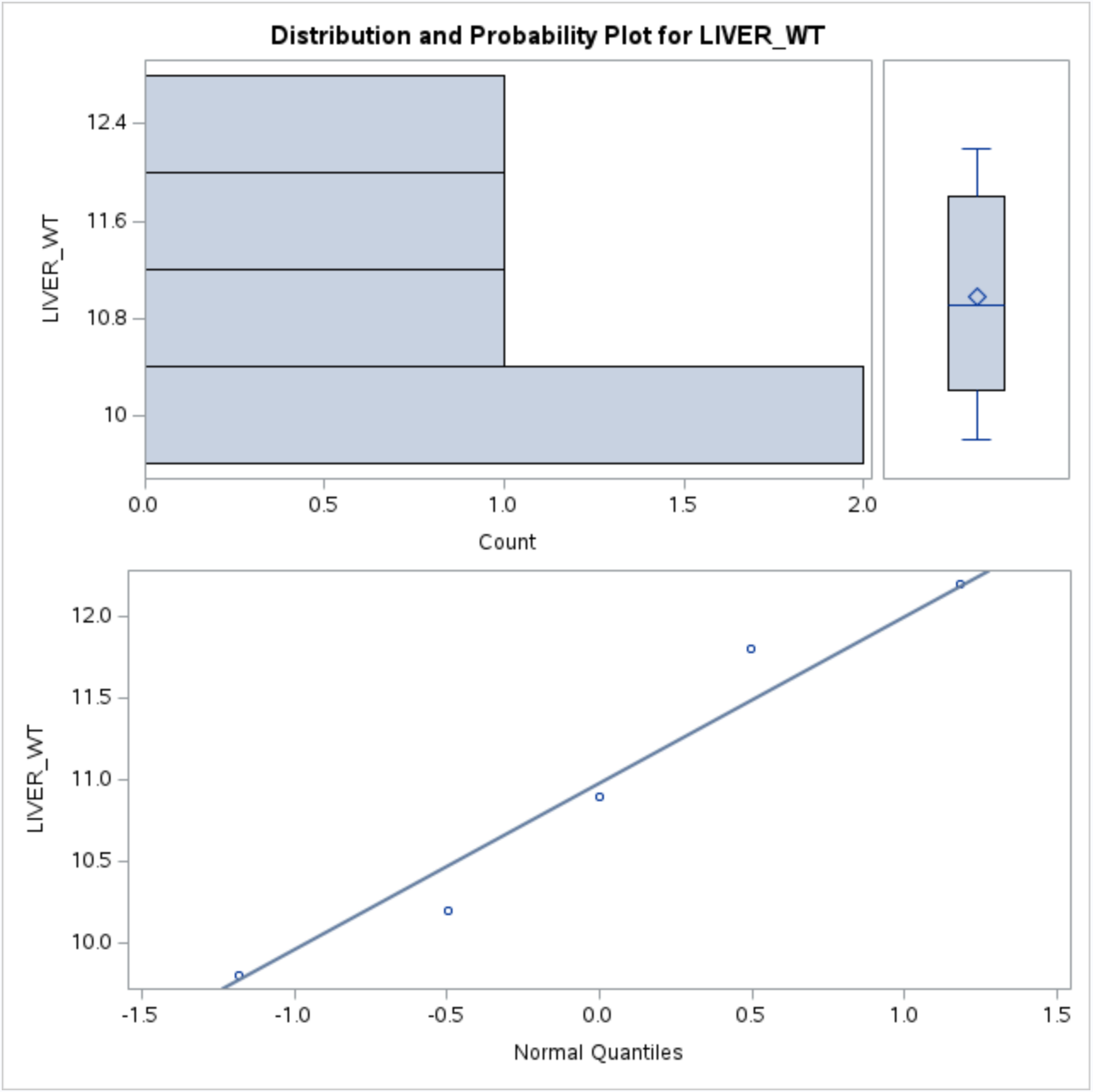
Basic Statistical Measures			
Location		Variability	
		Interquartile Range	1.60000

Tests for Location: Mu0=0				
Test	Statistic		p Value	
Student's t	t	24.05213	Pr > |t|	<.0001
Sign	M	2.5	Pr >= |M|	0.0625
Signed Rank	S	7.5	Pr >= |S|	0.0625

Tests for Normality				
Test	Statistic		p Value	
Shapiro-Wilk	W	0.94184	Pr < W	0.6790
Kolmogorov-Smirnov	D	0.189101	Pr > D	>0.1500
Cramer-von Mises	W-Sq	0.032428	Pr > W-Sq	>0.2500
Anderson-Darling	A-Sq	0.218264	Pr > A-Sq	>0.2500

Quantiles (Definition 5)	
Level	Quantile
100% Max	12.2
99%	12.2
95%	12.2
90%	12.2
75% Q3	11.8
50% Median	10.9
25% Q1	10.2
10%	9.8
5%	9.8
1%	9.8
0% Min	9.8

Extreme Observations			
Lowest		Highest	
Value	Obs	Value	Obs
9.8	2	9.8	2
10.2	1	10.2	1
10.9	5	10.9	5
11.8	4	11.8	4
12.2	3	12.2	3



The UNIVARIATE Procedure
Variable: SPLEEN

DOSE=1

Moments			
N	5	**Sum Weights**	5
Mean	8.62	**Sum Observations**	43.1
Std Deviation	0.74632433	**Variance**	0.557
Skewness	-2.1116055	**Kurtosis**	4.55882211
Uncorrected SS	373.75	**Corrected SS**	2.228
Coeff Variation	8.65805483	**Std Error Mean**	0.33376639

Basic Statistical Measures			
Location		**Variability**	
Mean	8.620000	**Std Deviation**	0.74632
Median	8.900000	**Variance**	0.55700
Mode	.	**Range**	1.80000

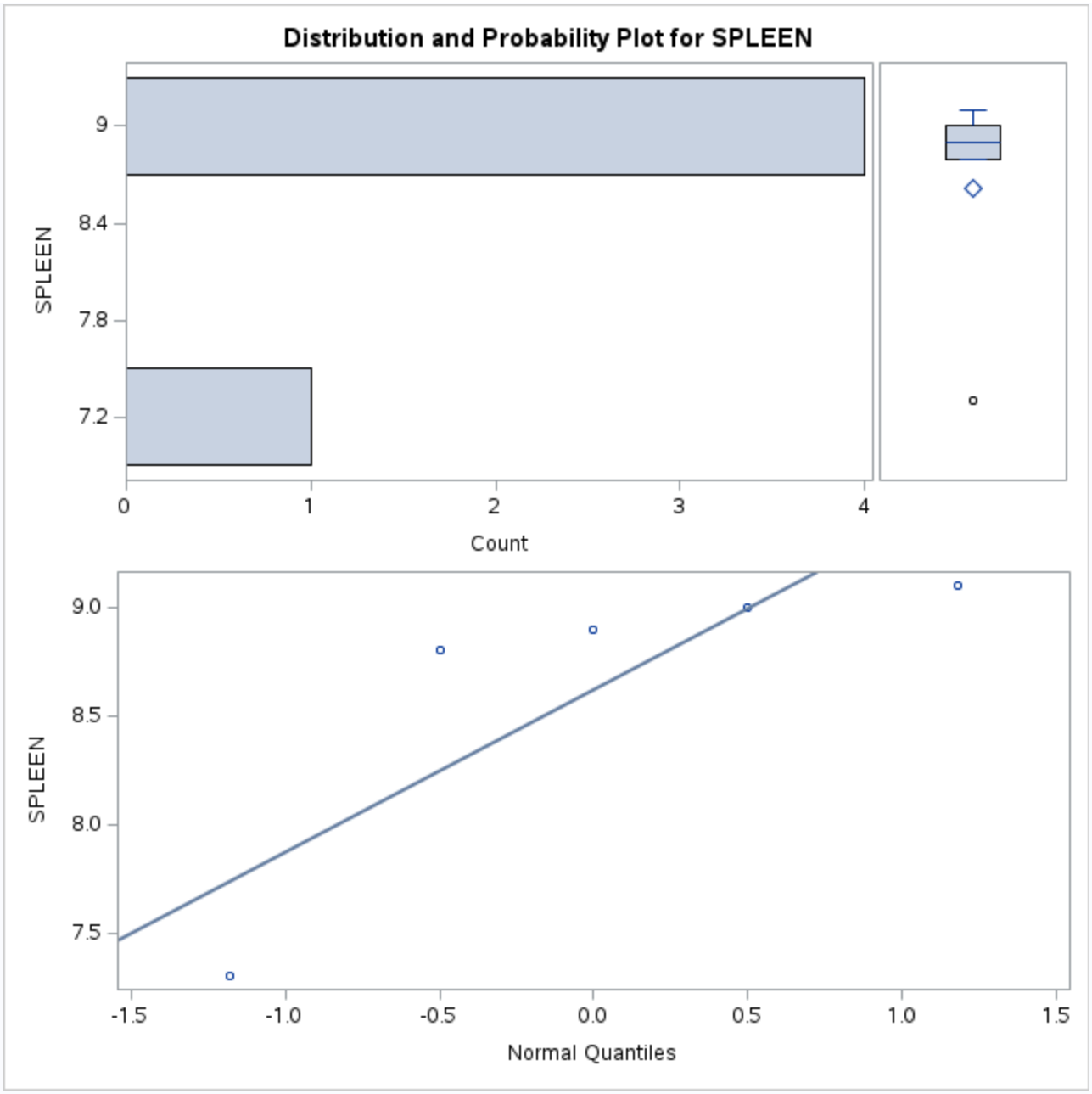
Basic Statistical Measures			
Location		Variability	
		Interquartile Range	0.20000

Tests for Location: Mu0=0				
Test	Statistic		p Value	
Student's t	t	25.82645	Pr > |t|	<.0001
Sign	M	2.5	Pr >= |M|	0.0625
Signed Rank	S	7.5	Pr >= |S|	0.0625

Tests for Normality				
Test	Statistic		p Value	
Shapiro-Wilk	W	0.695281	Pr < W	0.0085
Kolmogorov-Smirnov	D	0.395293	Pr > D	0.0109
Cramer-von Mises	W-Sq	0.154683	Pr > W-Sq	0.0139
Anderson-Darling	A-Sq	0.808906	Pr > A-Sq	0.0130

Quantiles (Definition 5)	
Level	Quantile
100% Max	9.1
99%	9.1
95%	9.1
90%	9.1
75% Q3	9.0
50% Median	8.9
25% Q1	8.8
10%	7.3
5%	7.3
1%	7.3
0% Min	7.3

Extreme Observations			
Lowest		Highest	
Value	Obs	Value	Obs
7.3	2	7.3	2
8.8	4	8.8	4
8.9	1	8.9	1
9.0	5	9.0	5
9.1	3	9.1	3



The UNIVARIATE Procedure
Variable: REACT

DOSE=2

Moments			
N	5	**Sum Weights**	5
Mean	8.06	**Sum Observations**	40.3
Std Deviation	5.71340529	**Variance**	32.643
Skewness	2.15164673	**Kurtosis**	4.67593424
Uncorrected SS	455.39	**Corrected SS**	130.572
Coeff Variation	70.8859217	**Std Error Mean**	2.55511252

Basic Statistical Measures			
Location		**Variability**	
Mean	8.060000	**Std Deviation**	5.71341
Median	5.500000	**Variance**	32.64300
Mode	.	**Range**	13.30000

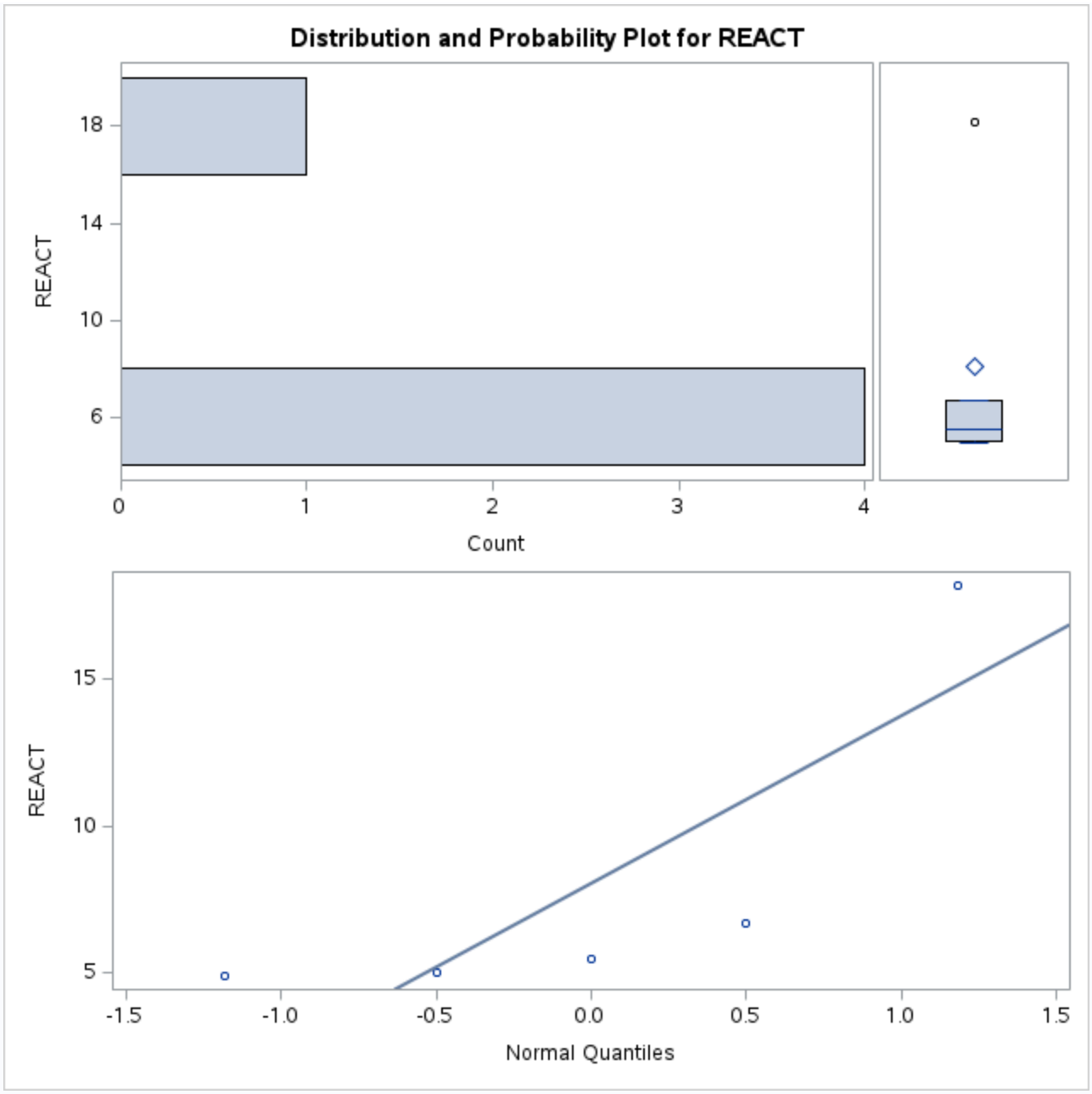
Basic Statistical Measures			
Location		Variability	
		Interquartile Range	1.70000

Tests for Location: Mu0=0				
Test	Statistic		p Value	
Student's t	t	3.15446	Pr > |t|	0.0344
Sign	M	2.5	Pr >= |M|	0.0625
Signed Rank	S	7.5	Pr >= |S|	0.0625

Tests for Normality				
Test	Statistic		p Value	
Shapiro-Wilk	W	0.655292	Pr < W	0.0031
Kolmogorov-Smirnov	D	0.394074	Pr > D	0.0115
Cramer-von Mises	W-Sq	0.173059	Pr > W-Sq	0.0073
Anderson-Darling	A-Sq	0.898316	Pr > A-Sq	0.0068

Quantiles (Definition 5)	
Level	Quantile
100% Max	18.2
99%	18.2
95%	18.2
90%	18.2
75% Q3	6.7
50% Median	5.5
25% Q1	5.0
10%	4.9
5%	4.9
1%	4.9
0% Min	4.9

Extreme Observations			
Lowest		Highest	
Value	Obs	Value	Obs
4.9	6	4.9	6
5.0	7	5.0	7
5.5	10	5.5	10
6.7	8	6.7	8
18.2	9	18.2	9



The UNIVARIATE Procedure
Variable: LIVER_WT

DOSE=2

Moments			
N	5	**Sum Weights**	5
Mean	11.62	**Sum Observations**	58.1
Std Deviation	1.5155857	**Variance**	2.297
Skewness	0.47200754	**Kurtosis**	-0.1965862
Uncorrected SS	684.31	**Corrected SS**	9.188
Coeff Variation	13.0429062	**Std Error Mean**	0.67779053

Basic Statistical Measures			
Location		**Variability**	
Mean	11.62000	**Std Deviation**	1.51559
Median	11.90000	**Variance**	2.29700
Mode	.	**Range**	3.90000

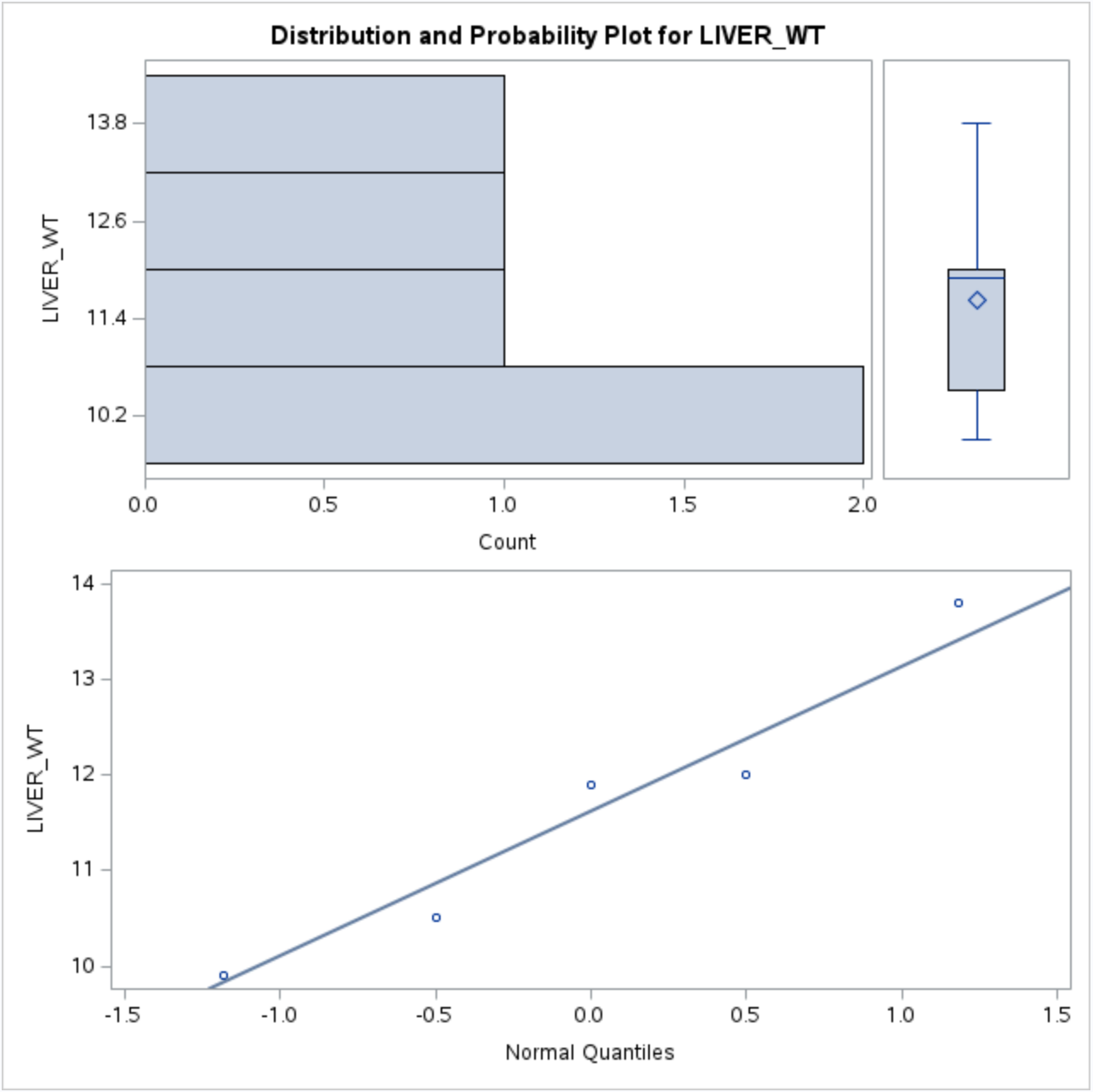
Basic Statistical Measures			
Location		Variability	
		Interquartile Range	1.50000

Tests for Location: Mu0=0				
Test	Statistic		p Value	
Student's t	t	17.14394	Pr > |t|	<.0001
Sign	M	2.5	Pr >= |M|	0.0625
Signed Rank	S	7.5	Pr >= |S|	0.0625

Tests for Normality				
Test	Statistic		p Value	
Shapiro-Wilk	W	0.949815	Pr < W	0.7359
Kolmogorov-Smirnov	D	0.201012	Pr > D	>0.1500
Cramer-von Mises	W-Sq	0.03856	Pr > W-Sq	>0.2500
Anderson-Darling	A-Sq	0.237599	Pr > A-Sq	>0.2500

Quantiles (Definition 5)	
Level	Quantile
100% Max	13.8
99%	13.8
95%	13.8
90%	13.8
75% Q3	12.0
50% Median	11.9
25% Q1	10.5
10%	9.9
5%	9.9
1%	9.9
0% Min	9.9

Extreme Observations			
Lowest		Highest	
Value	Obs	Value	Obs
9.9	10	9.9	10
10.5	8	10.5	8
11.9	9	11.9	9
12.0	7	12.0	7
13.8	6	13.8	6



The UNIVARIATE Procedure
Variable: SPLEEN

DOSE=2

Moments			
N	5	**Sum Weights**	5
Mean	7.7	**Sum Observations**	38.5
Std Deviation	0.99247166	**Variance**	0.985
Skewness	0.39894246	**Kurtosis**	-0.6241336
Uncorrected SS	300.39	**Corrected SS**	3.94
Coeff Variation	12.8892424	**Std Error Mean**	0.44384682

Basic Statistical Measures			
Location		**Variability**	
Mean	7.700000	**Std Deviation**	0.99247
Median	7.900000	**Variance**	0.98500
Mode	.	**Range**	2.50000

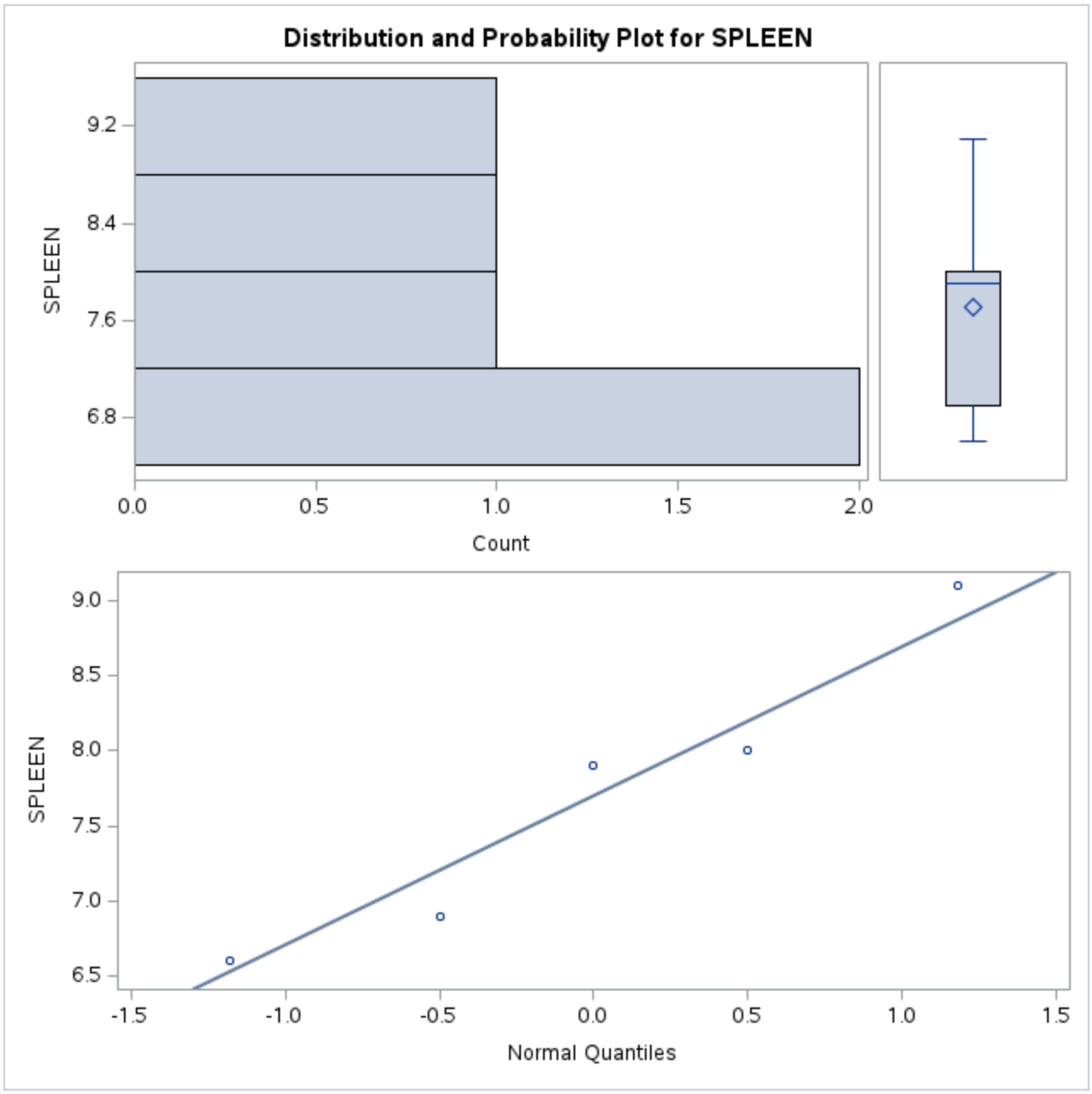
Basic Statistical Measures			
Location		Variability	
		Interquartile Range	1.10000

Tests for Location: Mu0=0				
Test	Statistic		p Value	
Student's t	t	17.34833	Pr > |t|	<.0001
Sign	M	2.5	Pr >= |M|	0.0625
Signed Rank	S	7.5	Pr >= |S|	0.0625

Tests for Normality				
Test	Statistic		p Value	
Shapiro-Wilk	W	0.942561	Pr < W	0.6841
Kolmogorov-Smirnov	D	0.189898	Pr > D	>0.1500
Cramer-von Mises	W-Sq	0.039302	Pr > W-Sq	>0.2500
Anderson-Darling	A-Sq	0.245613	Pr > A-Sq	>0.2500

Quantiles (Definition 5)	
Level	Quantile
100% Max	9.1
99%	9.1
95%	9.1
90%	9.1
75% Q3	8.0
50% Median	7.9
25% Q1	6.9
10%	6.6
5%	6.6
1%	6.6
0% Min	6.6

Extreme Observations			
Lowest		Highest	
Value	Obs	Value	Obs
6.6	6	6.6	6
6.9	9	6.9	9
7.9	7	7.9	7
8.0	8	8.0	8
9.1	10	9.1	10


Distribution and Probability Plot for SPLEEN
SPLEEN
9.2
8.4
7.6
6.8
0.0
0.5
1.0
1.5
2.0
Count
SPLEEN
9.0
8.5
8.0
7.5
7.0
6.5
-1.5
-1.0
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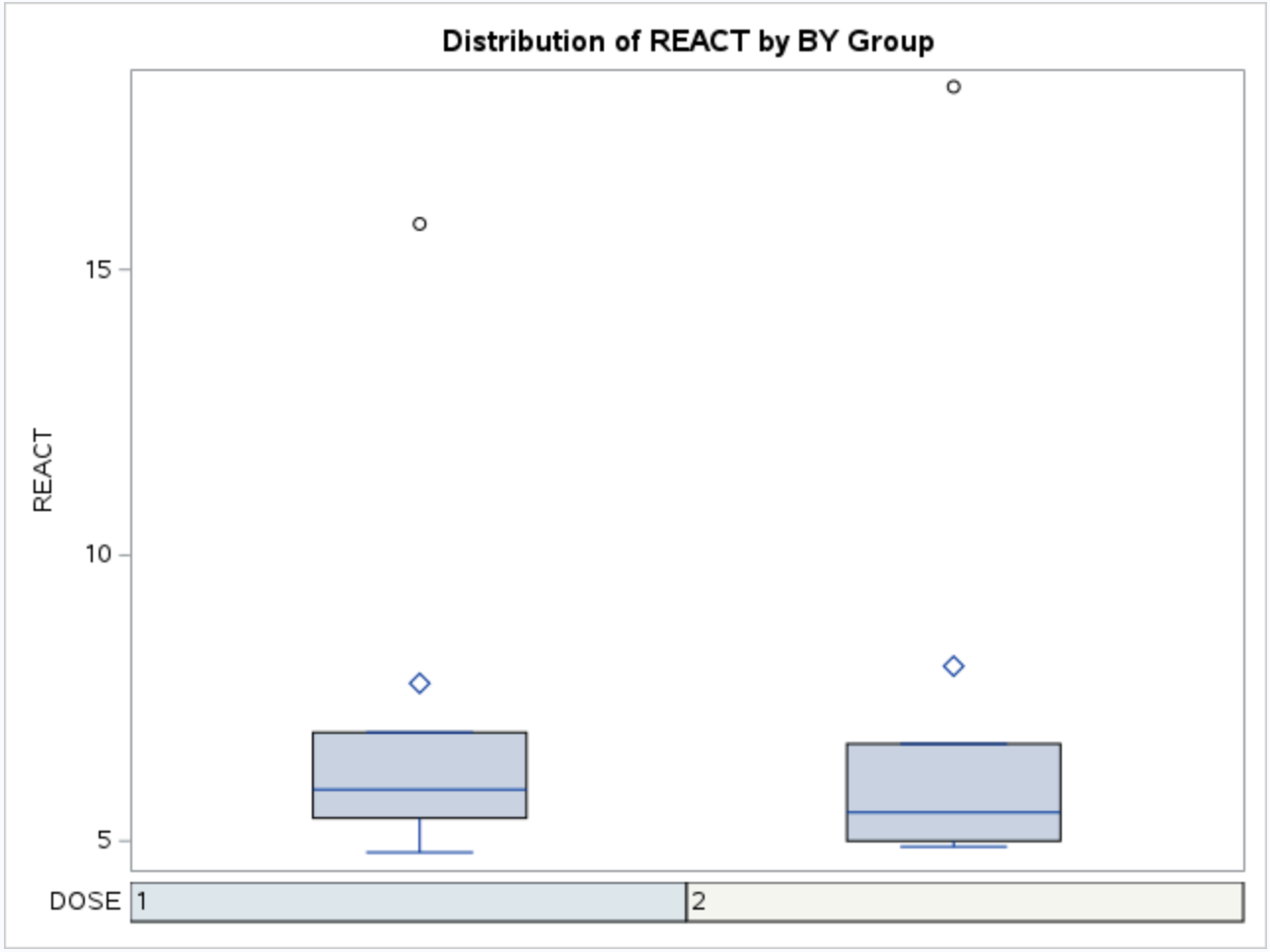
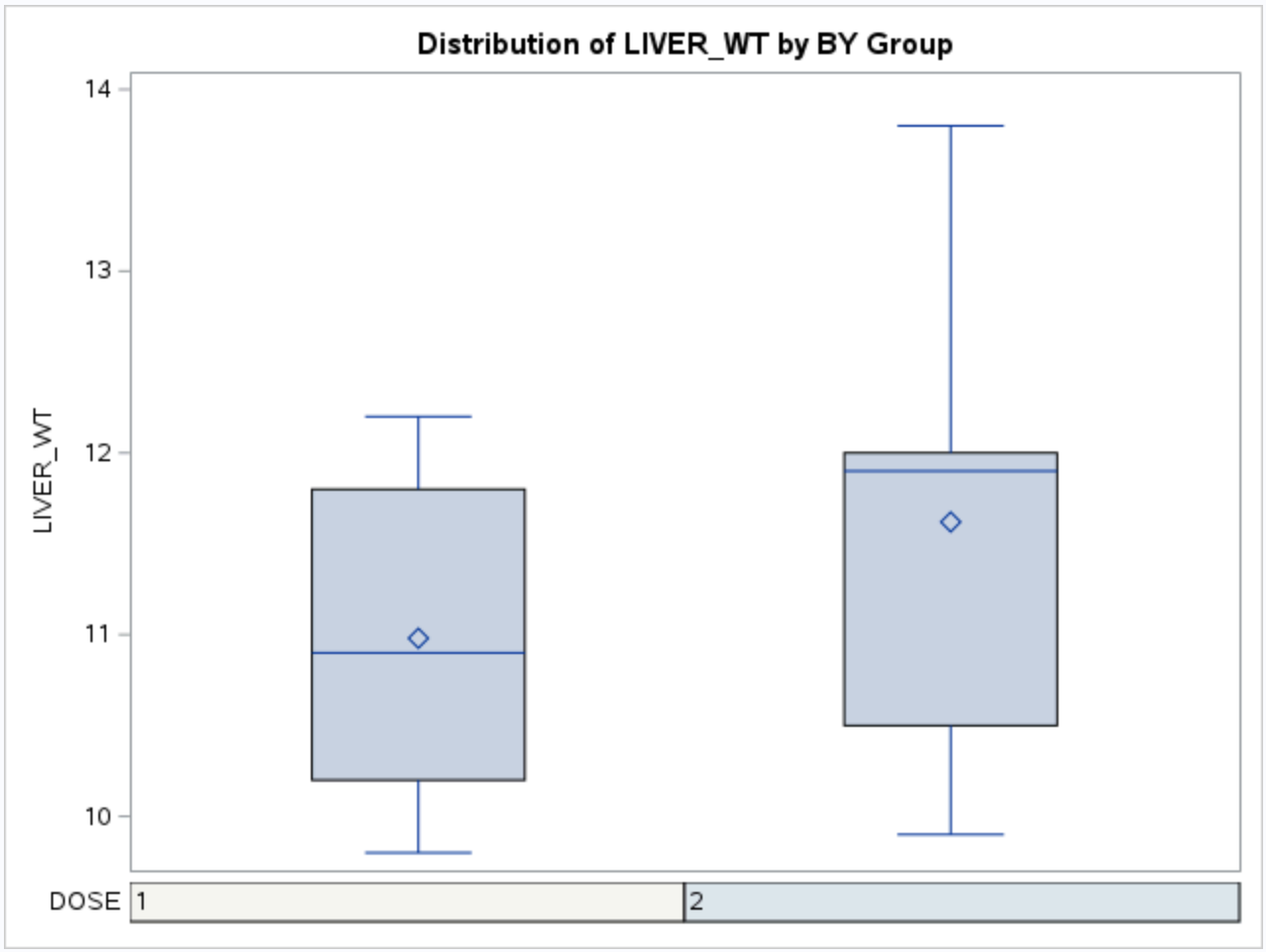
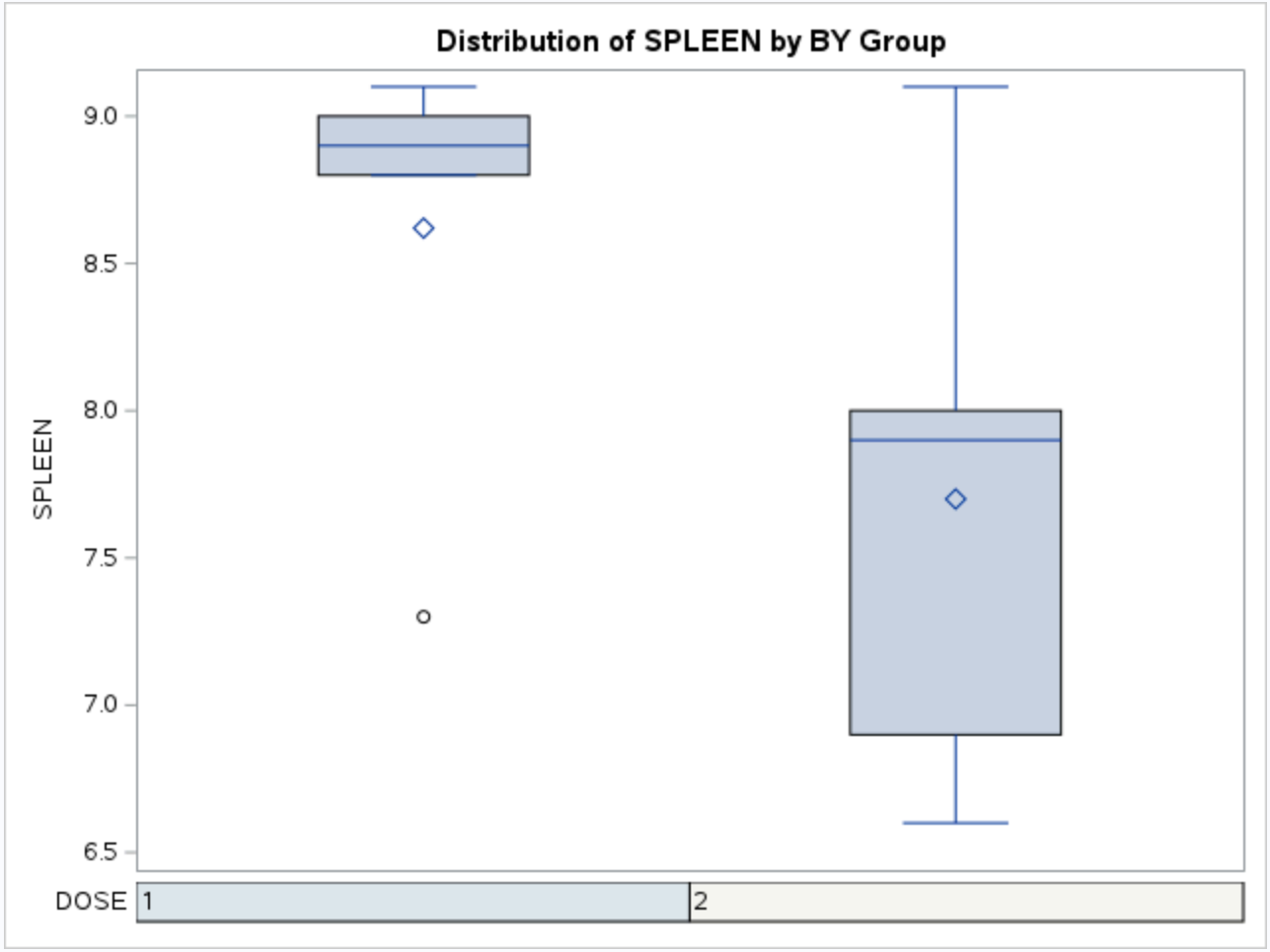
0.5
1.0
1.5
Normal Quantiles


Distribution of REACT by BY Group
REACT
15
10
5
DOSE
1
2


Distribution of LIVER_WT by BY Group
LIVER_WT
14
13
12
11
10
DOSE
1
2



The MEANS Procedure

Analysis Variable : LIVER_WT
Std Error
0.3997221

The MEANS Procedure

DOSE=1

Analysis Variable : LIVER_WT
Std Error
0.4565085

DOSE=2

Analysis Variable : LIVER_WT
Std Error
0.6777905

The MEANS Procedure

DOSE=1

Analysis Variable : REACT
Skewness

Analysis Variable : REACT
Skewness
2.0811158

DOSE=2

Analysis Variable : REACT
Skewness
2.1516467

The MEANS Procedure

DOSE=1

Analysis Variable : SPLEEN				
N	Mean	Std Dev	Minimum	Maximum
5	8.6200000	0.7463243	7.3000000	9.1000000

DOSE=2

Analysis Variable : SPLEEN				
N	Mean	Std Dev	Minimum	Maximum
5	7.7000000	0.9924717	6.6000000	9.1000000

The TTEST Procedure

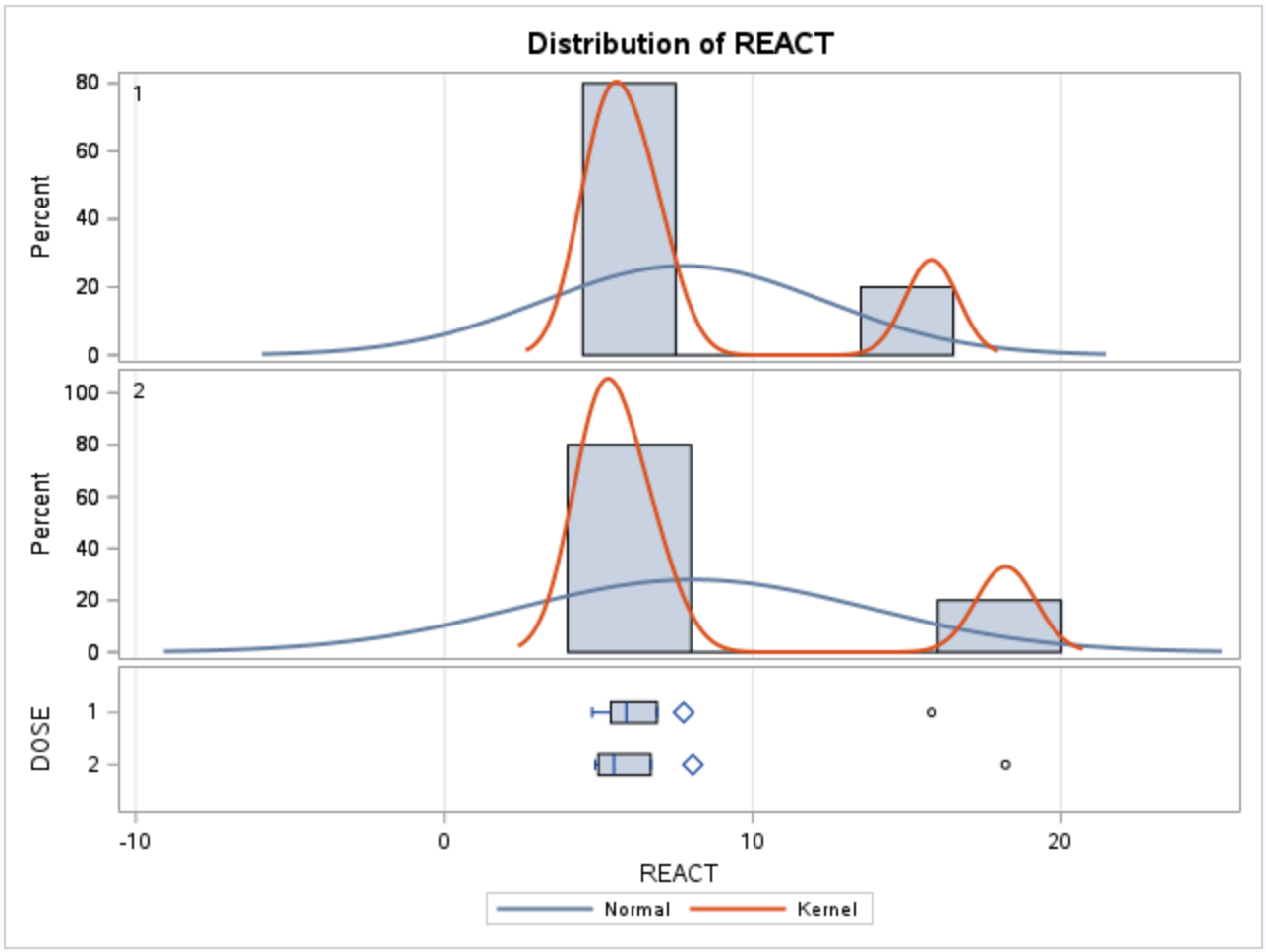
Variable: REACT

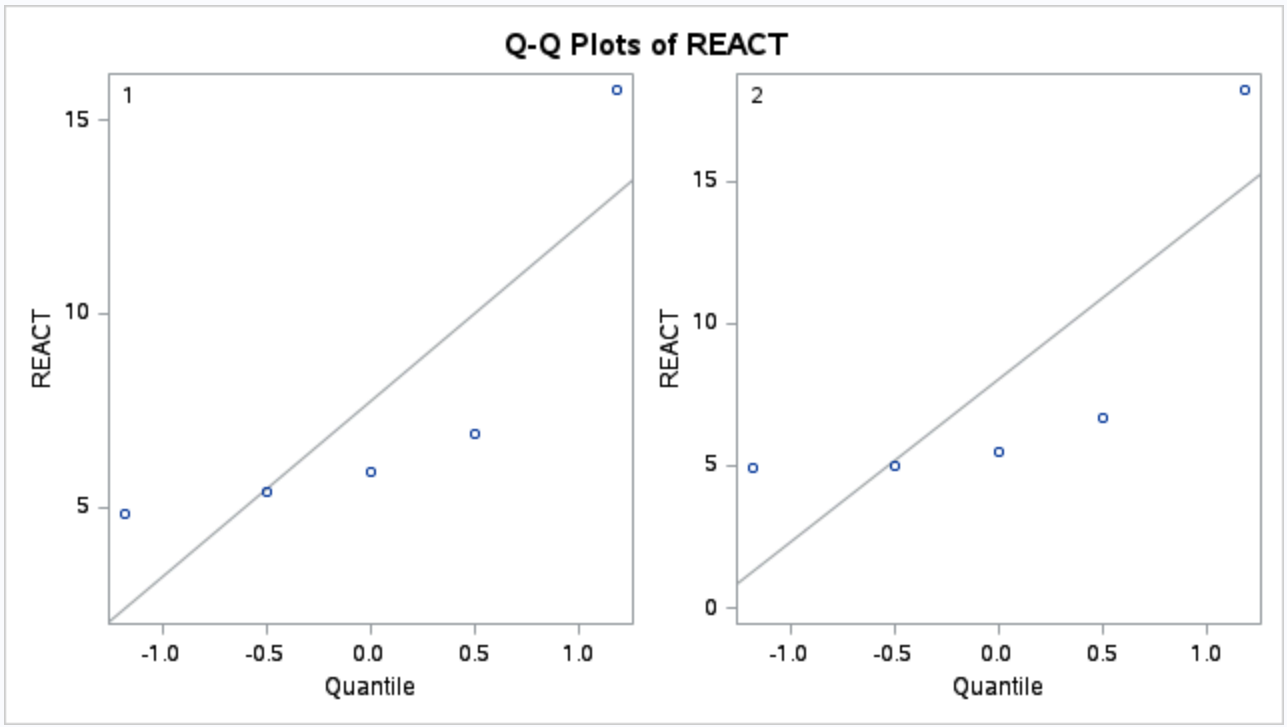
DOSE	Method	N	Mean	Std Dev	Std Err	Minimum	Maximum
1		5	7.7600	4.5599	2.0393	4.8000	15.8000
2		5	8.0600	5.7134	2.5551	4.9000	18.2000
Diff (1-2)	Pooled		-0.3000	5.1689	3.2691		
Diff (1-2)	Satterthwaite		-0.3000		3.2691		

DOSE	Method	Mean	95% CL Mean		Std Dev	95% CL Std Dev	
1		7.7600	2.0981	13.4219	4.5599	2.7320	13.1032
2		8.0600	0.9659	15.1541	5.7134	3.4231	16.4178
Diff (1-2)	Pooled	-0.3000	-7.8386	7.2386	5.1689	3.4914	9.9025
Diff (1-2)	Satterthwaite	-0.3000	-7.9036	7.3036			

Method	Variances	DF	t Value	Pr > |t|
Pooled	Equal	8	-0.09	0.9291
Satterthwaite	Unequal	7.625	-0.09	0.9292

Equality of Variances				
Method	Num DF	Den DF	F Value	Pr > F
Folded F	4	4	1.57	0.6728


Distribution of REACT
Percent
80
60
40
20
0
1
Percent
100
80
60
40
20
0
2
DOSE
1
2
-10
0
10
20
REACT
Normal
Kernel


Q-Q Plots of REACT
REACT
15
10
5
1
-1.0
-0.5
0.0
0.5
1.0
Quantile
REACT
15
10
5
0
2
-1.0
-0.5
0.0
0.5
1.0
Quantile