

**1. AUC over 3 Visits--Treatment vs Control**  
**AUC between treatment and control at visit 3**

**The GENMOD Procedure**

Model Information	
Data Set	WORK.TEMP
Distribution	Normal
Link Function	Identity
Dependent Variable	auc

Number of Observations Read	69
Number of Observations Used	50
Missing Values	19

Class Level Information		
Class	Levels	Values
visit	3	1 2 3
txgroup	2	Treatment Control
ConCat	3	1 2 3
ID	22	1010 1011 1012 1014 1015 1016 1017 1018 1019 1020 1021 1022 1023 1024 1025 1026 1027 1028 1029 1030 1031 1034

Parameter Information				
Parameter	Effect	visit	txgroup	ConCat
Prm1	Intercept			
Prm2	visit	1		
Prm3	visit	2		
Prm4	visit	3		
Prm5	txgroup		Treatment	
Prm6	txgroup		Control	
Prm7	covCon1			
Prm8	covcon2			
Prm9	ConCat			1
Prm10	ConCat			2
Prm11	ConCat			3
Prm12	visit*txgroup	1	Treatment	
Prm13	visit*txgroup	1	Control	

**1. AUC over 3 Visits--Treatment vs Control**  
**AUC between treatment and control at visit 3**

**The GENMOD Procedure**

Parameter Information				
Parameter	Effect	visit	txgroup	ConCat
Prm14	visit*txgroup	2	Treatment	
Prm15	visit*txgroup	2	Control	
Prm16	visit*txgroup	3	Treatment	
Prm17	visit*txgroup	3	Control	

Algorithm converged.

GEE Model Information	
Correlation Structure	AR(1)
Subject Effect	ID (24 levels)
Number of Clusters	24
Clusters With Missing Values	11
Correlation Matrix Dimension	3
Maximum Cluster Size	3
Minimum Cluster Size	0

Covariance Matrix (Model-Based)										
	Prm1	Prm2	Prm3	Prm5	Prm7	Prm8	Prm9	Prm10	Prm12	Prm14
Prm1	46997.89	-24769.57	-12007.06	249.27	-522.60	-1323.19	-1969.90	-2542.52	-726.48	218.92
Prm2	-24769.57	15312.33	7251.68	318.85	-181.80	723.00	1061.98	1062.14	-1433.20	-728.01
Prm3	-12007.06	7251.68	4790.87	570.19	-102.63	338.60	543.96	608.90	-770.16	-1765.56
Prm5	249.27	318.85	570.19	3145.68	42.31978	-54.10475	-424.78	131.91	-2968.05	-2227.17
Prm7	-522.60	-181.80	-102.63	42.31978	356.33	-13.13656	-200.56	-6.61214	-31.85455	-11.76401
Prm8	-1323.19	723.00	338.60	-54.10475	-13.13656	40.99033	58.14568	58.52745	62.86328	31.75637
Prm9	-1969.90	1061.98	543.96	-424.78	-200.56	58.14568	2466.45	672.14	598.61	-258.95
Prm10	-2542.52	1062.14	608.90	131.91	-6.61214	58.52745	672.14	1307.87	-61.85586	-411.36
Prm12	-726.48	-1433.20	-770.16	-2968.05	-31.85455	62.86328	598.61	-61.85586	5942.19	2741.18
Prm14	218.92	-728.01	-1765.56	-2227.17	-11.76401	31.75637	-258.95	-411.36	2741.18	4411.43

**1. AUC over 3 Visits--Treatment vs Control**  
**AUC between treatment and control at visit 3**

**The GENMOD Procedure**

Covariance Matrix (Empirical)										
	Prm1	Prm2	Prm3	Prm5	Prm7	Prm8	Prm9	Prm10	Prm12	Prm14
Prm1	46384.54	-28797.47	-13380.02	785.06	-185.91	-1377.18	-706.23	-3056.78	940.44	1547.01
Prm2	-28797.47	19755.45	9527.96	107.37	-515.77	895.33	959.14	1845.91	-2504.37	-2277.87
Prm3	-13380.02	9527.96	5842.69	464.86	-273.94	414.46	-20.75997	281.14	-1560.84	-2348.20
Prm5	785.06	107.37	464.86	1488.90	-337.94	-13.15480	846.74	-181.90	-902.40	-1133.68
Prm7	-185.91	-515.77	-273.94	-337.94	339.41	-17.81949	-460.97	-66.07370	666.15	577.17
Prm8	-1377.18	895.33	414.46	-13.15480	-17.81949	43.11376	38.88761	85.92608	-63.84700	-72.46609
Prm9	-706.23	959.14	-20.75997	846.74	-460.97	38.88761	2409.24	863.48	-1027.41	-1104.81
Prm10	-3056.78	1845.91	281.14	-181.90	-66.07370	85.92608	863.48	1288.29	-146.38	55.83221
Prm12	940.44	-2504.37	-1560.84	-902.40	666.15	-63.84700	-1027.41	-146.38	2998.58	1389.73
Prm14	1547.01	-2277.87	-2348.20	-1133.68	577.17	-72.46609	-1104.81	55.83221	1389.73	3380.37

Algorithm converged.

Working Correlation Matrix			
	Col1	Col2	Col3
Row1	1.0000	0.3151	0.0993
Row2	0.3151	1.0000	0.3151
Row3	0.0993	0.3151	1.0000

GEE Fit Criteria	
QIC	57.8301
QICu	60.0000

**1. AUC over 3 Visits--Treatment vs Control**  
**AUC between treatment and control at visit 3**

**The GENMOD Procedure**

Analysis Of GEE Parameter Estimates								
Empirical Standard Error Estimates								
Parameter			Estimate	Standard Error	95% Confidence Limits		Z	Pr >  Z
Intercept			-85.4291	215.3707	-507.548	336.6897	-0.40	0.6916
visit	1		-55.5487	140.5541	-331.030	219.9322	-0.40	0.6927
visit	2		140.2272	76.4375	-9.5876	290.0419	1.83	0.0666
visit	3		0.0000	0.0000	0.0000	0.0000	.	.
txgroup	Treatment		-361.037	38.5863	-436.664	-285.409	-9.36	<.0001
txgroup	Control		0.0000	0.0000	0.0000	0.0000	.	.
covCon1			13.9267	18.4232	-22.1821	50.0355	0.76	0.4497
covcon2			18.5248	6.5661	5.6555	31.3941	2.82	0.0048
ConCat	1		17.3148	49.0840	-78.8881	113.5177	0.35	0.7243
ConCat	2		42.6226	35.8928	-27.7261	112.9712	1.19	0.2350
ConCat	3		0.0000	0.0000	0.0000	0.0000	.	.
visit*txgroup	1	Treatment	528.1456	54.7593	420.8194	635.4717	9.64	<.0001
visit*txgroup	1	Control	0.0000	0.0000	0.0000	0.0000	.	.
visit*txgroup	2	Treatment	44.4467	58.1409	-69.5075	158.4008	0.76	0.4446
visit*txgroup	2	Control	0.0000	0.0000	0.0000	0.0000	.	.
visit*txgroup	3	Treatment	0.0000	0.0000	0.0000	0.0000	.	.
visit*txgroup	3	Control	0.0000	0.0000	0.0000	0.0000	.	.

Score Statistics For Type 3 GEE Analysis			
Source	DF	Chi-Square	Pr > ChiSq
visit	2	5.77	0.0560
txgroup	1	8.48	0.0036
covCon1	1	0.68	0.4112
covcon2	1	4.39	0.0362
ConCat	2	0.98	0.6129
visit*txgroup	2	14.06	0.0009

**1. AUC over 3 Visits--Treatment vs Control**  
**AUC between treatment and control at visit 3**

**The GENMOD Procedure**

Least Squares Means								
Effect	visit	txgroup	Estimate		Standard Error	DF	Chi-Square	Pr > ChiSq
			Mean	L'Beta				
visit	1		447.6240	447.6240	81.7866	1	29.95	<.0001
visit	2		401.5504	401.5504	25.6998	1	244.13	<.0001
visit	3		239.0999	239.0999	58.7369	1	16.57	<.0001
txgroup		Treatment	277.6718	277.6718	29.4603	1	88.84	<.0001
txgroup		Control	447.8444	447.8444	22.6570	1	390.71	<.0001
visit*txgroup	1	Treatment	531.1784	531.1784	82.9359	1	41.02	<.0001
visit*txgroup	1	Control	364.0696	364.0696	88.5498	1	16.90	<.0001
visit*txgroup	2	Treatment	243.2554	243.2554	38.7849	1	39.34	<.0001
visit*txgroup	2	Control	559.8455	559.8455	33.4311	1	280.44	<.0001
visit*txgroup	3	Treatment	58.5816	58.5816	65.9525	1	0.79	0.3744
visit*txgroup	3	Control	419.6183	419.6183	57.4000	1	53.44	<.0001

Differences of Least Squares Means									
Effect	visit	txgroup	_visit	_txgroup	Estimate	Standard Error	DF	Chi-Square	Pr > ChiSq
visit	1		2		46.0736	80.1762	1	0.33	0.5655
visit	1		3		208.5241	134.1668	1	2.42	0.1201
visit	2		3		162.4505	65.8755	1	6.08	0.0137
txgroup		Treatment		Control	-170.173	33.8986	1	25.20	<.0001
visit*txgroup	1	Treatment	1	Control	167.1089	51.7946	1	10.41	0.0013
visit*txgroup	1	Treatment	2	Treatment	287.9230	90.0776	1	10.22	0.0014
visit*txgroup	1	Treatment	2	Control	-28.6670	81.3810	1	0.12	0.7246
visit*txgroup	1	Treatment	3	Treatment	472.5969	133.2114	1	12.59	0.0004
visit*txgroup	1	Treatment	3	Control	111.5601	132.8312	1	0.71	0.4010
visit*txgroup	1	Control	2	Treatment	120.8142	98.5821	1	1.50	0.2204
visit*txgroup	1	Control	2	Control	-195.776	80.8839	1	5.86	0.0155
visit*txgroup	1	Control	3	Treatment	305.4880	145.0159	1	4.44	0.0352
visit*txgroup	1	Control	3	Control	-55.5487	140.5541	1	0.16	0.6927
visit*txgroup	2	Treatment	2	Control	-316.590	51.0088	1	38.52	<.0001
visit*txgroup	2	Treatment	3	Treatment	184.6738	67.2805	1	7.53	0.0061

**1. AUC over 3 Visits--Treatment vs Control**  
**AUC between treatment and control at visit 3**

***The GENMOD Procedure***

<b>Differences of Least Squares Means</b>									
<b>Effect</b>	<b>visit</b>	<b>txgroup</b>	<b>_visit</b>	<b>_txgroup</b>	<b>Estimate</b>	<b>Standard Error</b>	<b>DF</b>	<b>Chi-Square</b>	<b>Pr &gt; ChiSq</b>
<b>visit*txgroup</b>	2	Treatment	3	Control	-176.363	68.3954	1	6.65	0.0099
<b>visit*txgroup</b>	2	Control	3	Treatment	501.2639	80.0117	1	39.25	<.0001
<b>visit*txgroup</b>	2	Control	3	Control	140.2272	76.4375	1	3.37	0.0666
<b>visit*txgroup</b>	3	Treatment	3	Control	-361.037	38.5863	1	87.55	<.0001

# 1. AUC over 3 Visits--Treatment vs Control

AUC between treatment and control at visit 3

