The GLIMMIX Procedure

Model Information	
Data Set	WORK.BRONCH
Response Variable	Value
Response Distribution	Multinomial (ordered)
Link Function	Cumulative Logit
Variance Function	Default
Variance Matrix Blocked By	newID
Estimation Technique	Maximum Likelihood
Likelihood Approximation	Gauss-Hermite Quadrature
Degrees of Freedom Method	Containment

Class Level Information		
Class	Levels	Values
Attribute	6	LLL LLS LUS RLL RML RUL
rater	2	JW VH

Number of Observations Read	1464
Number of Observations Used	1464

Response Profile		
Ordered Value	Value	Total Frequency
1	0	492
2	1	648
3	2	210
4	3	114

The GLIMMIX procedure is modeling the probabilities of levels of Value having lower Ordered Values in the Response Profile table.

Dimensions	
G-side Cov. Parameters	2
Columns in X	9
Columns in Z per Subject	3
Subjects (Blocks in V)	244
Max Obs per Subject	6

Optimization Information	
Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	10
Lower Boundaries	2
Upper Boundaries	0
Fixed Effects	Not Profiled
Starting From	GLM estimates
Quadrature Points	5

Iteration History					
Iteration	Restarts	Evaluations	Objective Function	Change	Max Gradient
0	0	4	2996.4522553	.	407.7365
1	0	2	2907.8103551	88.64190018	129.7459
2	0	2	2857.5040028	50.30635225	79.95138
3	0	2	2804.1747742	53.32922866	29.74264
4	0	2	2801.3589683	2.81580582	59.65816
5	0	4	2788.8072604	12.55170790	15.63968
6	0	3	2782.3708828	6.43637760	13.65866
7	0	3	2779.9179603	2.45292255	4.033654
8	0	3	2779.6841733	0.23378704	1.56814
9	0	3	2779.656343	0.02783023	0.317257
10	0	3	2779.6546021	0.00174089	0.069287
11	0	3	2779.6543835	0.00021862	0.07278
12	0	2	2779.6541205	0.00026301	0.040112
13	0	3	2779.6540944	0.00002612	0.038659
14	0	2	2779.6540804	0.00001396	0.036345

Convergence criterion (GCONV=1E-8) satisfied.

Fit Statistics

Fit Statistics	
-2 Log Likelihood	2779.65
AIC (smaller is better)	2799.65
AICC (smaller is better)	2799.81
BIC (smaller is better)	2834.63
CAIC (smaller is better)	2844.63
HQIC (smaller is better)	2813.74

Fit Statistics for Conditional Distribution	
-2 log L(Value | r. effects)	2079.07

Covariance Parameter Estimates			
Cov Parm	Subject	Estimate	Standard Error
Intercept	newID	4.7881	3.0275
rater	newID	0.6362	2.9631

Solutions for Fixed Effects							
Effect	Value	Attribute	Estimate	Standard Error	DF	t Value	Pr > |t|
Intercept	0		-1.4536	0.2133	0	-6.81	.
Intercept	1		2.2714	0.2215	0	10.25	.
Intercept	2		4.2574	0.2543	0	16.74	.
Attribute		LLL	0.8190	0.1981	1213	4.13	<.0001
Attribute		LLS	-0.6348	0.1919	1213	-3.31	0.0010
Attribute		LUS	1.9206	0.2150	1213	8.93	<.0001
Attribute		RLL	0.2446	0.1925	1213	1.27	0.2040
Attribute		RML	-1.4288	0.1978	1213	-7.22	<.0001
Attribute		RUL	0	.	.	.	.

Type III Tests of Fixed Effects				
Effect	Num DF	Den DF	F Value	Pr > F
Attribute	5	1213	49.04	<.0001

Estimates								
Label	Estimate	Standard Error	DF	t Value	Pr > |t|	Alpha	Lower	Upper
RUL vs. RML	-1.4288	0.1978	1213	-7.22	<.0001	0.05	-1.8169	-1.0407
RUL vs. RLL	0.2446	0.1925	1213	1.27	0.2040	0.05	-0.1330	0.6223
RUL vs. LUS	1.9206	0.2150	1213	8.93	<.0001	0.05	1.4988	2.3423
RUL vs. LLS	-0.6348	0.1919	1213	-3.31	0.0010	0.05	-1.0113	-0.2583
RUL vs. LLL	0.8190	0.1981	1213	4.13	<.0001	0.05	0.4304	1.2076
RML vs. RLL	1.6735	0.1994	1213	8.39	<.0001	0.05	1.2822	2.0647
RML vs. LUS	3.3494	0.2314	1213	14.47	<.0001	0.05	2.8954	3.8034
RML vs. LLS	0.7940	0.1927	1213	4.12	<.0001	0.05	0.4161	1.1720
RML vs. LLL	2.2478	0.2084	1213	10.79	<.0001	0.05	1.8389	2.6567
RML vs. RUL	1.4288	0.1978	1213	7.22	<.0001	0.05	1.0407	1.8169
RLL vs. LUS	1.6759	0.2132	1213	7.86	<.0001	0.05	1.2577	2.0942
RLL vs. LLS	-0.8794	0.1927	1213	-4.56	<.0001	0.05	-1.2575	-0.5014
RLL vs. LLL	0.5744	0.1972	1213	2.91	0.0036	0.05	0.1875	0.9612
LUS vs. LLS	-2.5554	0.2200	1213	-11.62	<.0001	0.05	-2.9870	-2.1238
LUS vs. LLL	-1.1016	0.2133	1213	-5.16	<.0001	0.05	-1.5201	-0.6830
LLS vs. LLL	1.4538	0.1999	1213	7.27	<.0001	0.05	1.0617	1.8459

Significant Pairwise Comparisons for bronch

Comparison	P-Value	Exponentiated Estimate (Odds Ratio)
RUL vs. RML	<.0001	0.2396
RUL vs. LUS	<.0001	6.8247
RUL vs. LLS	0.0010	0.5300
RUL vs. LLL	<.0001	2.2682
RML vs. RLL	<.0001	5.3306
RML vs. LUS	<.0001	28.4852
RML vs. LLS	<.0001	2.2123
RML vs. LLL	<.0001	9.4670
RML vs. RUL	<.0001	4.1738
RLL vs. LUS	<.0001	5.3437

Comparison	P-Value	Exponentiated Estimate (Odds Ratio)
RLL vs. LLS	<.0001	0.4150
RLL vs. LLL	0.0036	1.7760
LUS vs. LLS	<.0001	0.0777
LUS vs. LLL	<.0001	0.3323
LLS vs. LLL	<.0001	4.2793