The NLMIXED Procedure

Specifications	
Data Set	WORK.E
Dependent Variable	y
Distribution for Dependent Variable	Binary
Random Effects	u
Distribution for Random Effects	Normal
Subject Variable	id
Optimization Technique	Dual Quasi-Newton
Integration Method	Adaptive Gaussian Quadrature

Dimensions	
Observations Used	2148
Observations Not Used	0
Total Observations	2148
Subjects	537
Max Obs per Subject	4
Parameters	4
Quadrature Points	25

Initial Parameters				
int_	**ms_**	**age_**	**sigmasq**	**Negative Log Likelihood**
-3	0.4	-0.2	5	798.539648

Iteration History					
Iteration	**Calls**	**Negative Log Likelihood**	**Difference**	**Maximum Gradient**	**Slope**
1	5	798.0028	0.536863	5.34589	-99.8732
2	8	797.7248	0.278024	0.88089	-19.5094
3	11	797.6924	0.032357	0.73465	-0.25081
4	13	797.6490	0.043421	0.077937	-0.07682
5	15	797.6484	0.000627	0.003625	-0.00133
6	18	797.6484	2.325E-6	0.000277	-4.71E-6

NOTE: GCONV convergence criterion satisfied.

The NLMIXED Procedure

Fit Statistics	
-2 Log Likelihood	1595.3
AIC (smaller is better)	1603.3
AICC (smaller is better)	1603.3
BIC (smaller is better)	1620.4

Parameter Estimates								
Parameter	Estimate	Standard Error	DF	t Value	Pr > |t|	95% Confidence Limits		Gradient
int_	-3.1015	0.2190	536	-14.16	<.0001	-3.5318	-2.6712	0.000277
ms_	0.3986	0.2731	536	1.46	0.1450	-0.1379	0.9350	0.000051
age_	-0.1756	0.06768	536	-2.60	0.0097	-0.3086	-0.04268	-0.00019
sigmasq	4.6869	0.8009	536	5.85	<.0001	3.1136	6.2601	0.000088

The NLMIXED Procedure

Specifications	
Data Set	WORK.A
Dependent Variable	y
Distribution for Dependent Variable	Binary
Random Effects	u
Distribution for Random Effects	Normal
Subject Variable	id
Replicate Variable	count
Optimization Technique	Dual Quasi-Newton
Integration Method	Adaptive Gaussian Quadrature

Dimensions	
Observations Used	128
Observations Not Used	0
Total Observations	128
Subjects	537
Max Obs per Subject	4
Parameters	4
Quadrature Points	25

Initial Parameters				
int_	**ms_**	**age_**	**sigmasq**	**Negative Log Likelihood**
-3	0.4	-0.2	5	798.539648

Iteration History					
Iteration	**Calls**	**Negative Log Likelihood**	**Difference**	**Maximum Gradient**	**Slope**
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2	8	797.7248	0.278024	0.88089	-19.5094
3	11	797.6924	0.032357	0.73465	-0.25081
4	13	797.6490	0.043421	0.077937	-0.07682
5	15	797.6484	0.000627	0.003625	-0.00133
6	18	797.6484	2.325E-6	0.000277	-4.71E-6

NOTE: GCONV convergence criterion satisfied.

The NLMIXED Procedure

Fit Statistics	
-2 Log Likelihood	1595.3
AIC (smaller is better)	1603.3
AICC (smaller is better)	1603.6
BIC (smaller is better)	1620.4

Parameter Estimates								
Parameter	**Estimate**	**Standard Error**	**DF**	**t Value**	**Pr > |t|**	**95% Confidence Limits**		**Gradient**
int_	-3.1015	0.2190	536	-14.16	<.0001	-3.5318	-2.6712	0.000277
ms_	0.3986	0.2731	536	1.46	0.1450	-0.1379	0.9350	0.000051
age_	-0.1756	0.06768	536	-2.60	0.0097	-0.3086	-0.04268	-0.00019
sigmasq	4.6869	0.8009	536	5.85	<.0001	3.1136	6.2601	0.000088

The NLMIXED Procedure

Specifications	
Data Set	WORK.E
Dependent Variable	y
Distribution for Dependent Variable	Binary
Random Effects	u
Distribution for Random Effects	Normal
Subject Variable	id
Optimization Technique	Dual Quasi-Newton
Integration Method	Adaptive Gaussian Quadrature

Dimensions	
Observations Used	2148
Observations Not Used	0
Total Observations	2148
Subjects	537
Max Obs per Subject	4
Parameters	4
Quadrature Points	25

Initial Parameters				
int_	**ms_**	**age_**	**sigmasq**	**Negative Log Likelihood**
-3	0.4	-0.2	5	798.539648

Iteration History					
Iteration	**Calls**	**Negative Log Likelihood**	**Difference**	**Maximum Gradient**	**Slope**
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2	8	797.7248	0.278024	0.88089	-19.5094
3	11	797.6924	0.032357	0.73465	-0.25081
4	13	797.6490	0.043421	0.077937	-0.07682
5	15	797.6484	0.000627	0.003625	-0.00133
6	18	797.6484	2.325E-6	0.000277	-4.71E-6

NOTE: GCONV convergence criterion satisfied.

The NLMIXED Procedure

Fit Statistics	
-2 Log Likelihood	1595.3
AIC (smaller is better)	1603.3
AICC (smaller is better)	1603.3
BIC (smaller is better)	1620.4

Parameter Estimates								
Parameter	**Estimate**	**Standard Error**	**DF**	**t Value**	**Pr > |t|**	**95% Confidence Limits**		**Gradient**
int_	-3.1015	0.2166	536	-14.32	<.0001	-3.5270	-2.6760	0.000277
ms_	0.3986	0.2735	536	1.46	0.1457	-0.1387	0.9359	0.000051
age_	-0.1756	0.06789	536	-2.59	0.0099	-0.3090	-0.04227	-0.00019
sigmasq	4.6869	0.8257	536	5.68	<.0001	3.0649	6.3088	0.000088

The NLMIXED Procedure

Specifications	
Data Set	WORK.A
Dependent Variable	y
Distribution for Dependent Variable	Binary
Random Effects	u
Distribution for Random Effects	Normal
Subject Variable	id
Replicate Variable	count
Optimization Technique	Dual Quasi-Newton
Integration Method	Adaptive Gaussian Quadrature

Dimensions	
Observations Used	128
Observations Not Used	0
Total Observations	128
Subjects	537
Max Obs per Subject	4
Parameters	4
Quadrature Points	25

Initial Parameters				
int_	**ms_**	**age_**	**sigmasq**	**Negative Log Likelihood**
-3	0.4	-0.2	5	798.539648

Iteration History					
Iteration	**Calls**	**Negative Log Likelihood**	**Difference**	**Maximum Gradient**	**Slope**
1	5	798.0028	0.536863	5.34589	-99.8732
2	8	797.7248	0.278024	0.88089	-19.5094
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4	13	797.6490	0.043421	0.077937	-0.07682
5	15	797.6484	0.000627	0.003625	-0.00133
6	18	797.6484	2.325E-6	0.000277	-4.71E-6

NOTE: GCONV convergence criterion satisfied.

The NLMIXED Procedure

Fit Statistics	
-2 Log Likelihood	1595.3
AIC (smaller is better)	1603.3
AICC (smaller is better)	1603.6
BIC (smaller is better)	1620.4

Parameter Estimates

Parameter	Estimate	Standard Error	DF	t Value	Pr > |t|	95% Confidence Limits		Gradient
int_	-3.1015	0.2166	536	-14.32	<.0001	-3.5270	-2.6760	0.000277
ms_	0.3986	0.2735	536	1.46	0.1457	-0.1387	0.9359	0.000051
age_	-0.1756	0.06789	536	-2.59	0.0099	-0.3090	-0.04227	-0.00019
sigmasq	4.6869	0.8257	536	5.68	<.0001	3.0649	6.3088	0.000088