

Now assessing with 6 hours pre-post-transfusion windows

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The HPMIXED Procedure

Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	2	1 2
idnr	6033	210001535114 210002448146 210003060142 210004170105 210004315135 210004408139 210005174143 210005222149 210006865127 210007122112 210007733127 210007993103 210008804129 210010801153 210011153115 210011264134 210011623133 210012323142 210012696118 210014500120 ...

Number of Observations Read	8759
Number of Observations Used	8757

Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z per Subject	1
Subjects (Blocks in V)	6033

Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	23941.852564	.	571.2224
1	2	23828.969112	112.88345200	17.52758
2	5	23828.024121	0.94499111	6.031679

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#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	3	23827.974384	0.04973697	0.30217
4	2	23827.974274	0.00010983	0.029877
5	2	23827.974273	0.00000108	0.000121

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.02678
Residual		0.8578

#### Fit Statistics

-2 Res Log Likelihood	23828
AIC (Smaller is Better)	23832
AICC (Smaller is Better)	23832
BIC (Smaller is Better)	23845
CAIC (Smaller is Better)	23847
HQIC (Smaller is Better)	23837

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				0.2162	0.04082	8751	5.30	<.0001
predictorvalue			1	0	.	.	.	.
predictorvalue			2	-0.03329	0.02059	8751	-1.62	0.1060
tsp11	1			0	.	.	.	.
tsp11	2			-0.00989	0.004264	8751	-2.32	0.0204
tsp11	3			-6.38E-7	0.000535	8751	-0.00	0.9990
tsp12		1		0	.	.	.	.
tsp12		2		-0.00947	0.004756	8751	-1.99	0.0464
tsp12		3		0.000208	0.000490	8751	0.43	0.6704

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	8751	2.61	2.61	0.1059	0.1060

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Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	2	1 2
idnr	6014	210001535114 210002448146 210003060142 210004170105 210004315135 210004408139 210005174143 210005222149 210006865127 210007122112 210007733127 210007993103 210008804129 210010801153 210011153115 210011264134 210011623133 210012323142 210012696118 210014500120 ...

Number of Observations Read	8759
Number of Observations Used	8713

Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	12
Columns in Z per Subject	1
Subjects (Blocks in V)	6014

Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	23886.996704	.	567.3851
1	2	23775.565078	111.43162629	18.43723
2	5	23774.589145	0.97593306	6.537845

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Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	3	23774.531734	0.05741055	0.31151
4	2	23774.53162	0.00011407	0.031886
5	2	23774.531619	0.00000120	0.000126

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

Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.02817
Residual		0.8605

Fit Statistics

-2 Res Log Likelihood	23775
AIC (Smaller is Better)	23779
AICC (Smaller is Better)	23779
BIC (Smaller is Better)	23792
CAIC (Smaller is Better)	23794
HQIC (Smaller is Better)	23783

Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					0.1228	0.2231	8705	0.55
predictorvalue				1	0	.	.	.
predictorvalue				2	-0.03400	0.02070	8705	-1.64
tspl1	1				0	.	.	.
tspl1	2				-0.00998	0.004283	8705	-2.33
tspl1	3				-4.51E-6	0.000537	8705	-0.01

Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.5822
predictorvalue				1	.
predictorvalue				2	0.1005
tspl1	1				.
tspl1	2				0.0198
tspl1	3				0.9933

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Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
tspl2		1			0	.	.	.
tspl2		2			-0.00957	0.004778	8705	-2.00
tspl2		3			0.000209	0.000492	8705	0.43
hbspl			1		0	.	.	.
hbspl			2		0.000669	0.001623	8705	0.41
hbspl			3		0.000124	0.000146	8705	0.85

Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
tspl2		1			.
tspl2		2			0.0452
tspl2		3			0.6702
hbspl			1		.
hbspl			2		0.6800
hbspl			3		0.3945

Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	8705	2.70	2.70	0.1005	0.1005

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Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

Class Level Information

Class	Levels	Values
predictorvalue	2	0 1
recipientsex	2	1 2
idnr	12390	210000196120 210000954103 210001535114 210002448146 210003060142 210003603115 210004034153 210004170105 210004315135 210004404141 210004408139 210004674105 210005174143 210005222149 210005505147 210006242138 210006865127 210007122112 210007733127 210007993103 ...

Number of Observations Read	24364
Number of Observations Used	24362

Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z per Subject	1
Subjects (Blocks in V)	12390

Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	68226.644883	.	1273.051
1	5	68065.566106	161.07877724	132.7165
2	2	68063.209182	2.35692372	36.31331

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#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	68063.003365	0.20581745	2.734164
4	2	68063.002154	0.00121022	0.068725
5	2	68063.002154	0.00000077	0.000139

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.1138
Residual		0.8558

#### Fit Statistics

-2 Res Log Likelihood	68063
AIC (Smaller is Better)	68067
AICC (Smaller is Better)	68067
BIC (Smaller is Better)	68082
CAIC (Smaller is Better)	68084
HQIC (Smaller is Better)	68072

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				0.2088	0.02452	24356	8.52	<.0001
predictorvalue			0	0	.	.	.	.
predictorvalue			1	-0.04550	0.02620	24356	-1.74	0.0825
tsp11	1			0	.	.	.	.
tsp11	2			-0.01453	0.002627	24356	-5.53	<.0001
tsp11	3			0.000773	0.000327	24356	2.37	0.0180
tsp12		1		0	.	.	.	.
tsp12		2		-0.00687	0.002929	24356	-2.35	0.0190
tsp12		3		-0.00013	0.000300	24356	-0.42	0.6741

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	24356	3.02	3.02	0.0825	0.0825



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Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

Class Level Information

Class	Levels	Values
predictorvalue	2	0 1
recipientsex	2	1 2
idnr	11634	210000196120 210000954103 210001535114 210002448146 210003060142 210004034153 210004170105 210004315135 210004404141 210004408139 210004674105 210005174143 210005222149 210005505147 210006865127 210007122112 210007733127 210007993103 210008804129 210010801153 ...

Number of Observations Read	24364
Number of Observations Used	21988

Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	12
Columns in Z per Subject	1
Subjects (Blocks in V)	11634

Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	61588.494682	.	1209.855
1	5	61410.152176	178.34250553	175.512
2	2	61404.602136	5.55003989	65.35318

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#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	61403.55754	1.04459590	11.27228
4	2	61403.521905	0.03563528	1.097125
5	2	61403.521555	0.00034950	0.022927
6	3	61403.521555	0.00000015	1.289E-6

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.07546
Residual		0.8831

#### Fit Statistics

-2 Res Log Likelihood	61404
AIC (Smaller is Better)	61408
AICC (Smaller is Better)	61408
BIC (Smaller is Better)	61422
CAIC (Smaller is Better)	61424
HQIC (Smaller is Better)	61412

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					0.06115	0.1331	21980	0.46
predictorvalue				0	0	.	.	.
predictorvalue				1	-0.04874	0.02635	21980	-1.85
tspl1	1				0	.	.	.
tspl1	2				-0.01412	0.002769	21980	-5.10

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.6458
predictorvalue				0	.
predictorvalue				1	0.0644
tspl1	1				.
tspl1	2				<.0001

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Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
tspl1	3				0.000639	0.000344	21980	1.86
tspl2		1			0	.	.	.
tspl2		2			-0.00868	0.003082	21980	-2.82
tspl2		3			8.108E-6	0.000316	21980	0.03
hbspl			1		0	.	.	.
hbspl			2		0.001174	0.000942	21980	1.25
hbspl			3		-0.00003	0.000040	21980	-0.68

Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
tspl1	3				0.0629
tspl2		1			.
tspl2		2			0.0049
tspl2		3			0.9795
hbspl			1		.
hbspl			2		0.2128
hbspl			3		0.4985

Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	21980	3.42	3.42	0.0643	0.0644

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#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	2	1 2
idnr	11614	210000196120 210000954103 210001535114 210002448146 210003060142 210003603115 210004034153 210004170105 210004315135 210004404141 210004408139 210004674105 210005174143 210005222149 210005505147 210006865127 210007122112 210007733127 210007993103 210008804129 ...

Number of Observations Read	22476
Number of Observations Used	22414

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	10
Columns in Z per Subject	1
Subjects (Blocks in V)	11614

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	61832.419448	.	1441.356
1	5	61615.642686	216.77676256	194.1847
2	2	61609.883841	5.75884532	72.10692
3	2	61608.791937	1.09190336	13.67927

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#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	2	61608.74582	0.04611736	1.575986
5	2	61608.745178	0.00064177	0.0452
6	3	61608.745178	0.00000054	0.000029

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.04686
Residual		0.8674

#### Fit Statistics

-2 Res Log Likelihood	61609
AIC (Smaller is Better)	61613
AICC (Smaller is Better)	61613
BIC (Smaller is Better)	61627
CAIC (Smaller is Better)	61629
HQIC (Smaller is Better)	61618

#### Solution for Fixed Effects

Effect	tspl1	tspl2	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				0.2165	0.04012	22407	5.40	<.0001
predspline			1	0	.	.	.	.
predspline			2	-0.00067	0.000863	22407	-0.77	0.4394
predspline			3	0.000037	0.000037	22407	0.99	0.3222
tspl1	1			0	.	.	.	.
tspl1	2			-0.01215	0.002683	22407	-4.53	<.0001
tspl1	3			0.000512	0.000333	22407	1.54	0.1247
tspl2		1		0	.	.	.	.
tspl2		2		-0.00833	0.002993	22407	-2.78	0.0054
tspl2		3		0.000033	0.000306	22407	0.11	0.9140

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	22407	1.03	0.51	0.5983	0.5983

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#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	2	1 2
idnr	10933	210000196120 210000954103 210001535114 210002448146 210003060142 210004034153 210004170105 210004315135 210004404141 210004408139 210004674105 210005174143 210005222149 210005505147 210006865127 210007122112 210007733127 210007993103 210008804129 210010801153 ...

Number of Observations Read	22476
Number of Observations Used	20253

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	13
Columns in Z per Subject	1
Subjects (Blocks in V)	10933

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	56127.765453	.	1406.518
1	5	55883.998112	243.76734096	232.2629
2	4	55870.1434	13.85471169	18.16569
3	4	55869.942943	0.20045693	1.081082

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#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	2	55869.942046	0.00089679	0.210116
5	2	55869.94201	0.00003590	0.003729

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.01194
Residual		0.9068

#### Fit Statistics

-2 Res Log Likelihood	55870
AIC (Smaller is Better)	55874
AICC (Smaller is Better)	55874
BIC (Smaller is Better)	55889
CAIC (Smaller is Better)	55891
HQIC (Smaller is Better)	55879

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept					0.09053	0.1398	20244	0.65	0.5172
predspline				1	0	.	.	.	.
predspline				2	-0.00041	0.000893	20244	-0.46	0.6438
predspline				3	0.000026	0.000039	20244	0.66	0.5071
tspl1	1				0	.	.	.	.
tspl1	2				-0.01084	0.002833	20244	-3.83	0.0001
tspl1	3				0.000274	0.000352	20244	0.78	0.4360
tspl2		1			0	.	.	.	.
tspl2		2			-0.01122	0.003152	20244	-3.56	0.0004
tspl2		3			0.000292	0.000324	20244	0.90	0.3676
hbspl			1		0	.	.	.	.
hbspl			2		0.000962	0.000967	20244	0.99	0.3202
hbspl			3		-0.00001	0.000041	20244	-0.29	0.7729

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Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	20244	0.51	0.25	0.7767	0.7767



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#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	2	1 2
idnr	11630	210000196120 210000954103 210001535114 210002448146 210003060142 210004034153 210004170105 210004315135 210004404141 210004408139 210004674105 210005174143 210005222149 210005505147 210006865127 210007122112 210007733127 210007993103 210008804129 210010801153 ...

Number of Observations Read	22063
Number of Observations Used	21976

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	10
Columns in Z per Subject	1
Subjects (Blocks in V)	11630

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	61564.753852	.	1210.129
1	5	61386.400473	178.35337964	175.2788
2	2	61380.870077	5.53039556	65.1825
3	2	61379.832627	1.03745024	11.21411

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#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	2	61379.797436	0.03519091	1.086718
5	2	61379.797094	0.00034205	0.022537
6	3	61379.797094	0.00000015	0.000012

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.07554
Residual		0.8837

#### Fit Statistics

-2 Res Log Likelihood	61380
AIC (Smaller is Better)	61384
AICC (Smaller is Better)	61384
BIC (Smaller is Better)	61399
CAIC (Smaller is Better)	61401
HQIC (Smaller is Better)	61389

#### Solution for Fixed Effects

Effect	tspl1	tspl2	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				0.05568	0.1494	21969	0.37	0.7094
predspline			1	0	.	.	.	.
predspline			2	0.001191	0.001070	21969	1.11	0.2660
predspline			3	-0.00002	0.000041	21969	-0.59	0.5574
tspl1	1			0	.	.	.	.
tspl1	2			-0.01413	0.002770	21969	-5.10	<.0001
tspl1	3			0.000639	0.000344	21969	1.86	0.0632
tspl2		1		0	.	.	.	.
tspl2		2		-0.00863	0.003083	21969	-2.80	0.0051
tspl2		3		1.327E-6	0.000316	21969	0.00	0.9966

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	21969	1.83	0.92	0.3995	0.3995

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#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	2	1 2
idnr	12390	210000196120 210000954103 210001535114 210002448146 210003060142 210003603115 210004034153 210004170105 210004315135 210004404141 210004408139 210004674105 210005174143 210005222149 210005505147 210006242138 210006865127 210007122112 210007733127 210007993103 ...

Number of Observations Read	24364
Number of Observations Used	24362

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z per Subject	1
Subjects (Blocks in V)	12390

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	68230.202495	.	1273.807
1	5	68069.128362	161.07413328	132.4341
2	2	68066.785885	2.34247657	36.14851

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	68066.582474	0.20341165	2.706262
4	2	68066.581291	0.00118211	0.067415
5	2	68066.581291	0.00000074	0.000134

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.1138
Residual		0.8558

#### Fit Statistics

-2 Res Log Likelihood	68067
AIC (Smaller is Better)	68071
AICC (Smaller is Better)	68071
BIC (Smaller is Better)	68085
CAIC (Smaller is Better)	68087
HQIC (Smaller is Better)	68076

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				0.2116	0.02521	24356	8.39	<.0001
predictorvalue			1	0	.	.	.	.
predictorvalue			2	-0.01196	0.01259	24356	-0.95	0.3423
tsp11	1			0	.	.	.	.
tsp11	2			-0.01453	0.002627	24356	-5.53	<.0001
tsp11	3			0.000771	0.000327	24356	2.36	0.0182
tsp12		1		0	.	.	.	.
tsp12		2		-0.00683	0.002929	24356	-2.33	0.0197
tsp12		3		-0.00013	0.000300	24356	-0.44	0.6630

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	24356	0.90	0.90	0.3423	0.3423

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	2	1 2
idnr	11634	210000196120 210000954103 210001535114 210002448146 210003060142 210004034153 210004170105 210004315135 210004404141 210004408139 210004674105 210005174143 210005222149 210005505147 210006865127 210007122112 210007733127 210007993103 210008804129 210010801153 ...

Number of Observations Read	24364
Number of Observations Used	21988

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	12
Columns in Z per Subject	1
Subjects (Blocks in V)	11634

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	61592.828732	.	1209.691
1	5	61414.626856	178.20187560	175.24
2	2	61409.09879	5.52806609	65.19552

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	61408.060677	1.03811322	11.22358
4	2	61408.025413	0.03526384	1.08882
5	2	61408.02507	0.00034354	0.022622
6	3	61408.02507	0.00000015	0.00001

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.07567
Residual		0.8831

#### Fit Statistics

-2 Res Log Likelihood	61408
AIC (Smaller is Better)	61412
AICC (Smaller is Better)	61412
BIC (Smaller is Better)	61427
CAIC (Smaller is Better)	61429
HQIC (Smaller is Better)	61417

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					0.04659	0.1440	21980	0.32
predictorvalue				1	0	.	.	.
predictorvalue				2	0.003614	0.01489	21980	0.24
tspl1	1				0	.	.	.
tspl1	2				-0.01414	0.002769	21980	-5.10

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.7463
predictorvalue				1	.
predictorvalue				2	0.8083
tspl1	1				.
tspl1	2				<.0001

## Now assessing with 6 hours pre-post-transfusion windows

The HPMIXED Procedure

Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
tspl1	3				0.000640	0.000344	21980	1.86
tspl2		1			0	.	.	.
tspl2		2			-0.00862	0.003082	21980	-2.80
tspl2		3			1.973E-6	0.000316	21980	0.01
hbspl			1		0	.	.	.
hbspl			2		0.001238	0.001000	21980	1.24
hbspl			3		-0.00003	0.000040	21980	-0.67

Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
tspl1	3				0.0626
tspl2		1			.
tspl2		2			0.0051
tspl2		3			0.9950
hbspl			1		.
hbspl			2		0.2161
hbspl			3		0.5033

Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	21980	0.06	0.06	0.8083	0.8083

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	2	1 2
idnr	12387	210000196120 210000954103 210001535114 210002448146 210003060142 210003603115 210004034153 210004170105 210004315135 210004404141 210004408139 210004674105 210005174143 210005222149 210005505147 210006242138 210006865127 210007122112 210007733127 210007993103 ...

Number of Observations Read	24436
Number of Observations Used	24353

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	10
Columns in Z per Subject	1
Subjects (Blocks in V)	12387

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	68233.322521	.	1278.528
1	5	68070.130291	163.19223038	135.9956
2	2	68067.630859	2.49943180	37.99765
3	2	68067.401588	0.22927092	3.025661



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	2	68067.400075	0.00151279	0.082967
5	2	68067.400074	0.00000114	0.000194

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.1114
Residual		0.8578

#### Fit Statistics

-2 Res Log Likelihood	68067
AIC (Smaller is Better)	68071
AICC (Smaller is Better)	68071
BIC (Smaller is Better)	68086
CAIC (Smaller is Better)	68088
HQIC (Smaller is Better)	68076

#### Solution for Fixed Effects

Effect	tspl1	tspl2	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				0.2438	0.03535	24346	6.90	<.0001
predspline			1	0	.	.	.	.
predspline			2	-0.00141	0.001597	24346	-0.88	0.3778
predspline			3	-3.77E-6	0.000086	24346	-0.04	0.9649
tspl1	1			0	.	.	.	.
tspl1	2			-0.01464	0.002629	24346	-5.57	<.0001
tspl1	3			0.000778	0.000327	24346	2.38	0.0172
tspl2		1		0	.	.	.	.
tspl2		2		-0.00701	0.002931	24346	-2.39	0.0167
tspl2		3		-0.00010	0.000300	24346	-0.34	0.7337

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	24346	6.43	3.22	0.0401	0.0401

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	2	1 2
idnr	11631	210000196120 210000954103 210001535114 210002448146 210003060142 210004034153 210004170105 210004315135 210004404141 210004408139 210004674105 210005174143 210005222149 210005505147 210006865127 210007122112 210007733127 210007993103 210008804129 210010801153 ...

Number of Observations Read	24436
Number of Observations Used	21979

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	13
Columns in Z per Subject	1
Subjects (Blocks in V)	11631

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	61596.244756	.	1213.734
1	5	61415.967623	180.27713351	178.2753
2	2	61410.192487	5.77513564	67.19686
3	2	61409.068835	1.12365253	12.01209

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	2	61409.027318	0.04151629	1.244573
5	2	61409.026855	0.00046331	0.029092
6	3	61409.026855	0.00000025	8.519E-6

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.07304
Residual		0.8855

#### Fit Statistics

-2 Res Log Likelihood	61409
AIC (Smaller is Better)	61413
AICC (Smaller is Better)	61413
BIC (Smaller is Better)	61428
CAIC (Smaller is Better)	61430
HQIC (Smaller is Better)	61418

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept					0.08731	0.1357	21970	0.64	0.5200
predspline				1	0	.	.	.	.
predspline				2	-0.00050	0.001626	21970	-0.31	0.7581
predspline				3	-0.00005	0.000089	21970	-0.57	0.5715
tspl1	1				0	.	.	.	.
tspl1	2				-0.01420	0.002771	21970	-5.12	<.0001
tspl1	3				0.000644	0.000344	21970	1.87	0.0610
tspl2		1			0	.	.	.	.
tspl2		2			-0.00879	0.003084	21970	-2.85	0.0044
tspl2		3			0.000032	0.000316	21970	0.10	0.9194
hbspl			1		0	.	.	.	.
hbspl			2		0.001131	0.000943	21970	1.20	0.2304
hbspl			3		-0.00003	0.000040	21970	-0.63	0.5278

**Now assessing with 6 hours pre-post-transfusion windows**

The HPMIXED Procedure

Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	21970	5.47	2.73	0.0650	0.0651

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	6	0 1 5 10 20 99
recipientsex	2	1 2
idnr	12390	210000196120 210000954103 210001535114 210002448146 210003060142 210003603115 210004034153 210004170105 210004315135 210004404141 210004408139 210004674105 210005174143 210005222149 210005505147 210006242138 210006865127 210007122112 210007733127 210007993103 ...

Number of Observations Read	24368
Number of Observations Used	24362

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	13
Columns in Z per Subject	1
Subjects (Blocks in V)	12390

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	68249.941779	.	1274.303
1	5	68088.542924	161.39885494	132.997
2	2	68086.175273	2.36765086	36.43587

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	68085.967901	0.20737189	2.754008
4	2	68085.966672	0.00122908	0.069633
5	2	68085.966671	0.00000079	0.000142

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.1135
Residual		0.8562

#### Fit Statistics

-2 Res Log Likelihood	68086
AIC (Smaller is Better)	68090
AICC (Smaller is Better)	68090
BIC (Smaller is Better)	68105
CAIC (Smaller is Better)	68107
HQIC (Smaller is Better)	68095

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				0.1993	0.05691	24352	3.50	0.0005
predictorvalue			0	-0.00514	0.05367	24352	-0.10	0.9237
predictorvalue			1	0.02064	0.05276	24352	0.39	0.6957
predictorvalue			5	0.01401	0.05386	24352	0.26	0.7948
predictorvalue			10	0.000060	0.05485	24352	0.00	0.9991
predictorvalue			20	0	.	.	.	.
predictorvalue			99	-0.00556	0.05384	24352	-0.10	0.9178
tsp11	1			0	.	.	.	.
tsp11	2			-0.01460	0.002628	24352	-5.56	<.0001
tsp11	3			0.000775	0.000327	24352	2.37	0.0176
tsp12		1		0	.	.	.	.
tsp12		2		-0.00685	0.002929	24352	-2.34	0.0193
tsp12		3		-0.00013	0.000300	24352	-0.43	0.6658

**Now assessing with 6 hours pre-post-transfusion windows**

The HPMIXED Procedure

Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	5	24352	3.39	0.68	0.6393	0.6393

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	6	0 1 5 10 20 99
recipientsex	2	1 2
idnr	11634	210000196120 210000954103 210001535114 210002448146 210003060142 210004034153 210004170105 210004315135 210004404141 210004408139 210004674105 210005174143 210005222149 210005505147 210006865127 210007122112 210007733127 210007993103 210008804129 210010801153 ...

Number of Observations Read	24368
Number of Observations Used	21988

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	16
Columns in Z per Subject	1
Subjects (Blocks in V)	11634

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	61611.559148	.	1209.709
1	5	61433.493762	178.06538581	174.7857
2	2	61428.004235	5.48952709	64.83089



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	61426.981653	1.02258168	11.06912
4	2	61426.947548	0.03410522	1.058565
5	2	61426.947225	0.00032258	0.02144
6	3	61426.947225	0.00000013	5.693E-6

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.07595
Residual		0.8829

#### Fit Statistics

-2 Res Log Likelihood	61427
AIC (Smaller is Better)	61431
AICC (Smaller is Better)	61431
BIC (Smaller is Better)	61446
CAIC (Smaller is Better)	61448
HQIC (Smaller is Better)	61436

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					0.05335	0.1418	21976	0.38
predictorvalue				0	-0.01052	0.05404	21976	-0.19
predictorvalue				1	0.01650	0.05310	21976	0.31
predictorvalue				5	0.01066	0.05421	21976	0.20
predictorvalue				10	-0.00397	0.05523	21976	-0.07

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.7067
predictorvalue				0	0.8456
predictorvalue				1	0.7560
predictorvalue				5	0.8441
predictorvalue				10	0.9427

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
predictorvalue				20	0	.	.	.
predictorvalue				99	-0.00186	0.05589	21976	-0.03
tspl1	1				0	.	.	.
tspl1	2				-0.01418	0.002770	21976	-5.12
tspl1	3				0.000640	0.000344	21976	1.86
tspl2		1			0	.	.	.
tspl2		2			-0.00862	0.003082	21976	-2.80
tspl2		3			7.372E-7	0.000316	21976	0.00
hbspl			1		0	.	.	.
hbspl			2		0.001169	0.000943	21976	1.24
hbspl			3		-0.00003	0.000040	21976	-0.65

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
predictorvalue				20	.
predictorvalue				99	0.9734
tspl1	1				.
tspl1	2				<.0001
tspl1	3				0.0628
tspl2		1			.
tspl2		2			0.0052
tspl2		3			0.9981
hbspl			1		.
hbspl			2		0.2152
hbspl			3		0.5173

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	5	21976	2.77	0.55	0.7360	0.7360

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	4	0 180 365 999
recipientsex	2	1 2
idnr	12390	210000196120 210000954103 210001535114 210002448146 210003060142 210003603115 210004034153 210004170105 210004315135 210004404141 210004408139 210004674105 210005174143 210005222149 210005505147 210006242138 210006865127 210007122112 210007733127 210007993103 ...

Number of Observations Read	24366
Number of Observations Used	24362

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	11
Columns in Z per Subject	1
Subjects (Blocks in V)	12390

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	68232.747863	.	1274.744
1	5	68071.39259	161.35527273	132.7353
2	2	68069.038163	2.35442703	36.26596

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	68068.833247	0.20491537	2.722175
4	2	68068.83205	0.00119728	0.068083
5	2	68068.832049	0.00000075	0.000136

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.1135
Residual		0.8558

#### Fit Statistics

-2 Res Log Likelihood	68069
AIC (Smaller is Better)	68073
AICC (Smaller is Better)	68073
BIC (Smaller is Better)	68088
CAIC (Smaller is Better)	68090
HQIC (Smaller is Better)	68078

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				0.2136	0.02558	24354	8.35	<.0001
predictorvalue			0	0	.	.	.	.
predictorvalue			180	-0.02668	0.02083	24354	-1.28	0.2003
predictorvalue			365	0.05784	0.02653	24354	2.18	0.0292
predictorvalue			999	-0.01961	0.01404	24354	-1.40	0.1626
tsp11	1			0	.	.	.	.
tsp11	2			-0.01457	0.002628	24354	-5.54	<.0001
tsp11	3			0.000780	0.000327	24354	2.39	0.0170
tsp12		1		0	.	.	.	.
tsp12		2		-0.00691	0.002929	24354	-2.36	0.0184
tsp12		3		-0.00013	0.000300	24354	-0.42	0.6714

**Now assessing with 6 hours pre-post-transfusion windows**

The HPMIXED Procedure

Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	3	24354	9.92	3.31	0.0193	0.0193

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	4	0 180 365 999
recipientsex	2	1 2
idnr	11634	210000196120 210000954103 210001535114 210002448146 210003060142 210004034153 210004170105 210004315135 210004404141 210004408139 210004674105 210005174143 210005222149 210005505147 210006865127 210007122112 210007733127 210007993103 210008804129 210010801153 ...

Number of Observations Read	24366
Number of Observations Used	21988

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	14
Columns in Z per Subject	1
Subjects (Blocks in V)	11634

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	61594.638775	.	1210.363
1	5	61416.44708	178.19169495	174.8373
2	2	61410.9575	5.48958027	64.80581

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	61409.936801	1.02069935	11.04192
4	2	61409.902915	0.03388573	1.052078
5	2	61409.902597	0.00031809	0.02117
6	3	61409.902597	0.00000013	0.000011

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.07586
Residual		0.8826

#### Fit Statistics

-2 Res Log Likelihood	61410
AIC (Smaller is Better)	61414
AICC (Smaller is Better)	61414
BIC (Smaller is Better)	61429
CAIC (Smaller is Better)	61431
HQIC (Smaller is Better)	61419

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					0.06960	0.1331	21978	0.52
predictorvalue				0	0	.	.	.
predictorvalue				180	-0.02887	0.02094	21978	-1.38
predictorvalue				365	0.05839	0.02673	21978	2.18
predictorvalue				999	-0.01836	0.01517	21978	-1.21

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.6010
predictorvalue				0	.
predictorvalue				180	0.1681
predictorvalue				365	0.0290
predictorvalue				999	0.2261

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
tspl1	1				0	.	.	.
tspl1	2				-0.01415	0.002769	21978	-5.11
tspl1	3				0.000648	0.000344	21978	1.88
tspl2		1			0	.	.	.
tspl2		2			-0.00868	0.003082	21978	-2.82
tspl2		3			3.396E-6	0.000316	21978	0.01
hbspl			1		0	.	.	.
hbspl			2		0.001129	0.000943	21978	1.20
hbspl			3		-0.00002	0.000040	21978	-0.59

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
tspl1	1				.
tspl1	2				<.0001
tspl1	3				0.0595
tspl2		1			.
tspl2		2			0.0049
tspl2		3			0.9914
hbspl			1		.
hbspl			2		0.2315
hbspl			3		0.5559

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	3	21978	9.59	3.20	0.0224	0.0224



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	3	0 1 2
idnr	5392	210001535114 210003060142 210004156135 210004315135 210004408139 210005174143 210005222149 210006865127 210007122112 210007993103 210008804129 210010801153 210011153115 210011264134 210011623133 210012696118 210015345106 210015662118 210015670103 210015945108 ...

Number of Observations Read	7672
Number of Observations Used	7670

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z per Subject	1
Subjects (Blocks in V)	5392

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	37877.454419	.	687.7257
1	5	37730.586025	146.86839437	101.3298
2	4	37723.689634	6.89639108	12.11391

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	4	37723.530983	0.15865080	4.954497
4	5	37723.525119	0.00586451	4.493676
5	4	37723.512426	0.01269242	3.28797
6	5	37723.509941	0.00248563	2.996645
7	4	37723.504517	0.00542340	2.234401
8	5	37723.503437	0.00108066	2.049211
9	4	37723.501054	0.00238287	1.565723
10	5	37723.500568	0.00048554	1.447618
11	4	37723.499483	0.00108505	1.140431
12	5	37723.499256	0.00022735	1.064919
13	4	37723.49791	0.00134576	0

Convergence is assumed but all parameters are actively constrained.

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	8.842E-6
Residual		7.9645

#### Fit Statistics

-2 Res Log Likelihood	37723
AIC (Smaller is Better)	37725
AICC (Smaller is Better)	37725
BIC (Smaller is Better)	37732
CAIC (Smaller is Better)	37733
HQIC (Smaller is Better)	37728

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				0.02256	0.1296	7664	0.17	0.8618
predictorvalue			1	0	.	.	.	.
predictorvalue			2	-0.08771	0.06593	7664	-1.33	0.1834
tsp11	1			0	.	.	.	.
tsp11	2			0.04029	0.01348	7664	2.99	0.0028
tsp11	3			-0.00657	0.001696	7664	-3.88	0.0001
tsp12		1		0	.	.	.	.
tsp12		2		-0.01460	0.01525	7664	-0.96	0.3385
tsp12		3		0.002393	0.001564	7664	1.53	0.1261

**Now assessing with 6 hours pre-post-transfusion windows**

The HPMIXED Procedure

Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	7664	1.77	1.77	0.1834	0.1834

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	3	0 1 2
idnr	5374	210001535114 210003060142 210004156135 210004315135 210004408139 210005174143 210005222149 210006865127 210007122112 210007993103 210008804129 210010801153 210011153115 210011264134 210011623133 210012696118 210015345106 210015662118 210015670103 210015945108 ...

Number of Observations Read	7672
Number of Observations Used	7631

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	12
Columns in Z per Subject	1
Subjects (Blocks in V)	5374

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	37703.821977	.	686.7015
1	5	37556.545935	147.27604155	101.1749
2	4	37549.656335	6.88960037	11.44878

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	37549.516699	0.13963615	4.458649
4	5	37549.51221	0.00448868	4.050709
5	4	37549.502469	0.00974150	2.982812
6	5	37549.50055	0.00191892	2.724196
7	4	37549.496348	0.00420163	2.047871
8	5	37549.495505	0.00084349	1.883229
9	4	37549.493636	0.00186831	1.453882
10	5	37549.493252	0.00038430	1.348775
11	4	37549.49109	0.00216220	0

Convergence is assumed but all parameters are actively constrained.

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	8.839E-6
Residual		7.9611

#### Fit Statistics

-2 Res Log Likelihood	37549
AIC (Smaller is Better)	37551
AICC (Smaller is Better)	37551
BIC (Smaller is Better)	37558
CAIC (Smaller is Better)	37559
HQIC (Smaller is Better)	37554

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					1.0230	0.7189	7623	1.42
predictorvalue				1	0	.	.	.
predictorvalue				2	-0.08939	0.06614	7623	-1.35

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.1547
predictorvalue				1	.
predictorvalue				2	0.1766

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
tspl1	1				0	.	.	.
tspl1	2				0.04103	0.01351	7623	3.04
tspl1	3				-0.00679	0.001700	7623	-3.99
tspl2		1			0	.	.	.
tspl2		2			-0.01642	0.01529	7623	-1.07
tspl2		3			0.002521	0.001568	7623	1.61
hbspl			1		0	.	.	.
hbspl			2		-0.00732	0.005225	7623	-1.40
hbspl			3		0.000774	0.000476	7623	1.63

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
tspl1	1				.
tspl1	2				0.0024
tspl1	3				<.0001
tspl2		1			.
tspl2		2			0.2828
tspl2		3			0.1079
hbspl			1		.
hbspl			2		0.1611
hbspl			3		0.1040

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	7623	1.83	1.83	0.1765	0.1766

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	0 1
recipientsex	3	0 1 2
idnr	10893	210000196120 210000954103 210001535114 210003060142 210004156135 210004315135 210004404141 210004408139 210004674105 210005174143 210005222149 210005505147 210006865127 210007122112 210007733127 210007878104 210007993103 210008804129 210008871117 210010801153 ...

Number of Observations Read	20569
Number of Observations Used	20567

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z per Subject	1
Subjects (Blocks in V)	10893

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	101324.56915	.	1984.874
1	5	100969.22421	355.34493947	179.8457
2	4	100962.36015	6.86405739	29.48839

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	4	100961.80665	0.55350111	3.721575
4	2	100961.79397	0.01267873	1.073341
5	3	100961.79308	0.00089537	0

Convergence is assumed but all parameters are actively constrained.

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	8.788E-6
Residual		7.9152

#### Fit Statistics

-2 Res Log Likelihood	100962
AIC (Smaller is Better)	100964
AICC (Smaller is Better)	100964
BIC (Smaller is Better)	100971
CAIC (Smaller is Better)	100972
HQIC (Smaller is Better)	100966

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				-0.1686	0.07428	20561	-2.27	0.0232
predictorvalue			0	0	.	.	.	.
predictorvalue			1	-0.1162	0.08227	20561	-1.41	0.1579
tsp11	1			0	.	.	.	.
tsp11	2			0.03803	0.008161	20561	4.66	<.0001
tsp11	3			-0.00587	0.001015	20561	-5.79	<.0001
tsp12		1		0	.	.	.	.
tsp12		2		-0.00252	0.009130	20561	-0.28	0.7826
tsp12		3		0.001813	0.000937	20561	1.94	0.0528

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	20561	1.99	1.99	0.1579	0.1579



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	0 1
recipientsex	3	0 1 2
idnr	10380	210000196120 210000954103 210001535114 210003060142 210004156135 210004315135 210004404141 210004408139 210004674105 210005174143 210005222149 210005505147 210006865127 210007122112 210007733127 210007878104 210007993103 210008804129 210008871117 210010801153 ...

Number of Observations Read	20569
Number of Observations Used	19023

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	12
Columns in Z per Subject	1
Subjects (Blocks in V)	10380

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	93803.718744	.	1844.094
1	5	93471.837481	331.88126332	173.096
2	4	93465.062055	6.77542624	28.04549

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	4	93464.522509	0.53954635	3.704015
4	2	93464.508766	0.01374229	1.123114
5	3	93464.507594	0.00117178	0

Convergence is assumed but all parameters are actively constrained.

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	8.813E-6
Residual		7.9377

#### Fit Statistics

-2 Res Log Likelihood	93465
AIC (Smaller is Better)	93467
AICC (Smaller is Better)	93467
BIC (Smaller is Better)	93474
CAIC (Smaller is Better)	93475
HQIC (Smaller is Better)	93469

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					-0.2558	0.4304	19015	-0.59
predictorvalue				0	0	.	.	.
predictorvalue				1	-0.1337	0.08283	19015	-1.61
tspl1	1				0	.	.	.
tspl1	2				0.03650	0.008509	19015	4.29
tspl1	3				-0.00564	0.001057	19015	-5.33

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.5523
predictorvalue				0	.
predictorvalue				1	0.1066
tspl1	1				.
tspl1	2				<.0001
tspl1	3				<.0001

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tsp11	tsp12	hbsp1	predictorvalue	Estimate	Standard Error	DF	t Value
tsp12		1			0	.	.	.
tsp12		2			-0.00262	0.009512	19015	-0.28
tsp12		3			0.001882	0.000977	19015	1.93
hbsp1			1		0	.	.	.
hbsp1			2		0.000833	0.003063	19015	0.27
hbsp1			3		-0.00013	0.000124	19015	-1.02

#### Solution for Fixed Effects

Effect	tsp11	tsp12	hbsp1	predictorvalue	Pr >  t
tsp12		1			.
tsp12		2			0.7830
tsp12		3			0.0541
hbsp1			1		.
hbsp1			2		0.7856
hbsp1			3		0.3084

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	19015	2.60	2.60	0.1066	0.1066

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	3	0 1 2
idnr	10203	210000196120 210000954103 210001535114 210003060142 210004156135 210004315135 210004404141 210004408139 210004674105 210005174143 210005222149 210005505147 210006865127 210007122112 210007733127 210007878104 210007993103 210008804129 210008871117 210010801153 ...

Number of Observations Read	18875
Number of Observations Used	18813

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	10
Columns in Z per Subject	1
Subjects (Blocks in V)	10203

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	92556.132952	.	1800.244
1	5	92235.386347	320.74660449	156.3014
2	4	92229.88882	5.49752748	24.2884
3	4	92229.471309	0.41751112	4.739461

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	4	92229.421433	0.04987578	0.752555
5	2	92229.419439	0.00199359	0.290029
6	5	92229.419398	0.00004116	0.273019

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.000044
Residual		7.8526

#### Fit Statistics

-2 Res Log Likelihood	92229
AIC (Smaller is Better)	92233
AICC (Smaller is Better)	92233
BIC (Smaller is Better)	92248
CAIC (Smaller is Better)	92250
HQIC (Smaller is Better)	92238

#### Solution for Fixed Effects

Effect	tspl1	tspl2	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				-0.1804	0.1263	18806	-1.43	0.1534
predspline			1	0	.	.	.	.
predspline			2	0.000374	0.002744	18806	0.14	0.8916
predspline			3	0.000016	0.000119	18806	0.14	0.8913
tspl1	1			0	.	.	.	.
tspl1	2			0.03619	0.008506	18806	4.25	<.0001
tspl1	3			-0.00597	0.001056	18806	-5.65	<.0001
tspl2		1		0	.	.	.	.
tspl2		2		-0.00239	0.009527	18806	-0.25	0.8017
tspl2		3		0.001657	0.000976	18806	1.70	0.0896

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	18806	0.32	0.16	0.8528	0.8528

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	3	0 1 2
idnr	9755	210000196120 210000954103 210001535114 210003060142 210004156135 210004315135 210004404141 210004408139 210004674105 210005174143 210005222149 210005505147 210006865127 210007122112 210007733127 210007878104 210007993103 210008804129 210008871117 210010801153 ...

Number of Observations Read	18875
Number of Observations Used	17487

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	13
Columns in Z per Subject	1
Subjects (Blocks in V)	9755

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	86119.013438	.	1688.159
1	5	85813.644323	305.36911443	152.556
2	4	85807.990738	5.65358520	24.05758
3	4	85807.539494	0.45124440	4.563548

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	4	85807.49871	0.04078439	0.23511
5	3	85807.498694	0.00001508	0

Convergence is assumed but all parameters are actively constrained.

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	8.743E-6
Residual		7.8749

#### Fit Statistics

-2 Res Log Likelihood	85807
AIC (Smaller is Better)	85809
AICC (Smaller is Better)	85809
BIC (Smaller is Better)	85817
CAIC (Smaller is Better)	85818
HQIC (Smaller is Better)	85812

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept					-0.2818	0.4562	17478	-0.62	0.5367
predspline				1	0	.	.	.	.
predspline				2	-0.00109	0.002814	17478	-0.39	0.6985
predspline				3	0.000081	0.000123	17478	0.65	0.5127
tspl1	1				0	.	.	.	.
tspl1	2				0.03476	0.008836	17478	3.93	<.0001
tspl1	3				-0.00580	0.001097	17478	-5.29	<.0001
tspl2		1			0	.	.	.	.
tspl2		2			-0.00178	0.009877	17478	-0.18	0.8569
tspl2		3			0.001643	0.001014	17478	1.62	0.1051
hbspl			1		0	.	.	.	.
hbspl			2		0.001241	0.003184	17478	0.39	0.6967
hbspl			3		-0.00013	0.000130	17478	-1.04	0.3004

**Now assessing with 6 hours pre-post-transfusion windows**

The HPMIXED Procedure

Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	17478	0.59	0.29	0.7462	0.7462



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	3	0 1 2
idnr	10377	210000196120 210000954103 210001535114 210003060142 210004156135 210004315135 210004404141 210004408139 210004674105 210005174143 210005222149 210005505147 210006865127 210007122112 210007733127 210007878104 210007993103 210008804129 210008871117 210010801153 ...

Number of Observations Read	19099
Number of Observations Used	19012

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	10
Columns in Z per Subject	1
Subjects (Blocks in V)	10377

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	93755.541458	.	1841.549
1	5	93424.333851	331.20760675	173.715
2	4	93417.516247	6.81760417	28.10635
3	4	93416.973283	0.54296370	3.765231

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	2	93416.958981	0.01430278	1.160981
5	2	93416.957691	0.00129011	0

Convergence is assumed but all parameters are actively constrained.

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	8.817E-6
Residual		7.9413

#### Fit Statistics

-2 Res Log Likelihood	93417
AIC (Smaller is Better)	93419
AICC (Smaller is Better)	93419
BIC (Smaller is Better)	93426
CAIC (Smaller is Better)	93427
HQIC (Smaller is Better)	93421

#### Solution for Fixed Effects

Effect	tsp1	tsp2	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				-0.2573	0.4651	19005	-0.55	0.5801
predspline			1	0	.	.	.	.
predspline			2	0.000777	0.003333	19005	0.23	0.8156
predspline			3	-0.00011	0.000127	19005	-0.88	0.3771
tsp1	1			0	.	.	.	.
tsp1	2			0.03677	0.008515	19005	4.32	<.0001
tsp1	3			-0.00567	0.001058	19005	-5.35	<.0001
tsp2		1		0	.	.	.	.
tsp2		2		-0.00274	0.009517	19005	-0.29	0.7732
tsp2		3		0.001905	0.000978	19005	1.95	0.0514

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	19005	1.95	0.97	0.3775	0.3775

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	3	0 1 2
idnr	10893	210000196120 210000954103 210001535114 210003060142 210004156135 210004315135 210004404141 210004408139 210004674105 210005174143 210005222149 210005505147 210006865127 210007122112 210007733127 210007878104 210007993103 210008804129 210008871117 210010801153 ...

Number of Observations Read	20569
Number of Observations Used	20567

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z per Subject	1
Subjects (Blocks in V)	10893

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	101326.08124	.	1983.216
1	5	100971.38595	354.69529402	180.6807
2	4	100964.46852	6.91742662	29.59447

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	4	100963.91035	0.55817213	3.78408
4	2	100963.89717	0.01318308	1.107697
5	3	100963.89618	0.00098560	0

Convergence is assumed but all parameters are actively constrained.

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	8.788E-6
Residual		7.9154

#### Fit Statistics

-2 Res Log Likelihood	100964
AIC (Smaller is Better)	100966
AICC (Smaller is Better)	100966
BIC (Smaller is Better)	100973
CAIC (Smaller is Better)	100974
HQIC (Smaller is Better)	100968

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				-0.1970	0.07633	20561	-2.58	0.0099
predictorvalue			1	0	.	.	.	.
predictorvalue			2	0.04597	0.03926	20561	1.17	0.2417
tsp11	1			0	.	.	.	.
tsp11	2			0.03800	0.008161	20561	4.66	<.0001
tsp11	3			-0.00588	0.001015	20561	-5.79	<.0001
tsp12		1		0	.	.	.	.
tsp12		2		-0.00256	0.009131	20561	-0.28	0.7790
tsp12		3		0.001815	0.000937	20561	1.94	0.0527

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	20561	1.37	1.37	0.2417	0.2417

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	3	0 1 2
idnr	10380	210000196120 210000954103 210001535114 210003060142 210004156135 210004315135 210004404141 210004408139 210004674105 210005174143 210005222149 210005505147 210006865127 210007122112 210007733127 210007878104 210007993103 210008804129 210008871117 210010801153 ...

Number of Observations Read	20569
Number of Observations Used	19023

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	12
Columns in Z per Subject	1
Subjects (Blocks in V)	10380

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	93806.704929	.	1842.26
1	5	93475.362552	331.34237767	173.7266
2	4	93468.544427	6.81812453	28.11606

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	4	93468.001205	0.54322213	3.763623
4	2	93467.986921	0.01428346	1.159432
5	2	93467.985637	0.00128467	0

Convergence is assumed but all parameters are actively constrained.

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	8.814E-6
Residual		7.9386

#### Fit Statistics

-2 Res Log Likelihood	93468
AIC (Smaller is Better)	93470
AICC (Smaller is Better)	93470
BIC (Smaller is Better)	93477
CAIC (Smaller is Better)	93478
HQIC (Smaller is Better)	93472

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					-0.3482	0.4634	19015	-0.75
predictorvalue				1	0	.	.	.
predictorvalue				2	0.02498	0.04623	19015	0.54
tspl1	1				0	.	.	.
tspl1	2				0.03647	0.008510	19015	4.29
tspl1	3				-0.00564	0.001058	19015	-5.34

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.4524
predictorvalue				1	.
predictorvalue				2	0.5890
tspl1	1				.
tspl1	2				<.0001
tspl1	3				<.0001

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
tspl2		1			0	.	.	.
tspl2		2			-0.00263	0.009513	19015	-0.28
tspl2		3			0.001881	0.000977	19015	1.93
hbspl			1		0	.	.	.
hbspl			2		0.001336	0.003239	19015	0.41
hbspl			3		-0.00013	0.000125	19015	-1.03

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
tspl2		1			.
tspl2		2			0.7818
tspl2		3			0.0542
hbspl			1		.
hbspl			2		0.6800
hbspl			3		0.3026

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	19015	0.29	0.29	0.5890	0.5890

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	3	0 1 2
idnr	10890	210000196120 210000954103 210001535114 210003060142 210004156135 210004315135 210004404141 210004408139 210004674105 210005174143 210005222149 210005505147 210006865127 210007122112 210007733127 210007878104 210007993103 210008804129 210008871117 210010801153 ...

Number of Observations Read	20641
Number of Observations Used	20558

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	10
Columns in Z per Subject	1
Subjects (Blocks in V)	10890

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	101309.62558	.	1981.821
1	5	100955.26244	354.36314550	180.1442
2	4	100948.38855	6.87388881	29.49932
3	4	100947.83114	0.55740993	3.878757



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	2	100947.81708	0.01406160	1.173127
5	3	100947.8159	0.00117841	0

Convergence is assumed but all parameters are actively constrained.

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	8.791E-6
Residual		7.9186

#### Fit Statistics

-2 Res Log Likelihood	100948
AIC (Smaller is Better)	100950
AICC (Smaller is Better)	100950
BIC (Smaller is Better)	100957
CAIC (Smaller is Better)	100958
HQIC (Smaller is Better)	100952

#### Solution for Fixed Effects

Effect	tspl1	tspl2	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				-0.1652	0.1042	20551	-1.58	0.1130
predspline			1	0	.	.	.	.
predspline			2	-0.00105	0.004706	20551	-0.22	0.8229
predspline			3	0.000078	0.000259	20551	0.30	0.7621
tspl1	1			0	.	.	.	.
tspl1	2			0.03799	0.008165	20551	4.65	<.0001
tspl1	3			-0.00589	0.001016	20551	-5.80	<.0001
tspl2		1		0	.	.	.	.
tspl2		2		-0.00245	0.009136	20551	-0.27	0.7882
tspl2		3		0.001802	0.000938	20551	1.92	0.0546

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	20551	0.12	0.06	0.9434	0.9434

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	3	0 1 2
idnr	10377	210000196120 210000954103 210001535114 210003060142 210004156135 210004315135 210004404141 210004408139 210004674105 210005174143 210005222149 210005505147 210006865127 210007122112 210007733127 210007878104 210007993103 210008804129 210008871117 210010801153 ...

Number of Observations Read	20641
Number of Observations Used	19014

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	13
Columns in Z per Subject	1
Subjects (Blocks in V)	10377

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	93789.377264	.	1841.162
1	5	93458.362335	331.01492958	173.412
2	4	93451.57146	6.79087449	28.05844
3	4	93451.028619	0.54284156	3.829665

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	2	93451.013669	0.01494959	1.207748
5	5	93451.013465	0.00020400	1.132257
6	4	93451.012999	0.00046613	0.937427
7	3	93451.01222	0.00077850	0

Convergence is assumed but all parameters are actively constrained.

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	8.817E-6
Residual		7.9416

#### Fit Statistics

-2 Res Log Likelihood	93451
AIC (Smaller is Better)	93453
AICC (Smaller is Better)	93453
BIC (Smaller is Better)	93460
CAIC (Smaller is Better)	93461
HQIC (Smaller is Better)	93455

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept					-0.2419	0.4366	19005	-0.55	0.5796
predspline				1	0	.	.	.	.
predspline				2	-0.00086	0.004833	19005	-0.18	0.8595
predspline				3	0.000073	0.000269	19005	0.27	0.7844
tspl1	1				0	.	.	.	.
tspl1	2				0.03647	0.008514	19005	4.28	<.0001
tspl1	3				-0.00566	0.001058	19005	-5.35	<.0001
tspl2		1			0	.	.	.	.
tspl2		2			-0.00252	0.009518	19005	-0.26	0.7911
tspl2		3			0.001866	0.000978	19005	1.91	0.0565
hbspl			1		0	.	.	.	.
hbspl			2		0.000714	0.003064	19005	0.23	0.8157
hbspl			3		-0.00012	0.000124	19005	-0.98	0.3278

**Now assessing with 6 hours pre-post-transfusion windows**

The HPMIXED Procedure

Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	19005	0.12	0.06	0.9422	0.9422

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	6	0 1 5 10 20 99
recipientsex	3	0 1 2
idnr	10893	210000196120 210000954103 210001535114 210003060142 210004156135 210004315135 210004404141 210004408139 210004674105 210005174143 210005222149 210005505147 210006865127 210007122112 210007733127 210007878104 210007993103 210008804129 210008871117 210010801153 ...

Number of Observations Read	20573
Number of Observations Used	20567

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	13
Columns in Z per Subject	1
Subjects (Blocks in V)	10893

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	101337.79259	.	1981.073
1	5	100983.75947	354.03312100	179.8454
2	4	100976.91719	6.84228179	29.43631

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	4	100976.35895	0.55824073	4.013446
4	2	100976.3436	0.01534975	1.267695
5	2	100976.34212	0.00148332	0

Convergence is assumed but all parameters are actively constrained.

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	8.789E-6
Residual		7.9168

#### Fit Statistics

-2 Res Log Likelihood	100976
AIC (Smaller is Better)	100978
AICC (Smaller is Better)	100978
BIC (Smaller is Better)	100986
CAIC (Smaller is Better)	100987
HQIC (Smaller is Better)	100981

#### Solution for Fixed Effects

Effect	tspl1	tspl2	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				-0.1014	0.1686	20557	-0.60	0.5476
predictorvalue			0	-0.05871	0.1592	20557	-0.37	0.7123
predictorvalue			1	-0.1053	0.1562	20557	-0.67	0.5003
predictorvalue			5	-0.06877	0.1599	20557	-0.43	0.6671
predictorvalue			10	-0.03008	0.1630	20557	-0.18	0.8536
predictorvalue			20	0	.	.	.	.
predictorvalue			99	-0.07367	0.1603	20557	-0.46	0.6458
tspl1	1			0	.	.	.	.
tspl1	2			0.03811	0.008163	20557	4.67	<.0001
tspl1	3			-0.00588	0.001015	20557	-5.79	<.0001
tspl2		1		0	.	.	.	.
tspl2		2		-0.00249	0.009132	20557	-0.27	0.7849
tspl2		3		0.001806	0.000937	20557	1.93	0.0539

**Now assessing with 6 hours pre-post-transfusion windows**

The HPMIXED Procedure

Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	5	20557	1.83	0.37	0.8718	0.8718

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	6	0 1 5 10 20 99
recipientsex	3	0 1 2
idnr	10380	210000196120 210000954103 210001535114 210003060142 210004156135 210004315135 210004404141 210004408139 210004674105 210005174143 210005222149 210005505147 210006865127 210007122112 210007733127 210007878104 210007993103 210008804129 210008871117 210010801153 ...

Number of Observations Read	20573
Number of Observations Used	19023

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	16
Columns in Z per Subject	1
Subjects (Blocks in V)	10380

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	93816.991911	.	1840.496
1	5	93486.258529	330.73338240	173.1075
2	4	93479.501946	6.75658290	27.98277



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	4	93478.95922	0.54272595	3.955904
4	2	93478.942961	0.01625916	1.302739
5	5	93478.942701	0.00026016	1.216163
6	4	93478.941163	0.00153832	0

Convergence is assumed but all parameters are actively constrained.

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	8.815E-6
Residual		7.9396

#### Fit Statistics

-2 Res Log Likelihood	93479
AIC (Smaller is Better)	93481
AICC (Smaller is Better)	93481
BIC (Smaller is Better)	93488
CAIC (Smaller is Better)	93489
HQIC (Smaller is Better)	93483

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					-0.2498	0.4339	19011	-0.58
predictorvalue				0	0	.	.	.
predictorvalue				1	-0.05227	0.05643	19011	-0.93
predictorvalue				5	-0.01369	0.06616	19011	-0.21
predictorvalue				10	0.01881	0.07366	19011	0.26

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.5647
predictorvalue				0	.
predictorvalue				1	0.3543
predictorvalue				5	0.8361
predictorvalue				10	0.7984

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
predictorvalue				20	0.03518	0.1603	19011	0.22
predictorvalue				99	0.01601	0.07966	19011	0.20
tspl1	1				0	.	.	.
tspl1	2				0.03666	0.008512	19011	4.31
tspl1	3				-0.00566	0.001058	19011	-5.35
tspl2		1			0	.	.	.
tspl2		2			-0.00265	0.009515	19011	-0.28
tspl2		3			0.001883	0.000977	19011	1.93
hbspl			1		0	.	.	.
hbspl			2		0.000847	0.003066	19011	0.28
hbspl			3		-0.00012	0.000124	19011	-1.00

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
predictorvalue				20	0.8263
predictorvalue				99	0.8408
tspl1	1				.
tspl1	2				<.0001
tspl1	3				<.0001
tspl2		1			.
tspl2		2			0.7808
tspl2		3			0.0540
hbspl			1		.
hbspl			2		0.7824
hbspl			3		0.3154

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	5	19011	2.01	0.40	0.8471	0.8471

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	4	0 180 365 999
recipientsex	3	0 1 2
idnr	10893	210000196120 210000954103 210001535114 210003060142 210004156135 210004315135 210004404141 210004408139 210004674105 210005174143 210005222149 210005505147 210006865127 210007122112 210007733127 210007878104 210007993103 210008804129 210008871117 210010801153 ...

Number of Observations Read	20571
Number of Observations Used	20567

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	11
Columns in Z per Subject	1
Subjects (Blocks in V)	10893

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	101331.37116	.	1984.293
1	5	100976.01241	355.35874532	180.8389
2	4	100969.06999	6.94242015	29.62071

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	4	100968.51498	0.55501432	3.61351
4	2	100968.50324	0.01174322	1.002615
5	3	100968.50252	0.00071229	0

Convergence is assumed but all parameters are actively constrained.

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	8.788E-6
Residual		7.9154

#### Fit Statistics

-2 Res Log Likelihood	100969
AIC (Smaller is Better)	100971
AICC (Smaller is Better)	100971
BIC (Smaller is Better)	100978
CAIC (Smaller is Better)	100979
HQIC (Smaller is Better)	100973

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				-0.1590	0.07744	20559	-2.05	0.0400
predictorvalue			0	0	.	.	.	.
predictorvalue			180	-0.03123	0.06459	20559	-0.48	0.6287
predictorvalue			365	-0.1491	0.08131	20559	-1.83	0.0668
predictorvalue			999	-0.00671	0.04387	20559	-0.15	0.8785
tsp11	1			0	.	.	.	.
tsp11	2			0.03779	0.008163	20559	4.63	<.0001
tsp11	3			-0.00587	0.001015	20559	-5.78	<.0001
tsp12		1		0	.	.	.	.
tsp12		2		-0.00238	0.009130	20559	-0.26	0.7943
tsp12		3		0.001799	0.000937	20559	1.92	0.0547

**Now assessing with 6 hours pre-post-transfusion windows**

The HPMIXED Procedure

Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	3	20559	3.52	1.17	0.3186	0.3187

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	4	0 180 365 999
recipientsex	3	0 1 2
idnr	10380	210000196120 210000954103 210001535114 210003060142 210004156135 210004315135 210004404141 210004408139 210004674105 210005174143 210005222149 210005505147 210006865127 210007122112 210007733127 210007878104 210007993103 210008804129 210008871117 210010801153 ...

Number of Observations Read	20571
Number of Observations Used	19023

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	14
Columns in Z per Subject	1
Subjects (Blocks in V)	10380

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	93810.397094	.	1843.632
1	5	93478.326227	332.07086711	174.0569
2	4	93471.466695	6.85953189	28.18124

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	4	93470.925971	0.54072406	3.55778
4	2	93470.913588	0.01238325	1.023335
5	3	93470.912709	0.00087874	0

Convergence is assumed but all parameters are actively constrained.

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	8.813E-6
Residual		7.9378

#### Fit Statistics

-2 Res Log Likelihood	93471
AIC (Smaller is Better)	93473
AICC (Smaller is Better)	93473
BIC (Smaller is Better)	93480
CAIC (Smaller is Better)	93481
HQIC (Smaller is Better)	93475

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					-0.2750	0.4305	19013	-0.64
predictorvalue				0	0	.	.	.
predictorvalue				180	-0.02112	0.06496	19013	-0.33
predictorvalue				365	-0.1579	0.08193	19013	-1.93
predictorvalue				999	0.01283	0.04725	19013	0.27
tspl1	1				0	.	.	.

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.5230
predictorvalue				0	.
predictorvalue				180	0.7451
predictorvalue				365	0.0539
predictorvalue				999	0.7859
tspl1	1				.

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
tspl1	2				0.03629	0.008511	19013	4.26
tspl1	3				-0.00564	0.001058	19013	-5.33
tspl2		1			0	.	.	.
tspl2		2			-0.00247	0.009512	19013	-0.26
tspl2		3			0.001871	0.000977	19013	1.91
hbspl			1		0	.	.	.
hbspl			2		0.000984	0.003066	19013	0.32
hbspl			3		-0.00013	0.000124	19013	-1.06

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
tspl1	2				<.0001
tspl1	3				<.0001
tspl2		1			.
tspl2		2			0.7953
tspl2		3			0.0555
hbspl			1		.
hbspl			2		0.7484
hbspl			3		0.2893

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	3	19013	4.25	1.42	0.2355	0.2355



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	2	1 2
idnr	5955	210001535114 210002429149 210002448146 210004170105 210004408139 210005222149 210007122112 210007615116 210007993103 210009873148 210011623133 210012323142 210012696118 210014500120 210014884130 210015945108 210017449144 210017503139 210017840129 210018650126 ...

Number of Observations Read	8043
Number of Observations Used	8041

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z per Subject	1
Subjects (Blocks in V)	5955

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	66909.33649	.	654.9029
1	5	66781.177598	128.15889145	107.0159
2	4	66773.395022	7.78257660	16.11698

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	4	66772.845224	0.54979752	2.860424
4	4	66772.815614	0.02960980	1.37334
5	2	66772.805677	0.00993691	0.163809
6	3	66772.805579	0.00009883	0

Convergence is assumed but all parameters are actively constrained.

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.000262
Residual		235.90

#### Fit Statistics

-2 Res Log Likelihood	66773
AIC (Smaller is Better)	66775
AICC (Smaller is Better)	66775
BIC (Smaller is Better)	66781
CAIC (Smaller is Better)	66782
HQIC (Smaller is Better)	66777

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				-1.2712	0.4618	8035	-2.75	0.0059
predictorvalue			1	0	.	.	.	.
predictorvalue			2	-0.1422	0.3490	8035	-0.41	0.6837
tsp11	1			0	.	.	.	.
tsp11	2			0.08549	0.05853	8035	1.46	0.1442
tsp11	3			-0.00900	0.008564	8035	-1.05	0.2935
tsp12		1		0	.	.	.	.
tsp12		2		-0.1035	0.06057	8035	-1.71	0.0874
tsp12		3		0.008610	0.007310	8035	1.18	0.2389

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	8035	0.17	0.17	0.6837	0.6837

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	2	1 2
idnr	5946	210001535114 210002429149 210002448146 210004170105 210004408139 210005222149 210007122112 210007615116 210007993103 210009873148 210011623133 210012323142 210012696118 210014500120 210014884130 210015945108 210017449144 210017503139 210017840129 210018650126 ...

Number of Observations Read	8043
Number of Observations Used	8025

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	12
Columns in Z per Subject	1
Subjects (Blocks in V)	5946

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	66802.253509	.	652.8385
1	5	66674.358897	127.89461250	107.4895
2	4	66666.45174	7.90715707	16.2245

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	4	66665.892883	0.55885702	2.80408
4	4	66665.864831	0.02805210	1.286637
5	2	66665.856616	0.00821488	0.123088
6	3	66665.856592	0.00002390	0

Convergence is assumed but all parameters are actively constrained.

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.000262
Residual		236.24

#### Fit Statistics

-2 Res Log Likelihood	66666
AIC (Smaller is Better)	66668
AICC (Smaller is Better)	66668
BIC (Smaller is Better)	66675
CAIC (Smaller is Better)	66676
HQIC (Smaller is Better)	66670

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					-0.6532	4.1306	8017	-0.16
predictorvalue				1	0	.	.	.
predictorvalue				2	-0.1215	0.3499	8017	-0.35
tspl1	1				0	.	.	.
tspl1	2				0.08436	0.05863	8017	1.44

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.8743
predictorvalue				1	.
predictorvalue				2	0.7284
tspl1	1				.
tspl1	2				0.1502

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
tspl1	3				-0.00862	0.008579	8017	-1.01
tspl2		1			0	.	.	.
tspl2		2			-0.1027	0.06068	8017	-1.69
tspl2		3			0.008496	0.007325	8017	1.16
hbspl			1		0	.	.	.
hbspl			2		-0.00384	0.03044	8017	-0.13
hbspl			3		-0.00233	0.002333	8017	-1.00

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
tspl1	3				0.3148
tspl2		1			.
tspl2		2			0.0906
tspl2		3			0.2462
hbspl			1		.
hbspl			2		0.8996
hbspl			3		0.3170

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	8017	0.12	0.12	0.7284	0.7284

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	0 1
recipientsex	2	1 2
idnr	12785	210000909149 210001535114 210002204152 210002429149 210002448146 210004034153 210004156135 210004170105 210004408139 210005070120 210005222149 210005505147 210006865127 210007122112 210007615116 210007733127 210007878104 210007993103 210008883124 210009873148 ...

Number of Observations Read	22640
Number of Observations Used	22638

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z per Subject	1
Subjects (Blocks in V)	12785

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	187980.03763	.	2182.349
1	5	187597.3645	382.67312238	276.8094
2	4	187583.79304	13.57145968	40.59116

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	4	187583.01648	0.77656512	2.864871
4	5	187583.01199	0.00449278	0

Convergence is assumed but all parameters are actively constrained.

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.000258
Residual		232.09

#### Fit Statistics

-2 Res Log Likelihood	187583
AIC (Smaller is Better)	187585
AICC (Smaller is Better)	187585
BIC (Smaller is Better)	187592
CAIC (Smaller is Better)	187593
HQIC (Smaller is Better)	187588

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				-1.6769	0.2441	22632	-6.87	<.0001
predictorvalue			0	0	.	.	.	.
predictorvalue			1	-0.4344	0.4320	22632	-1.01	0.3146
tsp11	1			0	.	.	.	.
tsp11	2			0.02877	0.03502	22632	0.82	0.4113
tsp11	3			-0.00065	0.005150	22632	-0.13	0.8994
tsp12		1		0	.	.	.	.
tsp12		2		-0.02581	0.03592	22632	-0.72	0.4725
tsp12		3		0.001420	0.004316	22632	0.33	0.7422

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	22632	1.01	1.01	0.3146	0.3146

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	0 1
recipientsex	2	1 2
idnr	11799	210001535114 210002204152 210002429149 210002448146 210004034153 210004170105 210004408139 210005070120 210005222149 210005505147 210006865127 210007122112 210007615116 210007733127 210007878104 210007993103 210008883124 210009873148 210011623133 210011988130 ...

Number of Observations Read	22640
Number of Observations Used	20031

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	12
Columns in Z per Subject	1
Subjects (Blocks in V)	11799

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	167018.71403	.	1914.865
1	5	166679.44133	339.27269722	248.3558
2	4	166666.75832	12.68301231	37.26202



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	4	166665.94824	0.81007767	3.670635
4	2	166665.93773	0.01051241	0.815497
5	3	166665.93751	0.00021321	0

Convergence is assumed but all parameters are actively constrained.

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.000266
Residual		239.92

#### Fit Statistics

-2 Res Log Likelihood	166666
AIC (Smaller is Better)	166668
AICC (Smaller is Better)	166668
BIC (Smaller is Better)	166675
CAIC (Smaller is Better)	166676
HQIC (Smaller is Better)	166670

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					1.1082	2.3675	20023	0.47
predictorvalue				0	0	.	.	.
predictorvalue				1	-0.3930	0.4424	20023	-0.89
tspl1	1				0	.	.	.
tspl1	2				0.02875	0.03775	20023	0.76
tspl1	3				-0.00231	0.005557	20023	-0.42

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.6397
predictorvalue				0	.
predictorvalue				1	0.3744
tspl1	1				.
tspl1	2				0.4462
tspl1	3				0.6772

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tsp11	tsp12	hbsp1	predictorvalue	Estimate	Standard Error	DF	t Value
tsp12		1			0	.	.	.
tsp12		2			-0.02091	0.03875	20023	-0.54
tsp12		3			0.000651	0.004654	20023	0.14
hbsp1			1		0	.	.	.
hbsp1			2		-0.01956	0.01705	20023	-1.15
hbsp1			3		0.000096	0.000634	20023	0.15

#### Solution for Fixed Effects

Effect	tsp11	tsp12	hbsp1	predictorvalue	Pr >  t
tsp12		1			.
tsp12		2			0.5896
tsp12		3			0.8888
hbsp1			1		.
hbsp1			2		0.2514
hbsp1			3		0.8799

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	20023	0.79	0.79	0.3744	0.3744

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	2	1 2
idnr	11778	210000909149 210001535114 210002204152 210002429149 210002448146 210004034153 210004156135 210004170105 210004408139 210005070120 210005222149 210005505147 210006865127 210007122112 210007615116 210007733127 210007878104 210007993103 210008883124 210009873148 ...

Number of Observations Read	20532
Number of Observations Used	20470

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	10
Columns in Z per Subject	1
Subjects (Blocks in V)	11778

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	169720.53196	.	1965.784
1	5	169360.25525	360.27671603	255.7067
2	4	169346.75246	13.50278663	34.59271
3	4	169346.33994	0.41252033	15.81008

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	2	169346.22235	0.11759102	1.227954
5	3	169346.2222	0.00015380	0

Convergence is assumed but all parameters are actively constrained.

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.000254
Residual		228.77

#### Fit Statistics

-2 Res Log Likelihood	169346
AIC (Smaller is Better)	169348
AICC (Smaller is Better)	169348
BIC (Smaller is Better)	169356
CAIC (Smaller is Better)	169357
HQIC (Smaller is Better)	169351

#### Solution for Fixed Effects

Effect	tspl1	tspl2	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				-1.3966	0.5788	20463	-2.41	0.0158
predspline			1	0	.	.	.	.
predspline			2	-0.00050	0.01410	20463	-0.04	0.9714
predspline			3	-0.00049	0.000602	20463	-0.82	0.4145
tspl1	1			0	.	.	.	.
tspl1	2			0.03087	0.03658	20463	0.84	0.3987
tspl1	3			-0.00022	0.005365	20463	-0.04	0.9675
tspl2		1		0	.	.	.	.
tspl2		2		-0.03744	0.03757	20463	-1.00	0.3191
tspl2		3		0.002221	0.004510	20463	0.49	0.6224

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	20463	3.35	1.67	0.1875	0.1875

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	2	1 2
idnr	10945	210001535114 210002204152 210002429149 210002448146 210004034153 210004170105 210004408139 210005070120 210005222149 210005505147 210006865127 210007122112 210007615116 210007733127 210007878104 210007993103 210008883124 210009873148 210011623133 210012323142 ...

Number of Observations Read	20532
Number of Observations Used	18221

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	13
Columns in Z per Subject	1
Subjects (Blocks in V)	10945

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	151685.7079	.	1737.486
1	5	151364.7326	320.97530075	227.4908
2	4	151352.46314	12.26945999	32.9153
3	4	151351.83005	0.63309464	1.491632

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	3	151351.82891	0.00114004	0

Convergence is assumed but all parameters are actively constrained.

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.000262
Residual		236.29

#### Fit Statistics

-2 Res Log Likelihood	151352
AIC (Smaller is Better)	151354
AICC (Smaller is Better)	151354
BIC (Smaller is Better)	151361
CAIC (Smaller is Better)	151362
HQIC (Smaller is Better)	151356

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept					0.02263	2.5120	18212	0.01	0.9928
predspline				1	0	.	.	.	.
predspline				2	-0.00016	0.01486	18212	-0.01	0.9916
predspline				3	-0.00036	0.000654	18212	-0.55	0.5817
tspl1	1				0	.	.	.	.
tspl1	2				0.02731	0.03926	18212	0.70	0.4868
tspl1	3				-0.00123	0.005758	18212	-0.21	0.8315
tspl2		1			0	.	.	.	.
tspl2		2			-0.02484	0.04039	18212	-0.62	0.5385
tspl2		3			0.000706	0.004847	18212	0.15	0.8842
hbspl			1		0	.	.	.	.
hbspl			2		-0.01020	0.01777	18212	-0.57	0.5659
hbspl			3		-0.00025	0.000663	18212	-0.38	0.7069

**Now assessing with 6 hours pre-post-transfusion windows**

The HPMIXED Procedure

Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	18212	1.39	0.70	0.4980	0.4980

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	2	1 2
idnr	11796	210001535114 210002204152 210002429149 210002448146 210004034153 210004170105 210004408139 210005070120 210005222149 210005505147 210006865127 210007122112 210007615116 210007733127 210007878104 210007993103 210008883124 210009873148 210011623133 210011988130 ...

Number of Observations Read	20107
Number of Observations Used	20020

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	10
Columns in Z per Subject	1
Subjects (Blocks in V)	11796

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	166932.71698	.	1914.971
1	5	166593.52379	339.19318344	248.3899
2	4	166580.83831	12.68547881	37.26513
3	4	166580.02925	0.80906774	3.646698



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	2	166580.0189	0.01034395	0.804828
5	3	166580.01871	0.00019553	0

Convergence is assumed but all parameters are actively constrained.

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.000266
Residual		239.97

#### Fit Statistics

-2 Res Log Likelihood	166580
AIC (Smaller is Better)	166582
AICC (Smaller is Better)	166582
BIC (Smaller is Better)	166589
CAIC (Smaller is Better)	166590
HQIC (Smaller is Better)	166584

#### Solution for Fixed Effects

Effect	tspl1	tspl2	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				0.4659	2.7389	20013	0.17	0.8649
predspline			1	0	.	.	.	.
predspline			2	-0.01492	0.01993	20013	-0.75	0.4541
predspline			3	-0.00013	0.000658	20013	-0.19	0.8469
tspl1	1			0	.	.	.	.
tspl1	2			0.02786	0.03776	20013	0.74	0.4606
tspl1	3			-0.00216	0.005559	20013	-0.39	0.6975
tspl2		1		0	.	.	.	.
tspl2		2		-0.02101	0.03876	20013	-0.54	0.5877
tspl2		3		0.000639	0.004656	20013	0.14	0.8908

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	20013	4.34	2.17	0.1141	0.1141

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	2	1 2
idnr	12785	210000909149 210001535114 210002204152 210002429149 210002448146 210004034153 210004156135 210004170105 210004408139 210005070120 210005222149 210005505147 210006865127 210007122112 210007615116 210007733127 210007878104 210007993103 210008883124 210009873148 ...

Number of Observations Read	22640
Number of Observations Used	22638

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z per Subject	1
Subjects (Blocks in V)	12785

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	187982.09966	.	2181.423
1	5	187599.85375	382.24590510	276.984
2	4	187586.26785	13.58589899	40.64857

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	4	187585.48632	0.78153454	2.93106
4	5	187585.48561	0.00071133	2.72396
5	4	187585.484	0.00160305	2.187037
6	2	187585.48155	0.00245787	0

Convergence is assumed but all parameters are actively constrained.

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.000258
Residual		232.10

#### Fit Statistics

-2 Res Log Likelihood	187585
AIC (Smaller is Better)	187587
AICC (Smaller is Better)	187587
BIC (Smaller is Better)	187595
CAIC (Smaller is Better)	187596
HQIC (Smaller is Better)	187590

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				-1.7264	0.2611	22632	-6.61	<.0001
predictorvalue			1	0	.	.	.	.
predictorvalue			2	0.04717	0.2028	22632	0.23	0.8161
tsp11	1			0	.	.	.	.
tsp11	2			0.02868	0.03502	22632	0.82	0.4128
tsp11	3			-0.00062	0.005150	22632	-0.12	0.9046
tsp12		1		0	.	.	.	.
tsp12		2		-0.02548	0.03593	22632	-0.71	0.4782
tsp12		3		0.001388	0.004317	22632	0.32	0.7479

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	22632	0.05	0.05	0.8161	0.8161

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	2	1 2
idnr	11799	210001535114 210002204152 210002429149 210002448146 210004034153 210004170105 210004408139 210005070120 210005222149 210005505147 210006865127 210007122112 210007615116 210007733127 210007878104 210007993103 210008883124 210009873148 210011623133 210011988130 ...

Number of Observations Read	22640
Number of Observations Used	20031

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	12
Columns in Z per Subject	1
Subjects (Blocks in V)	11799

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	167020.20293	.	1914.913
1	5	166680.75912	339.44381064	248.8564
2	4	166668.02214	12.73697058	37.27859

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	4	166667.21484	0.80730453	3.592638
4	2	166667.20487	0.00997277	0.780962
5	3	166667.20471	0.00015721	0

Convergence is assumed but all parameters are actively constrained.

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.000266
Residual		239.92

#### Fit Statistics

-2 Res Log Likelihood	166667
AIC (Smaller is Better)	166669
AICC (Smaller is Better)	166669
BIC (Smaller is Better)	166677
CAIC (Smaller is Better)	166678
HQIC (Smaller is Better)	166672

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					1.8238	2.5218	20023	0.72
predictorvalue				1	0	.	.	.
predictorvalue				2	-0.2055	0.2451	20023	-0.84
tspl1	1				0	.	.	.
tspl1	2				0.02917	0.03775	20023	0.77
tspl1	3				-0.00230	0.005557	20023	-0.41

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.4696
predictorvalue				1	.
predictorvalue				2	0.4016
tspl1	1				.
tspl1	2				0.4398
tspl1	3				0.6785

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tsp11	tsp12	hbsp1	predictorvalue	Estimate	Standard Error	DF	t Value
tsp12		1			0	.	.	.
tsp12		2			-0.02096	0.03875	20023	-0.54
tsp12		3			0.000672	0.004654	20023	0.14
hbsp1			1		0	.	.	.
hbsp1			2		-0.02407	0.01784	20023	-1.35
hbsp1			3		0.000130	0.000635	20023	0.20

#### Solution for Fixed Effects

Effect	tsp11	tsp12	hbsp1	predictorvalue	Pr >  t
tsp12		1			.
tsp12		2			0.5886
tsp12		3			0.8852
hbsp1			1		.
hbsp1			2		0.1773
hbsp1			3		0.8379

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	20023	0.70	0.70	0.4016	0.4016

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	2	1 2
idnr	12778	210000909149 210001535114 210002204152 210002429149 210002448146 210004034153 210004156135 210004170105 210004408139 210005070120 210005222149 210005505147 210006865127 210007122112 210007615116 210007733127 210007878104 210007993103 210008883124 210009873148 ...

Number of Observations Read	22710
Number of Observations Used	22627

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	10
Columns in Z per Subject	1
Subjects (Blocks in V)	12778

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	187908.69228	.	2181.72
1	5	187525.66894	383.02334317	280.1701
2	4	187511.61436	14.05458107	40.85803
3	4	187510.86303	0.75132569	2.059829

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	3	187510.86125	0.00178449	0

Convergence is assumed but all parameters are actively constrained.

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.000258
Residual		232.10

#### Fit Statistics

-2 Res Log Likelihood	187511
AIC (Smaller is Better)	187513
AICC (Smaller is Better)	187513
BIC (Smaller is Better)	187520
CAIC (Smaller is Better)	187521
HQIC (Smaller is Better)	187515

#### Solution for Fixed Effects

Effect	tspl1	tspl2	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				-0.5924	0.4158	22620	-1.42	0.1542
predspline			1	0	.	.	.	.
predspline			2	-0.07405	0.02299	22620	-3.22	0.0013
predspline			3	0.003494	0.001301	22620	2.69	0.0072
tspl1	1			0	.	.	.	.
tspl1	2			0.02786	0.03504	22620	0.80	0.4265
tspl1	3			-0.00073	0.005152	22620	-0.14	0.8875
tspl2		1		0	.	.	.	.
tspl2		2		-0.02426	0.03594	22620	-0.67	0.4997
tspl2		3		0.001393	0.004318	22620	0.32	0.7470

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	22620	10.95	5.48	0.0042	0.0042



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	2	1 2
idnr	11792	210001535114 210002204152 210002429149 210002448146 210004034153 210004170105 210004408139 210005070120 210005222149 210005505147 210006865127 210007122112 210007615116 210007733127 210007878104 210007993103 210008883124 210009873148 210011623133 210011988130 ...

Number of Observations Read	22710
Number of Observations Used	20020

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	13
Columns in Z per Subject	1
Subjects (Blocks in V)	11792

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	166945.94457	.	1914.531
1	5	166606.32957	339.61499841	251.0926
2	4	166593.20694	13.12263182	37.78767
3	4	166592.40504	0.80189875	2.797659

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	5	166592.40422	0.00081169	2.589818
5	4	166592.39973	0.00449169	0

Convergence is assumed but all parameters are actively constrained.

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.000266
Residual		239.92

#### Fit Statistics

-2 Res Log Likelihood	166592
AIC (Smaller is Better)	166594
AICC (Smaller is Better)	166594
BIC (Smaller is Better)	166602
CAIC (Smaller is Better)	166603
HQIC (Smaller is Better)	166597

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept					2.2679	2.3950	20011	0.95	0.3437
predspline				1	0	.	.	.	.
predspline				2	-0.08053	0.02427	20011	-3.32	0.0009
predspline				3	0.003871	0.001400	20011	2.77	0.0057
tspl1	1				0	.	.	.	.
tspl1	2				0.02808	0.03776	20011	0.74	0.4571
tspl1	3				-0.00247	0.005559	20011	-0.44	0.6573
tspl2		1			0	.	.	.	.
tspl2		2			-0.01831	0.03877	20011	-0.47	0.6367
tspl2		3			0.000526	0.004656	20011	0.11	0.9100
hbspl			1		0	.	.	.	.
hbspl			2		-0.01963	0.01706	20011	-1.15	0.2497
hbspl			3		0.000081	0.000634	20011	0.13	0.8983

**Now assessing with 6 hours pre-post-transfusion windows**

The HPMIXED Procedure

Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	20011	11.59	5.79	0.0030	0.0030

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	6	0 1 5 10 20 99
recipientsex	2	1 2
idnr	12785	210000909149 210001535114 210002204152 210002429149 210002448146 210004034153 210004156135 210004170105 210004408139 210005070120 210005222149 210005505147 210006865127 210007122112 210007615116 210007733127 210007878104 210007993103 210008883124 210009873148 ...

Number of Observations Read	22644
Number of Observations Used	22638

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	13
Columns in Z per Subject	1
Subjects (Blocks in V)	12785

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	187977.18205	.	2180.701
1	5	187594.85662	382.32543347	277.4096
2	4	187581.18808	13.66853832	40.71722

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	4	187557.28241	23.90566538	2.773591
4	54	187557.27021	0.01220075	2.773591
5	15	187557.27021	-0.00000000	2.773591

Convergence criterion (FCONV=2.220446E-16) satisfied.

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.002546
Residual		232.10

#### Fit Statistics

-2 Res Log Likelihood	187557
AIC (Smaller is Better)	187561
AICC (Smaller is Better)	187561
BIC (Smaller is Better)	187576
CAIC (Smaller is Better)	187578
HQIC (Smaller is Better)	187566

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				-0.2317	105819	22628	-0.00	1.0000
predictorvalue			0	-1.2576	105819	22628	-0.00	1.0000
predictorvalue			1	-1.4107	105819	22628	-0.00	1.0000
predictorvalue			5	-1.7025	105819	22628	-0.00	1.0000
predictorvalue			10	-1.4378	105819	22628	-0.00	1.0000
predictorvalue			20	-0.09033	105819	22628	-0.00	1.0000
predictorvalue			99	-1.6569	105819	22628	-0.00	1.0000
tsp11	1			0	.	.	.	.
tsp11	2			0.02793	0.03504	22628	0.80	0.4255
tsp11	3			-0.00050	0.005152	22628	-0.10	0.9225
tsp12		1		0	.	.	.	.
tsp12		2		-0.02550	0.03593	22628	-0.71	0.4779
tsp12		3		0.001409	0.004317	22628	0.33	0.7441

**Now assessing with 6 hours pre-post-transfusion windows**

The HPMIXED Procedure

Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	5	22628	3.86	0.77	0.5691	0.5692

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	6	0 1 5 10 20 99
recipientsex	2	1 2
idnr	11799	210001535114 210002204152 210002429149 210002448146 210004034153 210004170105 210004408139 210005070120 210005222149 210005505147 210006865127 210007122112 210007615116 210007733127 210007878104 210007993103 210008883124 210009873148 210011623133 210011988130 ...

Number of Observations Read	22644
Number of Observations Used	20031

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	16
Columns in Z per Subject	1
Subjects (Blocks in V)	11799

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	167013.70916	.	1913.059
1	5	166674.60953	339.09963725	249.1668
2	4	166661.79177	12.81775046	37.43377

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	4	166660.97881	0.81296806	3.492768
4	2	166660.96947	0.00933826	0.734534
5	3	166637.66815	23.30132147	0

Convergence is assumed but all parameters are actively constrained.

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.000266
Residual		239.91

#### Fit Statistics

-2 Res Log Likelihood	166638
AIC (Smaller is Better)	166640
AICC (Smaller is Better)	166640
BIC (Smaller is Better)	166647
CAIC (Smaller is Better)	166648
HQIC (Smaller is Better)	166642

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					0.1043	114762	20019	0.00
predictorvalue				0	1.3417	114762	20019	0.00
predictorvalue				1	1.1662	114762	20019	0.00
predictorvalue				5	0.8692	114762	20019	0.00
predictorvalue				10	1.1417	114762	20019	0.00
predictorvalue				20	2.4542	114762	20019	0.00

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					1.0000
predictorvalue				0	1.0000
predictorvalue				1	1.0000
predictorvalue				5	1.0000
predictorvalue				10	1.0000
predictorvalue				20	1.0000



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
predictorvalue				99	0.6653	114762	20019	0.00
tspl1	1				0	.	.	.
tspl1	2				0.02809	0.03776	20019	0.74
tspl1	3				-0.00218	0.005558	20019	-0.39
tspl2		1			0	.	.	.
tspl2		2			-0.01989	0.03876	20019	-0.51
tspl2		3			0.000596	0.004654	20019	0.13
hbspl			1		0	.	.	.
hbspl			2		-0.02046	0.01706	20019	-1.20
hbspl			3		0.000114	0.000634	20019	0.18

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
predictorvalue				99	1.0000
tspl1	1				.
tspl1	2				0.4570
tspl1	3				0.6948
tspl2		1			.
tspl2		2			0.6078
tspl2		3			0.8980
hbspl			1		.
hbspl			2		0.2306
hbspl			3		0.8579

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	5	20019	5.33	1.07	0.3774	0.3774

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	4	0 180 365 999
recipientsex	2	1 2
idnr	12785	210000909149 210001535114 210002204152 210002429149 210002448146 210004034153 210004156135 210004170105 210004408139 210005070120 210005222149 210005505147 210006865127 210007122112 210007615116 210007733127 210007878104 210007993103 210008883124 210009873148 ...

Number of Observations Read	22642
Number of Observations Used	22638

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	11
Columns in Z per Subject	1
Subjects (Blocks in V)	12785

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	187977.24177	.	2180.471
1	5	187595.19408	382.04769233	276.7636
2	4	187581.6251	13.56898442	40.64997

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	4	187580.84059	0.78450865	2.986469
4	5	187580.83983	0.00075246	2.773077
5	4	187580.83814	0.00169344	2.219643
6	2	187580.83557	0.00257372	0

Convergence is assumed but all parameters are actively constrained.

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.000258
Residual		232.08

#### Fit Statistics

-2 Res Log Likelihood	187581
AIC (Smaller is Better)	187583
AICC (Smaller is Better)	187583
BIC (Smaller is Better)	187590
CAIC (Smaller is Better)	187591
HQIC (Smaller is Better)	187585

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				-1.6974	0.2745	22630	-6.18	<.0001
predictorvalue			0	0	.	.	.	.
predictorvalue			180	0.3701	0.3480	22630	1.06	0.2876
predictorvalue			365	-0.8052	0.4777	22630	-1.69	0.0919
predictorvalue			999	-0.00310	0.2209	22630	-0.01	0.9888
tsp11	1			0	.	.	.	.
tsp11	2			0.02786	0.03503	22630	0.80	0.4265
tsp11	3			-0.00052	0.005151	22630	-0.10	0.9194
tsp12		1		0	.	.	.	.
tsp12		2		-0.02552	0.03593	22630	-0.71	0.4776
tsp12		3		0.001388	0.004316	22630	0.32	0.7477

**Now assessing with 6 hours pre-post-transfusion windows**

The HPMIXED Procedure

Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	3	22630	4.62	1.54	0.2019	0.2020

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	4	0 180 365 999
recipientsex	2	1 2
idnr	11799	210001535114 210002204152 210002429149 210002448146 210004034153 210004170105 210004408139 210005070120 210005222149 210005505147 210006865127 210007122112 210007615116 210007733127 210007878104 210007993103 210008883124 210009873148 210011623133 210011988130 ...

Number of Observations Read	22642
Number of Observations Used	20031

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	14
Columns in Z per Subject	1
Subjects (Blocks in V)	11799

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	167015.64515	.	1913.764
1	5	166676.79343	338.85171728	248.2883
2	4	166664.1214	12.67203342	37.26814

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	4	166663.30749	0.81390706	3.765163
4	2	166663.29631	0.01118250	0.858472
5	3	166663.29602	0.00028618	0

Convergence is assumed but all parameters are actively constrained.

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.000266
Residual		239.90

#### Fit Statistics

-2 Res Log Likelihood	166663
AIC (Smaller is Better)	166665
AICC (Smaller is Better)	166665
BIC (Smaller is Better)	166673
CAIC (Smaller is Better)	166674
HQIC (Smaller is Better)	166668

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					1.0617	2.3684	20021	0.45
predictorvalue				0	0	.	.	.
predictorvalue				180	0.3914	0.3550	20021	1.10
predictorvalue				365	-0.8040	0.4867	20021	-1.65
predictorvalue				999	-0.01689	0.2438	20021	-0.07
tspl1	1				0	.	.	.

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.6539
predictorvalue				0	.
predictorvalue				180	0.2704
predictorvalue				365	0.0986
predictorvalue				999	0.9448
tspl1	1				.

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
tspl1	2				0.02783	0.03776	20021	0.74
tspl1	3				-0.00218	0.005558	20021	-0.39
tspl2		1			0	.	.	.
tspl2		2			-0.02066	0.03875	20021	-0.53
tspl2		3			0.000622	0.004654	20021	0.13
hbspl			1		0	.	.	.
hbspl			2		-0.01934	0.01708	20021	-1.13
hbspl			3		0.000085	0.000635	20021	0.13

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
tspl1	2				0.4611
tspl1	3				0.6945
tspl2		1			.
tspl2		2			0.5940
tspl2		3			0.8938
hbspl			1		.
hbspl			2		0.2573
hbspl			3		0.8932

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	3	20021	4.61	1.54	0.2024	0.2024

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	2	1 2
idnr	5930	210001535114 210002448146 210003060142 210004170105 210004315135 210004408139 210005174143 210005222149 210006865127 210007122112 210007733127 210007993103 210008804129 210010801153 210011153115 210011264134 210011623133 210012323142 210012696118 210014500120 ...

Number of Observations Read	8627
Number of Observations Used	8625

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z per Subject	1
Subjects (Blocks in V)	5930

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	108020.39783	.	676.9392
1	5	107849.43819	170.95964208	130.2581
2	2	107840.13799	9.30020368	44.05476



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	107838.81354	1.32444323	4.103761
4	5	107838.81169	0.00184935	3.768493
5	4	107838.80761	0.00408639	2.893116
6	5	107838.80677	0.00083629	2.678952
7	4	107838.8049	0.00187345	2.122164
8	2	107838.80214	0.00276046	0

Convergence is assumed but all parameters are actively constrained.

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.01750
Residual		15765

#### Fit Statistics

-2 Res Log Likelihood	107839
AIC (Smaller is Better)	107841
AICC (Smaller is Better)	107841
BIC (Smaller is Better)	107847
CAIC (Smaller is Better)	107848
HQIC (Smaller is Better)	107843

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				24.8118	5.4738	8619	4.53	<.0001
predictorvalue			1	0	.	.	.	.
predictorvalue			2	0.9541	2.7692	8619	0.34	0.7304
tsp11	1			0	.	.	.	.
tsp11	2			-0.3810	0.5766	8619	-0.66	0.5088
tsp11	3			-0.01902	0.07226	8619	-0.26	0.7924
tsp12		1		0	.	.	.	.
tsp12		2		-1.8512	0.6413	8619	-2.89	0.0039
tsp12		3		0.08207	0.06615	8619	1.24	0.2148

**Now assessing with 6 hours pre-post-transfusion windows**

The HPMIXED Procedure

Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	8619	0.12	0.12	0.7304	0.7304

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	2	1 2
idnr	5914	210001535114 210002448146 210003060142 210004170105 210004315135 210004408139 210005174143 210005222149 210006865127 210007122112 210007733127 210007993103 210008804129 210010801153 210011153115 210011264134 210011623133 210012323142 210012696118 210014500120 ...

Number of Observations Read	8627
Number of Observations Used	8587

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	12
Columns in Z per Subject	1
Subjects (Blocks in V)	5914

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	107587.61062	.	672.621
1	5	107418.40703	169.20359142	130.2489
2	2	107409.03827	9.36875211	44.77174

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	107407.64943	1.38884591	4.342387
4	5	107407.64729	0.00213901	3.98195
5	4	107407.64257	0.00471514	3.040168
6	5	107407.64161	0.00096011	2.810004
7	4	107407.63947	0.00214446	2.211054
8	5	107407.63902	0.00044883	2.063815
9	4	107407.63637	0.00264827	0

Convergence is assumed but all parameters are actively constrained.

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.01758
Residual		15835

#### Fit Statistics

-2 Res Log Likelihood	107408
AIC (Smaller is Better)	107410
AICC (Smaller is Better)	107410
BIC (Smaller is Better)	107416
CAIC (Smaller is Better)	107417
HQIC (Smaller is Better)	107412

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					30.4439	30.0206	8579	1.01
predictorvalue				1	0	.	.	.
predictorvalue				2	0.9390	2.7829	8579	0.34
tspl1	1				0	.	.	.

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.3106
predictorvalue				1	.
predictorvalue				2	0.7358
tspl1	1				.

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
tspl1	2				-0.3756	0.5790	8579	-0.65
tspl1	3				-0.02102	0.07257	8579	-0.29
tspl2		1			0	.	.	.
tspl2		2			-1.8664	0.6442	8579	-2.90
tspl2		3			0.08257	0.06644	8579	1.24
hbspl			1		0	.	.	.
hbspl			2		-0.04312	0.2184	8579	-0.20
hbspl			3		0.01528	0.01961	8579	0.78

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
tspl1	2				0.5165
tspl1	3				0.7720
tspl2		1			.
tspl2		2			0.0038
tspl2		3			0.2140
hbspl			1		.
hbspl			2		0.8435
hbspl			3		0.4359

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	8579	0.11	0.11	0.7358	0.7358

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	0 1
recipientsex	2	1 2
idnr	12187	210000196120 210000954103 210001535114 210002448146 210003060142 210003603115 210004034153 210004170105 210004315135 210004404141 210004408139 210004674105 210005174143 210005222149 210005505147 210006242138 210006865127 210007122112 210007733127 210007993103 ...

Number of Observations Read	24051
Number of Observations Used	24049

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z per Subject	1
Subjects (Blocks in V)	12187

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	304083.47839	.	1185.229
1	5	303917.56823	165.91016097	155.538
2	2	303913.5214	4.04682731	49.79544

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	303913.00931	0.51208940	5.278226
4	2	303913.00319	0.00612543	0.228353
5	2	303913.00318	0.00001156	0.001152

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	1990.70
Residual		16281

#### Fit Statistics

-2 Res Log Likelihood	303913
AIC (Smaller is Better)	303917
AICC (Smaller is Better)	303917
BIC (Smaller is Better)	303932
CAIC (Smaller is Better)	303934
HQIC (Smaller is Better)	303922

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				35.6319	3.3906	24043	10.51	<.0001
predictorvalue			0	0	.	.	.	.
predictorvalue			1	-2.2414	3.6156	24043	-0.62	0.5353
tsp11	1			0	.	.	.	.
tsp11	2			-1.4180	0.3647	24043	-3.89	0.0001
tsp11	3			0.05639	0.04537	24043	1.24	0.2139
tsp12		1		0	.	.	.	.
tsp12		2		-1.9212	0.4069	24043	-4.72	<.0001
tsp12		3		0.05036	0.04161	24043	1.21	0.2262

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	24043	0.38	0.38	0.5353	0.5353

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	0 1
recipientsex	2	1 2
idnr	11429	210000196120 210000954103 210001535114 210002448146 210003060142 210004034153 210004170105 210004315135 210004404141 210004408139 210004674105 210005174143 210005222149 210005505147 210006865127 210007122112 210007733127 210007993103 210008804129 210010801153 ...

Number of Observations Read	24051
Number of Observations Used	21685

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	12
Columns in Z per Subject	1
Subjects (Blocks in V)	11429

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	274643.66096	.	1067.37
1	5	274498.21636	145.44459236	137.1231
2	2	274494.8192	3.39716902	43.92203



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	274494.3887	0.43049120	4.673434
4	2	274494.38351	0.00519146	0.204017
5	2	274494.3835	0.00000998	0.001044

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	2179.74
Residual		16483

#### Fit Statistics

-2 Res Log Likelihood	274494
AIC (Smaller is Better)	274498
AICC (Smaller is Better)	274498
BIC (Smaller is Better)	274513
CAIC (Smaller is Better)	274515
HQIC (Smaller is Better)	274503

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					16.8495	18.5604	21677	0.91
predictorvalue				0	0	.	.	.
predictorvalue				1	-2.9032	3.6798	21677	-0.79
tspl1	1				0	.	.	.
tspl1	2				-1.4457	0.3887	21677	-3.72
tspl1	3				0.05448	0.04825	21677	1.13

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.3640
predictorvalue				0	.
predictorvalue				1	0.4302
tspl1	1				.
tspl1	2				0.0002
tspl1	3				0.2588

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
tspl2		1			0	.	.	.
tspl2		2			-2.0121	0.4329	21677	-4.65
tspl2		3			0.05358	0.04431	21677	1.21
hbspl			1		0	.	.	.
hbspl			2		0.1484	0.1314	21677	1.13
hbspl			3		-0.00427	0.005563	21677	-0.77

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
tspl2		1			.
tspl2		2			<.0001
tspl2		3			0.2266
hbspl			1		.
hbspl			2		0.2588
hbspl			3		0.4423

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	21677	0.62	0.62	0.4301	0.4302

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	2	1 2
idnr	11432	210000196120 210000954103 210001535114 210002448146 210003060142 210003603115 210004034153 210004170105 210004315135 210004404141 210004408139 210004674105 210005174143 210005222149 210005505147 210006865127 210007122112 210007733127 210007993103 210008804129 ...

Number of Observations Read	22187
Number of Observations Used	22125

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	10
Columns in Z per Subject	1
Subjects (Blocks in V)	11432

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	279219.5739	.	1221.153
1	5	279018.42862	201.14528325	212.4999
2	4	279006.14459	12.28402841	3.162328
3	2	279006.14048	0.00411108	1.101727

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	2	279006.1399	0.00057515	0.014166

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	807.64
Residual		16774

#### Fit Statistics

-2 Res Log Likelihood	279006
AIC (Smaller is Better)	279010
AICC (Smaller is Better)	279010
BIC (Smaller is Better)	279025
CAIC (Smaller is Better)	279027
HQIC (Smaller is Better)	279015

#### Solution for Fixed Effects

Effect	tspl1	tspl2	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				38.3913	5.5977	22118	6.86	<.0001
predspline			1	0	.	.	.	.
predspline			2	-0.06229	0.1204	22118	-0.52	0.6049
predspline			3	0.000311	0.005182	22118	0.06	0.9522
tspl1	1			0	.	.	.	.
tspl1	2			-1.1675	0.3758	22118	-3.11	0.0019
tspl1	3			0.02414	0.04673	22118	0.52	0.6054
tspl2		1		0	.	.	.	.
tspl2		2		-2.2470	0.4195	22118	-5.36	<.0001
tspl2		3		0.08702	0.04294	22118	2.03	0.0427

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	22118	0.99	0.49	0.6096	0.6096

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	2	1 2
idnr	10744	210000196120 210000954103 210001535114 210002448146 210003060142 210004034153 210004170105 210004315135 210004404141 210004408139 210004674105 210005174143 210005222149 210005505147 210006865127 210007122112 210007733127 210007993103 210008804129 210010801153 ...

Number of Observations Read	22187
Number of Observations Used	19969

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	13
Columns in Z per Subject	1
Subjects (Blocks in V)	10744

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	252566.67562	.	1139.151
1	5	252376.10593	190.56968855	202.4934
2	4	252363.95785	12.14808531	2.277737
3	2	252363.95554	0.00230666	0.777287

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	2	252363.95523	0.00030692	0.007433

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	749.05
Residual		17298

#### Fit Statistics

-2 Res Log Likelihood	252364
AIC (Smaller is Better)	252368
AICC (Smaller is Better)	252368
BIC (Smaller is Better)	252383
CAIC (Smaller is Better)	252385
HQIC (Smaller is Better)	252373

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept					20.1158	19.6695	19960	1.02	0.3065
predspline				1	0	.	.	.	.
predspline				2	-0.01579	0.1259	19960	-0.13	0.9002
predspline				3	-0.00148	0.005520	19960	-0.27	0.7886
tspl1	1				0	.	.	.	.
tspl1	2				-1.1772	0.4011	19960	-2.93	0.0033
tspl1	3				0.01791	0.04981	19960	0.36	0.7191
tspl2		1			0	.	.	.	.
tspl2		2			-2.3928	0.4465	19960	-5.36	<.0001
tspl2		3			0.09478	0.04580	19960	2.07	0.0385
hbspl			1		0	.	.	.	.
hbspl			2		0.1352	0.1362	19960	0.99	0.3209
hbspl			3		-0.00400	0.005792	19960	-0.69	0.4902

**Now assessing with 6 hours pre-post-transfusion windows**

The HPMIXED Procedure

Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	19960	0.65	0.32	0.7226	0.7226

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	2	1 2
idnr	11425	210000196120 210000954103 210001535114 210002448146 210003060142 210004034153 210004170105 210004315135 210004404141 210004408139 210004674105 210005174143 210005222149 210005505147 210006865127 210007122112 210007733127 210007993103 210008804129 210010801153 ...

Number of Observations Read	21759
Number of Observations Used	21672

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	10
Columns in Z per Subject	1
Subjects (Blocks in V)	11425

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	274496.46375	.	1067.158
1	5	274351.13724	145.32650898	136.733
2	2	274347.76373	3.37351326	43.67242
3	2	274347.33921	0.42451767	4.613887



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	2	274347.33417	0.00504344	0.199134
5	2	274347.33416	0.00000947	0.000999

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	2184.45
Residual		16489

#### Fit Statistics

-2 Res Log Likelihood	274347
AIC (Smaller is Better)	274351
AICC (Smaller is Better)	274351
BIC (Smaller is Better)	274366
CAIC (Smaller is Better)	274368
HQIC (Smaller is Better)	274356

#### Solution for Fixed Effects

Effect	tspl1	tspl2	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				13.8706	20.8529	21665	0.67	0.5060
predspline			1	0	.	.	.	.
predspline			2	0.1693	0.1494	21665	1.13	0.2570
predspline			3	-0.00446	0.005675	21665	-0.79	0.4324
tspl1	1			0	.	.	.	.
tspl1	2			-1.4495	0.3890	21665	-3.73	0.0002
tspl1	3			0.05518	0.04828	21665	1.14	0.2531
tspl2		1		0	.	.	.	.
tspl2		2		-2.0105	0.4331	21665	-4.64	<.0001
tspl2		3		0.05331	0.04433	21665	1.20	0.2292

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	21665	1.45	0.73	0.4842	0.4842

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	2	1 2
idnr	12187	210000196120 210000954103 210001535114 210002448146 210003060142 210003603115 210004034153 210004170105 210004315135 210004404141 210004408139 210004674105 210005174143 210005222149 210005505147 210006242138 210006865127 210007122112 210007733127 210007993103 ...

Number of Observations Read	24051
Number of Observations Used	24049

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z per Subject	1
Subjects (Blocks in V)	12187

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	304085.13946	.	1185.01
1	5	303919.36479	165.77467148	155.249
2	2	303915.33688	4.02790880	49.61907

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	303914.8293	0.50758541	5.236794
4	2	303914.82328	0.00601662	0.225003
5	2	303914.82327	0.00001120	0.001121

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	1994.54
Residual		16278

#### Fit Statistics

-2 Res Log Likelihood	303915
AIC (Smaller is Better)	303919
AICC (Smaller is Better)	303919
BIC (Smaller is Better)	303934
CAIC (Smaller is Better)	303936
HQIC (Smaller is Better)	303924

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				35.6160	3.4860	24043	10.22	<.0001
predictorvalue			1	0	.	.	.	.
predictorvalue			2	-0.2766	1.7414	24043	-0.16	0.8738
tsp11	1			0	.	.	.	.
tsp11	2			-1.4185	0.3647	24043	-3.89	0.0001
tsp11	3			0.05640	0.04537	24043	1.24	0.2138
tsp12		1		0	.	.	.	.
tsp12		2		-1.9188	0.4069	24043	-4.72	<.0001
tsp12		3		0.05009	0.04161	24043	1.20	0.2286

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	24043	0.03	0.03	0.8738	0.8738

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	2	1 2
idnr	11429	210000196120 210000954103 210001535114 210002448146 210003060142 210004034153 210004170105 210004315135 210004404141 210004408139 210004674105 210005174143 210005222149 210005505147 210006865127 210007122112 210007733127 210007993103 210008804129 210010801153 ...

Number of Observations Read	24051
Number of Observations Used	21685

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	12
Columns in Z per Subject	1
Subjects (Blocks in V)	11429

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	274644.73172	.	1067.37
1	5	274499.30694	145.42477924	137.0612
2	2	274495.9138	3.39313299	43.88052

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	274495.48435	0.42945658	4.662957
4	2	274495.47918	0.00516489	0.203137
5	2	274495.47917	0.00000989	0.001036

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	2180.55
Residual		16482

#### Fit Statistics

-2 Res Log Likelihood	274495
AIC (Smaller is Better)	274499
AICC (Smaller is Better)	274499
BIC (Smaller is Better)	274514
CAIC (Smaller is Better)	274516
HQIC (Smaller is Better)	274504

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					10.4801	20.0827	21677	0.52
predictorvalue				1	0	.	.	.
predictorvalue				2	1.6994	2.0803	21677	0.82
tspl1	1				0	.	.	.
tspl1	2				-1.4488	0.3887	21677	-3.73
tspl1	3				0.05493	0.04825	21677	1.14

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.6018
predictorvalue				1	.
predictorvalue				2	0.4140
tspl1	1				.
tspl1	2				0.0002
tspl1	3				0.2550

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
tspl2		1			0	.	.	.
tspl2		2			-2.0094	0.4329	21677	-4.64
tspl2		3			0.05328	0.04431	21677	1.20
hbspl			1		0	.	.	.
hbspl			2		0.1858	0.1395	21677	1.33
hbspl			3		-0.00458	0.005580	21677	-0.82

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
tspl2		1			.
tspl2		2			<.0001
tspl2		3			0.2292
hbspl			1		.
hbspl			2		0.1830
hbspl			3		0.4115

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	21677	0.67	0.67	0.4140	0.4140

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	2	1 2
idnr	12184	210000196120 210000954103 210001535114 210002448146 210003060142 210003603115 210004034153 210004170105 210004315135 210004404141 210004408139 210004674105 210005174143 210005222149 210005505147 210006242138 210006865127 210007122112 210007733127 210007993103 ...

Number of Observations Read	24123
Number of Observations Used	24040

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	10
Columns in Z per Subject	1
Subjects (Blocks in V)	12184

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	303960.31465	.	1186.777
1	5	303793.34827	166.96637899	157.1866
2	2	303789.18817	4.16009920	50.7873
3	2	303788.6496	0.53857419	5.524345

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	2	303788.6428	0.00680177	0.249124
5	2	303788.64278	0.00001396	0.001349

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	1962.25
Residual		16285

#### Fit Statistics

-2 Res Log Likelihood	303789
AIC (Smaller is Better)	303793
AICC (Smaller is Better)	303793
BIC (Smaller is Better)	303807
CAIC (Smaller is Better)	303809
HQIC (Smaller is Better)	303798

#### Solution for Fixed Effects

Effect	tspl1	tspl2	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				37.2655	4.8846	24033	7.63	<.0001
predspline			1	0	.	.	.	.
predspline			2	0.01987	0.2206	24033	0.09	0.9283
predspline			3	-0.00968	0.01183	24033	-0.82	0.4131
tspl1	1			0	.	.	.	.
tspl1	2			-1.4328	0.3647	24033	-3.93	<.0001
tspl1	3			0.05732	0.04535	24033	1.26	0.2063
tspl2		1		0	.	.	.	.
tspl2		2		-1.9385	0.4069	24033	-4.76	<.0001
tspl2		3		0.05276	0.04162	24033	1.27	0.2050

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	24033	4.10	2.05	0.1285	0.1285



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	2	1 2
idnr	11426	210000196120 210000954103 210001535114 210002448146 210003060142 210004034153 210004170105 210004315135 210004404141 210004408139 210004674105 210005174143 210005222149 210005505147 210006865127 210007122112 210007733127 210007993103 210008804129 210010801153 ...

Number of Observations Read	24123
Number of Observations Used	21676

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	13
Columns in Z per Subject	1
Subjects (Blocks in V)	11426

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	274520.37056	.	1068.074
1	5	274374.23044	146.14012500	138.1648
2	2	274370.76269	3.46774930	44.5437
3	2	274370.31611	0.44658161	4.82745

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	2	274370.31051	0.00559741	0.217036
5	2	274370.3105	0.00001141	0.001168

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	2157.65
Residual		16480

#### Fit Statistics

-2 Res Log Likelihood	274370
AIC (Smaller is Better)	274374
AICC (Smaller is Better)	274374
BIC (Smaller is Better)	274389
CAIC (Smaller is Better)	274391
HQIC (Smaller is Better)	274379

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept					16.6725	18.9277	21667	0.88	0.3784
predspline				1	0	.	.	.	.
predspline				2	0.1152	0.2298	21667	0.50	0.6161
predspline				3	-0.01479	0.01249	21667	-1.18	0.2360
tspl1	1				0	.	.	.	.
tspl1	2				-1.4560	0.3887	21667	-3.75	0.0002
tspl1	3				0.05526	0.04823	21667	1.15	0.2519
tspl2		1			0	.	.	.	.
tspl2		2			-2.0272	0.4328	21667	-4.68	<.0001
tspl2		3			0.05601	0.04432	21667	1.26	0.2063
hbspl			1		0	.	.	.	.
hbspl			2		0.1507	0.1314	21667	1.15	0.2515
hbspl			3		-0.00426	0.005561	21667	-0.77	0.4437

**Now assessing with 6 hours pre-post-transfusion windows**

The HPMIXED Procedure

Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	21667	4.08	2.04	0.1303	0.1303

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	6	0 1 5 10 20 99
recipientsex	2	1 2
idnr	12187	210000196120 210000954103 210001535114 210002448146 210003060142 210003603115 210004034153 210004170105 210004315135 210004404141 210004408139 210004674105 210005174143 210005222149 210005505147 210006242138 210006865127 210007122112 210007733127 210007993103 ...

Number of Observations Read	24055
Number of Observations Used	24049

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	13
Columns in Z per Subject	1
Subjects (Blocks in V)	12187

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	304063.13407	.	1187.133
1	5	303896.44625	166.68781892	156.6182
2	2	303892.33068	4.11557030	50.39607

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	303891.8033	0.52738353	5.418279
4	2	303891.7968	0.00649924	0.239782
5	2	303891.79679	0.00001284	0.001257

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	1972.51
Residual		16294

#### Fit Statistics

-2 Res Log Likelihood	303892
AIC (Smaller is Better)	303896
AICC (Smaller is Better)	303896
BIC (Smaller is Better)	303911
CAIC (Smaller is Better)	303913
HQIC (Smaller is Better)	303901

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				27.3457	7.9539	24039	3.44	0.0006
predictorvalue			0	8.8783	7.5075	24039	1.18	0.2370
predictorvalue			1	8.8307	7.3840	24039	1.20	0.2317
predictorvalue			5	11.0947	7.5363	24039	1.47	0.1410
predictorvalue			10	6.5430	7.6771	24039	0.85	0.3941
predictorvalue			20	0	.	.	.	.
predictorvalue			99	5.5675	7.5265	24039	0.74	0.4595
tsp11	1			0	.	.	.	.
tsp11	2			-1.4300	0.3648	24039	-3.92	<.0001
tsp11	3			0.05726	0.04537	24039	1.26	0.2070
tsp12		1		0	.	.	.	.
tsp12		2		-1.9219	0.4069	24039	-4.72	<.0001
tsp12		3		0.05065	0.04161	24039	1.22	0.2235

**Now assessing with 6 hours pre-post-transfusion windows**

The HPMIXED Procedure

Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	5	24039	5.47	1.09	0.3613	0.3613

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	6	0 1 5 10 20 99
recipientsex	2	1 2
idnr	11429	210000196120 210000954103 210001535114 210002448146 210003060142 210004034153 210004170105 210004315135 210004404141 210004408139 210004674105 210005174143 210005222149 210005505147 210006865127 210007122112 210007733127 210007993103 21000804129 210010801153 ...

Number of Observations Read	24055
Number of Observations Used	21685

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	16
Columns in Z per Subject	1
Subjects (Blocks in V)	11429

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	274624.66765	.	1068.066
1	5	274478.93531	145.73233774	137.5521
2	2	274475.51188	3.42343177	44.17725

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	274475.07516	0.43671659	4.737332
4	2	274475.06981	0.00535336	0.2094
5	2	274475.0698	0.00001054	0.001095

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	2171.55
Residual		16490

#### Fit Statistics

-2 Res Log Likelihood	274475
AIC (Smaller is Better)	274479
AICC (Smaller is Better)	274479
BIC (Smaller is Better)	274494
CAIC (Smaller is Better)	274496
HQIC (Smaller is Better)	274484

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					8.5754	19.8163	21673	0.43
predictorvalue				0	8.7002	7.6240	21673	1.14
predictorvalue				1	8.7558	7.4935	21673	1.17
predictorvalue				5	10.8856	7.6437	21673	1.42
predictorvalue				10	6.3652	7.7852	21673	0.82
predictorvalue				20	0	.	.	.

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.6652
predictorvalue				0	0.2538
predictorvalue				1	0.2426
predictorvalue				5	0.1544
predictorvalue				10	0.4136
predictorvalue				20	.



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
predictorvalue				99	8.3645	7.8807	21673	1.06
tspl1	1				0	.	.	.
tspl1	2				-1.4502	0.3888	21673	-3.73
tspl1	3				0.05457	0.04826	21673	1.13
tspl2		1			0	.	.	.
tspl2		2			-2.0066	0.4329	21673	-4.64
tspl2		3			0.05341	0.04431	21673	1.21
hbspl			1		0	.	.	.
hbspl			2		0.1441	0.1315	21673	1.10
hbspl			3		-0.00425	0.005565	21673	-0.76

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
predictorvalue				99	0.2885
tspl1	1				.
tspl1	2				0.0002
tspl1	3				0.2582
tspl2		1			.
tspl2		2			<.0001
tspl2		3			0.2281
hbspl			1		.
hbspl			2		0.2734
hbspl			3		0.4454

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	5	21673	3.15	0.63	0.6767	0.6767

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	4	0 180 365 999
recipientsex	2	1 2
idnr	12187	210000196120 210000954103 210001535114 210002448146 210003060142 210003603115 210004034153 210004170105 210004315135 210004404141 210004408139 210004674105 210005174143 210005222149 210005505147 210006242138 210006865127 210007122112 210007733127 210007993103 ...

Number of Observations Read	24053
Number of Observations Used	24049

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	11
Columns in Z per Subject	1
Subjects (Blocks in V)	12187

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	304067.63849	.	1187.432
1	5	303901.37135	166.26713519	155.0352
2	2	303897.36522	4.00613650	49.29412

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	303896.86674	0.49847390	5.135989
4	2	303896.86099	0.00575126	0.216138
5	2	303896.86098	0.00001027	0.00104

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	1989.31
Residual		16276

#### Fit Statistics

-2 Res Log Likelihood	303897
AIC (Smaller is Better)	303901
AICC (Smaller is Better)	303901
BIC (Smaller is Better)	303916
CAIC (Smaller is Better)	303918
HQIC (Smaller is Better)	303906

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				35.3851	3.5397	24041	10.00	<.0001
predictorvalue			0	0	.	.	.	.
predictorvalue			180	-1.5413	2.8816	24041	-0.53	0.5927
predictorvalue			365	10.2378	3.6712	24041	2.79	0.0053
predictorvalue			999	-0.8469	1.9404	24041	-0.44	0.6625
tsp11	1			0	.	.	.	.
tsp11	2			-1.4122	0.3647	24041	-3.87	0.0001
tsp11	3			0.05634	0.04536	24041	1.24	0.2143
tsp12		1		0	.	.	.	.
tsp12		2		-1.9304	0.4069	24041	-4.74	<.0001
tsp12		3		0.05098	0.04160	24041	1.23	0.2204

**Now assessing with 6 hours pre-post-transfusion windows**

The HPMIXED Procedure

Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	3	24041	9.54	3.18	0.0229	0.0229

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	4	0 180 365 999
recipientsex	2	1 2
idnr	11429	210000196120 210000954103 210001535114 210002448146 210003060142 210004034153 210004170105 210004315135 210004404141 210004408139 210004674105 210005174143 210005222149 210005505147 210006865127 210007122112 210007733127 210007993103 210008804129 210010801153 ...

Number of Observations Read	24053
Number of Observations Used	21685

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	14
Columns in Z per Subject	1
Subjects (Blocks in V)	11429

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	274628.43485	.	1068.7
1	5	274482.88731	145.54753310	136.5549
2	2	274479.53073	3.35658716	43.46424

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	274479.11192	0.41881049	4.552108
4	2	274479.10703	0.00488560	0.193726
5	2	274479.10702	0.00000892	0.000949

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	2182.03
Residual		16476

#### Fit Statistics

-2 Res Log Likelihood	274479
AIC (Smaller is Better)	274483
AICC (Smaller is Better)	274483
BIC (Smaller is Better)	274498
CAIC (Smaller is Better)	274500
HQIC (Smaller is Better)	274488

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					17.7108	18.5639	21675	0.95
predictorvalue				0	0	.	.	.
predictorvalue				180	-1.6725	2.9223	21675	-0.57
predictorvalue				365	10.2947	3.7305	21675	2.76
predictorvalue				999	0.5777	2.1243	21675	0.27
tspl1	1				0	.	.	.

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.3401
predictorvalue				0	.
predictorvalue				180	0.5671
predictorvalue				365	0.0058
predictorvalue				999	0.7857
tspl1	1				.

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
tspl1	2				-1.4364	0.3888	21675	-3.69
tspl1	3				0.05443	0.04825	21675	1.13
tspl2		1			0	.	.	.
tspl2		2			-2.0173	0.4328	21675	-4.66
tspl2		3			0.05405	0.04430	21675	1.22
hbspl			1		0	.	.	.
hbspl			2		0.1357	0.1316	21675	1.03
hbspl			3		-0.00392	0.005564	21675	-0.70

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
tspl1	2				0.0002
tspl1	3				0.2592
tspl2		1			.
tspl2		2			<.0001
tspl2		3			0.2225
hbspl			1		.
hbspl			2		0.3024
hbspl			3		0.4812

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	3	21675	8.69	2.90	0.0338	0.0338

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	2	1 2
idnr	6237	210001535114 210002448146 210003060142 210004170105 210004315135 210004408139 210005174143 210005222149 210006865127 210007122112 210007733127 210007993103 210010801153 210011153115 210011264134 210011623133 210012323142 210012696118 210014500120 210015662118 ...

Number of Observations Read	9001
Number of Observations Used	8999

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z per Subject	1
Subjects (Blocks in V)	6237

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	75817.34453	.	742.2053
1	5	75740.154985	77.18954535	62.59725
2	2	75739.439511	0.71547424	15.51864



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	75739.389576	0.04993461	0.954113
4	2	75739.389382	0.00019381	0.017353

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	17.5771
Residual		247.10

#### Fit Statistics

-2 Res Log Likelihood	75739
AIC (Smaller is Better)	75743
AICC (Smaller is Better)	75743
BIC (Smaller is Better)	75757
CAIC (Smaller is Better)	75759
HQIC (Smaller is Better)	75748

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				3.9964	0.6868	8993	5.82	<.0001
predictorvalue			1	0	.	.	.	.
predictorvalue			2	0.5796	0.3509	8993	1.65	0.0986
tsp11	1			0	.	.	.	.
tsp11	2			-0.1330	0.07193	8993	-1.85	0.0645
tsp11	3			0.002049	0.009031	8993	0.23	0.8205
tsp12		1		0	.	.	.	.
tsp12		2		0.2125	0.07973	8993	2.67	0.0077
tsp12		3		-0.03139	0.008257	8993	-3.80	0.0001

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	8993	2.73	2.73	0.0986	0.0986

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	2	1 2
idnr	6219	210001535114 210002448146 210003060142 210004170105 210004315135 210004408139 210005174143 210005222149 210006865127 210007122112 210007733127 210007993103 210010801153 210011153115 210011264134 210011623133 210012323142 210012696118 210014500120 210015662118 ...

Number of Observations Read	9001
Number of Observations Used	8959

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	12
Columns in Z per Subject	1
Subjects (Blocks in V)	6219

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	75496.910284	.	740.3225
1	5	75418.74102	78.16926449	62.77757
2	2	75418.007221	0.73379876	15.70054

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	75417.954965	0.05225618	0.989614
4	2	75417.954751	0.00021339	0.018696

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	17.4527
Residual		247.25

#### Fit Statistics

-2 Res Log Likelihood	75418
AIC (Smaller is Better)	75422
AICC (Smaller is Better)	75422
BIC (Smaller is Better)	75435
CAIC (Smaller is Better)	75437
HQIC (Smaller is Better)	75427

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					3.3052	3.7957	8951	0.87
predictorvalue				1	0	.	.	.
predictorvalue				2	0.5670	0.3519	8951	1.61
tspl1	1				0	.	.	.
tspl1	2				-0.1319	0.07208	8951	-1.83
tspl1	3				0.001733	0.009050	8951	0.19

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.3839
predictorvalue				1	.
predictorvalue				2	0.1072
tspl1	1				.
tspl1	2				0.0672
tspl1	3				0.8481

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tsp11	tsp12	hbsp1	predictorvalue	Estimate	Standard Error	DF	t Value
tsp12		1			0	.	.	.
tsp12		2			0.2169	0.07991	8951	2.71
tsp12		3			-0.03217	0.008275	8951	-3.89
hbsp1			1		0	.	.	.
hbsp1			2		0.004456	0.02763	8951	0.16
hbsp1			3		0.002070	0.002475	8951	0.84

#### Solution for Fixed Effects

Effect	tsp11	tsp12	hbsp1	predictorvalue	Pr >  t
tsp12		1			.
tsp12		2			0.0066
tsp12		3			0.0001
hbsp1			1		.
hbsp1			2		0.8719
hbsp1			3		0.4030

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	8951	2.60	2.60	0.1071	0.1072

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	0 1
recipientsex	2	1 2
idnr	12808	210000196120 210000954103 210001535114 210002448146 210003060142 210003603115 210004034153 210004170105 210004315135 210004404141 210004408139 210004674105 210005174143 210005222149 210005505147 210006242138 210006865127 210007122112 210007733127 210007993103 ...

Number of Observations Read	24954
Number of Observations Used	24952

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z per Subject	1
Subjects (Blocks in V)	12808

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	211866.156	.	1734.361
1	5	211747.11464	119.04135445	38.02541
2	2	211747.05223	0.06240954	2.923614

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	211747.05186	0.00037298	0.011872

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	22.2106
Residual		263.41

#### Fit Statistics

-2 Res Log Likelihood	211747
AIC (Smaller is Better)	211751
AICC (Smaller is Better)	211751
BIC (Smaller is Better)	211766
CAIC (Smaller is Better)	211768
HQIC (Smaller is Better)	211756

#### Solution for Fixed Effects

Effect	tspl1	tspl2	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				4.2318	0.4085	24946	10.36	<.0001
predictorvalue			0	0	.	.	.	.
predictorvalue			1	0.3367	0.4460	24946	0.76	0.4503
tspl1	1			0	.	.	.	.
tspl1	2			-0.1505	0.04433	24946	-3.39	0.0007
tspl1	3			0.004977	0.005534	24946	0.90	0.3684
tspl2		1		0	.	.	.	.
tspl2		2		0.3184	0.04922	24946	6.47	<.0001
tspl2		3		-0.03939	0.005059	24946	-7.79	<.0001

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	24946	0.57	0.57	0.4502	0.4503

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	0 1
recipientsex	2	1 2
idnr	12011	210000196120 210000954103 210001535114 210002448146 210003060142 210004034153 210004170105 210004315135 210004404141 210004408139 210004674105 210005174143 210005222149 210005505147 210006865127 210007122112 210007733127 210007993103 210010801153 210011153115 ...

Number of Observations Read	24954
Number of Observations Used	22513

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	12
Columns in Z per Subject	1
Subjects (Blocks in V)	12011

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	190979.00375	.	1552.861
1	5	190869.2611	109.74265427	35.92252
2	2	190869.19692	0.06417278	2.807102

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	190869.19653	0.00039633	0.011902

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	24.1831
Residual		259.09

#### Fit Statistics

-2 Res Log Likelihood	190869
AIC (Smaller is Better)	190873
AICC (Smaller is Better)	190873
BIC (Smaller is Better)	190888
CAIC (Smaller is Better)	190890
HQIC (Smaller is Better)	190878

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					-0.5563	2.2553	22505	-0.25
predictorvalue				0	0	.	.	.
predictorvalue				1	0.3332	0.4471	22505	0.75
tspl1	1				0	.	.	.
tspl1	2				-0.1607	0.04657	22505	-3.45
tspl1	3				0.006498	0.005801	22505	1.12
tspl2		1			0	.	.	.

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.8052
predictorvalue				0	.
predictorvalue				1	0.4562
tspl1	1				.
tspl1	2				0.0006
tspl1	3				0.2626
tspl2		1			.



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
tspl2		2			0.3230	0.05164	22505	6.26
tspl2		3			-0.03951	0.005310	22505	-7.44
hbspl			1		0	.	.	.
hbspl			2		0.03211	0.01599	22505	2.01
hbspl			3		0.001136	0.000678	22505	1.67

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
tspl2		2			<.0001
tspl2		3			<.0001
hbspl			1		.
hbspl			2		0.0446
hbspl			3		0.0940

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	22505	0.56	0.56	0.4562	0.4562

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	2	1 2
idnr	11993	210000196120 210000954103 210001535114 210002448146 210003060142 210003603115 210004034153 210004170105 210004315135 210004404141 210004408139 210004674105 210005174143 210005222149 210005505147 210006865127 210007122112 210007733127 210007993103 210010801153 ...

Number of Observations Read	22985
Number of Observations Used	22923

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	10
Columns in Z per Subject	1
Subjects (Blocks in V)	11993

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	194797.29632	.	1579.63
1	5	194685.61742	111.67890114	34.84898
2	2	194685.55816	0.05926219	2.663279
3	2	194685.55781	0.00034989	0.010709

## Now assessing with 6 hours pre-post-transfusion windows

The HPMIXED Procedure

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

### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	24.0396
Residual		263.47

### Fit Statistics

-2 Res Log Likelihood	194686
AIC (Smaller is Better)	194690
AICC (Smaller is Better)	194690
BIC (Smaller is Better)	194704
CAIC (Smaller is Better)	194706
HQIC (Smaller is Better)	194695

### Solution for Fixed Effects

Effect	tspl1	tspl2	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				3.8952	0.6997	22916	5.57	<.0001
predspline			1	0	.	.	.	.
predspline			2	0.01355	0.01509	22916	0.90	0.3692
predspline			3	-0.00031	0.000650	22916	-0.48	0.6296
tspl1	1			0	.	.	.	.
tspl1	2			-0.1382	0.04647	22916	-2.97	0.0029
tspl1	3			0.002887	0.005792	22916	0.50	0.6182
tspl2		1		0	.	.	.	.
tspl2		2		0.2890	0.05165	22916	5.60	<.0001
tspl2		3		-0.03698	0.005300	22916	-6.98	<.0001

### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	22916	1.25	0.62	0.5354	0.5355

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	2	1 2
idnr	11293	210000196120 210000954103 210001535114 210002448146 210003060142 210004034153 210004170105 210004315135 210004404141 210004408139 210004674105 210005174143 210005222149 210005505147 210006865127 210007122112 210007733127 210007993103 210010801153 210011153115 ...

Number of Observations Read	22985
Number of Observations Used	20730

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	13
Columns in Z per Subject	1
Subjects (Blocks in V)	11293

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	175964.09583	.	1410.011
1	5	175861.81044	102.28538511	31.2342
2	2	175861.7558	0.05463947	2.332412
3	2	175861.75549	0.00030786	0.008972

## Now assessing with 6 hours pre-post-transfusion windows

The HPMIXED Procedure

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

### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	26.4544
Residual		258.25

### Fit Statistics

-2 Res Log Likelihood	175862
AIC (Smaller is Better)	175866
AICC (Smaller is Better)	175866
BIC (Smaller is Better)	175880
CAIC (Smaller is Better)	175882
HQIC (Smaller is Better)	175871

### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept					-0.2764	2.4117	20721	-0.11	0.9088
predspline				1	0	.	.	.	.
predspline				2	0.009084	0.01545	20721	0.59	0.5565
predspline				3	-2.65E-6	0.000678	20721	-0.00	0.9969
tspl1	1				0	.	.	.	.
tspl1	2				-0.1512	0.04863	20721	-3.11	0.0019
tspl1	3				0.004529	0.006054	20721	0.75	0.4544
tspl2		1			0	.	.	.	.
tspl2		2			0.2971	0.05392	20721	5.51	<.0001
tspl2		3			-0.03762	0.005542	20721	-6.79	<.0001
hbspl			1		0	.	.	.	.
hbspl			2		0.02856	0.01671	20721	1.71	0.0873
hbspl			3		0.001239	0.000713	20721	1.74	0.0820

### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	20721	1.51	0.76	0.4693	0.4693

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	2	1 2
idnr	12006	210000196120 210000954103 210001535114 210002448146 210003060142 210004034153 210004170105 210004315135 210004404141 210004408139 210004674105 210005174143 210005222149 210005505147 210006865127 210007122112 210007733127 210007993103 210010801153 210011153115 ...

Number of Observations Read	22586
Number of Observations Used	22499

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	10
Columns in Z per Subject	1
Subjects (Blocks in V)	12006

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	190842.83053	.	1541.748
1	5	190734.58052	108.25000233	34.64076
2	2	190734.52095	0.05956841	2.628758
3	2	190734.52061	0.00034672	0.010461

## Now assessing with 6 hours pre-post-transfusion windows

The HPMIXED Procedure

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

### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	24.5684
Residual		258.55

### Fit Statistics

-2 Res Log Likelihood	190735
AIC (Smaller is Better)	190739
AICC (Smaller is Better)	190739
BIC (Smaller is Better)	190753
CAIC (Smaller is Better)	190755
HQIC (Smaller is Better)	190743

### Solution for Fixed Effects

Effect	tspl1	tspl2	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				0.01737	2.5333	22492	0.01	0.9945
predspline			1	0	.	.	.	.
predspline			2	0.02777	0.01816	22492	1.53	0.1262
predspline			3	0.001149	0.000692	22492	1.66	0.0966
tspl1	1			0	.	.	.	.
tspl1	2			-0.1586	0.04657	22492	-3.41	0.0007
tspl1	3			0.005858	0.005801	22492	1.01	0.3126
tspl2		1		0	.	.	.	.
tspl2		2		0.3252	0.05162	22492	6.30	<.0001
tspl2		3		-0.03964	0.005309	22492	-7.47	<.0001

### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	22492	38.95	19.47	<.0001	<.0001

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	2	1 2
idnr	12808	210000196120 210000954103 210001535114 210002448146 210003060142 210003603115 210004034153 210004170105 210004315135 210004404141 210004408139 210004674105 210005174143 210005222149 210005505147 210006242138 210006865127 210007122112 210007733127 210007993103 ...

Number of Observations Read	24954
Number of Observations Used	24952

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z per Subject	1
Subjects (Blocks in V)	12808

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	211850.70624	.	1737.616
1	5	211731.15945	119.54679700	38.48789
2	2	211731.09543	0.06401953	2.987386



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	211731.09504	0.00039002	0.012384

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	22.0898
Residual		263.32

#### Fit Statistics

-2 Res Log Likelihood	211731
AIC (Smaller is Better)	211735
AICC (Smaller is Better)	211735
BIC (Smaller is Better)	211750
CAIC (Smaller is Better)	211752
HQIC (Smaller is Better)	211740

#### Solution for Fixed Effects

Effect	tspl1	tspl2	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				4.6951	0.4202	24946	11.17	<.0001
predictorvalue			1	0	.	.	.	.
predictorvalue			2	-0.9093	0.2143	24946	-4.24	<.0001
tspl1	1			0	.	.	.	.
tspl1	2			-0.1490	0.04431	24946	-3.36	0.0008
tspl1	3			0.004694	0.005532	24946	0.85	0.3962
tspl2		1		0	.	.	.	.
tspl2		2		0.3172	0.04920	24946	6.45	<.0001
tspl2		3		-0.03930	0.005057	24946	-7.77	<.0001

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	24946	18.00	18.00	<.0001	<.0001

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	2	1 2
idnr	12011	210000196120 210000954103 210001535114 210002448146 210003060142 210004034153 210004170105 210004315135 210004404141 210004408139 210004674105 210005174143 210005222149 210005505147 210006865127 210007122112 210007733127 210007993103 210010801153 210011153115 ...

Number of Observations Read	24954
Number of Observations Used	22513

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	12
Columns in Z per Subject	1
Subjects (Blocks in V)	12011

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	190977.59475	.	1554.416
1	5	190867.65315	109.94159080	35.92563
2	2	190867.58898	0.06417306	2.808764

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	190867.58858	0.00039675	0.01192

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	24.1298
Residual		259.10

#### Fit Statistics

-2 Res Log Likelihood	190868
AIC (Smaller is Better)	190872
AICC (Smaller is Better)	190872
BIC (Smaller is Better)	190886
CAIC (Smaller is Better)	190888
HQIC (Smaller is Better)	190877

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					1.1567	2.4412	22505	0.47
predictorvalue				1	0	.	.	.
predictorvalue				2	-0.4594	0.2527	22505	-1.82
tspl1	1				0	.	.	.
tspl1	2				-0.1598	0.04656	22505	-3.43
tspl1	3				0.006360	0.005801	22505	1.10
tspl2		1			0	.	.	.

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.6356
predictorvalue				1	.
predictorvalue				2	0.0691
tspl1	1				.
tspl1	2				0.0006
tspl1	3				0.2729
tspl2		1			.

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
tspl2		2			0.3229	0.05163	22505	6.25
tspl2		3			-0.03951	0.005309	22505	-7.44
hbspl			1		0	.	.	.
hbspl			2		0.02182	0.01697	22505	1.29
hbspl			3		0.001229	0.000680	22505	1.81

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
tspl2		2			<.0001
tspl2		3			<.0001
hbspl			1		.
hbspl			2		0.1986
hbspl			3		0.0709

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	22505	3.31	3.31	0.0691	0.0691

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	2	1 2
idnr	12805	210000196120 210000954103 210001535114 210002448146 210003060142 210003603115 210004034153 210004170105 210004315135 210004404141 210004408139 210004674105 210005174143 210005222149 210005505147 210006242138 210006865127 210007122112 210007733127 210007993103 ...

Number of Observations Read	25026
Number of Observations Used	24943

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	10
Columns in Z per Subject	1
Subjects (Blocks in V)	12805

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	211426.43111	.	1752.935
1	5	211304.0685	122.36261213	41.7229
2	2	211303.99242	0.07607704	3.441393
3	2	211303.9919	0.00052416	0.01632

## Now assessing with 6 hours pre-post-transfusion windows

The HPMIXED Procedure

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

### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	21.2371
Residual		259.91

### Fit Statistics

-2 Res Log Likelihood	211304
AIC (Smaller is Better)	211308
AICC (Smaller is Better)	211308
BIC (Smaller is Better)	211323
CAIC (Smaller is Better)	211325
HQIC (Smaller is Better)	211313

### Solution for Fixed Effects

Effect	tspl1	tspl2	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				1.0029	0.5832	24936	1.72	0.0855
predspline			1	0	.	.	.	.
predspline			2	0.07070	0.02654	24936	2.66	0.0077
predspline			3	0.006703	0.001434	24936	4.67	<.0001
tspl1	1			0	.	.	.	.
tspl1	2			-0.1432	0.04400	24936	-3.25	0.0011
tspl1	3			0.004427	0.005492	24936	0.81	0.4202
tspl2		1		0	.	.	.	.
tspl2		2		0.3396	0.04887	24936	6.95	<.0001
tspl2		3		-0.04334	0.005024	24936	-8.63	<.0001

### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	24936	393.48	196.74	<.0001	<.0001

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	2	1 2
idnr	12008	210000196120 210000954103 210001535114 210002448146 210003060142 210004034153 210004170105 210004315135 210004404141 210004408139 210004674105 210005174143 210005222149 210005505147 210006865127 210007122112 210007733127 210007993103 210010801153 210011153115 ...

Number of Observations Read	25026
Number of Observations Used	22504

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	13
Columns in Z per Subject	1
Subjects (Blocks in V)	12008

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	190565.31779	.	1568.037
1	5	190453.12639	112.19139906	38.64835
2	2	190453.05154	0.07484842	3.193765
3	2	190453.05102	0.00051767	0.015312

## Now assessing with 6 hours pre-post-transfusion windows

The HPMIXED Procedure

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

### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	23.1717
Residual		255.53

### Fit Statistics

-2 Res Log Likelihood	190453
AIC (Smaller is Better)	190457
AICC (Smaller is Better)	190457
BIC (Smaller is Better)	190472
CAIC (Smaller is Better)	190474
HQIC (Smaller is Better)	190462

### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept					-4.5642	2.2803	22495	-2.00	0.0453
predspline				1	0	.	.	.	.
predspline				2	0.08896	0.02726	22495	3.26	0.0011
predspline				3	0.005838	0.001492	22495	3.91	<.0001
tspl1	1				0	.	.	.	.
tspl1	2				-0.1532	0.04622	22495	-3.31	0.0009
tspl1	3				0.005919	0.005756	22495	1.03	0.3037
tspl2		1			0	.	.	.	.
tspl2		2			0.3458	0.05125	22495	6.75	<.0001
tspl2		3			-0.04381	0.005273	22495	-8.31	<.0001
hbspl			1		0	.	.	.	.
hbspl			2		0.03611	0.01587	22495	2.28	0.0229
hbspl			3		0.001023	0.000673	22495	1.52	0.1283

### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	22495	366.09	183.04	<.0001	<.0001



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	6	0 1 5 10 20 99
recipientsex	2	1 2
idnr	12808	210000196120 210000954103 210001535114 210002448146 210003060142 210003603115 210004034153 210004170105 210004315135 210004404141 210004408139 210004674105 210005174143 210005222149 210005505147 210006242138 210006865127 210007122112 210007733127 210007993103 ...

Number of Observations Read	24958
Number of Observations Used	24952

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	13
Columns in Z per Subject	1
Subjects (Blocks in V)	12808

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	211860.78072	.	1736.058
1	5	211741.51652	119.26420560	38.0761
2	2	211741.45394	0.06257981	2.933403

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	211741.45356	0.00037553	0.011957

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	22.1598
Residual		263.43

#### Fit Statistics

-2 Res Log Likelihood	211741
AIC (Smaller is Better)	211745
AICC (Smaller is Better)	211745
BIC (Smaller is Better)	211760
CAIC (Smaller is Better)	211762
HQIC (Smaller is Better)	211750

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				4.6709	0.9795	24942	4.77	<.0001
predictorvalue			0	-0.2131	0.9290	24942	-0.23	0.8186
predictorvalue			1	-0.6634	0.9138	24942	-0.73	0.4679
predictorvalue			5	-0.5252	0.9330	24942	-0.56	0.5735
predictorvalue			10	-0.7831	0.9510	24942	-0.82	0.4103
predictorvalue			20	0	.	.	.	.
predictorvalue			99	-0.00261	0.9312	24942	-0.00	0.9978
tsp11	1			0	.	.	.	.
tsp11	2			-0.1491	0.04433	24942	-3.36	0.0008
tsp11	3			0.004884	0.005534	24942	0.88	0.3774
tsp12		1		0	.	.	.	.
tsp12		2		0.3188	0.04922	24942	6.48	<.0001
tsp12		3		-0.03938	0.005058	24942	-7.78	<.0001

Now assessing with 6 hours pre-post-transfusion windows

The HPMIXED Procedure						
Type III Tests of Fixed Effects						
Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	5	24942	6.79	1.36	0.2370	0.2370

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	6	0 1 5 10 20 99
recipientsex	2	1 2
idnr	12011	210000196120 210000954103 210001535114 210002448146 210003060142 210004034153 210004170105 210004315135 210004404141 210004408139 210004674105 210005174143 210005222149 210005505147 210006865127 210007122112 210007733127 210007993103 210010801153 210011153115 ...

Number of Observations Read	24958
Number of Observations Used	22513

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	16
Columns in Z per Subject	1
Subjects (Blocks in V)	12011

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	190969.73872	.	1554.103
1	5	190859.82546	109.91325736	35.82524
2	2	190859.76164	0.06381566	2.797137

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	190859.76125	0.00039346	0.011831

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	24.1487
Residual		259.05

#### Fit Statistics

-2 Res Log Likelihood	190860
AIC (Smaller is Better)	190864
AICC (Smaller is Better)	190864
BIC (Smaller is Better)	190879
CAIC (Smaller is Better)	190881
HQIC (Smaller is Better)	190869

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					-0.03370	2.4093	22501	-0.01
predictorvalue				0	-0.5018	0.9297	22501	-0.54
predictorvalue				1	-0.8334	0.9139	22501	-0.91
predictorvalue				5	-0.6501	0.9326	22501	-0.70
predictorvalue				10	-0.8675	0.9504	22501	-0.91
predictorvalue				20	0	.	.	.
predictorvalue				99	0.3223	0.9613	22501	0.34

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.9888
predictorvalue				0	0.5893
predictorvalue				1	0.3618
predictorvalue				5	0.4857
predictorvalue				10	0.3613
predictorvalue				20	.
predictorvalue				99	0.7374

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
tspl1	1				0	.	.	.
tspl1	2				-0.1583	0.04657	22501	-3.40
tspl1	3				0.006246	0.005801	22501	1.08
tspl2		1			0	.	.	.
tspl2		2			0.3229	0.05163	22501	6.25
tspl2		3			-0.03950	0.005309	22501	-7.44
hbspl			1		0	.	.	.
hbspl			2		0.03274	0.01600	22501	2.05
hbspl			3		0.001082	0.000678	22501	1.59

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
tspl1	1				.
tspl1	2				0.0007
tspl1	3				0.2816
tspl2		1			.
tspl2		2			<.0001
tspl2		3			<.0001
hbspl			1		.
hbspl			2		0.0407
hbspl			3		0.1108

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	5	22501	10.06	2.01	0.0736	0.0737

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	4	0 180 365 999
recipientsex	2	1 2
idnr	12808	210000196120 210000954103 210001535114 210002448146 210003060142 210003603115 210004034153 210004170105 210004315135 210004404141 210004408139 210004674105 210005174143 210005222149 210005505147 210006242138 210006865127 210007122112 210007733127 210007993103 ...

Number of Observations Read	24956
Number of Observations Used	24952

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	11
Columns in Z per Subject	1
Subjects (Blocks in V)	12808

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	211862.07394	.	1736.146
1	5	211742.82312	119.25081881	38.08885
2	2	211742.76051	0.06260840	2.934275

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	211742.76014	0.00037567	0.011961

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	22.1495
Residual		263.42

#### Fit Statistics

-2 Res Log Likelihood	211743
AIC (Smaller is Better)	211747
AICC (Smaller is Better)	211747
BIC (Smaller is Better)	211762
CAIC (Smaller is Better)	211764
HQIC (Smaller is Better)	211752

#### Solution for Fixed Effects

Effect	tspl1	tspl2	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				4.0946	0.4267	24944	9.60	<.0001
predictorvalue			0	0	.	.	.	.
predictorvalue			180	-0.2996	0.3567	24944	-0.84	0.4010
predictorvalue			365	0.000532	0.4531	24944	0.00	0.9991
predictorvalue			999	0.4701	0.2384	24944	1.97	0.0486
tspl1	1			0	.	.	.	.
tspl1	2			-0.1495	0.04433	24944	-3.37	0.0007
tspl1	3			0.004936	0.005534	24944	0.89	0.3724
tspl2		1		0	.	.	.	.
tspl2		2		0.3186	0.04922	24944	6.47	<.0001
tspl2		3		-0.03934	0.005058	24944	-7.78	<.0001

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	3	24944	6.24	2.08	0.1003	0.1004



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	4	0 180 365 999
recipientsex	2	1 2
idnr	12011	210000196120 210000954103 210001535114 210002448146 210003060142 210004034153 210004170105 210004315135 210004404141 210004408139 210004674105 210005174143 210005222149 210005505147 210006865127 210007122112 210007733127 210007993103 210010801153 210011153115 ...

Number of Observations Read	24956
Number of Observations Used	22513

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	14
Columns in Z per Subject	1
Subjects (Blocks in V)	12011

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	190974.53737	.	1554.828
1	5	190864.51339	110.02398018	36.07871
2	2	190864.44864	0.06475509	2.830612

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	190864.44823	0.00040318	0.012103

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	24.1077
Residual		259.10

#### Fit Statistics

-2 Res Log Likelihood	190864
AIC (Smaller is Better)	190868
AICC (Smaller is Better)	190868
BIC (Smaller is Better)	190883
CAIC (Smaller is Better)	190885
HQIC (Smaller is Better)	190873

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					-0.6321	2.2558	22503	-0.28
predictorvalue				0	0	.	.	.
predictorvalue				180	-0.4207	0.3565	22503	-1.18
predictorvalue				365	-0.08509	0.4535	22503	-0.19
predictorvalue				999	0.4662	0.2576	22503	1.81
tspl1	1				0	.	.	.
tspl1	2				-0.1600	0.04657	22503	-3.44

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.7793
predictorvalue				0	.
predictorvalue				180	0.2380
predictorvalue				365	0.8512
predictorvalue				999	0.0703
tspl1	1				.
tspl1	2				0.0006

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
tspl1	3				0.006456	0.005801	22503	1.11
tspl2		1			0	.	.	.
tspl2		2			0.3227	0.05163	22503	6.25
tspl2		3			-0.03942	0.005310	22503	-7.43
hbspl			1		0	.	.	.
hbspl			2		0.03215	0.01600	22503	2.01
hbspl			3		0.001095	0.000678	22503	1.61

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
tspl1	3				0.2657
tspl2		1			.
tspl2		2			<.0001
tspl2		3			<.0001
hbspl			1		.
hbspl			2		0.0446
hbspl			3		0.1066

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	3	22503	6.52	2.17	0.0890	0.0891

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	2	1 2
idnr	2357	210001535114 210002448146 210003060142 210011264134 210011623133 210012323142 210014500120 210015670103 210020087126 210020940136 210027943117 210028795112 210030587104 210031749139 210037043146 210041698113 210042991121 210044715150 210044796127 210045616115 ...

Number of Observations Read	3190
Number of Observations Used	3188

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z per Subject	1
Subjects (Blocks in V)	2357

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	25731.311593	.	279.0313
1	5	25698.419294	32.89229876	31.4006
2	2	25697.832226	0.58706886	10.4697

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	25697.748864	0.08336105	1.409892
4	2	25697.747208	0.00165600	0.089697
5	2	25697.747202	0.00000681	0.000894

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	9.0043
Residual		175.63

#### Fit Statistics

-2 Res Log Likelihood	25698
AIC (Smaller is Better)	25702
AICC (Smaller is Better)	25702
BIC (Smaller is Better)	25713
CAIC (Smaller is Better)	25715
HQIC (Smaller is Better)	25706

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				-0.00512	0.9496	3182	-0.01	0.9957
predictorvalue			1	0	.	.	.	.
predictorvalue			2	0.6717	0.4934	3182	1.36	0.1735
tsp11	1			0	.	.	.	.
tsp11	2			-0.02543	0.09952	3182	-0.26	0.7984
tsp11	3			0.002801	0.01234	3182	0.23	0.8205
tsp12		1		0	.	.	.	.
tsp12		2		0.2777	0.1113	3182	2.49	0.0127
tsp12		3		-0.02271	0.01154	3182	-1.97	0.0492

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	3182	1.85	1.85	0.1734	0.1735

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	2	1 2
idnr	2351	210001535114 210002448146 210003060142 210011264134 210011623133 210012323142 210014500120 210015670103 210020087126 210020940136 210027943117 210028795112 210030587104 210031749139 210037043146 210041698113 210042991121 210044715150 210044796127 210045616115 ...

Number of Observations Read	3190
Number of Observations Used	3175

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	12
Columns in Z per Subject	1
Subjects (Blocks in V)	2351

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	25641.772385	.	279.7609
1	5	25608.6272	33.14518549	31.76705
2	2	25608.022639	0.60456020	10.7346

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	25607.933793	0.08884605	1.501344
4	2	25607.931878	0.00191483	0.101802
5	2	25607.93187	0.00000897	0.001134

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	8.7075
Residual		176.06

#### Fit Statistics

-2 Res Log Likelihood	25608
AIC (Smaller is Better)	25612
AICC (Smaller is Better)	25612
BIC (Smaller is Better)	25623
CAIC (Smaller is Better)	25625
HQIC (Smaller is Better)	25616

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					1.3420	5.5412	3167	0.24
predictorvalue				1	0	.	.	.
predictorvalue				2	0.7307	0.4952	3167	1.48
tspl1	1				0	.	.	.
tspl1	2				-0.03435	0.09980	3167	-0.34
tspl1	3				0.003868	0.01237	3167	0.31

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.8086
predictorvalue				1	.
predictorvalue				2	0.1401
tspl1	1				.
tspl1	2				0.7307
tspl1	3				0.7545

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
tspl2		1			0	.	.	.
tspl2		2			0.2908	0.1116	3167	2.61
tspl2		3			-0.02393	0.01156	3167	-2.07
hbspl			1		0	.	.	.
hbspl			2		-0.01029	0.04047	3167	-0.25
hbspl			3		-0.00076	0.004255	3167	-0.18

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
tspl2		1			.
tspl2		2			0.0092
tspl2		3			0.0386
hbspl			1		.
hbspl			2		0.7994
hbspl			3		0.8575

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	3167	2.18	2.18	0.1400	0.1401



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	0 1
recipientsex	2	1 2
idnr	5091	210001535114 210002448146 210003060142 210003603115 210005505147 210006242138 210011264134 210011324136 210011623133 210012323142 210013505110 210014500120 210015670103 210020087126 210020426134 210020839106 210020940136 210022666149 210023240110 210023828152 ...

Number of Observations Read	9029
Number of Observations Used	9027

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z per Subject	1
Subjects (Blocks in V)	5091

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	72756.331501	.	793.8641
1	5	72687.517431	68.81406996	68.6821
2	2	72686.828755	0.68867548	19.25872

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	72686.764837	0.06391797	1.617696
4	2	72686.764366	0.00047088	0.048087
5	2	72686.764366	0.00000042	0.00013

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	6.0843
Residual		177.56

#### Fit Statistics

-2 Res Log Likelihood	72687
AIC (Smaller is Better)	72691
AICC (Smaller is Better)	72691
BIC (Smaller is Better)	72704
CAIC (Smaller is Better)	72706
HQIC (Smaller is Better)	72695

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				1.8978	0.5276	9021	3.60	0.0003
predictorvalue			0	0	.	.	.	.
predictorvalue			1	-0.1012	0.6313	9021	-0.16	0.8726
tsp11	1			0	.	.	.	.
tsp11	2			-0.07300	0.05828	9021	-1.25	0.2104
tsp11	3			0.002725	0.007189	9021	0.38	0.7047
tsp12		1		0	.	.	.	.
tsp12		2		0.1980	0.06518	9021	3.04	0.0024
tsp12		3		-0.02013	0.006723	9021	-2.99	0.0028

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	9021	0.03	0.03	0.8726	0.8726

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	0 1
recipientsex	2	1 2
idnr	4776	210001535114 210002448146 210003060142 210005505147 210011264134 210011324136 210011623133 210012323142 210013505110 210014500120 210015670103 210020087126 210020426134 210020839106 210020940136 210022666149 210023240110 210023828152 210024440152 210024735137 ...

Number of Observations Read	9029
Number of Observations Used	8142

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	12
Columns in Z per Subject	1
Subjects (Blocks in V)	4776

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	65735.346532	.	704.135
1	5	65672.297945	63.04858624	53.98771
2	2	65671.817231	0.48071428	13.35488

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	65671.78385	0.03338105	0.8162
4	2	65671.783722	0.00012801	0.014761

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	7.8413
Residual		178.00

#### Fit Statistics

-2 Res Log Likelihood	65672
AIC (Smaller is Better)	65676
AICC (Smaller is Better)	65676
BIC (Smaller is Better)	65689
CAIC (Smaller is Better)	65691
HQIC (Smaller is Better)	65680

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					3.2222	3.2372	8134	1.00
predictorvalue				0	0	.	.	.
predictorvalue				1	-0.1446	0.6389	8134	-0.23
tspl1	1				0	.	.	.
tspl1	2				-0.04983	0.06185	8134	-0.81
tspl1	3				0.001872	0.007589	8134	0.25

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.3196
predictorvalue				0	.
predictorvalue				1	0.8210
tspl1	1				.
tspl1	2				0.4205
tspl1	3				0.8051

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
tspl2		1			0	.	.	.
tspl2		2			0.2029	0.06862	8134	2.96
tspl2		3			-0.01906	0.007107	8134	-2.68
hbspl			1		0	.	.	.
hbspl			2		-0.01220	0.02310	8134	-0.53
hbspl			3		0.001003	0.000940	8134	1.07

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
tspl2		1			.
tspl2		2			0.0031
tspl2		3			0.0073
hbspl			1		.
hbspl			2		0.5973
hbspl			3		0.2862

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	8134	0.05	0.05	0.8210	0.8210

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	2	1 2
idnr	4756	210001535114 210002448146 210003060142 210003603115 210005505147 210011264134 210011324136 210011623133 210012323142 210013505110 210014500120 210015670103 210020087126 210020426134 210020839106 210020940136 210022666149 210023240110 210023828152 210024309139 ...

Number of Observations Read	8317
Number of Observations Used	8255

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	10
Columns in Z per Subject	1
Subjects (Blocks in V)	4756

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	66586.909976	.	723.7222
1	5	66523.494776	63.41519925	65.58481
2	2	66522.79359	0.70118657	18.80897
3	2	66522.724937	0.06865239	1.675598

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	2	66522.724366	0.00057124	0.054598
5	2	66522.724366	0.00000061	0.000172

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	6.4154
Residual		177.93

#### Fit Statistics

-2 Res Log Likelihood	66523
AIC (Smaller is Better)	66527
AICC (Smaller is Better)	66527
BIC (Smaller is Better)	66540
CAIC (Smaller is Better)	66542
HQIC (Smaller is Better)	66531

#### Solution for Fixed Effects

Effect	tspl1	tspl2	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				1.8450	0.9107	8248	2.03	0.0428
predspline			1	0	.	.	.	.
predspline			2	0.006763	0.01970	8248	0.34	0.7313
predspline			3	-0.00037	0.000856	8248	-0.43	0.6662
tspl1	1			0	.	.	.	.
tspl1	2			-0.07138	0.06110	8248	-1.17	0.2427
tspl1	3			0.001696	0.007532	8248	0.23	0.8218
tspl2		1		0	.	.	.	.
tspl2		2		0.1826	0.06837	8248	2.67	0.0076
tspl2		3		-0.01899	0.007043	8248	-2.70	0.0070

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	8248	0.19	0.10	0.9084	0.9084

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	2	1 2
idnr	4476	210001535114 210002448146 210003060142 210005505147 210011264134 210011324136 210011623133 210012323142 210013505110 210014500120 210015670103 210020087126 210020426134 210020839106 210020940136 210022666149 210023240110 210023828152 210024440152 210024735137 ...

Number of Observations Read	8317
Number of Observations Used	7473

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	13
Columns in Z per Subject	1
Subjects (Blocks in V)	4476

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	60315.671442	.	637.0156
1	5	60259.21737	56.45407156	47.85809
2	2	60258.807769	0.40960083	11.3339
3	2	60258.781996	0.02577304	0.619796



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	2	60258.781918	0.00007880	0.009442

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	8.7239
Residual		176.19

#### Fit Statistics

-2 Res Log Likelihood	60259
AIC (Smaller is Better)	60263
AICC (Smaller is Better)	60263
BIC (Smaller is Better)	60276
CAIC (Smaller is Better)	60278
HQIC (Smaller is Better)	60267

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept					3.7802	3.4520	7464	1.10	0.2735
predspline				1	0	.	.	.	.
predspline				2	0.007205	0.02032	7464	0.35	0.7230
predspline				3	-0.00027	0.000902	7464	-0.29	0.7686
tspl1	1				0	.	.	.	.
tspl1	2				-0.04715	0.06435	7464	-0.73	0.4638
tspl1	3				0.000838	0.007892	7464	0.11	0.9155
tspl2		1			0	.	.	.	.
tspl2		2			0.1895	0.07134	7464	2.66	0.0079
tspl2		3			-0.01808	0.007387	7464	-2.45	0.0144
hbspl			1		0	.	.	.	.
hbspl			2		-0.01729	0.02410	7464	-0.72	0.4731
hbspl			3		0.001212	0.000992	7464	1.22	0.2216

**Now assessing with 6 hours pre-post-transfusion windows**

The HPMIXED Procedure

Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	7464	0.13	0.06	0.9385	0.9385

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	2	1 2
idnr	4775	210001535114 210002448146 210003060142 210005505147 210011264134 210011324136 210011623133 210012323142 210013505110 210014500120 210015670103 210020087126 210020426134 210020839106 210020940136 210022666149 210023240110 210023828152 210024440152 210024735137 ...

Number of Observations Read	8227
Number of Observations Used	8140

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	10
Columns in Z per Subject	1
Subjects (Blocks in V)	4775

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	65722.0746	.	704.054
1	5	65659.015297	63.05930292	53.98692
2	2	65658.534387	0.48090958	13.35692
3	2	65658.50098	0.03340737	0.816694

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	2	65658.500852	0.00012822	0.014781

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	7.8416
Residual		178.02

#### Fit Statistics

-2 Res Log Likelihood	65659
AIC (Smaller is Better)	65663
AICC (Smaller is Better)	65663
BIC (Smaller is Better)	65675
CAIC (Smaller is Better)	65677
HQIC (Smaller is Better)	65667

#### Solution for Fixed Effects

Effect	tspl1	tspl2	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				3.4975	3.4408	8133	1.02	0.3094
predspline			1	0	.	.	.	.
predspline			2	-0.01433	0.02468	8133	-0.58	0.5615
predspline			3	0.001011	0.000951	8133	1.06	0.2878
tspl1	1			0	.	.	.	.
tspl1	2			-0.04960	0.06187	8133	-0.80	0.4228
tspl1	3			0.001837	0.007591	8133	0.24	0.8087
tspl2		1		0	.	.	.	.
tspl2		2		0.2026	0.06862	8133	2.95	0.0032
tspl2		3		-0.01904	0.007108	8133	-2.68	0.0074

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	8133	1.61	0.80	0.4474	0.4474

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	2	1 2
idnr	5091	210001535114 210002448146 210003060142 210003603115 210005505147 210006242138 210011264134 210011324136 210011623133 210012323142 210013505110 210014500120 210015670103 210020087126 210020426134 210020839106 210020940136 210022666149 210023240110 210023828152 ...

Number of Observations Read	9029
Number of Observations Used	9027

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z per Subject	1
Subjects (Blocks in V)	5091

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	72757.717953	.	794.1085
1	5	72688.831679	68.88627430	68.85526
2	2	72688.138846	0.69283346	19.34863

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	72688.074215	0.06463046	1.634454
4	2	72688.073734	0.00048173	0.04902
5	2	72688.073733	0.00000043	0.000134

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	6.0689
Residual		177.57

#### Fit Statistics

-2 Res Log Likelihood	72688
AIC (Smaller is Better)	72692
AICC (Smaller is Better)	72692
BIC (Smaller is Better)	72705
CAIC (Smaller is Better)	72707
HQIC (Smaller is Better)	72697

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				1.9664	0.5436	9021	3.62	0.0003
predictorvalue			1	0	.	.	.	.
predictorvalue			2	-0.1561	0.2864	9021	-0.55	0.5857
tsp11	1			0	.	.	.	.
tsp11	2			-0.07305	0.05827	9021	-1.25	0.2100
tsp11	3			0.002728	0.007189	9021	0.38	0.7044
tsp12		1		0	.	.	.	.
tsp12		2		0.1979	0.06518	9021	3.04	0.0024
tsp12		3		-0.02013	0.006723	9021	-2.99	0.0028

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	9021	0.30	0.30	0.5857	0.5857

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	2	1 2
idnr	4776	210001535114 210002448146 210003060142 210005505147 210011264134 210011324136 210011623133 210012323142 210013505110 210014500120 210015670103 210020087126 210020426134 210020839106 210020940136 210022666149 210023240110 210023828152 210024440152 210024735137 ...

Number of Observations Read	9029
Number of Observations Used	8142

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	12
Columns in Z per Subject	1
Subjects (Blocks in V)	4776

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	65736.597804	.	704.0499
1	5	65673.558669	63.03913552	53.98314
2	2	65673.078004	0.48066448	13.35185

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	65673.044638	0.03336682	0.815742
4	2	65673.04451	0.00012786	0.014745

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	7.8448
Residual		178.00

#### Fit Statistics

-2 Res Log Likelihood	65673
AIC (Smaller is Better)	65677
AICC (Smaller is Better)	65677
BIC (Smaller is Better)	65690
CAIC (Smaller is Better)	65692
HQIC (Smaller is Better)	65682

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					2.9833	3.4771	8134	0.86
predictorvalue				1	0	.	.	.
predictorvalue				2	0.06609	0.3425	8134	0.19
tspl1	1				0	.	.	.
tspl1	2				-0.04994	0.06185	8134	-0.81
tspl1	3				0.001872	0.007589	8134	0.25

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.3909
predictorvalue				1	.
predictorvalue				2	0.8470
tspl1	1				.
tspl1	2				0.4194
tspl1	3				0.8052



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tsp11	tsp12	hbsp1	predictorvalue	Estimate	Standard Error	DF	t Value
tsp12		1			0	.	.	.
tsp12		2			0.2028	0.06862	8134	2.96
tsp12		3			-0.01904	0.007107	8134	-2.68
hbsp1			1		0	.	.	.
hbsp1			2		-0.01080	0.02437	8134	-0.44
hbsp1			3		0.000995	0.000942	8134	1.06

#### Solution for Fixed Effects

Effect	tsp11	tsp12	hbsp1	predictorvalue	Pr >  t
tsp12		1			.
tsp12		2			0.0031
tsp12		3			0.0074
hbsp1			1		.
hbsp1			2		0.6576
hbsp1			3		0.2911

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	8134	0.04	0.04	0.8470	0.8470

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	2	1 2
idnr	5089	210001535114 210002448146 210003060142 210003603115 210005505147 210006242138 210011264134 210011324136 210011623133 210012323142 210013505110 210014500120 210015670103 210020087126 210020426134 210020839106 210020940136 210022666149 210023240110 210023828152 ...

Number of Observations Read	9105
Number of Observations Used	9022

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	10
Columns in Z per Subject	1
Subjects (Blocks in V)	5089

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	72688.330134	.	790.2806
1	5	72619.99538	68.33475385	66.74166
2	2	72619.347421	0.64795843	18.30624
3	2	72619.290329	0.05709267	1.451424

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	2	72619.289955	0.00037334	0.039399
5	2	72619.289955	0.00000028	0.000091

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	6.2539
Residual		176.50

#### Fit Statistics

-2 Res Log Likelihood	72619
AIC (Smaller is Better)	72623
AICC (Smaller is Better)	72623
BIC (Smaller is Better)	72636
CAIC (Smaller is Better)	72638
HQIC (Smaller is Better)	72628

#### Solution for Fixed Effects

Effect	tspl1	tspl2	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				0.7853	0.7497	9015	1.05	0.2949
predspline			1	0	.	.	.	.
predspline			2	0.005629	0.03409	9015	0.17	0.8689
predspline			3	0.004577	0.001873	9015	2.44	0.0145
tspl1	1			0	.	.	.	.
tspl1	2			-0.07507	0.05814	9015	-1.29	0.1967
tspl1	3			0.003320	0.007174	9015	0.46	0.6435
tspl2		1		0	.	.	.	.
tspl2		2		0.2119	0.06506	9015	3.26	0.0011
tspl2		3		-0.02231	0.006714	9015	-3.32	0.0009

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	9015	48.21	24.11	<.0001	<.0001

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	2	1 2
idnr	4774	210001535114 210002448146 210003060142 210005505147 210011264134 210011324136 210011623133 210012323142 210013505110 210014500120 210015670103 210020087126 210020426134 210020839106 210020940136 210022666149 210023240110 210023828152 210024440152 210024735137 ...

Number of Observations Read	9105
Number of Observations Used	8137

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	13
Columns in Z per Subject	1
Subjects (Blocks in V)	4774

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	65664.821161	.	700.0866
1	5	65602.402182	62.41897854	52.10433
2	2	65601.956628	0.44555393	12.53555
3	2	65601.927578	0.02905047	0.714135

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	2	65601.927481	0.00009653	0.011593

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	8.0542
Residual		176.74

#### Fit Statistics

-2 Res Log Likelihood	65602
AIC (Smaller is Better)	65606
AICC (Smaller is Better)	65606
BIC (Smaller is Better)	65619
CAIC (Smaller is Better)	65621
HQIC (Smaller is Better)	65610

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept					1.9626	3.2797	8128	0.60	0.5496
predspline				1	0	.	.	.	.
predspline				2	0.01184	0.03549	8128	0.33	0.7387
predspline				3	0.004658	0.001974	8128	2.36	0.0183
tspl1	1				0	.	.	.	.
tspl1	2				-0.05221	0.06168	8128	-0.85	0.3973
tspl1	3				0.002663	0.007570	8128	0.35	0.7250
tspl2		1			0	.	.	.	.
tspl2		2			0.2214	0.06848	8128	3.23	0.0012
tspl2		3			-0.02178	0.007097	8128	-3.07	0.0022
hbspl			1		0	.	.	.	.
hbspl			2		-0.01258	0.02303	8128	-0.55	0.5849
hbspl			3		0.001089	0.000937	8128	1.16	0.2454

**Now assessing with 6 hours pre-post-transfusion windows**

The HPMIXED Procedure

Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	8128	50.43	25.22	<.0001	<.0001

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	6	0 1 5 10 20 99
recipientsex	2	1 2
idnr	5091	210001535114 210002448146 210003060142 210003603115 210005505147 210006242138 210011264134 210011324136 210011623133 210012323142 210013505110 210014500120 210015670103 210020087126 210020426134 210020839106 210020940136 210022666149 210023240110 210023828152 ...

Number of Observations Read	9033
Number of Observations Used	9027

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	13
Columns in Z per Subject	1
Subjects (Blocks in V)	5091

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	72751.474759	.	792.6728
1	5	72682.877441	68.59731753	68.10227
2	2	72682.201598	0.67584271	18.96976

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	72682.139849	0.06174889	1.56533
4	2	72682.139411	0.00043849	0.045246
5	2	72682.139411	0.00000037	0.000116

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	6.1442
Residual		177.54

#### Fit Statistics

-2 Res Log Likelihood	72682
AIC (Smaller is Better)	72686
AICC (Smaller is Better)	72686
BIC (Smaller is Better)	72699
CAIC (Smaller is Better)	72701
HQIC (Smaller is Better)	72691

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				1.7543	0.6025	9017	2.91	0.0036
predictorvalue			0	0	.	.	.	.
predictorvalue			1	-0.1338	0.4019	9017	-0.33	0.7393
predictorvalue			5	0.3212	0.4843	9017	0.66	0.5072
predictorvalue			10	0.4596	0.5780	9017	0.80	0.4266
predictorvalue			20	0.2221	1.4199	9017	0.16	0.8757
predictorvalue			99	0.3835	0.4536	9017	0.85	0.3979
tsp11	1			0	.	.	.	.
tsp11	2			-0.07266	0.05829	9017	-1.25	0.2127
tsp11	3			0.002793	0.007191	9017	0.39	0.6978
tsp12		1		0	.	.	.	.
tsp12		2		0.1995	0.06521	9017	3.06	0.0022
tsp12		3		-0.02028	0.006726	9017	-3.02	0.0026



**Now assessing with 6 hours pre-post-transfusion windows**

The HPMIXED Procedure

Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	5	9017	2.72	0.54	0.7430	0.7430

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	6	0 1 5 10 20 99
recipientsex	2	1 2
idnr	4776	210001535114 210002448146 210003060142 210005505147 210011264134 210011324136 210011623133 210012323142 210013505110 210014500120 210015670103 210020087126 210020426134 210020839106 210020940136 210022666149 210023240110 210023828152 210024440152 210024735137 ...

Number of Observations Read	9033
Number of Observations Used	8142

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	16
Columns in Z per Subject	1
Subjects (Blocks in V)	4776

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	65727.11438	.	703.118
1	5	65664.221197	62.89318251	53.62285
2	2	65663.747305	0.47389231	13.19896

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	65663.714768	0.03253740	0.796231
4	2	65663.714646	0.00012150	0.014116

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	7.8945
Residual		177.92

#### Fit Statistics

-2 Res Log Likelihood	65664
AIC (Smaller is Better)	65668
AICC (Smaller is Better)	65668
BIC (Smaller is Better)	65681
CAIC (Smaller is Better)	65683
HQIC (Smaller is Better)	65672

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					2.8105	3.2609	8130	0.86
predictorvalue				0	0	.	.	.
predictorvalue				1	-0.09956	0.4060	8130	-0.25
predictorvalue				5	0.3416	0.4902	8130	0.70
predictorvalue				10	0.5241	0.5855	8130	0.90
predictorvalue				20	0.3568	1.4296	8130	0.25

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.3888
predictorvalue				0	.
predictorvalue				1	0.8063
predictorvalue				5	0.4859
predictorvalue				10	0.3708
predictorvalue				20	0.8029

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
predictorvalue				99	0.9821	0.5493	8130	1.79
tspl1	1				0	.	.	.
tspl1	2				-0.04840	0.06186	8130	-0.78
tspl1	3				0.001763	0.007591	8130	0.23
tspl2		1			0	.	.	.
tspl2		2			0.2042	0.06863	8130	2.98
tspl2		3			-0.01924	0.007109	8130	-2.71
hbspl			1		0	.	.	.
hbspl			2		-0.01086	0.02311	8130	-0.47
hbspl			3		0.001010	0.000940	8130	1.07

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
predictorvalue				99	0.0738
tspl1	1				.
tspl1	2				0.4339
tspl1	3				0.8163
tspl2		1			.
tspl2		2			0.0029
tspl2		3			0.0068
hbspl			1		.
hbspl			2		0.6384
hbspl			3		0.2827

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	5	8130	5.59	1.12	0.3478	0.3479

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	4	0 180 365 999
recipientsex	2	1 2
idnr	5091	210001535114 210002448146 210003060142 210003603115 210005505147 210006242138 210011264134 210011324136 210011623133 210012323142 210013505110 210014500120 210015670103 210020087126 210020426134 210020839106 210020940136 210022666149 210023240110 210023828152 ...

Number of Observations Read	9031
Number of Observations Used	9027

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	11
Columns in Z per Subject	1
Subjects (Blocks in V)	5091

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	72753.807117	.	793.9189
1	5	72684.959569	68.84754868	68.63288
2	2	72684.271768	0.68780034	19.2317

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	72684.208034	0.06373417	1.612862
4	2	72684.207566	0.00046799	0.047823
5	2	72684.207566	0.00000041	0.000128

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	6.0781
Residual		177.55

#### Fit Statistics

-2 Res Log Likelihood	72684
AIC (Smaller is Better)	72688
AICC (Smaller is Better)	72688
BIC (Smaller is Better)	72701
CAIC (Smaller is Better)	72703
HQIC (Smaller is Better)	72693

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				2.0236	0.5505	9019	3.68	0.0002
predictorvalue			0	0	.	.	.	.
predictorvalue			180	-0.4354	0.4844	9019	-0.90	0.3687
predictorvalue			365	-0.9320	0.6168	9019	-1.51	0.1308
predictorvalue			999	-0.05668	0.3147	9019	-0.18	0.8571
tsp11	1			0	.	.	.	.
tsp11	2			-0.07525	0.05829	9019	-1.29	0.1968
tsp11	3			0.002968	0.007190	9019	0.41	0.6797
tsp12		1		0	.	.	.	.
tsp12		2		0.1994	0.06520	9019	3.06	0.0022
tsp12		3		-0.02029	0.006725	9019	-3.02	0.0026

**Now assessing with 6 hours pre-post-transfusion windows**

The HPMIXED Procedure

Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	3	9019	2.88	0.96	0.4099	0.4099

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	4	0 180 365 999
recipientsex	2	1 2
idnr	4776	210001535114 210002448146 210003060142 210005505147 210011264134 210011324136 210011623133 210012323142 210013505110 210014500120 210015670103 210020087126 210020426134 210020839106 210020940136 210022666149 210023240110 210023828152 210024440152 210024735137 ...

Number of Observations Read	9031
Number of Observations Used	8142

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	14
Columns in Z per Subject	1
Subjects (Blocks in V)	4776

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	65732.130781	.	704.7142
1	5	65668.944495	63.18628616	54.17747
2	2	65668.459815	0.48467956	13.44092



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	65668.425935	0.03388052	0.827701
4	2	65668.425803	0.00013194	0.015145

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	7.7995
Residual		178.01

#### Fit Statistics

-2 Res Log Likelihood	65668
AIC (Smaller is Better)	65672
AICC (Smaller is Better)	65672
BIC (Smaller is Better)	65685
CAIC (Smaller is Better)	65687
HQIC (Smaller is Better)	65677

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					3.1863	3.2375	8132	0.98
predictorvalue				0	0	.	.	.
predictorvalue				180	-0.5542	0.4896	8132	-1.13
predictorvalue				365	-0.9136	0.6231	8132	-1.47
predictorvalue				999	0.04175	0.3422	8132	0.12
tspl1	1				0	.	.	.

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.3251
predictorvalue				0	.
predictorvalue				180	0.2576
predictorvalue				365	0.1426
predictorvalue				999	0.9029
tspl1	1				.

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
tspl1	2				-0.05221	0.06186	8132	-0.84
tspl1	3				0.002136	0.007590	8132	0.28
tspl2		1			0	.	.	.
tspl2		2			0.2038	0.06863	8132	2.97
tspl2		3			-0.01919	0.007109	8132	-2.70
hbspl			1		0	.	.	.
hbspl			2		-0.01112	0.02311	8132	-0.48
hbspl			3		0.000971	0.000940	8132	1.03

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
tspl1	2				0.3987
tspl1	3				0.7784
tspl2		1			.
tspl2		2			0.0030
tspl2		3			0.0070
hbspl			1		.
hbspl			2		0.6302
hbspl			3		0.3019

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	3	8132	3.51	1.17	0.3201	0.3201

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	2	1 2
idnr	1759	210004170105 210009873148 210011623133 210012696118 210014500120 210014884130 210017449144 210018650126 210027943117 210030203103 210033152111 210034807114 210037043146 210037456139 210040296102 210041698113 210041754143 210044715150 210044794134 210047556153 ...

Number of Observations Read	2485
Number of Observations Used	2483

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z per Subject	1
Subjects (Blocks in V)	1759

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	4334.4681146	.	144.9514
1	2	4309.3908127	25.07730191	14.27864
2	4	4308.6281005	0.76271220	3.644135

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	4308.6021708	0.02592971	1.302388
4	2	4308.5980131	0.00415772	0.057244
5	2	4308.5980052	0.00000787	0.001004

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.02598
Residual		0.2999

#### Fit Statistics

-2 Res Log Likelihood	4308.59801
AIC (Smaller is Better)	4312.59801
AICC (Smaller is Better)	4312.60286
BIC (Smaller is Better)	4323.54301
CAIC (Smaller is Better)	4325.54301
HQIC (Smaller is Better)	4316.64292

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				0.09879	0.03176	2477	3.11	0.0019
predictorvalue			1	0	.	.	.	.
predictorvalue			2	0.02143	0.02345	2477	0.91	0.3610
tsp11	1			0	.	.	.	.
tsp11	2			-0.00728	0.003970	2477	-1.83	0.0669
tsp11	3			-0.00106	0.000590	2477	-1.80	0.0725
tsp12		1		0	.	.	.	.
tsp12		2		0.01432	0.004016	2477	3.57	0.0004
tsp12		3		-0.00195	0.000489	2477	-3.99	<.0001

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	2477	0.83	0.83	0.3609	0.3610

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	2	1 2
idnr	1753	210004170105 210009873148 210011623133 210012696118 210014500120 210014884130 210017449144 210018650126 210027943117 210030203103 210033152111 210034807114 210037043146 210037456139 210040296102 210041698113 210041754143 210044715150 210044794134 210047556153 ...

Number of Observations Read	2485
Number of Observations Used	2472

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	12
Columns in Z per Subject	1
Subjects (Blocks in V)	1753

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	4347.6925932	.	144.489
1	2	4322.646879	25.04571417	14.04641
2	4	4321.9026423	0.74423677	3.61737

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	4321.8768729	0.02576935	1.2917
4	2	4321.8727454	0.00412751	0.057368
5	2	4321.8727374	0.00000797	0.001017

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.02589
Residual		0.3010

#### Fit Statistics

-2 Res Log Likelihood	4321.87274
AIC (Smaller is Better)	4325.87274
AICC (Smaller is Better)	4325.87761
BIC (Smaller is Better)	4336.81091
CAIC (Smaller is Better)	4338.81091
HQIC (Smaller is Better)	4329.91583

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					0.1899	0.2344	2464	0.81
predictorvalue				1	0	.	.	.
predictorvalue				2	0.02162	0.02358	2464	0.92
tspl1	1				0	.	.	.
tspl1	2				-0.00734	0.003986	2464	-1.84
tspl1	3				-0.00104	0.000593	2464	-1.75

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.4179
predictorvalue				1	.
predictorvalue				2	0.3593
tspl1	1				.
tspl1	2				0.0655
tspl1	3				0.0809

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tsp11	tsp12	hbsp1	predictorvalue	Estimate	Standard Error	DF	t Value
tsp12		1			0	.	.	.
tsp12		2			0.01427	0.004031	2464	3.54
tsp12		3			-0.00195	0.000490	2464	-3.98
hbsp1			1		0	.	.	.
hbsp1			2		-0.00067	0.001706	2464	-0.39
hbsp1			3		0.000078	0.000204	2464	0.38

#### Solution for Fixed Effects

Effect	tsp11	tsp12	hbsp1	predictorvalue	Pr >  t
tsp12		1			.
tsp12		2			0.0004
tsp12		3			<.0001
hbsp1			1		.
hbsp1			2		0.6946
hbsp1			3		0.7017

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	2464	0.84	0.84	0.3592	0.3593

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	0 1
recipientsex	2	1 2
idnr	3721	210004170105 210005070120 210008883124 210009873148 210011623133 210012696118 210014500120 210014884130 210016313119 210017449144 210017777122 210018650126 210022666149 210024309139 210024440152 210025581148 210027793111 210027943117 210030203103 210033152111 ...

Number of Observations Read	7043
Number of Observations Used	7041

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z per Subject	1
Subjects (Blocks in V)	3721

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	11770.089355	.	506.1723
1	2	11686.115179	83.97417572	41.21551
2	7	11682.162273	3.95290605	18.69742



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	3	11681.96884	0.19343370	0.594305
4	2	11681.968625	0.00021431	0.040467
5	2	11681.968624	0.00000099	0.000106

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.01178
Residual		0.2939

#### Fit Statistics

-2 Res Log Likelihood	11682
AIC (Smaller is Better)	11686
AICC (Smaller is Better)	11686
BIC (Smaller is Better)	11698
CAIC (Smaller is Better)	11700
HQIC (Smaller is Better)	11690

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				0.09284	0.01608	7035	5.77	<.0001
predictorvalue			0	0	.	.	.	.
predictorvalue			1	-0.00950	0.02721	7035	-0.35	0.7269
tsp11	1			0	.	.	.	.
tsp11	2			-0.00793	0.002295	7035	-3.45	0.0006
tsp11	3			-0.00057	0.000342	7035	-1.66	0.0967
tsp12		1		0	.	.	.	.
tsp12		2		0.01231	0.002309	7035	5.33	<.0001
tsp12		3		-0.00129	0.000283	7035	-4.56	<.0001

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	7035	0.12	0.12	0.7269	0.7269

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	0 1
recipientsex	2	1 2
idnr	3406	210004170105 210005070120 210008883124 210009873148 210011623133 210012696118 210014500120 210014884130 210016313119 210017449144 210017777122 210018650126 210022666149 210024309139 210024440152 210027793111 210027943117 210030203103 210033152111 210034807114 ...

Number of Observations Read	7043
Number of Observations Used	6073

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	12
Columns in Z per Subject	1
Subjects (Blocks in V)	3406

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	10430.355662	.	432.7034
1	2	10354.280683	76.07497953	31.92551
2	5	10352.198913	2.08177002	5.786817

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	3	10352.169935	0.02897753	0.081094
4	2	10352.16993	0.00000539	0.003328

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.01160
Residual		0.3062

#### Fit Statistics

-2 Res Log Likelihood	10352
AIC (Smaller is Better)	10356
AICC (Smaller is Better)	10356
BIC (Smaller is Better)	10368
CAIC (Smaller is Better)	10370
HQIC (Smaller is Better)	10361

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					0.2084	0.1480	6065	1.41
predictorvalue				0	0	.	.	.
predictorvalue				1	-0.00901	0.02809	6065	-0.32
tspl1	1				0	.	.	.
tspl1	2				-0.00861	0.002504	6065	-3.44
tspl1	3				-0.00069	0.000375	6065	-1.83

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.1592
predictorvalue				0	.
predictorvalue				1	0.7484
tspl1	1				.
tspl1	2				0.0006
tspl1	3				0.0674

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tsp11	tsp12	hbsp1	predictorvalue	Estimate	Standard Error	DF	t Value
tsp12		1			0	.	.	.
tsp12		2			0.01224	0.002521	6065	4.86
tsp12		3			-0.00141	0.000310	6065	-4.55
hbsp1			1		0	.	.	.
hbsp1			2		-0.00073	0.001058	6065	-0.69
hbsp1			3		-6.89E-6	0.000045	6065	-0.15

#### Solution for Fixed Effects

Effect	tsp11	tsp12	hbsp1	predictorvalue	Pr >  t
tsp12		1			.
tsp12		2			<.0001
tsp12		3			<.0001
hbsp1			1		.
hbsp1			2		0.4887
hbsp1			3		0.8772

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	6065	0.10	0.10	0.7484	0.7484

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	2	1 2
idnr	3494	210004170105 210005070120 210008883124 210009873148 210011623133 210012696118 210014500120 210014884130 210016313119 210017449144 210017777122 210018650126 210022666149 210024309139 210024440152 210027793111 210027943117 210030203103 210033152111 210034807114 ...

Number of Observations Read	6508
Number of Observations Used	6446

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	10
Columns in Z per Subject	1
Subjects (Blocks in V)	3494

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	10669.995505	.	433.9401
1	2	10604.69187	65.30363499	53.94063
2	5	10599.297443	5.39442712	12.14104
3	3	10599.198037	0.09940586	0.307777

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	2	10599.197977	0.00005996	0.014843
5	2	10599.197977	0.00000014	0.000016

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.01681
Residual		0.2834

#### Fit Statistics

-2 Res Log Likelihood	10599
AIC (Smaller is Better)	10603
AICC (Smaller is Better)	10603
BIC (Smaller is Better)	10616
CAIC (Smaller is Better)	10618
HQIC (Smaller is Better)	10608

#### Solution for Fixed Effects

Effect	tspl1	tspl2	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				0.1216	0.03922	6439	3.10	0.0019
predspline			1	0	.	.	.	.
predspline			2	-0.00089	0.000943	6439	-0.94	0.3478
predspline			3	0.000022	0.000040	6439	0.56	0.5782
tspl1	1			0	.	.	.	.
tspl1	2			-0.00654	0.002380	6439	-2.75	0.0060
tspl1	3			-0.00062	0.000354	6439	-1.74	0.0817
tspl2		1		0	.	.	.	.
tspl2		2		0.01234	0.002396	6439	5.15	<.0001
tspl2		3		-0.00127	0.000294	6439	-4.33	<.0001

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	6439	1.24	0.62	0.5392	0.5392

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	2	1 2
idnr	3203	210004170105 210005070120 210008883124 210009873148 210011623133 210012696118 210014500120 210014884130 210016313119 210017449144 210017777122 210018650126 210022666149 210024309139 210024440152 210027793111 210027943117 210030203103 210033152111 210034807114 ...

Number of Observations Read	6508
Number of Observations Used	5581

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	13
Columns in Z per Subject	1
Subjects (Blocks in V)	3203

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	9500.9771895	.	367.8225
1	2	9444.9824294	55.99476006	49.34079
2	4	9441.9422962	3.04013320	47.27105
3	2	9440.8903166	1.05197960	20.87907

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	2	9440.5159022	0.37441442	3.332931
5	2	9440.5073382	0.00856400	0.368242
6	3	9440.5072345	0.00010371	0.004957
7	3	9440.5072345	0.00000002	1.092E-7

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.01916
Residual		0.2934

#### Fit Statistics

-2 Res Log Likelihood	9440.50723
AIC (Smaller is Better)	9444.50723
AICC (Smaller is Better)	9444.50939
BIC (Smaller is Better)	9456.65092
CAIC (Smaller is Better)	9458.65092
HQIC (Smaller is Better)	9448.86076

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept					0.2306	0.1573	5572	1.47	0.1428
predspline				1	0	.	.	.	.
predspline				2	-0.00083	0.001004	5572	-0.83	0.4074
predspline				3	0.000015	0.000043	5572	0.35	0.7255
tspl1	1				0	.	.	.	.
tspl1	2				-0.00755	0.002590	5572	-2.91	0.0036
tspl1	3				-0.00063	0.000385	5572	-1.65	0.0994
tspl2		1			0	.	.	.	.
tspl2		2			0.01239	0.002612	5572	4.75	<.0001
tspl2		3			-0.00140	0.000320	5572	-4.37	<.0001
hbspl			1		0	.	.	.	.
hbspl			2		-0.00070	0.001097	5572	-0.64	0.5248
hbspl			3		3.42E-10	0.000047	5572	0.00	1.0000



Now assessing with 6 hours pre-post-transfusion windows

The HPMIXED Procedure						
Type III Tests of Fixed Effects						
Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	5572	1.32	0.66	0.5167	0.5168

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	2	1 2
idnr	3406	210004170105 210005070120 210008883124 210009873148 210011623133 210012696118 210014500120 210014884130 210016313119 210017449144 210017777122 210018650126 210022666149 210024309139 210024440152 210027793111 210027943117 210030203103 210033152111 210034807114 ...

Number of Observations Read	6157
Number of Observations Used	6070

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	10
Columns in Z per Subject	1
Subjects (Blocks in V)	3406

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	10422.220292	.	431.9279
1	2	10346.46871	75.75158266	32.2852
2	5	10344.344969	2.12374039	5.796606
3	3	10344.316018	0.02895162	0.080237

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	2	10344.316012	0.00000526	0.003253

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.01174
Residual		0.3062

#### Fit Statistics

-2 Res Log Likelihood	10344
AIC (Smaller is Better)	10348
AICC (Smaller is Better)	10348
BIC (Smaller is Better)	10361
CAIC (Smaller is Better)	10363
HQIC (Smaller is Better)	10353

#### Solution for Fixed Effects

Effect	tspl1	tspl2	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				0.2144	0.1552	6063	1.38	0.1671
predspline			1	0	.	.	.	.
predspline			2	-0.00078	0.001113	6063	-0.70	0.4840
predspline			3	-4.79E-6	0.000045	6063	-0.11	0.9158
tspl1	1			0	.	.	.	.
tspl1	2			-0.00861	0.002504	6063	-3.44	0.0006
tspl1	3			-0.00068	0.000375	6063	-1.83	0.0675
tspl2		1		0	.	.	.	.
tspl2		2		0.01220	0.002521	6063	4.84	<.0001
tspl2		3		-0.00140	0.000310	6063	-4.53	<.0001

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	6063	2.33	1.17	0.3112	0.3113

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	2	1 2
idnr	3721	210004170105 210005070120 210008883124 210009873148 210011623133 210012696118 210014500120 210014884130 210016313119 210017449144 210017777122 210018650126 210022666149 210024309139 210024440152 210025581148 210027793111 210027943117 210030203103 210033152111 ...

Number of Observations Read	7043
Number of Observations Used	7041

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z per Subject	1
Subjects (Blocks in V)	3721

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	11767.778167	.	506.6754
1	2	11684.099563	83.67860401	42.24533
2	7	11679.958656	4.14090671	19.89916

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	3	11679.743904	0.21475171	0.651904
4	2	11679.743651	0.00025315	0.045121
5	2	11679.74365	0.00000122	0.000125

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.01193
Residual		0.2936

#### Fit Statistics

-2 Res Log Likelihood	11680
AIC (Smaller is Better)	11684
AICC (Smaller is Better)	11684
BIC (Smaller is Better)	11696
CAIC (Smaller is Better)	11698
HQIC (Smaller is Better)	11688

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				0.07976	0.01722	7035	4.63	<.0001
predictorvalue			1	0	.	.	.	.
predictorvalue			2	0.02575	0.01322	7035	1.95	0.0515
tsp11	1			0	.	.	.	.
tsp11	2			-0.00784	0.002293	7035	-3.42	0.0006
tsp11	3			-0.00058	0.000342	7035	-1.70	0.0897
tsp12		1		0	.	.	.	.
tsp12		2		0.01224	0.002308	7035	5.30	<.0001
tsp12		3		-0.00129	0.000283	7035	-4.54	<.0001

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	7035	3.79	3.79	0.0515	0.0515

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	2	1 2
idnr	3406	210004170105 210005070120 210008883124 210009873148 210011623133 210012696118 210014500120 210014884130 210016313119 210017449144 210017777122 210018650126 210022666149 210024309139 210024440152 210027793111 210027943117 210030203103 210033152111 210034807114 ...

Number of Observations Read	7043
Number of Observations Used	6073

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	12
Columns in Z per Subject	1
Subjects (Blocks in V)	3406

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	10429.465981	.	433.1827
1	2	10353.282241	76.18373937	32.30696
2	5	10351.169649	2.11259171	5.641086

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	3	10351.142393	0.02725629	0.074284
4	2	10351.142389	0.00000449	0.002912

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.01159
Residual		0.3061

#### Fit Statistics

-2 Res Log Likelihood	10351
AIC (Smaller is Better)	10355
AICC (Smaller is Better)	10355
BIC (Smaller is Better)	10367
CAIC (Smaller is Better)	10369
HQIC (Smaller is Better)	10360

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					0.1204	0.1593	6065	0.76
predictorvalue				1	0	.	.	.
predictorvalue				2	0.02419	0.01619	6065	1.49
tspl1	1				0	.	.	.
tspl1	2				-0.00854	0.002502	6065	-3.42
tspl1	3				-0.00069	0.000374	6065	-1.85

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.4496
predictorvalue				1	.
predictorvalue				2	0.1352
tspl1	1				.
tspl1	2				0.0006
tspl1	3				0.0643

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tsp11	tsp12	hbsp1	predictorvalue	Estimate	Standard Error	DF	t Value
tsp12		1			0	.	.	.
tsp12		2			0.01216	0.002520	6065	4.83
tsp12		3			-0.00140	0.000310	6065	-4.52
hbsp1			1		0	.	.	.
hbsp1			2		-0.00020	0.001116	6065	-0.18
hbsp1			3		-0.00001	0.000045	6065	-0.27

#### Solution for Fixed Effects

Effect	tsp11	tsp12	hbsp1	predictorvalue	Pr >  t
tsp12		1			.
tsp12		2			<.0001
tsp12		3			<.0001
hbsp1			1		.
hbsp1			2		0.8555
hbsp1			3		0.7857

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	6065	2.23	2.23	0.1351	0.1352



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	2	1 2
idnr	3719	210004170105 210005070120 210008883124 210009873148 210011623133 210012696118 210014500120 210014884130 210016313119 210017449144 210017777122 210018650126 210022666149 210024309139 210024440152 210025581148 210027793111 210027943117 210030203103 210033152111 ...

Number of Observations Read	7122
Number of Observations Used	7039

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	10
Columns in Z per Subject	1
Subjects (Blocks in V)	3719

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	11786.564432	.	506.2652
1	2	11702.433821	84.13061084	37.72775
2	7	11698.673527	3.76029435	12.13933
3	3	11698.587087	0.08643967	0.369313

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	2	11698.587002	0.00008586	0.019123
5	2	11698.587001	0.00000023	0.000035

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.01160
Residual		0.2939

#### Fit Statistics

-2 Res Log Likelihood	11699
AIC (Smaller is Better)	11703
AICC (Smaller is Better)	11703
BIC (Smaller is Better)	11715
CAIC (Smaller is Better)	11717
HQIC (Smaller is Better)	11707

#### Solution for Fixed Effects

Effect	tspl1	tspl2	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				0.06089	0.02934	7032	2.08	0.0380
predspline			1	0	.	.	.	.
predspline			2	0.001409	0.001638	7032	0.86	0.3897
predspline			3	-0.00002	0.000089	7032	-0.23	0.8144
tspl1	1			0	.	.	.	.
tspl1	2			-0.00787	0.002295	7032	-3.43	0.0006
tspl1	3			-0.00056	0.000342	7032	-1.64	0.1007
tspl2		1		0	.	.	.	.
tspl2		2		0.01228	0.002309	7032	5.32	<.0001
tspl2		3		-0.00129	0.000283	7032	-4.55	<.0001

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	7032	3.30	1.65	0.1917	0.1918

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	2	1 2
idnr	3404	210004170105 210005070120 210008883124 210009873148 210011623133 210012696118 210014500120 210014884130 210016313119 210017449144 210017777122 210018650126 210022666149 210024309139 210024440152 210027793111 210027943117 210030203103 210033152111 210034807114 ...

Number of Observations Read	7122
Number of Observations Used	6071

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	13
Columns in Z per Subject	1
Subjects (Blocks in V)	3404

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	10446.742581	.	432.5507
1	2	10370.812378	75.93020325	29.55131
2	5	10368.899357	1.91302068	8.134048
3	3	10368.837883	0.06147441	0.247215

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	2	10368.837831	0.00005190	0.016887
5	2	10368.837831	0.00000024	0.00003

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.01148
Residual		0.3062

#### Fit Statistics

-2 Res Log Likelihood	10369
AIC (Smaller is Better)	10373
AICC (Smaller is Better)	10373
BIC (Smaller is Better)	10385
CAIC (Smaller is Better)	10387
HQIC (Smaller is Better)	10377

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predsplne	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept					0.1789	0.1499	6062	1.19	0.2328
predsplne				1	0	.	.	.	.
predsplne				2	0.001293	0.001749	6062	0.74	0.4597
predsplne				3	-0.00001	0.000097	6062	-0.13	0.8981
tspl1	1				0	.	.	.	.
tspl1	2				-0.00857	0.002505	6062	-3.42	0.0006
tspl1	3				-0.00067	0.000374	6062	-1.80	0.0719
tspl2		1			0	.	.	.	.
tspl2		2			0.01217	0.002523	6062	4.82	<.0001
tspl2		3			-0.00140	0.000310	6062	-4.52	<.0001
hbspl			1		0	.	.	.	.
hbspl			2		-0.00074	0.001057	6062	-0.70	0.4862
hbspl			3		-6.37E-6	0.000045	6062	-0.14	0.8864

**Now assessing with 6 hours pre-post-transfusion windows**

The HPMIXED Procedure

Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	6062	2.96	1.48	0.2278	0.2279

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	6	0 1 5 10 20 99
recipientsex	2	1 2
idnr	3721	210004170105 210005070120 210008883124 210009873148 210011623133 210012696118 210014500120 210014884130 210016313119 210017449144 210017777122 210018650126 210022666149 210024309139 210024440152 210025581148 210027793111 210027943117 210030203103 210033152111 ...

Number of Observations Read	7047
Number of Observations Used	7041

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	13
Columns in Z per Subject	1
Subjects (Blocks in V)	3721

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	11789.989339	.	507.8998
1	2	11705.665382	84.32395730	40.69937
2	7	11701.579169	4.08621319	16.97843

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	3	11701.419865	0.15930302	0.56099
4	2	11701.419676	0.00018934	0.035002
5	2	11701.419675	0.00000074	0.000086

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.01171
Residual		0.2940

#### Fit Statistics

-2 Res Log Likelihood	11701
AIC (Smaller is Better)	11705
AICC (Smaller is Better)	11705
BIC (Smaller is Better)	11718
CAIC (Smaller is Better)	11720
HQIC (Smaller is Better)	11710

#### Solution for Fixed Effects

Effect	tspl1	tspl2	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				0.09820	0.02049	7031	4.79	<.0001
predictorvalue			0	0	.	.	.	.
predictorvalue			1	-0.01093	0.01848	7031	-0.59	0.5541
predictorvalue			5	0.01177	0.02306	7031	0.51	0.6099
predictorvalue			10	0.01337	0.02719	7031	0.49	0.6228
predictorvalue			20	0.000301	0.06636	7031	0.00	0.9964
predictorvalue			99	-0.02032	0.02024	7031	-1.00	0.3155
tspl1	1			0	.	.	.	.
tspl1	2			-0.00797	0.002294	7031	-3.47	0.0005
tspl1	3			-0.00055	0.000343	7031	-1.62	0.1055
tspl2		1		0	.	.	.	.
tspl2		2		0.01225	0.002310	7031	5.30	<.0001
tspl2		3		-0.00129	0.000284	7031	-4.55	<.0001

**Now assessing with 6 hours pre-post-transfusion windows**

The HPMIXED Procedure

## Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	5	7031	3.10	0.62	0.6852	0.6852



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	6	0 1 5 10 20 99
recipientsex	2	1 2
idnr	3406	210004170105 210005070120 210008883124 210009873148 210011623133 210012696118 210014500120 210014884130 210016313119 210017449144 210017777122 210018650126 210022666149 210024309139 210024440152 210027793111 210027943117 210030203103 210033152111 210034807114 ...

Number of Observations Read	7047
Number of Observations Used	6073

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	16
Columns in Z per Subject	1
Subjects (Blocks in V)	3406

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	10448.091923	.	433.6876
1	2	10371.981058	76.11086462	32.68788
2	5	10369.81037	2.17068782	6.170211

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	3	10369.777975	0.03239521	0.094254
4	2	10369.777968	0.00000714	0.004017

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.01167
Residual		0.3062

#### Fit Statistics

-2 Res Log Likelihood	10370
AIC (Smaller is Better)	10374
AICC (Smaller is Better)	10374
BIC (Smaller is Better)	10386
CAIC (Smaller is Better)	10388
HQIC (Smaller is Better)	10378

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					0.2129	0.1492	6061	1.43
predictorvalue				0	0	.	.	.
predictorvalue				1	-0.01336	0.01902	6061	-0.70
predictorvalue				5	0.009891	0.02369	6061	0.42
predictorvalue				10	0.01136	0.02799	6061	0.41
predictorvalue				20	-0.00148	0.06776	6061	-0.02

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.1537
predictorvalue				0	.
predictorvalue				1	0.4825
predictorvalue				5	0.6763
predictorvalue				10	0.6848
predictorvalue				20	0.9826

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
predictorvalue				99	-0.03836	0.02653	6061	-1.45
tspl1	1				0	.	.	.
tspl1	2				-0.00865	0.002503	6061	-3.45
tspl1	3				-0.00067	0.000375	6061	-1.78
tspl2		1			0	.	.	.
tspl2		2			0.01226	0.002522	6061	4.86
tspl2		3			-0.00141	0.000310	6061	-4.56
hbspl			1		0	.	.	.
hbspl			2		-0.00072	0.001058	6061	-0.68
hbspl			3		-3.96E-6	0.000045	6061	-0.09

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
predictorvalue				99	0.1482
tspl1	1				.
tspl1	2				0.0006
tspl1	3				0.0758
tspl2		1			.
tspl2		2			<.0001
tspl2		3			<.0001
hbspl			1		.
hbspl			2		0.4935
hbspl			3		0.9293

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	5	6061	4.04	0.81	0.5434	0.5434

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	4	0 180 365 999
recipientsex	2	1 2
idnr	3721	210004170105 210005070120 210008883124 210009873148 210011623133 210012696118 210014500120 210014884130 210016313119 210017449144 210017777122 210018650126 210022666149 210024309139 210024440152 210025581148 210027793111 210027943117 210030203103 210033152111 ...

Number of Observations Read	7045
Number of Observations Used	7041

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	11
Columns in Z per Subject	1
Subjects (Blocks in V)	3721

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	11781.444031	.	505.9215
1	2	11697.368418	84.07561309	40.88834
2	7	11693.481342	3.88707643	18.35756

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	3	11693.293692	0.18765005	0.577634
4	2	11693.293488	0.00020369	0.039237
5	2	11693.293487	0.00000094	0.000102

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.01174
Residual		0.2940

#### Fit Statistics

-2 Res Log Likelihood	11693
AIC (Smaller is Better)	11697
AICC (Smaller is Better)	11697
BIC (Smaller is Better)	11710
CAIC (Smaller is Better)	11712
HQIC (Smaller is Better)	11702

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				0.09887	0.01790	7033	5.52	<.0001
predictorvalue			0	0	.	.	.	.
predictorvalue			180	-0.01748	0.02324	7033	-0.75	0.4521
predictorvalue			365	0.004627	0.03047	7033	0.15	0.8793
predictorvalue			999	-0.01140	0.01442	7033	-0.79	0.4293
tsp11	1			0	.	.	.	.
tsp11	2			-0.00789	0.002294	7033	-3.44	0.0006
tsp11	3			-0.00057	0.000342	7033	-1.68	0.0936
tsp12		1		0	.	.	.	.
tsp12		2		0.01224	0.002310	7033	5.30	<.0001
tsp12		3		-0.00129	0.000284	7033	-4.54	<.0001

Now assessing with 6 hours pre-post-transfusion windows

The HPMIXED Procedure						
Type III Tests of Fixed Effects						
Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	3	7033	1.06	0.35	0.7858	0.7858

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	4	0 180 365 999
recipientsex	2	1 2
idnr	3406	210004170105 210005070120 210008883124 210009873148 210011623133 210012696118 210014500120 210014884130 210016313119 210017449144 210017777122 210018650126 210022666149 210024309139 210024440152 210027793111 210027943117 210030203103 210033152111 210034807114 ...

Number of Observations Read	7045
Number of Observations Used	6073

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	14
Columns in Z per Subject	1
Subjects (Blocks in V)	3406

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	10441.626006	.	432.1793
1	2	10365.543198	76.08280738	31.4885
2	5	10363.506047	2.03715142	5.759015

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	3	10363.477076	0.02897079	0.081625
4	2	10363.477071	0.00000551	0.0034

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.01157
Residual		0.3063

#### Fit Statistics

-2 Res Log Likelihood	10363
AIC (Smaller is Better)	10367
AICC (Smaller is Better)	10367
BIC (Smaller is Better)	10380
CAIC (Smaller is Better)	10382
HQIC (Smaller is Better)	10372

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					0.2084	0.1480	6063	1.41
predictorvalue				0	0	.	.	.
predictorvalue				180	-0.01547	0.02377	6063	-0.65
predictorvalue				365	0.003658	0.03122	6063	0.12
predictorvalue				999	-0.01072	0.01628	6063	-0.66
tspl1	1				0	.	.	.

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.1593
predictorvalue				0	.
predictorvalue				180	0.5151
predictorvalue				365	0.9067
predictorvalue				999	0.5101
tspl1	1				.



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
tspl1	2				-0.00856	0.002503	6063	-3.42
tspl1	3				-0.00069	0.000375	6063	-1.85
tspl2		1			0	.	.	.
tspl2		2			0.01219	0.002522	6063	4.83
tspl2		3			-0.00140	0.000310	6063	-4.53
hbspl			1		0	.	.	.
hbspl			2		-0.00070	0.001059	6063	-0.66
hbspl			3		-6.69E-6	0.000045	6063	-0.15

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
tspl1	2				0.0006
tspl1	3				0.0648
tspl2		1			.
tspl2		2			<.0001
tspl2		3			<.0001
hbspl			1		.
hbspl			2		0.5086
hbspl			3		0.8807

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	3	6063	0.77	0.26	0.8577	0.8577

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	3	0 1 2
idnr	19913	210000486129 210000598144 210000905111 210001428104 210001535114 210002388128 210002429149 210002448146 210002985127 210003060142 210003353100 210003574148 210003729131 210004055143 210004156135 210004170105 210004315135 210004408139 210004558102 210005070120 ...

Number of Observations Read	29473
Number of Observations Used	29471

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z per Subject	1
Subjects (Blocks in V)	19913

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	127117.4729	.	2775.469
1	5	126639.53576	477.93713505	382.2709
2	4	126619.3858	20.14996031	57.40019

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	4	126617.93758	1.44821920	11.24817
4	4	126617.76699	0.17059838	1.627384
5	2	126617.76155	0.00543853	0.558792
6	2	126617.76092	0.00063281	0

Convergence is assumed but all parameters are actively constrained.

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	4.765E-6
Residual		4.2916

#### Fit Statistics

-2 Res Log Likelihood	126618
AIC (Smaller is Better)	126620
AICC (Smaller is Better)	126620
BIC (Smaller is Better)	126628
CAIC (Smaller is Better)	126629
HQIC (Smaller is Better)	126622

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				0.06449	0.03693	29465	1.75	0.0807
predictorvalue			1	0	.	.	.	.
predictorvalue			2	-0.03356	0.02470	29465	-1.36	0.1743
tsp11	1			0	.	.	.	.
tsp11	2			0.01680	0.004481	29465	3.75	0.0002
tsp11	3			-0.00224	0.000663	29465	-3.38	0.0007
tsp12		1		0	.	.	.	.
tsp12		2		-0.03206	0.004701	29465	-6.82	<.0001
tsp12		3		0.002441	0.000525	29465	4.65	<.0001

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	29465	1.85	1.85	0.1743	0.1743

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	3	0 1 2
idnr	19852	210000486129 210000598144 210000905111 210001428104 210001535114 210002388128 210002429149 210002448146 210002985127 210003060142 210003353100 210003574148 210003729131 210004055143 210004156135 210004170105 210004315135 210004408139 210004558102 210005070120 ...

Number of Observations Read	29473
Number of Observations Used	29316

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	12
Columns in Z per Subject	1
Subjects (Blocks in V)	19852

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	126480.22108	.	2765.927
1	5	125998.18242	482.03865755	387.9038
2	4	125976.84995	21.33247064	59.79201

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	4	125975.21205	1.63790533	11.21512
4	4	125975.07282	0.13922348	0.470091
5	3	125975.07275	0.00007691	0

Convergence is assumed but all parameters are actively constrained.

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	4.764E-6
Residual		4.2913

#### Fit Statistics

-2 Res Log Likelihood	125975
AIC (Smaller is Better)	125977
AICC (Smaller is Better)	125977
BIC (Smaller is Better)	125985
CAIC (Smaller is Better)	125986
HQIC (Smaller is Better)	125980

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					0.07983	0.2662	29308	0.30
predictorvalue				1	0	.	.	.
predictorvalue				2	-0.03407	0.02479	29308	-1.37
tspl1	1				0	.	.	.
tspl1	2				0.01637	0.004491	29308	3.64
tspl1	3				-0.00221	0.000664	29308	-3.33

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.7643
predictorvalue				1	.
predictorvalue				2	0.1692
tspl1	1				.
tspl1	2				0.0003
tspl1	3				0.0009

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
tspl2		1			0	.	.	.
tspl2		2			-0.03215	0.004711	29308	-6.82
tspl2		3			0.002472	0.000526	29308	4.70
hbspl			1		0	.	.	.
hbspl			2		-0.00012	0.001948	29308	-0.06
hbspl			3		0.000142	0.000182	29308	0.78

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
tspl2		1			.
tspl2		2			<.0001
tspl2		3			<.0001
hbspl			1		.
hbspl			2		0.9488
hbspl			3		0.4335

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	29308	1.89	1.89	0.1692	0.1692

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	0 1
recipientsex	3	0 1 2
idnr	39636	210000196120 210000486129 210000598144 210000905111 210000954103 210001151104 210001428104 210001535114 210001682118 210002204152 210002319145 210002388128 210002390143 210002429149 210002448146 210002521130 210002985127 210002999135 210003039107 210003060142 ...

Number of Observations Read	80032
Number of Observations Used	80030

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z per Subject	1
Subjects (Blocks in V)	39636

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	345232.72292	.	8212.675
1	5	344033.35217	1199.3707434	1003.129
2	4	343992.20571	41.14646055	139.3096

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	4	343990.89438	1.31133739	61.55927
4	5	343990.83502	0.05935582	55.88185
5	4	343990.7063	0.12872377	41.0991
6	5	343990.68097	0.02532940	37.53708
7	4	343990.62549	0.05547949	28.2458
8	5	343990.61434	0.01114856	25.98832
9	4	343990.58962	0.02471751	20.1095
10	5	343990.58453	0.00509493	18.67113
11	4	343990.57306	0.01146430	14.93968
12	2	343990.55566	0.01740378	0

Convergence is assumed but all parameters are actively constrained.

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	4.779E-6
Residual		4.3045

#### Fit Statistics

-2 Res Log Likelihood	343991
AIC (Smaller is Better)	343993
AICC (Smaller is Better)	343993
BIC (Smaller is Better)	344001
CAIC (Smaller is Better)	344002
HQIC (Smaller is Better)	343995

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				0.04420	0.02058	80024	2.15	0.0318
predictorvalue			0	0	.	.	.	.
predictorvalue			1	0.04372	0.03084	80024	1.42	0.1563
tsp11	1			0	.	.	.	.
tsp11	2			0.01570	0.002709	80024	5.80	<.0001
tsp11	3			-0.00202	0.000403	80024	-5.01	<.0001
tsp12		1		0	.	.	.	.
tsp12		2		-0.03242	0.002846	80024	-11.39	<.0001
tsp12		3		0.002622	0.000317	80024	8.26	<.0001



**Now assessing with 6 hours pre-post-transfusion windows**

The HPMIXED Procedure

## Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	80024	2.01	2.01	0.1563	0.1563

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	0 1
recipientsex	3	0 1 2
idnr	37129	210000196120 210000486129 210000598144 210000905111 210000954103 210001151104 210001428104 210001535114 210001682118 210002204152 210002319145 210002388128 210002390143 210002429149 210002448146 210002521130 210002985127 210002999135 210003039107 210003060142 ...

Number of Observations Read	80032
Number of Observations Used	72656

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	12
Columns in Z per Subject	1
Subjects (Blocks in V)	37129

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	313317.83829	.	7494.409
1	5	312200.60644	1117.2318444	932.9853
2	4	312161.0076	39.59884167	126.3231

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	4	312159.82127	1.18632893	54.1843
4	5	312159.77216	0.04911086	49.23438
5	4	312159.6655	0.10666159	36.33017
6	5	312159.64445	0.02105207	33.21447
7	4	312159.59826	0.04618494	25.08538
8	5	312159.58895	0.00931174	23.10773
9	4	312159.56827	0.02068540	17.9592
10	5	312159.56399	0.00428074	16.69806
11	4	312159.53946	0.02452256	0

Convergence is assumed but all parameters are actively constrained.

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	4.768E-6
Residual		4.2945

#### Fit Statistics

-2 Res Log Likelihood	312160
AIC (Smaller is Better)	312162
AICC (Smaller is Better)	312162
BIC (Smaller is Better)	312170
CAIC (Smaller is Better)	312171
HQIC (Smaller is Better)	312164

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					0.1194	0.1660	72648	0.72
predictorvalue				0	0	.	.	.
predictorvalue				1	0.04157	0.03099	72648	1.34

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.4721
predictorvalue				0	.
predictorvalue				1	0.1797

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
tspl1	1				0	.	.	.
tspl1	2				0.01504	0.002848	72648	5.28
tspl1	3				-0.00199	0.000422	72648	-4.72
tspl2		1			0	.	.	.
tspl2		2			-0.03207	0.002988	72648	-10.73
tspl2		3			0.002646	0.000333	72648	7.95
hbspl			1		0	.	.	.
hbspl			2		-0.00054	0.001193	72648	-0.45
hbspl			3		0.000014	0.000044	72648	0.33

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
tspl1	1				.
tspl1	2				<.0001
tspl1	3				<.0001
tspl2		1			.
tspl2		2			<.0001
tspl2		3			<.0001
hbspl			1		.
hbspl			2		0.6510
hbspl			3		0.7435

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	72648	1.80	1.80	0.1797	0.1797

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	3	0 1 2
idnr	36691	210000196120 210000486129 210000598144 210000905111 210000954103 210001151104 210001428104 210001535114 210001682118 210002204152 210002319145 210002388128 210002390143 210002429149 210002448146 210002521130 210002985127 210002999135 210003039107 210003060142 ...

Number of Observations Read	72293
Number of Observations Used	72231

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	10
Columns in Z per Subject	1
Subjects (Blocks in V)	36691

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	311661.69497	.	7411.07
1	5	310571.14866	1090.5463116	911.9469
2	4	310532.9755	38.17315481	131.315
3	4	310531.64143	1.33407426	61.14755

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	2	310531.23965	0.40178099	5.265985
5	3	310531.23908	0.00057033	0

Convergence is assumed but all parameters are actively constrained.

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	4.781E-6
Residual		4.3064

#### Fit Statistics

-2 Res Log Likelihood	310531
AIC (Smaller is Better)	310533
AICC (Smaller is Better)	310533
BIC (Smaller is Better)	310542
CAIC (Smaller is Better)	310543
HQIC (Smaller is Better)	310536

#### Solution for Fixed Effects

Effect	tspl1	tspl2	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				0.06922	0.04365	72224	1.59	0.1128
predspline			1	0	.	.	.	.
predspline			2	-0.00020	0.001031	72224	-0.19	0.8466
predspline			3	-0.00003	0.000044	72224	-0.74	0.4609
tspl1	1			0	.	.	.	.
tspl1	2			0.01580	0.002856	72224	5.53	<.0001
tspl1	3			-0.00210	0.000426	72224	-4.92	<.0001
tspl2		1		0	.	.	.	.
tspl2		2		-0.03259	0.003000	72224	-10.86	<.0001
tspl2		3		0.002668	0.000334	72224	7.98	<.0001

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	72224	3.88	1.94	0.1440	0.1440

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	3	0 1 2
idnr	34610	210000196120 210000486129 210000598144 210000905111 210000954103 210001151104 210001428104 210001535114 210001682118 210002204152 210002319145 210002388128 210002390143 210002429149 210002448146 210002521130 210002985127 210002999135 210003039107 210003060142 ...

Number of Observations Read	72293
Number of Observations Used	66041

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	13
Columns in Z per Subject	1
Subjects (Blocks in V)	34610

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	284882.96892	.	6784.312
1	5	283860.15789	1022.8110340	864.3653
2	4	283822.05076	38.10712479	120.1167
3	4	283820.83073	1.22002895	53.54748

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	5	283820.50724	0.32348991	0

Convergence is assumed but all parameters are actively constrained.

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	4.771E-6
Residual		4.2977

#### Fit Statistics

-2 Res Log Likelihood	283821
AIC (Smaller is Better)	283823
AICC (Smaller is Better)	283823
BIC (Smaller is Better)	283831
CAIC (Smaller is Better)	283832
HQIC (Smaller is Better)	283825

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept					0.06917	0.1779	66032	0.39	0.6974
predspline				1	0	.	.	.	.
predspline				2	0.000218	0.001061	66032	0.21	0.8372
predspline				3	-0.00006	0.000046	66032	-1.21	0.2279
tspl1	1				0	.	.	.	.
tspl1	2				0.01522	0.002990	66032	5.09	<.0001
tspl1	3				-0.00204	0.000444	66032	-4.60	<.0001
tspl2		1			0	.	.	.	.
tspl2		2			-0.03257	0.003137	66032	-10.38	<.0001
tspl2		3			0.002720	0.000349	66032	7.79	<.0001
hbspl			1		0	.	.	.	.
hbspl			2		-0.00008	0.001255	66032	-0.06	0.9494
hbspl			3		-3.43E-6	0.000047	66032	-0.07	0.9415



**Now assessing with 6 hours pre-post-transfusion windows**

The HPMIXED Procedure

Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	66032	4.74	2.37	0.0936	0.0936

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	3	0 1 2
idnr	37111	210000196120 210000486129 210000598144 210000905111 210000954103 210001151104 210001428104 210001535114 210001682118 210002204152 210002319145 210002388128 210002390143 210002429149 210002448146 210002521130 210002985127 210002999135 210003039107 210003060142 ...

Number of Observations Read	72705
Number of Observations Used	72618

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	10
Columns in Z per Subject	1
Subjects (Blocks in V)	37111

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	313132.91237	.	7489.13
1	5	312016.56778	1116.3445810	936.6625
2	4	311976.65319	39.91459329	125.9948
3	4	311975.47683	1.17636494	53.55556

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	5	311975.42944	0.04738983	48.67938
5	4	311975.32646	0.10297825	35.96394
6	5	311975.30611	0.02034738	32.892
7	4	311975.26144	0.04466697	24.87713
8	5	311975.25243	0.00901724	22.92641
9	4	311975.23238	0.02004591	17.84887
10	5	311975.22823	0.00415508	16.60459
11	4	311975.21885	0.00937866	13.37944
12	3	311975.20432	0.01452572	0

Convergence is assumed but all parameters are actively constrained.

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	4.767E-6
Residual		4.2935

#### Fit Statistics

-2 Res Log Likelihood	311975
AIC (Smaller is Better)	311977
AICC (Smaller is Better)	311977
BIC (Smaller is Better)	311986
CAIC (Smaller is Better)	311987
HQIC (Smaller is Better)	311980

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				0.09141	0.1918	72611	0.48	0.6336
predspline			1	0	.	.	.	.
predspline			2	-0.00031	0.001393	72611	-0.22	0.8246
predspline			3	3.268E-6	0.000046	72611	0.07	0.9433
tsp11	1			0	.	.	.	.
tsp11	2			0.01491	0.002848	72611	5.24	<.0001
tsp11	3			-0.00198	0.000422	72611	-4.69	<.0001
tsp12		1		0	.	.	.	.
tsp12		2		-0.03200	0.002989	72611	-10.71	<.0001
tsp12		3		0.002632	0.000333	72611	7.90	<.0001

**Now assessing with 6 hours pre-post-transfusion windows**

The HPMIXED Procedure

Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	72611	0.13	0.07	0.9367	0.9367

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	3	0 1 2
idnr	39636	210000196120 210000486129 210000598144 210000905111 210000954103 210001151104 210001428104 210001535114 210001682118 210002204152 210002319145 210002388128 210002390143 210002429149 210002448146 210002521130 210002985127 210002999135 210003039107 210003060142 ...

Number of Observations Read	80031
Number of Observations Used	80029

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z per Subject	1
Subjects (Blocks in V)	39636

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	345232.87696	.	8213.338
1	2	343990.17337	1242.7035886	0

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

Convergence is assumed but all parameters are actively constrained.

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	4.779E-6
Residual		4.3046

#### Fit Statistics

-2 Res Log Likelihood	343990
AIC (Smaller is Better)	343992
AICC (Smaller is Better)	343992
BIC (Smaller is Better)	344001
CAIC (Smaller is Better)	344002
HQIC (Smaller is Better)	343995

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				0.05143	0.02159	80023	2.38	0.0172
predictorvalue			1	0	.	.	.	.
predictorvalue			2	-0.00934	0.01467	80023	-0.64	0.5245
tsp11	1			0	.	.	.	.
tsp11	2			0.01573	0.002709	80023	5.81	<.0001
tsp11	3			-0.00202	0.000403	80023	-5.02	<.0001
tsp12		1		0	.	.	.	.
tsp12		2		-0.03245	0.002846	80023	-11.40	<.0001
tsp12		3		0.002626	0.000317	80023	8.27	<.0001

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	80023	0.41	0.41	0.5245	0.5245

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	3	0 1 2
idnr	37129	210000196120 210000486129 210000598144 210000905111 210000954103 210001151104 210001428104 210001535114 210001682118 210002204152 210002319145 210002388128 210002390143 210002429149 210002448146 210002521130 210002985127 210002999135 210003039107 210003060142 ...

Number of Observations Read	80031
Number of Observations Used	72655

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	12
Columns in Z per Subject	1
Subjects (Blocks in V)	37129

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	313317.36783	.	7495.394
1	5	312199.51322	1117.8546166	933.8247
2	4	312159.83587	39.67734551	125.9483

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	4	312158.65895	1.17692155	53.69286
4	5	312158.61112	0.04782414	48.79953
5	4	312158.50722	0.10390673	36.04049
6	5	312158.48669	0.02052438	32.95856
7	4	312158.44165	0.04504770	24.91771
8	2	312158.38411	0.05753909	0

Convergence is assumed but all parameters are actively constrained.

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	4.768E-6
Residual		4.2946

#### Fit Statistics

-2 Res Log Likelihood	312158
AIC (Smaller is Better)	312160
AICC (Smaller is Better)	312160
BIC (Smaller is Better)	312169
CAIC (Smaller is Better)	312170
HQIC (Smaller is Better)	312163

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					0.1739	0.1777	72647	0.98
predictorvalue				1	0	.	.	.
predictorvalue				2	-0.01388	0.01734	72647	-0.80
tspl1	1				0	.	.	.

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.3278
predictorvalue				1	.
predictorvalue				2	0.4236
tspl1	1				.



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
tspl1	2				0.01506	0.002848	72647	5.29
tspl1	3				-0.00199	0.000422	72647	-4.72
tspl2		1			0	.	.	.
tspl2		2			-0.03210	0.002988	72647	-10.74
tspl2		3			0.002650	0.000333	72647	7.96
hbspl			1		0	.	.	.
hbspl			2		-0.00085	0.001254	72647	-0.68
hbspl			3		0.000017	0.000044	72647	0.38

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
tspl1	2				<.0001
tspl1	3				<.0001
tspl2		1			.
tspl2		2			<.0001
tspl2		3			<.0001
hbspl			1		.
hbspl			2		0.4961
hbspl			3		0.7033

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	72647	0.64	0.64	0.4236	0.4236

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	3	0 1 2
idnr	39625	210000196120 210000486129 210000598144 210000905111 210000954103 210001151104 210001428104 210001535114 210001682118 210002204152 210002319145 210002388128 210002390143 210002429149 210002448146 210002521130 210002985127 210002999135 210003039107 210003060142 ...

Number of Observations Read	80091
Number of Observations Used	80008

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	10
Columns in Z per Subject	1
Subjects (Blocks in V)	39625

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	345163.12629	.	8209.123
1	5	343965.01885	1198.1074454	1002.47
2	4	343923.91919	41.09966370	139.6937
3	4	343922.59786	1.32132966	62.05214

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	5	343922.53706	0.06079709	56.31658
5	4	343922.40526	0.13180327	41.38601
6	5	343922.37934	0.02591695	37.78992
7	4	343922.32259	0.05674393	28.40997
8	5	343922.3112	0.01139259	26.13165
9	4	343922.28596	0.02524663	20.19821
10	5	343922.28076	0.00519887	18.74681
11	4	343922.26906	0.01169165	14.98102
12	2	343922.25138	0.01768328	0

Convergence is assumed but all parameters are actively constrained.

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	4.779E-6
Residual		4.3047

#### Fit Statistics

-2 Res Log Likelihood	343922
AIC (Smaller is Better)	343924
AICC (Smaller is Better)	343924
BIC (Smaller is Better)	343933
CAIC (Smaller is Better)	343934
HQIC (Smaller is Better)	343927

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				0.1032	0.03641	80001	2.83	0.0046
predspline			1	0	.	.	.	.
predspline			2	-0.00313	0.001898	80001	-1.65	0.0994
predspline			3	0.000115	0.000100	80001	1.16	0.2479
tsp11	1			0	.	.	.	.
tsp11	2			0.01569	0.002710	80001	5.79	<.0001
tsp11	3			-0.00203	0.000403	80001	-5.04	<.0001
tsp12		1		0	.	.	.	.
tsp12		2		-0.03245	0.002847	80001	-11.40	<.0001
tsp12		3		0.002633	0.000318	80001	8.29	<.0001

**Now assessing with 6 hours pre-post-transfusion windows**

The HPMIXED Procedure

Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	80001	3.91	1.96	0.1414	0.1414

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	3	0 1 2
idnr	37118	210000196120 210000486129 210000598144 210000905111 210000954103 210001151104 210001428104 210001535114 210001682118 210002204152 210002319145 210002388128 210002390143 210002429149 210002448146 210002521130 210002985127 210002999135 210003039107 210003060142 ...

Number of Observations Read	80091
Number of Observations Used	72634

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	13
Columns in Z per Subject	1
Subjects (Blocks in V)	37118

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	313249.18958	.	7492.702
1	5	312132.29303	1116.8965552	932.4797
2	4	312092.72539	39.56763615	126.3123
3	4	312091.53868	1.18671392	54.21089

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	5	312091.48946	0.04921371	49.25743
5	4	312091.38258	0.10688109	36.34418
6	5	312091.36149	0.02109351	33.22646
7	4	312091.31521	0.04627433	25.09215
8	5	312091.30589	0.00932881	23.11326
9	4	312091.28516	0.02072213	17.96157
10	5	312091.28087	0.00428825	16.69965
11	4	312091.2712	0.00967050	13.42782
12	2	312091.25632	0.01488735	0

Convergence is assumed but all parameters are actively constrained.

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	4.768E-6
Residual		4.2947

#### Fit Statistics

-2 Res Log Likelihood	312091
AIC (Smaller is Better)	312093
AICC (Smaller is Better)	312093
BIC (Smaller is Better)	312102
CAIC (Smaller is Better)	312103
HQIC (Smaller is Better)	312096

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept					0.1837	0.1688	72625	1.09	0.2765
predspline				1	0	.	.	.	.
predspline				2	-0.00356	0.001948	72625	-1.83	0.0676
predspline				3	0.000161	0.000104	72625	1.55	0.1214
tspl1	1				0	.	.	.	.
tspl1	2				0.01503	0.002848	72625	5.28	<.0001
tspl1	3				-0.00200	0.000422	72625	-4.74	<.0001
tspl2		1			0	.	.	.	.
tspl2		2			-0.03207	0.002989	72625	-10.73	<.0001
tspl2		3			0.002649	0.000333	72625	7.95	<.0001
hbspl			1		0	.	.	.	.
hbspl			2		-0.00057	0.001193	72625	-0.48	0.6327
hbspl			3		0.000015	0.000044	72625	0.33	0.7380

**Now assessing with 6 hours pre-post-transfusion windows**

The HPMIXED Procedure

Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	72625	3.54	1.77	0.1705	0.1706

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	6	0 1 5 10 20 99
recipientsex	3	0 1 2
idnr	39636	210000196120 210000486129 210000598144 210000905111 210000954103 210001151104 210001428104 210001535114 210001682118 210002204152 210002319145 210002388128 210002390143 210002429149 210002448146 210002521130 210002985127 210002999135 210003039107 210003060142 ...

Number of Observations Read	80036
Number of Observations Used	80030

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	13
Columns in Z per Subject	1
Subjects (Blocks in V)	39636

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	345248.71343	.	8211.761
1	5	344048.41923	1200.2941999	1004.978
2	4	344007.07963	41.33959312	138.7767



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	4	344005.7815	1.29812885	60.73674
4	5	344005.72447	0.05703625	55.15619
5	4	344005.6007	0.12376601	40.61972
6	5	344005.57632	0.02438393	37.11441
7	4	344005.52287	0.05344442	27.9705
8	5	344005.51212	0.01075410	25.74773
9	4	344005.48826	0.02386251	19.96032
10	5	344005.48333	0.00492749	18.5436
11	4	344005.47223	0.01109776	14.86906
12	2	344005.45528	0.01694969	0

Convergence is assumed but all parameters are actively constrained.

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	4.779E-6
Residual		4.3043

#### Fit Statistics

-2 Res Log Likelihood	344005
AIC (Smaller is Better)	344007
AICC (Smaller is Better)	344007
BIC (Smaller is Better)	344016
CAIC (Smaller is Better)	344017
HQIC (Smaller is Better)	344010

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				0.009940	0.02526	80020	0.39	0.6940
predictorvalue			0	0	.	.	.	.
predictorvalue			1	0.05833	0.02087	80020	2.80	0.0052
predictorvalue			5	0.05524	0.02471	80020	2.24	0.0254
predictorvalue			10	0.03768	0.02789	80020	1.35	0.1767
predictorvalue			20	0.02898	0.06506	80020	0.45	0.6560
predictorvalue			99	0.02643	0.02398	80020	1.10	0.2705
tsp11	1			0	.	.	.	.
tsp11	2			0.01565	0.002709	80020	5.78	<.0001
tsp11	3			-0.00202	0.000403	80020	-5.01	<.0001
tsp12		1		0	.	.	.	.
tsp12		2		-0.03250	0.002847	80020	-11.42	<.0001

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
tsp12		3		0.002622	0.000317	80020	8.26	<.0001

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	5	80020	9.18	1.84	0.1020	0.1021

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	6	0 1 5 10 20 99
recipientsex	3	0 1 2
idnr	37129	210000196120 210000486129 210000598144 210000905111 210000954103 210001151104 210001428104 210001535114 210001682118 210002204152 210002319145 210002388128 210002390143 210002429149 210002448146 210002521130 210002985127 210002999135 210003039107 210003060142 ...

Number of Observations Read	80036
Number of Observations Used	72656

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	16
Columns in Z per Subject	1
Subjects (Blocks in V)	37129

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	313332.98971	.	7493.135
1	5	312215.03399	1117.9557203	934.6718
2	4	312175.25201	39.78198615	125.8244

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	4	312174.07782	1.17418456	53.45775
4	5	312174.03059	0.04723130	48.59151
5	4	312173.92795	0.10263746	35.90187
6	5	312173.90767	0.02028188	32.83602
7	4	312173.86315	0.04452448	24.83694
8	5	312173.85416	0.00898916	22.89004
9	4	312173.83417	0.01998450	17.82249
10	5	312173.83003	0.00414305	16.58062
11	4	312173.82068	0.00935200	13.36154
12	5	312173.81868	0.00200020	12.56684
13	5	312173.80619	0.01248731	0

Convergence is assumed but all parameters are actively constrained.

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	4.768E-6
Residual		4.2943

#### Fit Statistics

-2 Res Log Likelihood	312174
AIC (Smaller is Better)	312176
AICC (Smaller is Better)	312176
BIC (Smaller is Better)	312184
CAIC (Smaller is Better)	312185
HQIC (Smaller is Better)	312179

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					0.07471	0.1671	72644	0.45
predictorvalue				0	0	.	.	.

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.6549
predictorvalue				0	.

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
predictorvalue				1	0.05896	0.02095	72644	2.81
predictorvalue				5	0.05709	0.02484	72644	2.30
predictorvalue				10	0.03638	0.02809	72644	1.30
predictorvalue				20	0.01746	0.06549	72644	0.27
predictorvalue				99	0.03543	0.02908	72644	1.22
tspl1	1				0	.	.	.
tspl1	2				0.01499	0.002848	72644	5.27
tspl1	3				-0.00199	0.000422	72644	-4.72
tspl2		1			0	.	.	.
tspl2		2			-0.03215	0.002988	72644	-10.76
tspl2		3			0.002648	0.000333	72644	7.95
hbspl			1		0	.	.	.
hbspl			2		-0.00049	0.001193	72644	-0.41
hbspl			3		0.000016	0.000044	72644	0.35

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
predictorvalue				1	0.0049
predictorvalue				5	0.0215
predictorvalue				10	0.1952
predictorvalue				20	0.7898
predictorvalue				99	0.2232
tspl1	1				.
tspl1	2				<.0001
tspl1	3				<.0001
tspl2		1			.
tspl2		2			<.0001
tspl2		3			<.0001
hbspl			1		.
hbspl			2		0.6843
hbspl			3		0.7253

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	5	72644	9.02	1.80	0.1082	0.1082

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	4	0 180 365 999
recipientsex	3	0 1 2
idnr	39636	210000196120 210000486129 210000598144 210000905111 210000954103 210001151104 210001428104 210001535114 210001682118 210002204152 210002319145 210002388128 210002390143 210002429149 210002448146 210002521130 210002985127 210002999135 210003039107 210003060142 ...

Number of Observations Read	80034
Number of Observations Used	80030

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	11
Columns in Z per Subject	1
Subjects (Blocks in V)	39636

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	345232.1384	.	8215.082
1	5	344030.89627	1201.2421346	1006.35
2	4	343989.45902	41.43724434	138.1832

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	4	343988.17652	1.28250543	59.95448
4	5	343988.12166	0.05486061	54.46541
5	4	343988.00254	0.11911206	40.16263
6	5	343987.97905	0.02349491	36.71141
7	4	343987.92752	0.05152950	27.70842
8	5	343987.86204	0.06547982	0

Convergence is assumed but all parameters are actively constrained.

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	4.778E-6
Residual		4.3038

#### Fit Statistics

-2 Res Log Likelihood	343988
AIC (Smaller is Better)	343990
AICC (Smaller is Better)	343990
BIC (Smaller is Better)	343998
CAIC (Smaller is Better)	343999
HQIC (Smaller is Better)	343993

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				0.06825	0.02214	80022	3.08	0.0020
predictorvalue			0	0	.	.	.	.
predictorvalue			180	-0.05426	0.02424	80022	-2.24	0.0252
predictorvalue			365	0.05700	0.03198	80022	1.78	0.0747
predictorvalue			999	-0.04511	0.01622	80022	-2.78	0.0054
tsp11	1			0	.	.	.	.
tsp11	2			0.01566	0.002709	80022	5.78	<.0001
tsp11	3			-0.00202	0.000403	80022	-5.00	<.0001
tsp12		1		0	.	.	.	.
tsp12		2		-0.03254	0.002846	80022	-11.43	<.0001
tsp12		3		0.002621	0.000317	80022	8.26	<.0001

**Now assessing with 6 hours pre-post-transfusion windows**

The HPMIXED Procedure

Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	3	80022	16.80	5.60	0.0008	0.0008



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	4	0 180 365 999
recipientsex	3	0 1 2
idnr	37129	210000196120 210000486129 210000598144 210000905111 210000954103 210001151104 210001428104 210001535114 210001682118 210002204152 210002319145 210002388128 210002390143 210002429149 210002448146 210002521130 210002985127 210002999135 210003039107 210003060142 ...

Number of Observations Read	80034
Number of Observations Used	72656

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	14
Columns in Z per Subject	1
Subjects (Blocks in V)	37129

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	313317.82388	.	7497.18
1	5	312198.46752	1119.3563578	935.8702
2	4	312158.60414	39.86337353	125.021

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	4	312157.45016	1.15398529	52.52882
4	5	312157.40527	0.04488731	47.76863
5	4	312157.30766	0.09761342	35.35194
6	5	312157.28834	0.01931783	32.34992
7	4	312157.2459	0.04244501	24.51783
8	5	312157.23731	0.00858472	22.6105
9	4	312157.21821	0.01910547	17.64723
10	2	312157.19126	0.02694778	0

Convergence is assumed but all parameters are actively constrained.

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	4.767E-6
Residual		4.2938

#### Fit Statistics

-2 Res Log Likelihood	312157
AIC (Smaller is Better)	312159
AICC (Smaller is Better)	312159
BIC (Smaller is Better)	312168
CAIC (Smaller is Better)	312169
HQIC (Smaller is Better)	312162

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					0.1302	0.1660	72646	0.78
predictorvalue				0	0	.	.	.
predictorvalue				180	-0.05426	0.02433	72646	-2.23

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.4328
predictorvalue				0	.
predictorvalue				180	0.0257

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
predictorvalue				365	0.05743	0.03212	72646	1.79
predictorvalue				999	-0.04653	0.01759	72646	-2.64
tspl1	1				0	.	.	.
tspl1	2				0.01503	0.002847	72646	5.28
tspl1	3				-0.00199	0.000422	72646	-4.71
tspl2		1			0	.	.	.
tspl2		2			-0.03220	0.002988	72646	-10.78
tspl2		3			0.002649	0.000333	72646	7.96
hbspl			1		0	.	.	.
hbspl			2		-0.00047	0.001194	72646	-0.39
hbspl			3		0.000016	0.000044	72646	0.37

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
predictorvalue				365	0.0738
predictorvalue				999	0.0082
tspl1	1				.
tspl1	2				<.0001
tspl1	3				<.0001
tspl2		1			.
tspl2		2			<.0001
tspl2		3			<.0001
hbspl			1		.
hbspl			2		0.6966
hbspl			3		0.7101

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	3	72646	16.06	5.35	0.0011	0.0011

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	2	1 2
idnr	172	210037043146 210071505145 210214337102 210242740132 210259885148 210310671143 210325887106 210365748125 210377864111 210385261103 210392450139 210403416142 210449925102 210628995108 210638298153 210699648119 210742235125 210746919148 210758990128 210762747152 ...

Number of Observations Read	214
Number of Observations Used	212

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z per Subject	1
Subjects (Blocks in V)	172

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	-20.63069144	.	26.80115
1	5	-21.84407107	1.21337963	24.29452
2	4	-24.46047481	2.61640374	17.5794

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	5	-24.96722807	0.50675327	15.91562
4	4	-26.05715495	1.08992687	11.44552
5	2	-27.17638892	1.11923397	0

Convergence is assumed but all parameters are actively constrained.

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	4.457E-8
Residual		0.04015

#### Fit Statistics

-2 Res Log Likelihood	-27.17639
AIC (Smaller is Better)	-25.17639
AICC (Smaller is Better)	-25.15678
BIC (Smaller is Better)	-22.02889
CAIC (Smaller is Better)	-21.02889
HQIC (Smaller is Better)	-23.89937

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				-0.02557	0.05039	206	-0.51	0.6124
predictorvalue			1	0	.	.	.	.
predictorvalue			2	-0.04493	0.02863	206	-1.57	0.1181
tsp11	1			0	.	.	.	.
tsp11	2			0.007204	0.005507	206	1.31	0.1923
tsp11	3			-0.00082	0.000647	206	-1.26	0.2073
tsp12		1		0	.	.	.	.
tsp12		2		-0.00007	0.005727	206	-0.01	0.9897
tsp12		3		0.000401	0.000612	206	0.65	0.5137

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	206	2.46	2.46	0.1166	0.1181

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	2	1 2
idnr	172	210037043146 210071505145 210214337102 210242740132 210259885148 210310671143 210325887106 210365748125 210377864111 210385261103 210392450139 210403416142 210449925102 210628995108 210638298153 210699648119 210742235125 210746919148 210758990128 210762747152 ...

Number of Observations Read	214
Number of Observations Used	212

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	12
Columns in Z per Subject	1
Subjects (Blocks in V)	172

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	1.1782983105	.	26.08317
1	5	-5.303161253	6.48145956	0

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

Convergence is assumed but all parameters are actively constrained.

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	4.428E-8
Residual		0.03988

#### Fit Statistics

-2 Res Log Likelihood	-5.30316
AIC (Smaller is Better)	-3.30316
AICC (Smaller is Better)	-3.28336
BIC (Smaller is Better)	-0.15567
CAIC (Smaller is Better)	0.84433
HQIC (Smaller is Better)	-2.02614

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					-0.09319	0.3968	204	-0.23
predictorvalue				1	0	.	.	.
predictorvalue				2	-0.03983	0.02877	204	-1.38
tspl1	1				0	.	.	.
tspl1	2				0.007885	0.005565	204	1.42
tspl1	3				-0.00079	0.000652	204	-1.21
tspl2		1			0	.	.	.
tspl2		2			-0.00002	0.005708	204	-0.00
tspl2		3			0.000373	0.000611	204	0.61
hbspl			1		0	.	.	.

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.8146
predictorvalue				1	.
predictorvalue				2	0.1677
tspl1	1				.
tspl1	2				0.1581
tspl1	3				0.2287
tspl2		1			.
tspl2		2			0.9969
tspl2		3			0.5425
hbspl			1		.

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
hbspl			2		0.000529	0.002963	204	0.18
hbspl			3		-0.00037	0.000289	204	-1.27

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
hbspl			2		0.8585
hbspl			3		0.2046

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	204	1.92	1.92	0.1662	0.1677



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	0 1
recipientsex	2	1 2
idnr	382	210037043146 210064370137 210071505145 210105465112 210112082126 210198886143 210214337102 210242740132 210251854127 210259885148 210286578147 210310671143 210325887106 210365748125 210366101153 210377864111 210385261103 210387065146 210392450139 210403416142 ...

Number of Observations Read	534
Number of Observations Used	532

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z per Subject	1
Subjects (Blocks in V)	382

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	-9.939491391	.	24.77624
1	3	-11.8986434	1.95915201	2.488388
2	2	-11.91954928	0.02090588	0.083757

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	-11.91957281	0.00002353	0.000502
4	2	-11.91957281	0.00000000	9.504E-8

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.01164
Residual		0.04107

#### Fit Statistics

-2 Res Log Likelihood	-11.91957
AIC (Smaller is Better)	-7.91957
AICC (Smaller is Better)	-7.89663
BIC (Smaller is Better)	-0.02873
CAIC (Smaller is Better)	1.97127
HQIC (Smaller is Better)	-4.78909

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				-0.02589	0.03438	526	-0.75	0.4518
predictorvalue			0	0	.	.	.	.
predictorvalue			1	-0.06947	0.04227	526	-1.64	0.1009
tsp11	1			0	.	.	.	.
tsp11	2			0.008695	0.003809	526	2.28	0.0229
tsp11	3			-0.00078	0.000450	526	-1.73	0.0848
tsp12		1		0	.	.	.	.
tsp12		2		-0.00586	0.004068	526	-1.44	0.1501
tsp12		3		0.000804	0.000431	526	1.87	0.0625

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	526	2.70	2.70	0.1003	0.1009

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	0 1
recipientsex	2	1 2
idnr	369	210037043146 210064370137 210071505145 210112082126 210198886143 210214337102 210242740132 210251854127 210259885148 210286578147 210310671143 210325887106 210365748125 210366101153 210377864111 210385261103 210387065146 210392450139 210403416142 210449925102 ...

Number of Observations Read	534
Number of Observations Used	508

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	12
Columns in Z per Subject	1
Subjects (Blocks in V)	369

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	2.5993892056	.	15.78494
1	3	1.7094656251	0.88992358	2.065277
2	2	1.6934433951	0.01602223	0.047398

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	1.6934350043	0.00000839	0.000226
4	2	1.693435004	0.00000000	2.327E-8

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.01579
Residual		0.03599

#### Fit Statistics

-2 Res Log Likelihood	1.69344
AIC (Smaller is Better)	5.69344
AICC (Smaller is Better)	5.71758
BIC (Smaller is Better)	13.51503
CAIC (Smaller is Better)	15.51503
HQIC (Smaller is Better)	8.80056

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					0.5093	0.2533	500	2.01
predictorvalue				0	0	.	.	.
predictorvalue				1	-0.07804	0.04160	500	-1.88
tspl1	1				0	.	.	.
tspl1	2				0.009397	0.003852	500	2.44
tspl1	3				-0.00087	0.000454	500	-1.91

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.0449
predictorvalue				0	.
predictorvalue				1	0.0612
tspl1	1				.
tspl1	2				0.0151
tspl1	3				0.0565

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tsp11	tsp12	hbsp1	predictorvalue	Estimate	Standard Error	DF	t Value
tsp12		1			0	.	.	.
tsp12		2			-0.00630	0.004158	500	-1.51
tsp12		3			0.000862	0.000436	500	1.98
hbsp1			1		0	.	.	.
hbsp1			2		-0.00383	0.001841	500	-2.08
hbsp1			3		0.000080	0.000074	500	1.08

#### Solution for Fixed Effects

Effect	tsp11	tsp12	hbsp1	predictorvalue	Pr >  t
tsp12		1			.
tsp12		2			0.1305
tsp12		3			0.0485
hbsp1			1		.
hbsp1			2		0.0382
hbsp1			3		0.2804

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	500	3.52	3.52	0.0607	0.0612

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	2	1 2
idnr	355	210037043146 210064370137 210105465112 210112082126 210198886143 210214337102 210242740132 210251854127 210259885148 210286578147 210310671143 210325887106 210365748125 210366101153 210385261103 210387065146 210392450139 210403416142 210449925102 210461643139 ...

Number of Observations Read	551
Number of Observations Used	489

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	10
Columns in Z per Subject	1
Subjects (Blocks in V)	355

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	-5.443912599	.	19.31596
1	3	-6.663846367	1.21993377	1.926323
2	2	-6.67634025	0.01249388	0.0279
3	2	-6.676342862	0.00000261	0.00008

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	2	-6.676342862	0.00000000	3.089E-9

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.01305
Residual		0.03734

#### Fit Statistics

-2 Res Log Likelihood	-6.67634
AIC (Smaller is Better)	-2.67634
AICC (Smaller is Better)	-2.65129
BIC (Smaller is Better)	5.06789
CAIC (Smaller is Better)	7.06789
HQIC (Smaller is Better)	0.40452

#### Solution for Fixed Effects

Effect	tspl1	tspl2	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				0.05360	0.05697	482	0.94	0.3473
predspline			1	0	.	.	.	.
predspline			2	-0.00190	0.001284	482	-1.48	0.1397
predspline			3	0.000085	0.000057	482	1.49	0.1381
tspl1	1			0	.	.	.	.
tspl1	2			0.008184	0.004016	482	2.04	0.0421
tspl1	3			-0.00065	0.000477	482	-1.36	0.1730
tspl2		1		0	.	.	.	.
tspl2		2		-0.00720	0.004245	482	-1.70	0.0904
tspl2		3		0.000877	0.000446	482	1.97	0.0497

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	482	2.34	1.17	0.3107	0.3116

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	2	1 2
idnr	344	210037043146 210064370137 210112082126 210198886143 210214337102 210242740132 210251854127 210259885148 210286578147 210310671143 210325887106 210365748125 210366101153 210385261103 210387065146 210392450139 210403416142 210449925102 210461643139 210494268128 ...

Number of Observations Read	551
Number of Observations Used	469

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	13
Columns in Z per Subject	1
Subjects (Blocks in V)	344

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	4.6294211906	.	10.75329
1	3	4.2074374518	0.42198374	1.157945
2	2	4.202470901	0.00496655	0.003065
3	2	4.2024708662	0.00000003	2.429E-6



## Now assessing with 6 hours pre-post-transfusion windows

The HPMIXED Procedure

Convergence criterion (ABSGCONV=0.00001) satisfied.

### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.01734
Residual		0.03185

### Fit Statistics

-2 Res Log Likelihood	4.20247
AIC (Smaller is Better)	8.20247
AICC (Smaller is Better)	8.22873
BIC (Smaller is Better)	15.88375
CAIC (Smaller is Better)	17.88375
HQIC (Smaller is Better)	11.26183

### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept					0.6693	0.2621	460	2.55	0.0110
predspline				1	0	.	.	.	.
predspline				2	-0.00188	0.001276	460	-1.47	0.1420
predspline				3	0.000093	0.000057	460	1.63	0.1029
tspl1	1				0	.	.	.	.
tspl1	2				0.008152	0.004029	460	2.02	0.0436
tspl1	3				-0.00066	0.000478	460	-1.38	0.1688
tspl2		1			0	.	.	.	.
tspl2		2			-0.00703	0.004304	460	-1.63	0.1032
tspl2		3			0.000882	0.000448	460	1.97	0.0498
hbspl			1		0	.	.	.	.
hbspl			2		-0.00446	0.001895	460	-2.36	0.0189
hbspl			3		0.000101	0.000076	460	1.33	0.1838

### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	460	2.68	1.34	0.2624	0.2634

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	2	1 2
idnr	369	210037043146 210064370137 210071505145 210112082126 210198886143 210214337102 210242740132 210251854127 210259885148 210286578147 210310671143 210325887106 210365748125 210366101153 210377864111 210385261103 210387065146 210392450139 210403416142 210449925102 ...

Number of Observations Read	595
Number of Observations Used	508

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	10
Columns in Z per Subject	1
Subjects (Blocks in V)	369

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	1.6054192043	.	15.8994
1	3	0.7013950104	0.90402419	2.101559
2	2	0.684750758	0.01664425	0.050487
3	2	0.6847412094	0.00000955	0.000253

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	2	0.6847412091	0.00000000	2.881E-8

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.01581
Residual		0.03621

#### Fit Statistics

-2 Res Log Likelihood	0.68474
AIC (Smaller is Better)	4.68474
AICC (Smaller is Better)	4.70884
BIC (Smaller is Better)	12.50633
CAIC (Smaller is Better)	14.50633
HQIC (Smaller is Better)	7.79186

#### Solution for Fixed Effects

Effect	tspl1	tspl2	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				0.4729	0.2532	501	1.87	0.0624
predspline			1	0	.	.	.	.
predspline			2	-0.00358	0.001841	501	-1.94	0.0524
predspline			3	0.000071	0.000074	501	0.96	0.3380
tspl1	1			0	.	.	.	.
tspl1	2			0.009265	0.003861	501	2.40	0.0168
tspl1	3			-0.00084	0.000455	501	-1.86	0.0640
tspl2		1		0	.	.	.	.
tspl2		2		-0.00651	0.004167	501	-1.56	0.1189
tspl2		3		0.000879	0.000437	501	2.01	0.0449

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	501	7.00	3.50	0.0302	0.0309

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	2	1 2
idnr	382	210037043146 210064370137 210071505145 210105465112 210112082126 210198886143 210214337102 210242740132 210251854127 210259885148 210286578147 210310671143 210325887106 210365748125 210366101153 210377864111 210385261103 210387065146 210392450139 210403416142 ...

Number of Observations Read	534
Number of Observations Used	532

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z per Subject	1
Subjects (Blocks in V)	382

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	-5.708708451	.	24.92331
1	3	-7.687424102	1.97871565	2.515141
2	2	-7.708754778	0.02133068	0.085618

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	-7.708779329	0.00002455	0.000523
4	2	-7.708779329	0.00000000	1.02E-7

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.01163
Residual		0.04134

#### Fit Statistics

-2 Res Log Likelihood	-7.70878
AIC (Smaller is Better)	-3.70878
AICC (Smaller is Better)	-3.68583
BIC (Smaller is Better)	4.18206
CAIC (Smaller is Better)	6.18206
HQIC (Smaller is Better)	-0.57829

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				-0.02653	0.03615	526	-0.73	0.4633
predictorvalue			1	0	.	.	.	.
predictorvalue			2	-0.00287	0.01964	526	-0.15	0.8837
tsp11	1			0	.	.	.	.
tsp11	2			0.008609	0.003822	526	2.25	0.0247
tsp11	3			-0.00076	0.000451	526	-1.69	0.0921
tsp12		1		0	.	.	.	.
tsp12		2		-0.00608	0.004076	526	-1.49	0.1363
tsp12		3		0.000820	0.000432	526	1.90	0.0580

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	526	0.02	0.02	0.8836	0.8837

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	2	1 2
idnr	369	210037043146 210064370137 210071505145 210112082126 210198886143 210214337102 210242740132 210251854127 210259885148 210286578147 210310671143 210325887106 210365748125 210366101153 210377864111 210385261103 210387065146 210392450139 210403416142 210449925102 ...

Number of Observations Read	534
Number of Observations Used	508

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	12
Columns in Z per Subject	1
Subjects (Blocks in V)	369

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	5.8184784707	.	15.69365
1	3	4.9364564966	0.88202197	2.067716
2	2	4.9203425319	0.01611396	0.047974

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	4.9203339077	0.00000862	0.000232
4	2	4.9203339075	0.00000000	2.435E-8

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.01591
Residual		0.03608

#### Fit Statistics

-2 Res Log Likelihood	4.92033
AIC (Smaller is Better)	8.92033
AICC (Smaller is Better)	8.94448
BIC (Smaller is Better)	16.74193
CAIC (Smaller is Better)	18.74193
HQIC (Smaller is Better)	12.02746

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					0.5469	0.2597	500	2.11
predictorvalue				1	0	.	.	.
predictorvalue				2	-0.02734	0.02169	500	-1.26
tspl1	1				0	.	.	.
tspl1	2				0.009083	0.003862	500	2.35
tspl1	3				-0.00082	0.000455	500	-1.81

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.0357
predictorvalue				1	.
predictorvalue				2	0.2080
tspl1	1				.
tspl1	2				0.0191
tspl1	3				0.0710

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tsp11	tsp12	hbsp1	predictorvalue	Estimate	Standard Error	DF	t Value
tsp12		1			0	.	.	.
tsp12		2			-0.00650	0.004164	500	-1.56
tsp12		3			0.000883	0.000437	500	2.02
hbsp1			1		0	.	.	.
hbsp1			2		-0.00399	0.001868	500	-2.14
hbsp1			3		0.000068	0.000074	500	0.91

#### Solution for Fixed Effects

Effect	tsp11	tsp12	hbsp1	predictorvalue	Pr >  t
tsp12		1			.
tsp12		2			0.1194
tsp12		3			0.0439
hbsp1			1		.
hbsp1			2		0.0332
hbsp1			3		0.3619

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	500	1.59	1.59	0.2074	0.2080



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	2	1 2
idnr	381	210037043146 210064370137 210071505145 210105465112 210112082126 210198886143 210214337102 210242740132 210251854127 210259885148 210286578147 210310671143 210325887106 210365748125 210366101153 210377864111 210385261103 210387065146 210392450139 210403416142 ...

Number of Observations Read	614
Number of Observations Used	531

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	10
Columns in Z per Subject	1
Subjects (Blocks in V)	381

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	10.719626044	.	23.17598
1	3	9.0109571929	1.70866885	2.171035
2	2	8.9953645692	0.01559262	0.048904
3	2	8.9953566939	0.00000788	0.000191

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	2	8.9953566938	0.00000000	1.582E-8

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.01245
Residual		0.04022

#### Fit Statistics

-2 Res Log Likelihood	8.99536
AIC (Smaller is Better)	12.99536
AICC (Smaller is Better)	13.01839
BIC (Smaller is Better)	20.88096
CAIC (Smaller is Better)	22.88096
HQIC (Smaller is Better)	16.12408

#### Solution for Fixed Effects

Effect	tspl1	tspl2	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				0.007449	0.04602	524	0.16	0.8715
predspline			1	0	.	.	.	.
predspline			2	-0.00045	0.002133	524	-0.21	0.8346
predspline			3	-0.00011	0.000127	524	-0.88	0.3802
tspl1	1			0	.	.	.	.
tspl1	2			0.008028	0.003816	524	2.10	0.0359
tspl1	3			-0.00073	0.000450	524	-1.62	0.1054
tspl2		1		0	.	.	.	.
tspl2		2		-0.00673	0.004067	524	-1.66	0.0984
tspl2		3		0.000861	0.000431	524	2.00	0.0461

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	524	6.80	3.40	0.0333	0.0341

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	2	1 2
idnr	368	210037043146 210064370137 210071505145 210112082126 210198886143 210214337102 210242740132 210251854127 210259885148 210286578147 210310671143 210325887106 210365748125 210366101153 210377864111 210385261103 210387065146 210392450139 210403416142 210449925102 ...

Number of Observations Read	614
Number of Observations Used	507

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	13
Columns in Z per Subject	1
Subjects (Blocks in V)	368

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	25.32125774	.	14.80877
1	3	24.53676524	0.78449250	1.837744
2	2	24.524186268	0.01257897	0.031948
3	2	24.524182483	0.00000379	0.000111

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	2	24.524182483	0.00000000	6.33E-9

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.01638
Residual		0.03552

#### Fit Statistics

-2 Res Log Likelihood	24.52418
AIC (Smaller is Better)	28.52418
AICC (Smaller is Better)	28.54842
BIC (Smaller is Better)	36.34035
CAIC (Smaller is Better)	38.34035
HQIC (Smaller is Better)	31.62947

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept					0.4703	0.2550	498	1.84	0.0657
predspline				1	0	.	.	.	.
predspline				2	-0.00034	0.002145	498	-0.16	0.8738
predspline				3	-0.00011	0.000128	498	-0.83	0.4051
tspl1	1				0	.	.	.	.
tspl1	2				0.008651	0.003866	498	2.24	0.0257
tspl1	3				-0.00081	0.000454	498	-1.78	0.0763
tspl2		1			0	.	.	.	.
tspl2		2			-0.00708	0.004166	498	-1.70	0.0900
tspl2		3			0.000911	0.000437	498	2.09	0.0375
hbspl			1		0	.	.	.	.
hbspl			2		-0.00334	0.001838	498	-1.81	0.0702
hbspl			3		0.000070	0.000074	498	0.95	0.3438

**Now assessing with 6 hours pre-post-transfusion windows**

The HPMIXED Procedure

Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	498	5.59	2.80	0.0610	0.0620

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	6	0 1 5 10 20 99
recipientsex	2	1 2
idnr	382	210037043146 210064370137 210071505145 210105465112 210112082126 210198886143 210214337102 210242740132 210251854127 210259885148 210286578147 210310671143 210325887106 210365748125 210366101153 210377864111 210385261103 210387065146 210392450139 210403416142 ...

Number of Observations Read	538
Number of Observations Used	532

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	13
Columns in Z per Subject	1
Subjects (Blocks in V)	382

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	7.6445685551	.	24.57892
1	3	5.6904877014	1.95408085	2.443936
2	2	5.6700203955	0.02046731	0.085094

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	5.6699957469	0.00002465	0.000514
4	2	5.669995746	0.00000000	1.018E-7

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.01168
Residual		0.04120

#### Fit Statistics

-2 Res Log Likelihood	5.67000
AIC (Smaller is Better)	9.67000
AICC (Smaller is Better)	9.69312
BIC (Smaller is Better)	17.56084
CAIC (Smaller is Better)	19.56084
HQIC (Smaller is Better)	12.80048

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				0.01422	0.04019	522	0.35	0.7236
predictorvalue			0	0	.	.	.	.
predictorvalue			1	-0.04292	0.02848	522	-1.51	0.1324
predictorvalue			5	-0.06217	0.03370	522	-1.84	0.0657
predictorvalue			10	-0.04008	0.03834	522	-1.05	0.2963
predictorvalue			20	-0.09458	0.07959	522	-1.19	0.2352
predictorvalue			99	-0.06030	0.03359	522	-1.79	0.0732
tsp11	1			0	.	.	.	.
tsp11	2			0.008593	0.003819	522	2.25	0.0248
tsp11	3			-0.00077	0.000451	522	-1.72	0.0868
tsp12		1		0	.	.	.	.
tsp12		2		-0.00612	0.004094	522	-1.49	0.1356
tsp12		3		0.000828	0.000434	522	1.91	0.0570

Now assessing with 6 hours pre-post-transfusion windows

The HPMIXED Procedure						
Type III Tests of Fixed Effects						
Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	5	522	4.98	1.00	0.4187	0.4198



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	6	0 1 5 10 20 99
recipientsex	2	1 2
idnr	369	210037043146 210064370137 210071505145 210112082126 210198886143 210214337102 210242740132 210251854127 210259885148 210286578147 210310671143 210325887106 210365748125 210366101153 210377864111 210385261103 210387065146 210392450139 210403416142 210449925102 ...

Number of Observations Read	538
Number of Observations Used	508

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	16
Columns in Z per Subject	1
Subjects (Blocks in V)	369

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	21.219692377	.	15.97562
1	3	20.288860984	0.93083139	2.185401
2	2	20.270358202	0.01850278	0.062071

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	20.270343381	0.00001482	0.000374
4	2	20.27034338	0.00000000	6.001E-8

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.01566
Residual		0.03636

#### Fit Statistics

-2 Res Log Likelihood	20.27034
AIC (Smaller is Better)	24.27034
AICC (Smaller is Better)	24.29468
BIC (Smaller is Better)	32.09194
CAIC (Smaller is Better)	34.09194
HQIC (Smaller is Better)	27.37747

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					0.4929	0.2548	496	1.93
predictorvalue				0	0	.	.	.
predictorvalue				1	-0.04347	0.02798	496	-1.55
predictorvalue				5	-0.06327	0.03315	496	-1.91
predictorvalue				10	-0.04364	0.03783	496	-1.15
predictorvalue				20	-0.08436	0.07805	496	-1.08

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.0536
predictorvalue				0	.
predictorvalue				1	0.1209
predictorvalue				5	0.0569
predictorvalue				10	0.2492
predictorvalue				20	0.2803

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
predictorvalue				99	-0.05756	0.03645	496	-1.58
tspl1	1				0	.	.	.
tspl1	2				0.008999	0.003865	496	2.33
tspl1	3				-0.00082	0.000455	496	-1.81
tspl2		1			0	.	.	.
tspl2		2			-0.00629	0.004180	496	-1.50
tspl2		3			0.000870	0.000439	496	1.98
hbspl			1		0	.	.	.
hbspl			2		-0.00343	0.001851	496	-1.85
hbspl			3		0.000062	0.000075	496	0.83

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
predictorvalue				99	0.1149
tspl1	1				.
tspl1	2				0.0203
tspl1	3				0.0713
tspl2		1			.
tspl2		2			0.1332
tspl2		3			0.0484
hbspl			1		.
hbspl			2		0.0648
hbspl			3		0.4061

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	5	496	4.69	0.94	0.4550	0.4561

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	4	0 180 365 999
recipientsex	2	1 2
idnr	382	210037043146 210064370137 210071505145 210105465112 210112082126 210198886143 210214337102 210242740132 210251854127 210259885148 210286578147 210310671143 210325887106 210365748125 210366101153 210377864111 210385261103 210387065146 210392450139 210403416142 ...

Number of Observations Read	536
Number of Observations Used	532

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	11
Columns in Z per Subject	1
Subjects (Blocks in V)	382

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	2.8360891591	.	25.21755
1	3	0.7847838705	2.05130529	2.56914
2	2	0.7621104833	0.02267339	0.098065

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	0.7620776936	0.00003279	0.000674
4	2	0.7620776921	0.00000000	1.654E-7

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.01142
Residual		0.04159

#### Fit Statistics

-2 Res Log Likelihood	0.76208
AIC (Smaller is Better)	4.76208
AICC (Smaller is Better)	4.78511
BIC (Smaller is Better)	12.65292
CAIC (Smaller is Better)	14.65292
HQIC (Smaller is Better)	7.89256

#### Solution for Fixed Effects

Effect	tspl1	tspl2	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				-0.01736	0.03645	524	-0.48	0.6341
predictorvalue			0	-0.01742	0.02255	524	-0.77	0.4400
predictorvalue			180	-0.01698	0.03369	524	-0.50	0.6145
predictorvalue			365	-0.03777	0.03868	524	-0.98	0.3293
predictorvalue			999	0	.	.	.	.
tspl1	1			0	.	.	.	.
tspl1	2			0.008481	0.003824	524	2.22	0.0270
tspl1	3			-0.00074	0.000452	524	-1.63	0.1046
tspl2		1		0	.	.	.	.
tspl2		2		-0.00569	0.004094	524	-1.39	0.1650
tspl2		3		0.000782	0.000434	524	1.80	0.0719

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	3	524	1.19	0.40	0.7548	0.7549

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	4	0 180 365 999
recipientsex	2	1 2
idnr	369	210037043146 210064370137 210071505145 210112082126 210198886143 210214337102 210242740132 210251854127 210259885148 210286578147 210310671143 210325887106 210365748125 210366101153 210377864111 210385261103 210387065146 210392450139 210403416142 210449925102 ...

Number of Observations Read	536
Number of Observations Used	508

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	14
Columns in Z per Subject	1
Subjects (Blocks in V)	369

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	15.619717944	.	15.97042
1	3	14.700979613	0.91873833	2.078951
2	2	14.684581614	0.01639800	0.050126

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	14.684572137	0.00000948	0.000249
4	2	14.684572137	0.00000000	2.809E-8

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.01576
Residual		0.03639

#### Fit Statistics

-2 Res Log Likelihood	14.68457
AIC (Smaller is Better)	18.68457
AICC (Smaller is Better)	18.70881
BIC (Smaller is Better)	26.50617
CAIC (Smaller is Better)	28.50617
HQIC (Smaller is Better)	21.79169

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					0.4633	0.2541	498	1.82
predictorvalue				0	-0.02515	0.02301	498	-1.09
predictorvalue				180	-0.02231	0.03356	498	-0.66
predictorvalue				365	-0.04036	0.03870	498	-1.04
predictorvalue				999	0	.	.	.
tspl1	1				0	.	.	.

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.0689
predictorvalue				0	0.2749
predictorvalue				180	0.5065
predictorvalue				365	0.2975
predictorvalue				999	.
tspl1	1				.

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
tspl1	2				0.009132	0.003868	498	2.36
tspl1	3				-0.00082	0.000456	498	-1.80
tspl2		1			0	.	.	.
tspl2		2			-0.00617	0.004181	498	-1.48
tspl2		3			0.000841	0.000439	498	1.92
hbspl			1		0	.	.	.
hbspl			2		-0.00339	0.001852	498	-1.83
hbspl			3		0.000061	0.000075	498	0.81

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
tspl1	2				0.0186
tspl1	3				0.0725
tspl2		1			.
tspl2		2			0.1406
tspl2		3			0.0557
hbspl			1		.
hbspl			2		0.0679
hbspl			3		0.4172

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	3	498	1.69	0.56	0.6394	0.6397



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	3	0 1 2
idnr	25997	210000486129 210000556116 210000598144 210000801144 210000905111 210001428104 210001535114 210001589111 210002388128 210002429149 210002448146 210002985127 210003060142 210003353100 210003574148 210003729131 210004055143 210004156135 210004170105 210004301110 ...

Number of Observations Read	40368
Number of Observations Used	40366

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z per Subject	1
Subjects (Blocks in V)	25997

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	291881.74613	.	2026.837
1	5	291703.60284	178.14329740	14.13424
2	2	291703.59393	0.00890533	0.333653

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	291703.59393	0.00000499	0.000118

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	16.1946
Residual		66.1204

#### Fit Statistics

-2 Res Log Likelihood	291704
AIC (Smaller is Better)	291708
AICC (Smaller is Better)	291708
BIC (Smaller is Better)	291724
CAIC (Smaller is Better)	291726
HQIC (Smaller is Better)	291713

#### Solution for Fixed Effects

Effect	tspl1	tspl2	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				6.8499	0.1290	40360	53.09	<.0001
predictorvalue			1	0	.	.	.	.
predictorvalue			2	0.07286	0.09076	40360	0.80	0.4221
tspl1	1			0	.	.	.	.
tspl1	2			-0.04451	0.01664	40360	-2.67	0.0075
tspl1	3			-0.02225	0.002971	40360	-7.49	<.0001
tspl2		1		0	.	.	.	.
tspl2		2		0.4354	0.01808	40360	24.08	<.0001
tspl2		3		-0.03938	0.002111	40360	-18.65	<.0001

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	40360	0.64	0.64	0.4221	0.4221

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	3	0 1 2
idnr	25922	210000486129 210000556116 210000598144 210000801144 210000905111 210001428104 210001535114 210001589111 210002388128 210002429149 210002448146 210002985127 210003060142 210003353100 210003574148 210003729131 210004055143 210004156135 210004170105 210004301110 ...

Number of Observations Read	40368
Number of Observations Used	40170

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	12
Columns in Z per Subject	1
Subjects (Blocks in V)	25922

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	290451.77004	.	2004.389
1	5	290276.53241	175.23762752	14.17125
2	2	290276.5234	0.00900694	0.337564

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	290276.5234	0.00000510	0.000122

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	16.3286
Residual		65.9418

#### Fit Statistics

-2 Res Log Likelihood	290277
AIC (Smaller is Better)	290281
AICC (Smaller is Better)	290281
BIC (Smaller is Better)	290297
CAIC (Smaller is Better)	290299
HQIC (Smaller is Better)	290286

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					-0.8960	0.9740	40162	-0.92
predictorvalue				1	0	.	.	.
predictorvalue				2	0.04603	0.09099	40162	0.51
tspl1	1				0	.	.	.
tspl1	2				-0.04538	0.01667	40162	-2.72
tspl1	3				-0.02210	0.002973	40162	-7.43
tspl2		1			0	.	.	.

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.3576
predictorvalue				1	.
predictorvalue				2	0.6130
tspl1	1				.
tspl1	2				0.0065
tspl1	3				<.0001
tspl2		1			.

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
tspl2		2			0.4352	0.01811	40162	24.03
tspl2		3			-0.03932	0.002115	40162	-18.59
hbspl			1		0	.	.	.
hbspl			2		0.05674	0.007133	40162	7.95
hbspl			3		-0.00132	0.000662	40162	-2.00

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
tspl2		2			<.0001
tspl2		3			<.0001
hbspl			1		.
hbspl			2		<.0001
hbspl			3		0.0458

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	40162	0.26	0.26	0.6130	0.6130

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	0 1
recipientsex	3	0 1 2
idnr	49959	210000196120 210000486129 210000556116 210000598144 210000801144 210000905111 210000909149 210000954103 210001151104 210001428104 210001534105 210001535114 210001589111 210001682118 210001739105 210002063142 210002204152 210002319145 210002388128 210002390143 ...

Number of Observations Read	108128
Number of Observations Used	108126

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z per Subject	1
Subjects (Blocks in V)	49959

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	783443.55754	.	5046.901
1	5	783130.19661	313.36093171	91.23188
2	2	783130.10067	0.09593963	4.280465

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	783130.10046	0.00021186	0.002886

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	15.1279
Residual		69.7534

#### Fit Statistics

-2 Res Log Likelihood	783130
AIC (Smaller is Better)	783134
AICC (Smaller is Better)	783134
BIC (Smaller is Better)	783152
CAIC (Smaller is Better)	783154
HQIC (Smaller is Better)	783140

#### Solution for Fixed Effects

Effect	tspl1	tspl2	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				7.3700	0.07463	108E3	98.75	<.0001
predictorvalue			0	0	.	.	.	.
predictorvalue			1	-0.1377	0.1167	108E3	-1.18	0.2379
tspl1	1			0	.	.	.	.
tspl1	2			-0.04804	0.01023	108E3	-4.70	<.0001
tspl1	3			-0.02305	0.001804	108E3	-12.78	<.0001
tspl2		1		0	.	.	.	.
tspl2		2		0.4701	0.01113	108E3	42.24	<.0001
tspl2		3		-0.04237	0.001299	108E3	-32.61	<.0001

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	108E3	1.39	1.39	0.2379	0.2379

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	0 1
recipientsex	3	0 1 2
idnr	47078	210000196120 210000486129 210000556116 210000598144 210000801144 210000905111 210000954103 210001151104 210001428104 210001534105 210001535114 210001589111 210001682118 210001739105 210002063142 210002204152 210002319145 210002388128 210002390143 210002429149 ...

Number of Observations Read	108128
Number of Observations Used	98795

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	12
Columns in Z per Subject	1
Subjects (Blocks in V)	47078

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	715244.38215	.	4626.128
1	5	714950.99206	293.39008438	72.55924
2	2	714950.92379	0.06827492	2.894467



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	714950.92368	0.00010885	0.001331

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	15.3175
Residual		68.9782

#### Fit Statistics

-2 Res Log Likelihood	714951
AIC (Smaller is Better)	714955
AICC (Smaller is Better)	714955
BIC (Smaller is Better)	714972
CAIC (Smaller is Better)	714974
HQIC (Smaller is Better)	714960

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					-2.4362	0.6602	98787	-3.69
predictorvalue				0	0	.	.	.
predictorvalue				1	-0.1056	0.1170	98787	-0.90
tspl1	1				0	.	.	.
tspl1	2				-0.04936	0.01066	98787	-4.63
tspl1	3				-0.02259	0.001875	98787	-12.04
tspl2		1			0	.	.	.

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.0002
predictorvalue				0	.
predictorvalue				1	0.3668
tspl1	1				.
tspl1	2				<.0001
tspl1	3				<.0001
tspl2		1			.

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
tspl2		2			0.4584	0.01161	98787	39.47
tspl2		3			-0.04095	0.001351	98787	-30.31
hbspl			1		0	.	.	.
hbspl			2		0.06902	0.004781	98787	14.44
hbspl			3		-0.00041	0.000156	98787	-2.64

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
tspl2		2			<.0001
tspl2		3			<.0001
hbspl			1		.
hbspl			2		<.0001
hbspl			3		0.0082

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	98787	0.81	0.81	0.3668	0.3668

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	3	0 1 2
idnr	46390	210000196120 210000486129 210000556116 210000598144 210000801144 210000905111 210000909149 210000954103 210001151104 210001428104 210001534105 210001535114 210001589111 210001682118 210001739105 210002063142 210002204152 210002319145 210002388128 210002390143 ...

Number of Observations Read	97542
Number of Observations Used	97480

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	10
Columns in Z per Subject	1
Subjects (Blocks in V)	46390

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	705263.70742	.	4623.489
1	5	704960.51899	303.18843560	74.93725
2	2	704960.44356	0.07542337	2.926311
3	2	704960.44345	0.00011538	0.001328

## Now assessing with 6 hours pre-post-transfusion windows

The HPMIXED Procedure

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

### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	15.0008
Residual		68.8390

### Fit Statistics

-2 Res Log Likelihood	704960
AIC (Smaller is Better)	704964
AICC (Smaller is Better)	704964
BIC (Smaller is Better)	704982
CAIC (Smaller is Better)	704984
HQIC (Smaller is Better)	704970

### Solution for Fixed Effects

Effect	tspl1	tspl2	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				7.5779	0.1599	97473	47.39	<.0001
predspline			1	0	.	.	.	.
predspline			2	-0.00773	0.003819	97473	-2.02	0.0429
predspline			3	0.000411	0.000165	97473	2.50	0.0125
tspl1	1			0	.	.	.	.
tspl1	2			-0.04398	0.01072	97473	-4.10	<.0001
tspl1	3			-0.02319	0.001897	97473	-12.23	<.0001
tspl2		1		0	.	.	.	.
tspl2		2		0.4588	0.01166	97473	39.36	<.0001
tspl2		3		-0.04147	0.001361	97473	-30.48	<.0001

### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	97473	6.40	3.20	0.0408	0.0408

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	3	0 1 2
idnr	44006	210000196120 210000486129 210000556116 210000598144 210000801144 210000905111 210000954103 210001151104 210001428104 210001534105 210001535114 210001589111 210001682118 210001739105 210002063142 210002204152 210002319145 210002388128 210002390143 210002429149 ...

Number of Observations Read	97542
Number of Observations Used	89623

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	13
Columns in Z per Subject	1
Subjects (Blocks in V)	44006

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	648598.81303	.	4192.761
1	5	648326.47144	272.34159102	60.27828
2	2	648326.41791	0.05353105	2.173094
3	2	648326.41784	0.00006968	0.000801

## Now assessing with 6 hours pre-post-transfusion windows

The HPMIXED Procedure

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

### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	15.6338
Residual		68.3987

### Fit Statistics

-2 Res Log Likelihood	648326
AIC (Smaller is Better)	648330
AICC (Smaller is Better)	648330
BIC (Smaller is Better)	648348
CAIC (Smaller is Better)	648350
HQIC (Smaller is Better)	648336

### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept					-2.3149	0.7041	89614	-3.29	0.0010
predspline				1	0	.	.	.	.
predspline				2	-0.00631	0.003912	89614	-1.61	0.1066
predspline				3	0.000435	0.000172	89614	2.53	0.0113
tspl1	1				0	.	.	.	.
tspl1	2				-0.04889	0.01118	89614	-4.37	<.0001
tspl1	3				-0.02230	0.001969	89614	-11.32	<.0001
tspl2		1			0	.	.	.	.
tspl2		2			0.4535	0.01217	89614	37.27	<.0001
tspl2		3			-0.04056	0.001415	89614	-28.66	<.0001
hbspl			1		0	.	.	.	.
hbspl			2		0.06925	0.005021	89614	13.79	<.0001
hbspl			3		-0.00043	0.000164	89614	-2.65	0.0081

### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	89614	8.11	4.06	0.0173	0.0173

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	3	0 1 2
idnr	47061	210000196120 210000486129 210000556116 210000598144 210000801144 210000905111 210000954103 210001151104 210001428104 210001534105 210001535114 210001589111 210001682118 210001739105 210002063142 210002204152 210002319145 210002388128 210002390143 210002429149 ...

Number of Observations Read	98836
Number of Observations Used	98749

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	10
Columns in Z per Subject	1
Subjects (Blocks in V)	47061

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	714907.1049	.	4624.27
1	5	714613.70408	293.40081351	72.30938
2	2	714613.63621	0.06787653	2.873549
3	2	714613.6361	0.00010739	0.00131

## Now assessing with 6 hours pre-post-transfusion windows

The HPMIXED Procedure

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

### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	15.3165
Residual		68.9758

### Fit Statistics

-2 Res Log Likelihood	714614
AIC (Smaller is Better)	714618
AICC (Smaller is Better)	714618
BIC (Smaller is Better)	714635
CAIC (Smaller is Better)	714637
HQIC (Smaller is Better)	714623

### Solution for Fixed Effects

Effect	tspl1	tspl2	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				-2.9175	0.7860	98742	-3.71	0.0002
predspline			1	0	.	.	.	.
predspline			2	0.07261	0.005763	98742	12.60	<.0001
predspline			3	-0.00047	0.000166	98742	-2.80	0.0050
tspl1	1			0	.	.	.	.
tspl1	2			-0.04931	0.01066	98742	-4.63	<.0001
tspl1	3			-0.02257	0.001876	98742	-12.03	<.0001
tspl2		1		0	.	.	.	.
tspl2		2		0.4589	0.01161	98742	39.51	<.0001
tspl2		3		-0.04100	0.001351	98742	-30.34	<.0001

### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	98742	645.90	322.95	<.0001	<.0001



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	3	0 1 2
idnr	49959	210000196120 210000486129 210000556116 210000598144 210000801144 210000905111 210000909149 210000954103 210001151104 210001428104 210001534105 210001535114 210001589111 210001682118 210001739105 210002063142 210002204152 210002319145 210002388128 210002390143 ...

Number of Observations Read	108127
Number of Observations Used	108125

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z per Subject	1
Subjects (Blocks in V)	49959

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	783260.77026	.	4998.993
1	5	782953.13874	307.63151768	87.82618
2	2	782953.04972	0.08901645	4.087651

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	782953.04953	0.00019324	0.002672

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	15.2856
Residual		69.5218

#### Fit Statistics

-2 Res Log Likelihood	782953
AIC (Smaller is Better)	782957
AICC (Smaller is Better)	782957
BIC (Smaller is Better)	782975
CAIC (Smaller is Better)	782977
HQIC (Smaller is Better)	782963

#### Solution for Fixed Effects

Effect	tspl1	tspl2	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				7.7259	0.07920	108E3	97.55	<.0001
predictorvalue			1	0	.	.	.	.
predictorvalue			2	-0.7239	0.05502	108E3	-13.16	<.0001
tspl1	1			0	.	.	.	.
tspl1	2			-0.04676	0.01022	108E3	-4.58	<.0001
tspl1	3			-0.02324	0.001803	108E3	-12.89	<.0001
tspl2		1		0	.	.	.	.
tspl2		2		0.4689	0.01112	108E3	42.17	<.0001
tspl2		3		-0.04218	0.001298	108E3	-32.50	<.0001

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	108E3	173.11	173.11	<.0001	<.0001

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	3	0 1 2
idnr	47078	210000196120 210000486129 210000556116 210000598144 210000801144 210000905111 210000954103 210001151104 210001428104 210001534105 210001535114 210001589111 210001682118 210001739105 210002063142 210002204152 210002319145 210002388128 210002390143 210002429149 ...

Number of Observations Read	108127
Number of Observations Used	98794

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	12
Columns in Z per Subject	1
Subjects (Blocks in V)	47078

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	715219.37072	.	4618.586
1	5	714926.92051	292.45020621	72.01384
2	2	714926.85324	0.06726551	2.865801

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	714926.85314	0.00010672	0.001308

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	15.3448
Residual		68.9452

#### Fit Statistics

-2 Res Log Likelihood	714927
AIC (Smaller is Better)	714931
AICC (Smaller is Better)	714931
BIC (Smaller is Better)	714948
CAIC (Smaller is Better)	714950
HQIC (Smaller is Better)	714936

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					-1.4330	0.7002	98786	-2.05
predictorvalue				1	0	.	.	.
predictorvalue				2	-0.2784	0.06429	98786	-4.33
tspl1	1				0	.	.	.
tspl1	2				-0.04897	0.01066	98786	-4.60
tspl1	3				-0.02264	0.001875	98786	-12.08
tspl2		1			0	.	.	.

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.0407
predictorvalue				1	.
predictorvalue				2	<.0001
tspl1	1				.
tspl1	2				<.0001
tspl1	3				<.0001
tspl2		1			.

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
tspl2		2			0.4580	0.01161	98786	39.44
tspl2		3			-0.04090	0.001351	98786	-30.27
hbspl			1		0	.	.	.
hbspl			2		0.06292	0.004984	98786	12.62
hbspl			3		-0.00037	0.000156	98786	-2.40

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
tspl2		2			<.0001
tspl2		3			<.0001
hbspl			1		.
hbspl			2		<.0001
hbspl			3		0.0164

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	98786	18.75	18.75	<.0001	<.0001

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	3	0 1 2
idnr	49941	210000196120 210000486129 210000556116 210000598144 210000801144 210000905111 210000909149 210000954103 210001151104 210001428104 210001534105 210001535114 210001589111 210001682118 210001739105 210002063142 210002204152 210002319145 210002388128 210002390143 ...

Number of Observations Read	108170
Number of Observations Used	108087

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	10
Columns in Z per Subject	1
Subjects (Blocks in V)	49941

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	783202.80048	.	5046.401
1	5	782889.07001	313.73046782	90.90426
2	2	782888.9746	0.09541647	4.241486
3	2	782888.97439	0.00020852	0.002827

## Now assessing with 6 hours pre-post-transfusion windows

The HPMIXED Procedure

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

### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	15.1255
Residual		69.7703

### Fit Statistics

-2 Res Log Likelihood	782889
AIC (Smaller is Better)	782893
AICC (Smaller is Better)	782893
BIC (Smaller is Better)	782911
CAIC (Smaller is Better)	782913
HQIC (Smaller is Better)	782898

### Solution for Fixed Effects

Effect	tspl1	tspl2	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				7.3190	0.1344	108E3	54.47	<.0001
predspline			1	0	.	.	.	.
predspline			2	0.003881	0.007394	108E3	0.52	0.5997
predspline			3	-0.00025	0.000376	108E3	-0.66	0.5091
tspl1	1			0	.	.	.	.
tspl1	2			-0.04767	0.01023	108E3	-4.66	<.0001
tspl1	3			-0.02310	0.001805	108E3	-12.79	<.0001
tspl2		1		0	.	.	.	.
tspl2		2		0.4698	0.01113	108E3	42.20	<.0001
tspl2		3		-0.04234	0.001300	108E3	-32.57	<.0001

### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	108E3	0.50	0.25	0.7769	0.7769

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	3	0 1 2
idnr	47060	210000196120 210000486129 210000556116 210000598144 210000801144 210000905111 210000954103 210001151104 210001428104 210001534105 210001535114 210001589111 210001682118 210001739105 210002063142 210002204152 210002319145 210002388128 210002390143 210002429149 ...

Number of Observations Read	108170
Number of Observations Used	98756

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	13
Columns in Z per Subject	1
Subjects (Blocks in V)	47060

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	715001.12994	.	4627.751
1	5	714707.00801	294.12192491	72.23404
2	2	714706.94019	0.06781747	2.856085
3	2	714706.94009	0.00010631	0.001288



## Now assessing with 6 hours pre-post-transfusion windows

The HPMIXED Procedure

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

### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	15.3056
Residual		69.0005

### Fit Statistics

-2 Res Log Likelihood	714707
AIC (Smaller is Better)	714711
AICC (Smaller is Better)	714711
BIC (Smaller is Better)	714728
CAIC (Smaller is Better)	714730
HQIC (Smaller is Better)	714716

### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept					-2.5123	0.6702	98747	-3.75	0.0002
predspline				1	0	.	.	.	.
predspline				2	0.007455	0.007551	98747	0.99	0.3235
predspline				3	-0.00053	0.000388	98747	-1.35	0.1755
tspl1	1				0	.	.	.	.
tspl1	2				-0.04893	0.01066	98747	-4.59	<.0001
tspl1	3				-0.02265	0.001876	98747	-12.07	<.0001
tspl2		1			0	.	.	.	.
tspl2		2			0.4580	0.01162	98747	39.43	<.0001
tspl2		3			-0.04089	0.001352	98747	-30.25	<.0001
hbspl			1		0	.	.	.	.
hbspl			2		0.06900	0.004782	98747	14.43	<.0001
hbspl			3		-0.00041	0.000156	98747	-2.63	0.0085

### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	98747	2.44	1.22	0.2950	0.2950

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	6	0 1 5 10 20 99
recipientsex	3	0 1 2
idnr	49959	210000196120 210000486129 210000556116 210000598144 210000801144 210000905111 210000909149 210000954103 210001151104 210001428104 210001534105 210001535114 210001589111 210001682118 210001739105 210002063142 210002204152 210002319145 210002388128 210002390143 ...

Number of Observations Read	108132
Number of Observations Used	108126

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	13
Columns in Z per Subject	1
Subjects (Blocks in V)	49959

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	783448.45747	.	5048.476
1	5	783134.64276	313.81471543	90.94946
2	2	783134.5473	0.09545787	4.243818

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	783134.54709	0.00020843	0.002827

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	15.1206
Residual		69.7561

#### Fit Statistics

-2 Res Log Likelihood	783135
AIC (Smaller is Better)	783139
AICC (Smaller is Better)	783139
BIC (Smaller is Better)	783156
CAIC (Smaller is Better)	783158
HQIC (Smaller is Better)	783144

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				7.4401	0.09264	108E3	80.31	<.0001
predictorvalue			0	0	.	.	.	.
predictorvalue			1	-0.1077	0.07738	108E3	-1.39	0.1639
predictorvalue			5	-0.2176	0.09289	108E3	-2.34	0.0191
predictorvalue			10	-0.1300	0.1065	108E3	-1.22	0.2223
predictorvalue			20	0.1551	0.2473	108E3	0.63	0.5307
predictorvalue			99	-0.00769	0.09073	108E3	-0.08	0.9325
tsp11	1			0	.	.	.	.
tsp11	2			-0.04782	0.01023	108E3	-4.68	<.0001
tsp11	3			-0.02309	0.001804	108E3	-12.80	<.0001
tsp12		1		0	.	.	.	.
tsp12		2		0.4707	0.01113	108E3	42.28	<.0001
tsp12		3		-0.04241	0.001299	108E3	-32.64	<.0001

**Now assessing with 6 hours pre-post-transfusion windows**

The HPMIXED Procedure

Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	5	108E3	8.35	1.67	0.1379	0.1379

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	6	0 1 5 10 20 99
recipientsex	3	0 1 2
idnr	47078	210000196120 210000486129 210000556116 210000598144 210000801144 210000905111 210000954103 210001151104 210001428104 210001534105 210001535114 210001589111 210001682118 210001739105 210002063142 210002204152 210002319145 210002388128 210002390143 210002429149 ...

Number of Observations Read	108132
Number of Observations Used	98795

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	16
Columns in Z per Subject	1
Subjects (Blocks in V)	47078

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	715249.96045	.	4623.851
1	5	714956.81555	293.14490946	72.3632
2	2	714956.74762	0.06792201	2.882436

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	714956.74752	0.00010800	0.00132

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	15.3261
Residual		68.9715

#### Fit Statistics

-2 Res Log Likelihood	714957
AIC (Smaller is Better)	714961
AICC (Smaller is Better)	714961
BIC (Smaller is Better)	714978
CAIC (Smaller is Better)	714980
HQIC (Smaller is Better)	714966

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					-2.4394	0.6645	98783	-3.67
predictorvalue				0	0	.	.	.
predictorvalue				1	-0.03468	0.07753	98783	-0.45
predictorvalue				5	-0.06880	0.09319	98783	-0.74
predictorvalue				10	0.07351	0.1071	98783	0.69
predictorvalue				20	0.4461	0.2481	98783	1.80
predictorvalue				99	-0.06982	0.1073	98783	-0.65

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.0002
predictorvalue				0	.
predictorvalue				1	0.6546
predictorvalue				5	0.4604
predictorvalue				10	0.4924
predictorvalue				20	0.0722
predictorvalue				99	0.5152

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
tspl1	1				0	.	.	.
tspl1	2				-0.04937	0.01066	98783	-4.63
tspl1	3				-0.02258	0.001875	98783	-12.04
tspl2		1			0	.	.	.
tspl2		2			0.4584	0.01161	98783	39.47
tspl2		3			-0.04096	0.001351	98783	-30.31
hbspl			1		0	.	.	.
hbspl			2		0.06912	0.004784	98783	14.45
hbspl			3		-0.00041	0.000156	98783	-2.62

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
tspl1	1				.
tspl1	2				<.0001
tspl1	3				<.0001
tspl2		1			.
tspl2		2			<.0001
tspl2		3			<.0001
hbspl			1		.
hbspl			2		<.0001
hbspl			3		0.0089

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	5	98783	5.92	1.18	0.3142	0.3142

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	4	0 180 365 999
recipientsex	3	0 1 2
idnr	49959	210000196120 210000486129 210000556116 210000598144 210000801144 210000905111 210000909149 210000954103 210001151104 210001428104 210001534105 210001535114 210001589111 210001682118 210001739105 210002063142 210002204152 210002319145 210002388128 210002390143 ...

Number of Observations Read	108130
Number of Observations Used	108126

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	11
Columns in Z per Subject	1
Subjects (Blocks in V)	49959

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	783441.79022	.	5046.896
1	5	783128.26977	313.52044560	90.99725
2	2	783128.17425	0.09551623	4.254889



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	783128.17404	0.00020950	0.002847

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	15.1265
Residual		69.7494

#### Fit Statistics

-2 Res Log Likelihood	783128
AIC (Smaller is Better)	783132
AICC (Smaller is Better)	783132
BIC (Smaller is Better)	783150
CAIC (Smaller is Better)	783152
HQIC (Smaller is Better)	783138

#### Solution for Fixed Effects

Effect	tspl1	tspl2	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				7.2601	0.08114	108E3	89.48	<.0001
predictorvalue			0	0	.	.	.	.
predictorvalue			180	0.1963	0.09028	108E3	2.17	0.0297
predictorvalue			365	0.1106	0.1191	108E3	0.93	0.3531
predictorvalue			999	0.1768	0.06182	108E3	2.86	0.0042
tspl1	1			0	.	.	.	.
tspl1	2			-0.04776	0.01023	108E3	-4.67	<.0001
tspl1	3			-0.02310	0.001804	108E3	-12.80	<.0001
tspl2		1		0	.	.	.	.
tspl2		2		0.4705	0.01113	108E3	42.27	<.0001
tspl2		3		-0.04240	0.001299	108E3	-32.63	<.0001

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	3	108E3	10.13	3.38	0.0175	0.0175

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	4	0 180 365 999
recipientsex	3	0 1 2
idnr	47078	210000196120 210000486129 210000556116 210000598144 210000801144 210000905111 210000954103 210001151104 210001428104 210001534105 210001535114 210001589111 210001682118 210001739105 210002063142 210002204152 210002319145 210002388128 210002390143 210002429149 ...

Number of Observations Read	108130
Number of Observations Used	98795

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	14
Columns in Z per Subject	1
Subjects (Blocks in V)	47078

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	715250.87565	.	4625.744
1	5	714957.51379	293.36186879	72.48805
2	2	714957.44564	0.06814911	2.888978

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	714957.44553	0.00010854	0.001325

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	15.3188
Residual		68.9788

#### Fit Statistics

-2 Res Log Likelihood	714957
AIC (Smaller is Better)	714961
AICC (Smaller is Better)	714961
BIC (Smaller is Better)	714979
CAIC (Smaller is Better)	714981
HQIC (Smaller is Better)	714967

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					-2.4419	0.6603	98785	-3.70
predictorvalue				0	0	.	.	.
predictorvalue				180	0.07878	0.09040	98785	0.87
predictorvalue				365	-0.03643	0.1193	98785	-0.31
predictorvalue				999	0.006330	0.06582	98785	0.10
tspl1	1				0	.	.	.
tspl1	2				-0.04934	0.01066	98785	-4.63

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.0002
predictorvalue				0	.
predictorvalue				180	0.3835
predictorvalue				365	0.7601
predictorvalue				999	0.9234
tspl1	1				.
tspl1	2				<.0001

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
tspl1	3				-0.02260	0.001875	98785	-12.05
tspl2		1			0	.	.	.
tspl2		2			0.4584	0.01161	98785	39.47
tspl2		3			-0.04095	0.001351	98785	-30.31
hbspl			1		0	.	.	.
hbspl			2		0.06894	0.004787	98785	14.40
hbspl			3		-0.00041	0.000156	98785	-2.63

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
tspl1	3				<.0001
tspl2		1			.
tspl2		2			<.0001
tspl2		3			<.0001
hbspl			1		.
hbspl			2		<.0001
hbspl			3		0.0085

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	3	98785	0.97	0.32	0.8095	0.8095

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	2	1 2
idnr	9181	210001535114 210002429149 210002448146 210003060142 210004055143 210004170105 210005174143 210005222149 210006609115 210007122112 210007733127 210007993103 210008804129 210008871117 210009873148 210011153115 210011623133 210012323142 210012696118 210014500120 ...

Number of Observations Read	12551
Number of Observations Used	12549

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z per Subject	1
Subjects (Blocks in V)	9181

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	11956.028973	.	916.8062
1	5	11811.290921	144.73805260	119.1587
2	2	11807.720825	3.57009548	44.26275

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	11807.044406	0.67641910	8.309621
4	2	11807.016512	0.02789438	0.937486
5	2	11807.01614	0.00037157	0.025842
6	3	11807.01614	0.00000028	0.000016

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.008201
Residual		0.1412

#### Fit Statistics

-2 Res Log Likelihood	11807
AIC (Smaller is Better)	11811
AICC (Smaller is Better)	11811
BIC (Smaller is Better)	11825
CAIC (Smaller is Better)	11827
HQIC (Smaller is Better)	11816

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				-0.1215	0.01023	12543	-11.87	<.0001
predictorvalue			1	0	.	.	.	.
predictorvalue			2	-0.00332	0.007028	12543	-0.47	0.6370
tsp11	1			0	.	.	.	.
tsp11	2			0.003097	0.001231	12543	2.52	0.0118
tsp11	3			0.000117	0.000174	12543	0.67	0.5043
tsp12		1		0	.	.	.	.
tsp12		2		0.005075	0.001305	12543	3.89	0.0001
tsp12		3		-0.00016	0.000148	12543	-1.07	0.2825

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	12543	0.22	0.22	0.6370	0.6370

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	2	1 2
idnr	9160	210001535114 210002429149 210002448146 210003060142 210004055143 210004170105 210005174143 210005222149 210006609115 210007122112 210007733127 210007993103 210008804129 210008871117 210009873148 210011153115 210011623133 210012323142 210012696118 210014500120 ...

Number of Observations Read	12551
Number of Observations Used	12500

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	12
Columns in Z per Subject	1
Subjects (Blocks in V)	9160

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	11940.580588	.	907.2884
1	5	11798.86061	141.71997766	115.7371
2	2	11795.513022	3.34758842	42.21363

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	11794.909613	0.60340841	7.503496
4	2	11794.88761	0.02200373	0.767678
5	2	11794.88737	0.00023929	0.017738
6	3	11794.88737	0.00000012	0.000015

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.008734
Residual		0.1407

#### Fit Statistics

-2 Res Log Likelihood	11795
AIC (Smaller is Better)	11799
AICC (Smaller is Better)	11799
BIC (Smaller is Better)	11813
CAIC (Smaller is Better)	11815
HQIC (Smaller is Better)	11804

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					-0.2864	0.07563	12492	-3.79
predictorvalue				1	0	.	.	.
predictorvalue				2	-0.00374	0.007051	12492	-0.53
tspl1	1				0	.	.	.
tspl1	2				0.002999	0.001233	12492	2.43

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.0002
predictorvalue				1	.
predictorvalue				2	0.5960
tspl1	1				.
tspl1	2				0.0150



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
tspl1	3				0.000133	0.000175	12492	0.76
tspl2		1			0	.	.	.
tspl2		2			0.005249	0.001308	12492	4.01
tspl2		3			-0.00018	0.000148	12492	-1.22
hbspl			1		0	.	.	.
hbspl			2		0.001215	0.000553	12492	2.20
hbspl			3		-0.00007	0.000050	12492	-1.48

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
tspl1	3				0.4484
tspl2		1			.
tspl2		2			<.0001
tspl2		3			0.2232
hbspl			1		.
hbspl			2		0.0280
hbspl			3		0.1396

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	12492	0.28	0.28	0.5959	0.5960

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	0 1
recipientsex	2	1 2
idnr	19494	210000909149 210000954103 210001535114 210002204152 210002429149 210002448146 210003060142 210003440144 210004034153 210004055143 210004156135 210004170105 210005070120 210005174143 210005222149 210005505147 210006103110 210006198109 210006609115 210006622138 ...

Number of Observations Read	34778
Number of Observations Used	34776

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z per Subject	1
Subjects (Blocks in V)	19494

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	32003.694416	.	2927.833
1	5	31589.904245	413.79017094	346.5555
2	2	31581.480277	8.42396797	130.0322

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	31579.829706	1.65057153	26.19293
4	2	31579.749657	0.08004924	3.404496
5	2	31579.748222	0.00143427	0.122188
6	3	31579.74822	0.00000188	0.000128

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.003644
Residual		0.1413

#### Fit Statistics

-2 Res Log Likelihood	31580
AIC (Smaller is Better)	31584
AICC (Smaller is Better)	31584
BIC (Smaller is Better)	31600
CAIC (Smaller is Better)	31602
HQIC (Smaller is Better)	31589

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				-0.1078	0.005495	34770	-19.61	<.0001
predictorvalue			0	0	.	.	.	.
predictorvalue			1	-0.02264	0.008488	34770	-2.67	0.0077
tsp11	1			0	.	.	.	.
tsp11	2			0.003628	0.000727	34770	4.99	<.0001
tsp11	3			0.000160	0.000103	34770	1.55	0.1208
tsp12		1		0	.	.	.	.
tsp12		2		0.002659	0.000772	34770	3.45	0.0006
tsp12		3		0.000078	0.000087	34770	0.89	0.3741

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	34770	7.11	7.11	0.0077	0.0077

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	0 1
recipientsex	2	1 2
idnr	18136	210001535114 210002204152 210002429149 210002448146 210003060142 210003440144 210004034153 210004055143 210004170105 210005070120 210005174143 210005222149 210005505147 210006103110 210006198109 210006609115 210006622138 210007122112 210007615116 210007733127 ...

Number of Observations Read	34778
Number of Observations Used	31151

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	12
Columns in Z per Subject	1
Subjects (Blocks in V)	18136

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	30081.409331	.	2654.394
1	5	29706.210178	375.19915245	312.8682
2	2	29698.657393	7.55278534	116.2758

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	29697.215127	1.44226540	22.86436
4	2	29697.14895	0.06617692	2.841124
5	2	29697.147872	0.00107879	0.093916
6	3	29697.147871	0.00000120	0.000073

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.003984
Residual		0.1475

#### Fit Statistics

-2 Res Log Likelihood	29697
AIC (Smaller is Better)	29701
AICC (Smaller is Better)	29701
BIC (Smaller is Better)	29717
CAIC (Smaller is Better)	29719
HQIC (Smaller is Better)	29706

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					-0.1290	0.05298	31143	-2.43
predictorvalue				0	0	.	.	.
predictorvalue				1	-0.01984	0.008734	31143	-2.27
tspl1	1				0	.	.	.
tspl1	2				0.003850	0.000786	31143	4.90

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.0149
predictorvalue				0	.
predictorvalue				1	0.0231
tspl1	1				.
tspl1	2				<.0001

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
tspl1	3				0.000120	0.000112	31143	1.08
tspl2		1			0	.	.	.
tspl2		2			0.003105	0.000836	31143	3.71
tspl2		3			0.000060	0.000094	31143	0.64
hbspl			1		0	.	.	.
hbspl			2		0.000116	0.000384	31143	0.30
hbspl			3		-0.00001	0.000012	31143	-0.99

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
tspl1	3				0.2805
tspl2		1			.
tspl2		2			0.0002
tspl2		3			0.5219
hbspl			1		.
hbspl			2		0.7620
hbspl			3		0.3234

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	31143	5.16	5.16	0.0231	0.0231

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	2	1 2
idnr	17958	210000909149 210000954103 210001535114 210002204152 210002429149 210002448146 210003060142 210003440144 210004034153 210004055143 210004156135 210004170105 210005070120 210005174143 210005222149 210005505147 210006103110 210006609115 210006622138 210007122112 ...

Number of Observations Read	31484
Number of Observations Used	31422

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	10
Columns in Z per Subject	1
Subjects (Blocks in V)	17958

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	28861.620388	.	2527.651
1	5	28502.788417	358.83197124	303.3416
2	2	28495.318205	7.47021144	111.038
3	2	28493.952678	1.36552741	20.57142

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	2	28493.897983	0.05469510	2.284888
5	2	28493.897278	0.00070539	0.061464
6	3	28493.897277	0.00000049	0.000029

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.004754
Residual		0.1399

#### Fit Statistics

-2 Res Log Likelihood	28494
AIC (Smaller is Better)	28498
AICC (Smaller is Better)	28498
BIC (Smaller is Better)	28513
CAIC (Smaller is Better)	28515
HQIC (Smaller is Better)	28503

#### Solution for Fixed Effects

Effect	tspl1	tspl2	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				-0.1061	0.01204	31415	-8.81	<.0001
predspline			1	0	.	.	.	.
predspline			2	-0.00020	0.000287	31415	-0.68	0.4953
predspline			3	0.000019	0.000012	31415	1.57	0.1170
tspl1	1			0	.	.	.	.
tspl1	2			0.003719	0.000766	31415	4.86	<.0001
tspl1	3			0.000136	0.000109	31415	1.25	0.2101
tspl2		1		0	.	.	.	.
tspl2		2		0.002496	0.000813	31415	3.07	0.0022
tspl2		3		0.000085	0.000092	31415	0.93	0.3527

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	31415	4.78	2.39	0.0915	0.0915



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	2	1 2
idnr	16809	210001535114 210002204152 210002429149 210002448146 210003060142 210003440144 210004034153 210004055143 210004170105 210005070120 210005174143 210005222149 210005505147 210006103110 210006609115 210006622138 210007122112 210007615116 210007733127 210007878104 ...

Number of Observations Read	31484
Number of Observations Used	28265

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	13
Columns in Z per Subject	1
Subjects (Blocks in V)	16809

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	27335.543371	.	2298.148
1	5	27014.630766	320.91260487	267.9925
2	2	27008.378785	6.25198075	95.30953
3	2	27007.322098	1.05668722	16.15863

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	2	27007.287402	0.03469631	1.530643
5	2	27007.28708	0.00032189	0.030912
6	3	27007.28708	0.00000015	9.413E-6

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.005547
Residual		0.1462

#### Fit Statistics

-2 Res Log Likelihood	27007
AIC (Smaller is Better)	27011
AICC (Smaller is Better)	27011
BIC (Smaller is Better)	27027
CAIC (Smaller is Better)	27029
HQIC (Smaller is Better)	27016

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept					-0.1510	0.05642	28256	-2.68	0.0074
predspline				1	0	.	.	.	.
predspline				2	-0.00029	0.000303	28256	-0.97	0.3317
predspline				3	0.000021	0.000013	28256	1.58	0.1142
tspl1	1				0	.	.	.	.
tspl1	2				0.003887	0.000827	28256	4.70	<.0001
tspl1	3				0.000113	0.000117	28256	0.97	0.3343
tspl2		1			0	.	.	.	.
tspl2		2			0.003004	0.000880	28256	3.41	0.0006
tspl2		3			0.000062	0.000099	28256	0.63	0.5287
hbspl			1		0	.	.	.	.
hbspl			2		0.000320	0.000404	28256	0.79	0.4288
hbspl			3		-0.00002	0.000013	28256	-1.40	0.1608

Now assessing with 6 hours pre-post-transfusion windows

The HPMIXED Procedure						
Type III Tests of Fixed Effects						
Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	28256	3.28	1.64	0.1936	0.1936

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	2	1 2
idnr	18128	210001535114 210002204152 210002429149 210002448146 210003060142 210003440144 210004034153 210004055143 210004170105 210005070120 210005174143 210005222149 210005505147 210006103110 210006198109 210006609115 210006622138 210007122112 210007615116 210007733127 ...

Number of Observations Read	31219
Number of Observations Used	31132

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	10
Columns in Z per Subject	1
Subjects (Blocks in V)	18128

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	30072.185736	.	2651.639
1	5	29697.270916	374.91482043	313.7124
2	2	29689.661703	7.60921248	116.8103
3	2	29688.201247	1.46045652	23.07961

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	2	29688.133497	0.06775016	2.893175
5	2	29688.132372	0.00112495	0.097186
6	3	29688.13237	0.00000130	0.00011

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.003976
Residual		0.1476

#### Fit Statistics

-2 Res Log Likelihood	29688
AIC (Smaller is Better)	29692
AICC (Smaller is Better)	29692
BIC (Smaller is Better)	29708
CAIC (Smaller is Better)	29710
HQIC (Smaller is Better)	29697

#### Solution for Fixed Effects

Effect	tspl1	tspl2	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				-0.1494	0.06132	31125	-2.44	0.0148
predspline			1	0	.	.	.	.
predspline			2	0.000260	0.000449	31125	0.58	0.5625
predspline			3	-0.00002	0.000013	31125	-1.19	0.2341
tspl1	1			0	.	.	.	.
tspl1	2			0.003865	0.000787	31125	4.91	<.0001
tspl1	3			0.000120	0.000112	31125	1.08	0.2813
tspl2		1		0	.	.	.	.
tspl2		2		0.003104	0.000836	31125	3.71	0.0002
tspl2		3		0.000060	0.000094	31125	0.63	0.5256

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	31125	3.11	1.56	0.2111	0.2111

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	2	1 2
idnr	19494	210000909149 210000954103 210001535114 210002204152 210002429149 210002448146 210003060142 210003440144 210004034153 210004055143 210004156135 210004170105 210005070120 210005174143 210005222149 210005505147 210006103110 210006198109 210006609115 210006622138 ...

Number of Observations Read	34778
Number of Observations Used	34776

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z per Subject	1
Subjects (Blocks in V)	19494

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	32010.999561	.	2924.68
1	5	31598.156875	412.84268618	345.5674
2	2	31589.788377	8.36849778	129.3342

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	31588.160172	1.62820465	25.85112
4	2	31588.082605	0.07756746	3.311908
5	2	31588.081257	0.00134821	0.115739
6	3	31588.081255	0.00000165	0.000114

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.003687
Residual		0.1413

#### Fit Statistics

-2 Res Log Likelihood	31588
AIC (Smaller is Better)	31592
AICC (Smaller is Better)	31592
BIC (Smaller is Better)	31608
CAIC (Smaller is Better)	31610
HQIC (Smaller is Better)	31597

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				-0.1101	0.005809	34770	-18.96	<.0001
predictorvalue			1	0	.	.	.	.
predictorvalue			2	0.001988	0.004094	34770	0.49	0.6273
tsp11	1			0	.	.	.	.
tsp11	2			0.003636	0.000727	34770	5.00	<.0001
tsp11	3			0.000160	0.000103	34770	1.55	0.1202
tsp12		1		0	.	.	.	.
tsp12		2		0.002660	0.000772	34770	3.45	0.0006
tsp12		3		0.000077	0.000087	34770	0.88	0.3808

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	34770	0.24	0.24	0.6273	0.6273

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	2	1 2
idnr	18136	210001535114 210002204152 210002429149 210002448146 210003060142 210003440144 210004034153 210004055143 210004170105 210005070120 210005174143 210005222149 210005505147 210006103110 210006198109 210006609115 210006622138 210007122112 210007615116 210007733127 ...

Number of Observations Read	34778
Number of Observations Used	31151

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	12
Columns in Z per Subject	1
Subjects (Blocks in V)	18136

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	30086.985733	.	2652.332
1	5	29712.443416	374.54231714	312.2821
2	2	29704.924356	7.51905930	115.8471



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	29703.495782	1.42857435	22.64965
4	2	29703.431089	0.06469280	2.784739
5	2	29703.430058	0.00103136	0.090276
6	3	29703.430057	0.00000112	0.000084

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.004017
Residual		0.1475

#### Fit Statistics

-2 Res Log Likelihood	29703
AIC (Smaller is Better)	29707
AICC (Smaller is Better)	29707
BIC (Smaller is Better)	29723
CAIC (Smaller is Better)	29725
HQIC (Smaller is Better)	29713

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					-0.1286	0.05575	31143	-2.31
predictorvalue				1	0	.	.	.
predictorvalue				2	-0.00065	0.004939	31143	-0.13
tspl1	1				0	.	.	.
tspl1	2				0.003869	0.000786	31143	4.92

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.0210
predictorvalue				1	.
predictorvalue				2	0.8949
tspl1	1				.
tspl1	2				<.0001

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
tspl1	3				0.000120	0.000112	31143	1.07
tspl2		1			0	.	.	.
tspl2		2			0.003109	0.000836	31143	3.72
tspl2		3			0.000060	0.000094	31143	0.63
hbspl			1		0	.	.	.
hbspl			2		0.000106	0.000398	31143	0.27
hbspl			3		-0.00001	0.000012	31143	-0.99

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
tspl1	3				0.2834
tspl2		1			.
tspl2		2			0.0002
tspl2		3			0.5272
hbspl			1		.
hbspl			2		0.7903
hbspl			3		0.3237

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	31143	0.02	0.02	0.8949	0.8949

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	2	1 2
idnr	19484	210000909149 210000954103 210001535114 210002204152 210002429149 210002448146 210003060142 210003440144 210004034153 210004055143 210004156135 210004170105 210005070120 210005174143 210005222149 210005505147 210006103110 210006198109 210006609115 210006622138 ...

Number of Observations Read	34844
Number of Observations Used	34761

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	10
Columns in Z per Subject	1
Subjects (Blocks in V)	19484

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	32020.220198	.	2919.136
1	5	31609.029075	411.19112330	344.2319
2	2	31600.73439	8.29468471	128.4403
3	2	31599.134256	1.60013410	25.42951

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	2	31599.059673	0.07458274	3.200807
5	2	31599.058424	0.00124907	0.108269
6	3	31599.058423	0.00000146	0.000098

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.003745
Residual		0.1413

#### Fit Statistics

-2 Res Log Likelihood	31599
AIC (Smaller is Better)	31603
AICC (Smaller is Better)	31603
BIC (Smaller is Better)	31619
CAIC (Smaller is Better)	31621
HQIC (Smaller is Better)	31608

#### Solution for Fixed Effects

Effect	tspl1	tspl2	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				-0.1093	0.009249	34754	-11.82	<.0001
predspline			1	0	.	.	.	.
predspline			2	0.000179	0.000491	34754	0.36	0.7152
predspline			3	-0.00002	0.000027	34754	-0.78	0.4336
tspl1	1			0	.	.	.	.
tspl1	2			0.003628	0.000727	34754	4.99	<.0001
tspl1	3			0.000160	0.000103	34754	1.55	0.1209
tspl2		1		0	.	.	.	.
tspl2		2		0.002667	0.000772	34754	3.45	0.0006
tspl2		3		0.000078	0.000087	34754	0.89	0.3752

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	34754	1.61	0.80	0.4479	0.4479

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	2	1 2
idnr	18126	210001535114 210002204152 210002429149 210002448146 210003060142 210003440144 210004034153 210004055143 210004170105 210005070120 210005174143 210005222149 210005505147 210006103110 210006198109 210006609115 210006622138 210007122112 210007615116 210007733127 ...

Number of Observations Read	34844
Number of Observations Used	31136

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	13
Columns in Z per Subject	1
Subjects (Blocks in V)	18126

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	30094.836819	.	2647.106
1	2	29728.828271	366.00854823	2.839461
2	11	29713.643458	15.18481304	91.51911
3	4	29712.683565	0.95989310	3.250873

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	2	29712.682161	0.00140445	0.358186
5	2	29712.682143	0.00001718	0.001822

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.004060
Residual		0.1475

#### Fit Statistics

-2 Res Log Likelihood	29713
AIC (Smaller is Better)	29717
AICC (Smaller is Better)	29717
BIC (Smaller is Better)	29732
CAIC (Smaller is Better)	29734
HQIC (Smaller is Better)	29722

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept					-0.1272	0.05359	31127	-2.37	0.0176
predspline				1	0	.	.	.	.
predspline				2	-0.00007	0.000518	31127	-0.13	0.8935
predspline				3	-0.00002	0.000029	31127	-0.54	0.5920
tspl1	1				0	.	.	.	.
tspl1	2				0.003845	0.000787	31127	4.89	<.0001
tspl1	3				0.000121	0.000112	31127	1.08	0.2801
tspl2		1			0	.	.	.	.
tspl2		2			0.003115	0.000836	31127	3.72	0.0002
tspl2		3			0.000062	0.000094	31127	0.66	0.5116
hbspl			1		0	.	.	.	.
hbspl			2		0.000128	0.000384	31127	0.33	0.7393
hbspl			3		-0.00001	0.000012	31127	-1.02	0.3070

**Now assessing with 6 hours pre-post-transfusion windows**

The HPMIXED Procedure

Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	31127	3.21	1.61	0.2009	0.2009

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	6	0 1 5 10 20 99
recipientsex	2	1 2
idnr	19494	210000909149 210000954103 210001535114 210002204152 210002429149 210002448146 210003060142 210003440144 210004034153 210004055143 210004156135 210004170105 210005070120 210005174143 210005222149 210005505147 210006103110 210006198109 210006609115 210006622138 ...

Number of Observations Read	34782
Number of Observations Used	34776

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	13
Columns in Z per Subject	1
Subjects (Blocks in V)	19494

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	32001.713735	.	2933.503
1	2	31592.206449	409.50728646	3.031573
2	11	31577.205198	15.00125084	89.88885



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	3	31576.871009	0.33418915	60.84063
4	2	31576.353844	0.51716439	12.9051
5	2	31576.332735	0.02110904	1.596143
6	3	31576.332417	0.00031792	0.032502
7	3	31576.332417	0.00000010	0.000078

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.003586
Residual		0.1413

#### Fit Statistics

-2 Res Log Likelihood	31576
AIC (Smaller is Better)	31580
AICC (Smaller is Better)	31580
BIC (Smaller is Better)	31596
CAIC (Smaller is Better)	31598
HQIC (Smaller is Better)	31585

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				-0.1201	0.006785	34766	-17.70	<.0001
predictorvalue			0	0	.	.	.	.
predictorvalue			1	0.01356	0.005710	34766	2.37	0.0176
predictorvalue			5	-0.00778	0.007004	34766	-1.11	0.2666
predictorvalue			10	-0.00777	0.008392	34766	-0.93	0.3546
predictorvalue			20	-0.00987	0.02168	34766	-0.46	0.6489
predictorvalue			99	0.02928	0.006371	34766	4.60	<.0001
tsp11	1			0	.	.	.	.
tsp11	2			0.003787	0.000727	34766	5.21	<.0001
tsp11	3			0.000147	0.000103	34766	1.42	0.1545
tsp12		1		0	.	.	.	.
tsp12		2		0.002783	0.000772	34766	3.61	0.0003
tsp12		3		0.000072	0.000087	34766	0.83	0.4070

**Now assessing with 6 hours pre-post-transfusion windows**

The HPMIXED Procedure

## Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	5	34766	42.30	8.46	<.0001	<.0001

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	6	0 1 5 10 20 99
recipientsex	2	1 2
idnr	18136	210001535114 210002204152 210002429149 210002448146 210003060142 210003440144 210004034153 210004055143 210004170105 210005070120 210005174143 210005222149 210005505147 210006103110 210006198109 210006609115 210006622138 210007122112 210007615116 210007733127 ...

Number of Observations Read	34782
Number of Observations Used	31151

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	16
Columns in Z per Subject	1
Subjects (Blocks in V)	18136

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	30091.542734	.	2656.633
1	5	29716.265591	375.27714270	312.1065
2	2	29708.766961	7.49863071	115.7035

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	29707.34486	1.42210063	22.58401
4	2	29707.280702	0.06415773	2.769128
5	2	29707.279685	0.00101703	0.089329
6	3	29707.279684	0.00000107	0.000078

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.003989
Residual		0.1474

#### Fit Statistics

-2 Res Log Likelihood	29707
AIC (Smaller is Better)	29711
AICC (Smaller is Better)	29711
BIC (Smaller is Better)	29727
CAIC (Smaller is Better)	29729
HQIC (Smaller is Better)	29716

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					-0.1368	0.05327	31139	-2.57
predictorvalue				0	0	.	.	.
predictorvalue				1	0.01234	0.005868	31139	2.10
predictorvalue				5	-0.00962	0.007202	31139	-1.34
predictorvalue				10	-0.00992	0.008641	31139	-1.15

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.0102
predictorvalue				0	.
predictorvalue				1	0.0355
predictorvalue				5	0.1817
predictorvalue				10	0.2508

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
predictorvalue				20	-0.01311	0.02229	31139	-0.59
predictorvalue				99	0.02343	0.007812	31139	3.00
tspl1	1				0	.	.	.
tspl1	2				0.003927	0.000786	31139	5.00
tspl1	3				0.000114	0.000112	31139	1.02
tspl2		1			0	.	.	.
tspl2		2			0.003161	0.000836	31139	3.78
tspl2		3			0.000057	0.000094	31139	0.61
hbspl			1		0	.	.	.
hbspl			2		0.000123	0.000384	31139	0.32
hbspl			3		-0.00001	0.000012	31139	-1.11

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
predictorvalue				20	0.5564
predictorvalue				99	0.0027
tspl1	1				.
tspl1	2				<.0001
tspl1	3				0.3072
tspl2		1			.
tspl2		2			0.0002
tspl2		3			0.5434
hbspl			1		.
hbspl			2		0.7492
hbspl			3		0.2665

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	5	31139	26.05	5.21	<.0001	<.0001

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	4	0 180 365 999
recipientsex	2	1 2
idnr	19494	210000909149 210000954103 210001535114 210002204152 210002429149 210002448146 210003060142 210003440144 210004034153 210004055143 210004156135 210004170105 210005070120 210005174143 210005222149 210005505147 210006103110 210006198109 210006609115 210006622138 ...

Number of Observations Read	34780
Number of Observations Used	34776

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	11
Columns in Z per Subject	1
Subjects (Blocks in V)	19494

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	32021.743133	.	2928.619
1	5	31607.551064	414.19206925	347.5442
2	2	31599.068093	8.48297105	130.7422

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	31597.394126	1.67396739	26.52091
4	2	31597.311622	0.08250342	3.491814
5	2	31597.310103	0.00151887	0.128328
6	3	31597.310101	0.00000208	0.000139

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.003617
Residual		0.1414

#### Fit Statistics

-2 Res Log Likelihood	31597
AIC (Smaller is Better)	31601
AICC (Smaller is Better)	31601
BIC (Smaller is Better)	31617
CAIC (Smaller is Better)	31619
HQIC (Smaller is Better)	31606

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				-0.1135	0.006062	34768	-18.72	<.0001
predictorvalue			0	0	.	.	.	.
predictorvalue			180	0.001448	0.006927	34768	0.21	0.8345
predictorvalue			365	-0.00861	0.009405	34768	-0.92	0.3602
predictorvalue			999	0.009403	0.004486	34768	2.10	0.0361
tsp11	1			0	.	.	.	.
tsp11	2			0.003683	0.000727	34768	5.07	<.0001
tsp11	3			0.000158	0.000103	34768	1.53	0.1266
tsp12		1		0	.	.	.	.
tsp12		2		0.002714	0.000772	34768	3.51	0.0004
tsp12		3		0.000074	0.000087	34768	0.85	0.3956

**Now assessing with 6 hours pre-post-transfusion windows**

The HPMIXED Procedure

Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	3	34768	6.60	2.20	0.0858	0.0859



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	4	0 180 365 999
recipientsex	2	1 2
idnr	18136	210001535114 210002204152 210002429149 210002448146 210003060142 210003440144 210004034153 210004055143 210004170105 210005070120 210005174143 210005222149 210005505147 210006103110 210006198109 210006609115 210006622138 210007122112 210007615116 210007733127 ...

Number of Observations Read	34780
Number of Observations Used	31151

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	14
Columns in Z per Subject	1
Subjects (Blocks in V)	18136

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	30101.382864	.	2653.887
1	2	29732.998754	368.38410924	2.821149
2	11	29718.166609	14.83214572	89.34416

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	4	29717.244634	0.92197461	2.907307
4	2	29717.243504	0.00113025	0.318196
5	2	29717.24349	0.00001364	0.00147

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.003991
Residual		0.1475

#### Fit Statistics

-2 Res Log Likelihood	29717
AIC (Smaller is Better)	29721
AICC (Smaller is Better)	29721
BIC (Smaller is Better)	29737
CAIC (Smaller is Better)	29739
HQIC (Smaller is Better)	29726

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					-0.1325	0.05299	31141	-2.50
predictorvalue				0	0	.	.	.
predictorvalue				180	0.001825	0.007106	31141	0.26
predictorvalue				365	-0.00720	0.009655	31141	-0.75
predictorvalue				999	0.004679	0.004952	31141	0.94
tspl1	1				0	.	.	.

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.0124
predictorvalue				0	.
predictorvalue				180	0.7973
predictorvalue				365	0.4561
predictorvalue				999	0.3448
tspl1	1				.

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
tspl1	2				0.003877	0.000786	31141	4.93
tspl1	3				0.000120	0.000112	31141	1.07
tspl2		1			0	.	.	.
tspl2		2			0.003128	0.000836	31141	3.74
tspl2		3			0.000058	0.000094	31141	0.62
hbspl			1		0	.	.	.
hbspl			2		0.000120	0.000384	31141	0.31
hbspl			3		-0.00001	0.000012	31141	-1.02

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
tspl1	2				<.0001
tspl1	3				0.2836
tspl2		1			.
tspl2		2			0.0002
tspl2		3			0.5353
hbspl			1		.
hbspl			2		0.7557
hbspl			3		0.3090

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	3	31141	1.85	0.62	0.6046	0.6046

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	3	0 1 2
idnr	20716	210000486129 210000598144 210000905111 210001428104 210001535114 210001589111 210002388128 210002429149 210002448146 210002985127 210003060142 210003353100 210003574148 210004055143 210004156135 210004170105 210004315135 210004408139 210004558102 210005070120 ...

Number of Observations Read	30530
Number of Observations Used	30528

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z per Subject	1
Subjects (Blocks in V)	20716

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	297536.7041	.	2702.27
1	5	297162.46408	374.24001942	308.4066
2	2	297155.45127	7.01281563	112.0111

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	297154.19822	1.25304576	20.07194
4	2	297154.15166	0.04656550	2.099972
5	2	297154.15113	0.00053037	0.050591

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	33.1505
Residual		955.16

#### Fit Statistics

-2 Res Log Likelihood	297154
AIC (Smaller is Better)	297158
AICC (Smaller is Better)	297158
BIC (Smaller is Better)	297174
CAIC (Smaller is Better)	297176
HQIC (Smaller is Better)	297163

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				-0.4254	0.6289	30522	-0.68	0.4988
predictorvalue			1	0	.	.	.	.
predictorvalue			2	-0.2652	0.3679	30522	-0.72	0.4710
tsp11	1			0	.	.	.	.
tsp11	2			-0.1889	0.06790	30522	-2.78	0.0054
tsp11	3			0.009942	0.009706	30522	1.02	0.3057
tsp12		1		0	.	.	.	.
tsp12		2		-0.2619	0.07381	30522	-3.55	0.0004
tsp12		3		0.005429	0.007934	30522	0.68	0.4938

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	30522	0.52	0.52	0.4710	0.4710

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	3	0 1 2
idnr	20662	210000486129 210000598144 210000905111 210001428104 210001535114 210001589111 210002388128 210002429149 210002448146 210002985127 210003060142 210003353100 210003574148 210004055143 210004156135 210004170105 210004315135 210004408139 210004558102 210005070120 ...

Number of Observations Read	30530
Number of Observations Used	30385

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	12
Columns in Z per Subject	1
Subjects (Blocks in V)	20662

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	296147.36405	.	2673.056
1	5	295778.56004	368.80400819	300.829
2	2	295771.87609	6.68394953	107.313

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	295770.7379	1.13819019	18.27624
4	2	295770.70015	0.03775398	1.746626
5	2	295770.69979	0.00035673	0.035789

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	35.0730
Residual		953.13

#### Fit Statistics

-2 Res Log Likelihood	295771
AIC (Smaller is Better)	295775
AICC (Smaller is Better)	295775
BIC (Smaller is Better)	295791
CAIC (Smaller is Better)	295793
HQIC (Smaller is Better)	295780

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					-4.2252	3.9789	30377	-1.06
predictorvalue				1	0	.	.	.
predictorvalue				2	-0.2771	0.3691	30377	-0.75
tspl1	1				0	.	.	.
tspl1	2				-0.1873	0.06802	30377	-2.75
tspl1	3				0.01035	0.009719	30377	1.06

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.2883
predictorvalue				1	.
predictorvalue				2	0.4527
tspl1	1				.
tspl1	2				0.0059
tspl1	3				0.2871

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tsp11	tsp12	hbsp1	predictorvalue	Estimate	Standard Error	DF	t Value
tsp12		1			0	.	.	.
tsp12		2			-0.2617	0.07394	30377	-3.54
tsp12		3			0.005343	0.007950	30377	0.67
hbsp1			1		0	.	.	.
hbsp1			2		0.02812	0.02904	30377	0.97
hbsp1			3		-0.00274	0.002720	30377	-1.01

#### Solution for Fixed Effects

Effect	tsp11	tsp12	hbsp1	predictorvalue	Pr >  t
tsp12		1			.
tsp12		2			0.0004
tsp12		3			0.5015
hbsp1			1		.
hbsp1			2		0.3329
hbsp1			3		0.3138

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	30377	0.56	0.56	0.4527	0.4527



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	0 1
recipientsex	3	0 1 2
idnr	41255	210000196120 210000486129 210000598144 210000905111 210000954103 210001151104 210001428104 210001535114 210001589111 210001682118 210002204152 210002319145 210002388128 210002390143 210002429149 210002448146 210002521130 210002985127 210003039107 210003060142 ...

Number of Observations Read	82669
Number of Observations Used	82667

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z per Subject	1
Subjects (Blocks in V)	41255

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	802499.2427	.	6756.211
1	5	801826.30871	672.93398585	486.4057
2	2	801821.83004	4.47867301	115.7782

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	801821.54483	0.28520425	6.480941
4	2	801821.54392	0.00091436	0.102407

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	39.2055
Residual		917.73

#### Fit Statistics

-2 Res Log Likelihood	801822
AIC (Smaller is Better)	801826
AICC (Smaller is Better)	801826
BIC (Smaller is Better)	801843
CAIC (Smaller is Better)	801845
HQIC (Smaller is Better)	801831

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				-1.1066	0.3515	82661	-3.15	0.0016
predictorvalue			0	0	.	.	.	.
predictorvalue			1	-0.7633	0.4600	82661	-1.66	0.0971
tsp11	1			0	.	.	.	.
tsp11	2			-0.1115	0.04026	82661	-2.77	0.0056
tsp11	3			0.01008	0.005813	82661	1.73	0.0829
tsp12		1		0	.	.	.	.
tsp12		2		-0.2795	0.04379	82661	-6.38	<.0001
tsp12		3		0.009544	0.004704	82661	2.03	0.0424

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	82661	2.75	2.75	0.0971	0.0971

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	0 1
recipientsex	3	0 1 2
idnr	38739	210000196120 210000486129 210000598144 210000905111 210000954103 210001151104 210001428104 210001535114 210001589111 210001682118 210002204152 210002319145 210002388128 210002390143 210002429149 210002448146 210002521130 210002985127 210003039107 210003060142 ...

Number of Observations Read	82669
Number of Observations Used	75262

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	12
Columns in Z per Subject	1
Subjects (Blocks in V)	38739

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	731807.81579	.	6249.123
1	5	731169.27576	638.54003485	488.071
2	2	731164.19374	5.08201427	124.2822

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	731163.81641	0.37733541	8.282532
4	2	731163.81468	0.00172691	0.171069

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	38.4965
Residual		932.82

#### Fit Statistics

-2 Res Log Likelihood	731164
AIC (Smaller is Better)	731168
AICC (Smaller is Better)	731168
BIC (Smaller is Better)	731185
CAIC (Smaller is Better)	731187
HQIC (Smaller is Better)	731173

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					-4.2443	2.4553	75254	-1.73
predictorvalue				0	0	.	.	.
predictorvalue				1	-0.7599	0.4662	75254	-1.63
tspl1	1				0	.	.	.
tspl1	2				-0.1191	0.04272	75254	-2.79
tspl1	3				0.01101	0.006130	75254	1.80

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.0839
predictorvalue				0	.
predictorvalue				1	0.1031
tspl1	1				.
tspl1	2				0.0053
tspl1	3				0.0725

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
tspl2		1			0	.	.	.
tspl2		2			-0.2895	0.04646	75254	-6.23
tspl2		3			0.01129	0.004979	75254	2.27
hbspl			1		0	.	.	.
hbspl			2		0.02299	0.01759	75254	1.31
hbspl			3		-0.00055	0.000655	75254	-0.84

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
tspl2		1			.
tspl2		2			<.0001
tspl2		3			0.0234
hbspl			1		.
hbspl			2		0.1913
hbspl			3		0.3986

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	75254	2.66	2.66	0.1031	0.1031

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	3	0 1 2
idnr	38121	210000196120 210000486129 210000598144 210000905111 210000954103 210001151104 210001428104 210001535114 210001589111 210001682118 210002204152 210002319145 210002388128 210002390143 210002429149 210002448146 210002521130 210002985127 210003039107 210003060142 ...

Number of Observations Read	74572
Number of Observations Used	74510

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	10
Columns in Z per Subject	1
Subjects (Blocks in V)	38121

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	724268.14753	.	6080.765
1	5	723642.99896	625.14857309	443.8429
2	2	723638.71344	4.28552088	106.5541
3	2	723638.43516	0.27827746	6.118287

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	2	723638.43422	0.00093964	0.100435

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	41.7876
Residual		927.06

#### Fit Statistics

-2 Res Log Likelihood	723638
AIC (Smaller is Better)	723642
AICC (Smaller is Better)	723642
BIC (Smaller is Better)	723660
CAIC (Smaller is Better)	723662
HQIC (Smaller is Better)	723648

#### Solution for Fixed Effects

Effect	tspl1	tspl2	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				-1.9890	0.6700	74503	-2.97	0.0030
predspline			1	0	.	.	.	.
predspline			2	0.02487	0.01520	74503	1.64	0.1017
predspline			3	-0.00094	0.000650	74503	-1.44	0.1493
tspl1	1			0	.	.	.	.
tspl1	2			-0.09792	0.04274	74503	-2.29	0.0220
tspl1	3			0.008836	0.006180	74503	1.43	0.1528
tspl2		1		0	.	.	.	.
tspl2		2		-0.2933	0.04645	74503	-6.31	<.0001
tspl2		3		0.01029	0.004986	74503	2.06	0.0391

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	74503	2.68	1.34	0.2621	0.2621

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	3	0 1 2
idnr	36051	210000196120 210000486129 210000598144 210000905111 210000954103 210001151104 210001428104 210001535114 210001589111 210001682118 210002204152 210002319145 210002388128 210002390143 210002429149 210002448146 210002521130 210002985127 210003039107 210003060142 ...

Number of Observations Read	74572
Number of Observations Used	68335

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	13
Columns in Z per Subject	1
Subjects (Blocks in V)	36051

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	664934.00509	.	5658.92
1	5	664336.73918	597.26591223	455.7216
2	2	664331.65708	5.08209696	118.6436
3	2	664331.25991	0.39717305	8.396461



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	2	664331.25786	0.00205587	0.19024

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	40.5704
Residual		937.09

#### Fit Statistics

-2 Res Log Likelihood	664331
AIC (Smaller is Better)	664335
AICC (Smaller is Better)	664335
BIC (Smaller is Better)	664352
CAIC (Smaller is Better)	664354
HQIC (Smaller is Better)	664341

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept					-5.5734	2.6404	68326	-2.11	0.0348
predspline				1	0	.	.	.	.
predspline				2	0.02383	0.01568	68326	1.52	0.1285
predspline				3	-0.00095	0.000686	68326	-1.39	0.1658
tspl1	1				0	.	.	.	.
tspl1	2				-0.1034	0.04503	68326	-2.30	0.0217
tspl1	3				0.009782	0.006475	68326	1.51	0.1309
tspl2		1			0	.	.	.	.
tspl2		2			-0.3042	0.04893	68326	-6.22	<.0001
tspl2		3			0.01217	0.005243	68326	2.32	0.0202
hbspl			1		0	.	.	.	.
hbspl			2		0.02649	0.01857	68326	1.43	0.1538
hbspl			3		-0.00062	0.000694	68326	-0.90	0.3681

**Now assessing with 6 hours pre-post-transfusion windows**

The HPMIXED Procedure

Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	68326	2.32	1.16	0.3135	0.3135

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	3	0 1 2
idnr	38725	210000196120 210000486129 210000598144 210000905111 210000954103 210001151104 210001428104 210001535114 210001589111 210001682118 210002204152 210002319145 210002388128 210002390143 210002429149 210002448146 210002521130 210002985127 210003039107 210003060142 ...

Number of Observations Read	75313
Number of Observations Used	75226

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	10
Columns in Z per Subject	1
Subjects (Blocks in V)	38725

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	731445.42305	.	6241.767
1	5	730807.18992	638.23313660	491.7159
2	2	730802.01381	5.17611265	126.0013
3	2	730801.62389	0.38991053	8.5296

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	2	730801.62205	0.00184262	0.180495

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	38.4819
Residual		932.66

#### Fit Statistics

-2 Res Log Likelihood	730802
AIC (Smaller is Better)	730806
AICC (Smaller is Better)	730806
BIC (Smaller is Better)	730823
CAIC (Smaller is Better)	730825
HQIC (Smaller is Better)	730811

#### Solution for Fixed Effects

Effect	tspl1	tspl2	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				-4.4287	2.8323	75219	-1.56	0.1179
predspline			1	0	.	.	.	.
predspline			2	0.02405	0.02053	75219	1.17	0.2415
predspline			3	-0.00048	0.000678	75219	-0.71	0.4772
tspl1	1			0	.	.	.	.
tspl1	2			-0.1202	0.04273	75219	-2.81	0.0049
tspl1	3			0.01109	0.006131	75219	1.81	0.0704
tspl2		1		0	.	.	.	.
tspl2		2		-0.2894	0.04647	75219	-6.23	<.0001
tspl2		3		0.01134	0.004980	75219	2.28	0.0227

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	75219	1.95	0.97	0.3779	0.3779

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	3	0 1 2
idnr	41255	210000196120 210000486129 210000598144 210000905111 210000954103 210001151104 210001428104 210001535114 210001589111 210001682118 210002204152 210002319145 210002388128 210002390143 210002429149 210002448146 210002521130 210002985127 210003039107 210003060142 ...

Number of Observations Read	82668
Number of Observations Used	82666

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z per Subject	1
Subjects (Blocks in V)	41255

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	802493.99921	.	6755.504
1	5	801821.38462	672.61458228	485.5542
2	2	801816.92425	4.46037347	115.4112

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	801816.64112	0.28312933	6.436984
4	2	801816.64022	0.00090097	0.101149

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	39.2466
Residual		917.73

#### Fit Statistics

-2 Res Log Likelihood	801817
AIC (Smaller is Better)	801821
AICC (Smaller is Better)	801821
BIC (Smaller is Better)	801838
CAIC (Smaller is Better)	801840
HQIC (Smaller is Better)	801826

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				-1.0955	0.3648	82660	-3.00	0.0027
predictorvalue			1	0	.	.	.	.
predictorvalue			2	-0.1244	0.2157	82660	-0.58	0.5640
tsp11	1			0	.	.	.	.
tsp11	2			-0.1113	0.04027	82660	-2.77	0.0057
tsp11	3			0.01005	0.005813	82660	1.73	0.0840
tsp12		1		0	.	.	.	.
tsp12		2		-0.2789	0.04379	82660	-6.37	<.0001
tsp12		3		0.009513	0.004704	82660	2.02	0.0431

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	82660	0.33	0.33	0.5640	0.5640

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	3	0 1 2
idnr	38739	210000196120 210000486129 210000598144 210000905111 210000954103 210001151104 210001428104 210001535114 210001589111 210001682118 210002204152 210002319145 210002388128 210002390143 210002429149 210002448146 210002521130 210002985127 210003039107 210003060142 ...

Number of Observations Read	82668
Number of Observations Used	75261

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	12
Columns in Z per Subject	1
Subjects (Blocks in V)	38739

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	731802.20278	.	6248.533
1	5	731163.97685	638.22593061	487.0455
2	2	731158.91979	5.05705992	123.8105

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	731158.54577	0.37402071	8.215001
4	2	731158.54407	0.00169656	0.168526

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	38.5476
Residual		932.82

#### Fit Statistics

-2 Res Log Likelihood	731159
AIC (Smaller is Better)	731163
AICC (Smaller is Better)	731163
BIC (Smaller is Better)	731180
CAIC (Smaller is Better)	731182
HQIC (Smaller is Better)	731168

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					-3.8224	2.6228	75253	-1.46
predictorvalue				1	0	.	.	.
predictorvalue				2	-0.1341	0.2559	75253	-0.52
tspl1	1				0	.	.	.
tspl1	2				-0.1188	0.04272	75253	-2.78
tspl1	3				0.01097	0.006130	75253	1.79

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.1450
predictorvalue				1	.
predictorvalue				2	0.6002
tspl1	1				.
tspl1	2				0.0054
tspl1	3				0.0735



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tsp11	tsp12	hbsp1	predictorvalue	Estimate	Standard Error	DF	t Value
tsp12		1			0	.	.	.
tsp12		2			-0.2888	0.04646	75253	-6.22
tsp12		3			0.01125	0.004979	75253	2.26
hbsp1			1		0	.	.	.
hbsp1			2		0.02011	0.01847	75253	1.09
hbsp1			3		-0.00053	0.000656	75253	-0.81

#### Solution for Fixed Effects

Effect	tsp11	tsp12	hbsp1	predictorvalue	Pr >  t
tsp12		1			.
tsp12		2			<.0001
tsp12		3			0.0239
hbsp1			1		.
hbsp1			2		0.2763
hbsp1			3		0.4173

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	75253	0.27	0.27	0.6002	0.6002

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	3	0 1 2
idnr	41240	210000196120 210000486129 210000598144 210000905111 210000954103 210001151104 210001428104 210001535114 210001589111 210001682118 210002204152 210002319145 210002388128 210002390143 210002429149 210002448146 210002521130 210002985127 210003039107 210003060142 ...

Number of Observations Read	82723
Number of Observations Used	82640

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	10
Columns in Z per Subject	1
Subjects (Blocks in V)	41240

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	802258.89547	.	6749.274
1	5	801588.00189	670.89357829	482.6832
2	2	801583.60257	4.39932047	114.1001
3	2	801583.32675	0.27582102	6.27605

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	2	801583.32589	0.00085332	0.096537

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	39.4090
Residual		917.61

#### Fit Statistics

-2 Res Log Likelihood	801583
AIC (Smaller is Better)	801587
AICC (Smaller is Better)	801587
BIC (Smaller is Better)	801605
CAIC (Smaller is Better)	801607
HQIC (Smaller is Better)	801593

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				-0.2840	0.5551	82633	-0.51	0.6089
predspline			1	0	.	.	.	.
predspline			2	-0.02582	0.02710	82633	-0.95	0.3407
predspline			3	-0.00085	0.001450	82633	-0.59	0.5584
tsp11	1			0	.	.	.	.
tsp11	2			-0.1136	0.04028	82633	-2.82	0.0048
tsp11	3			0.009892	0.005816	82633	1.70	0.0890
tsp12		1		0	.	.	.	.
tsp12		2		-0.2827	0.04381	82633	-6.45	<.0001
tsp12		3		0.01015	0.004707	82633	2.16	0.0310

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	82633	17.50	8.75	0.0002	0.0002

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	3	0 1 2
idnr	38724	210000196120 210000486129 210000598144 210000905111 210000954103 210001151104 210001428104 210001535114 210001589111 210001682118 210002204152 210002319145 210002388128 210002390143 210002429149 210002448146 210002521130 210002985127 210003039107 210003060142 ...

Number of Observations Read	82723
Number of Observations Used	75235

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	13
Columns in Z per Subject	1
Subjects (Blocks in V)	38724

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	731568.78423	.	6242.05
1	5	730932.37743	636.40679555	483.9078
2	2	730927.39624	4.98119480	122.2638
3	2	730927.03295	0.36328669	7.986169

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	2	730927.03136	0.00159584	0.159889

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	38.7484
Residual		932.69

#### Fit Statistics

-2 Res Log Likelihood	730927
AIC (Smaller is Better)	730931
AICC (Smaller is Better)	730931
BIC (Smaller is Better)	730948
CAIC (Smaller is Better)	730950
HQIC (Smaller is Better)	730936

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept					-3.3727	2.4958	75226	-1.35	0.1766
predspline				1	0	.	.	.	.
predspline				2	-0.02670	0.02802	75226	-0.95	0.3406
predspline				3	-0.00077	0.001518	75226	-0.51	0.6113
tspl1	1				0	.	.	.	.
tspl1	2				-0.1208	0.04273	75226	-2.83	0.0047
tspl1	3				0.01082	0.006133	75226	1.76	0.0777
tspl2		1			0	.	.	.	.
tspl2		2			-0.2921	0.04648	75226	-6.29	<.0001
tspl2		3			0.01187	0.004983	75226	2.38	0.0172
hbspl			1		0	.	.	.	.
hbspl			2		0.02252	0.01760	75226	1.28	0.2006
hbspl			3		-0.00055	0.000655	75226	-0.83	0.4039

**Now assessing with 6 hours pre-post-transfusion windows**

The HPMIXED Procedure

Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	75226	15.51	7.76	0.0004	0.0004

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	6	0 1 5 10 20 99
recipientsex	3	0 1 2
idnr	41255	210000196120 210000486129 210000598144 210000905111 210000954103 210001151104 210001428104 210001535114 210001589111 210001682118 210002204152 210002319145 210002388128 210002390143 210002429149 210002448146 210002521130 210002985127 210003039107 210003060142 ...

Number of Observations Read	82673
Number of Observations Used	82667

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	13
Columns in Z per Subject	1
Subjects (Blocks in V)	41255

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	802499.02525	.	6753.864
1	5	801826.7292	672.29605760	485.6213
2	2	801822.2673	4.46189320	115.4504

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	801821.98395	0.28335313	6.442097
4	2	801821.98305	0.00090263	0.1013

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	39.2795
Residual		917.71

#### Fit Statistics

-2 Res Log Likelihood	801822
AIC (Smaller is Better)	801826
AICC (Smaller is Better)	801826
BIC (Smaller is Better)	801843
CAIC (Smaller is Better)	801845
HQIC (Smaller is Better)	801831

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				-1.0662	0.4132	82657	-2.58	0.0099
predictorvalue			0	0	.	.	.	.
predictorvalue			1	-0.1376	0.3058	82657	-0.45	0.6527
predictorvalue			5	-0.3401	0.3650	82657	-0.93	0.3515
predictorvalue			10	0.3525	0.4163	82657	0.85	0.3971
predictorvalue			20	-0.09001	0.9774	82657	-0.09	0.9266
predictorvalue			99	-0.1121	0.3509	82657	-0.32	0.7495
tsp11	1			0	.	.	.	.
tsp11	2			-0.1113	0.04027	82657	-2.76	0.0057
tsp11	3			0.01006	0.005814	82657	1.73	0.0834
tsp12		1		0	.	.	.	.
tsp12		2		-0.2791	0.04380	82657	-6.37	<.0001
tsp12		3		0.009482	0.004704	82657	2.02	0.0438



**Now assessing with 6 hours pre-post-transfusion windows**

The HPMIXED Procedure

Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	5	82657	2.83	0.57	0.7261	0.7261

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	6	0 1 5 10 20 99
recipientsex	3	0 1 2
idnr	38739	210000196120 210000486129 210000598144 210000905111 210000954103 210001151104 210001428104 210001535114 210001589111 210001682118 210002204152 210002319145 210002388128 210002390143 210002429149 210002448146 210002521130 210002985127 210003039107 210003060142 ...

Number of Observations Read	82673
Number of Observations Used	75262

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	16
Columns in Z per Subject	1
Subjects (Blocks in V)	38739

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	731806.1422	.	6247.106
1	5	731168.05944	638.08275729	487.8607
2	2	731162.98218	5.07726353	124.2274

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	731162.60521	0.37696999	8.277446
4	2	731162.60348	0.00172463	0.170922

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	38.5525
Residual		932.81

#### Fit Statistics

-2 Res Log Likelihood	731163
AIC (Smaller is Better)	731167
AICC (Smaller is Better)	731167
BIC (Smaller is Better)	731184
CAIC (Smaller is Better)	731186
HQIC (Smaller is Better)	731172

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					-4.2425	2.4728	75250	-1.72
predictorvalue				0	0	.	.	.
predictorvalue				1	-0.1055	0.3097	75250	-0.34
predictorvalue				5	-0.3132	0.3701	75250	-0.85
predictorvalue				10	0.4714	0.4228	75250	1.11
predictorvalue				20	-0.01888	0.9921	75250	-0.02

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.0862
predictorvalue				0	.
predictorvalue				1	0.7334
predictorvalue				5	0.3974
predictorvalue				10	0.2649
predictorvalue				20	0.9848

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
predictorvalue				99	-0.2620	0.4210	75250	-0.62
tspl1	1				0	.	.	.
tspl1	2				-0.1188	0.04272	75250	-2.78
tspl1	3				0.01101	0.006130	75250	1.80
tspl2		1			0	.	.	.
tspl2		2			-0.2894	0.04647	75250	-6.23
tspl2		3			0.01124	0.004980	75250	2.26
hbspl			1		0	.	.	.
hbspl			2		0.02311	0.01761	75250	1.31
hbspl			3		-0.00054	0.000655	75250	-0.82

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
predictorvalue				99	0.5338
tspl1	1				.
tspl1	2				0.0054
tspl1	3				0.0726
tspl2		1			.
tspl2		2			<.0001
tspl2		3			0.0239
hbspl			1		.
hbspl			2		0.1894
hbspl			3		0.4128

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	5	75250	3.79	0.76	0.5800	0.5800

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	4	0 180 365 999
recipientsex	3	0 1 2
idnr	41255	210000196120 210000486129 210000598144 210000905111 210000954103 210001151104 210001428104 210001535114 210001589111 210001682118 210002204152 210002319145 210002388128 210002390143 210002429149 210002448146 210002521130 210002985127 210003039107 210003060142 ...

Number of Observations Read	82671
Number of Observations Used	82667

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	11
Columns in Z per Subject	1
Subjects (Blocks in V)	41255

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	802502.29075	.	6754.616
1	5	801829.9095	672.38124532	485.262
2	2	801825.45531	4.45418654	115.2897

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	801825.17287	0.28244830	6.42254
4	2	801825.17197	0.00089679	0.100738

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	39.2765
Residual		917.71

#### Fit Statistics

-2 Res Log Likelihood	801825
AIC (Smaller is Better)	801829
AICC (Smaller is Better)	801829
BIC (Smaller is Better)	801846
CAIC (Smaller is Better)	801848
HQIC (Smaller is Better)	801835

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				-1.1571	0.3735	82659	-3.10	0.0019
predictorvalue			0	0	.	.	.	.
predictorvalue			180	0.03682	0.3554	82659	0.10	0.9175
predictorvalue			365	-0.2946	0.4700	82659	-0.63	0.5308
predictorvalue			999	0.03339	0.2395	82659	0.14	0.8891
tsp11	1			0	.	.	.	.
tsp11	2			-0.1115	0.04027	82659	-2.77	0.0056
tsp11	3			0.01004	0.005813	82659	1.73	0.0840
tsp12		1		0	.	.	.	.
tsp12		2		-0.2787	0.04380	82659	-6.36	<.0001
tsp12		3		0.009500	0.004704	82659	2.02	0.0434

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	3	82659	0.49	0.16	0.9203	0.9203

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	4	0 180 365 999
recipientsex	3	0 1 2
idnr	38739	210000196120 210000486129 210000598144 210000905111 210000954103 210001151104 210001428104 210001535114 210001589111 210001682118 210002204152 210002319145 210002388128 210002390143 210002429149 210002448146 210002521130 210002985127 210003039107 210003060142 ...

Number of Observations Read	82671
Number of Observations Used	75262

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	14
Columns in Z per Subject	1
Subjects (Blocks in V)	38739

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	731810.71063	.	6247.874
1	5	731172.58146	638.12917274	487.4422
2	2	731167.51485	5.06660580	124.0125

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	731167.13942	0.37542647	8.244916
4	2	731167.13771	0.00170993	0.169668

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	38.5513
Residual		932.83

#### Fit Statistics

-2 Res Log Likelihood	731167
AIC (Smaller is Better)	731171
AICC (Smaller is Better)	731171
BIC (Smaller is Better)	731188
CAIC (Smaller is Better)	731190
HQIC (Smaller is Better)	731177

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					-4.3265	2.4559	75252	-1.76
predictorvalue				0	0	.	.	.
predictorvalue				180	-0.04374	0.3598	75252	-0.12
predictorvalue				365	-0.3325	0.4761	75252	-0.70
predictorvalue				999	-0.06681	0.2598	75252	-0.26
tspl1	1				0	.	.	.

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.0781
predictorvalue				0	.
predictorvalue				180	0.9033
predictorvalue				365	0.4849
predictorvalue				999	0.7971
tspl1	1				.



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
tspl1	2				-0.1191	0.04272	75252	-2.79
tspl1	3				0.01098	0.006130	75252	1.79
tspl2		1			0	.	.	.
tspl2		2			-0.2889	0.04647	75252	-6.22
tspl2		3			0.01125	0.004980	75252	2.26
hbspl			1		0	.	.	.
hbspl			2		0.02354	0.01762	75252	1.34
hbspl			3		-0.00056	0.000655	75252	-0.85

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
tspl1	2				0.0053
tspl1	3				0.0733
tspl2		1			.
tspl2		2			<.0001
tspl2		3			0.0239
hbspl			1		.
hbspl			2		0.1817
hbspl			3		0.3941

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	3	75252	0.50	0.17	0.9189	0.9189

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	2	1 2
idnr	2737	210001535114 210001589111 210004055143 210007122112 210007993103 210012323142 210014212115 210014246115 210017556115 210019274121 210020940136 210021927117 210022159144 210025820148 210027518117 210037254102 210037361135 210037456139 210040419110 210041895149 ...

Number of Observations Read	3364
Number of Observations Used	3362

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z per Subject	1
Subjects (Blocks in V)	2737

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	12563.489103	.	179.3144
1	2	12536.76932	26.71978282	31.79291
2	4	12534.188468	2.58085211	8.480404

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	12534.109599	0.07886932	3.691762
4	2	12534.088973	0.02062631	0.175028
5	2	12534.088927	0.00004509	0.004104

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.3034
Residual		2.1107

#### Fit Statistics

-2 Res Log Likelihood	12534
AIC (Smaller is Better)	12538
AICC (Smaller is Better)	12538
BIC (Smaller is Better)	12550
CAIC (Smaller is Better)	12552
HQIC (Smaller is Better)	12542

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				-0.08262	0.05980	3356	-1.38	0.1671
predictorvalue			1	0	.	.	.	.
predictorvalue			2	-0.07567	0.05469	3356	-1.38	0.1665
tsp11	1			0	.	.	.	.
tsp11	2			0.004690	0.009581	3356	0.49	0.6245
tsp11	3			0.000140	0.001459	3356	0.10	0.9237
tsp12		1		0	.	.	.	.
tsp12		2		-0.02581	0.009583	3356	-2.69	0.0071
tsp12		3		0.003650	0.001314	3356	2.78	0.0055

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	3356	1.91	1.91	0.1664	0.1665

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	2	1 2
idnr	2726	210001535114 210001589111 210004055143 210007122112 210007993103 210012323142 210014212115 210014246115 210017556115 210019274121 210020940136 210021927117 210022159144 210025820148 210027518117 210037361135 210037456139 210040419110 210041895149 210049361143 ...

Number of Observations Read	3364
Number of Observations Used	3346

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	12
Columns in Z per Subject	1
Subjects (Blocks in V)	2726

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	12530.482411	.	180.9826
1	2	12502.273531	28.20887975	28.49392
2	4	12500.151473	2.12205827	7.538937

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	12500.084751	0.06672247	3.153086
4	2	12500.068995	0.01575559	0.148436
5	2	12500.068961	0.00003401	0.00331

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.2859
Residual		2.1303

#### Fit Statistics

-2 Res Log Likelihood	12500
AIC (Smaller is Better)	12504
AICC (Smaller is Better)	12504
BIC (Smaller is Better)	12516
CAIC (Smaller is Better)	12518
HQIC (Smaller is Better)	12508

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					-0.3588	0.5705	3338	-0.63
predictorvalue				1	0	.	.	.
predictorvalue				2	-0.07641	0.05489	3338	-1.39
tspl1	1				0	.	.	.
tspl1	2				0.004708	0.009626	3338	0.49
tspl1	3				0.000115	0.001464	3338	0.08

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.5295
predictorvalue				1	.
predictorvalue				2	0.1640
tspl1	1				.
tspl1	2				0.6248
tspl1	3				0.9372

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tsp11	tsp12	hbsp1	predictorvalue	Estimate	Standard Error	DF	t Value
tsp12		1			0	.	.	.
tsp12		2			-0.02559	0.009603	3338	-2.66
tsp12		3			0.003586	0.001318	3338	2.72
hbsp1			1		0	.	.	.
hbsp1			2		0.002067	0.004196	3338	0.49
hbsp1			3		-0.00019	0.000524	3338	-0.36

#### Solution for Fixed Effects

Effect	tsp11	tsp12	hbsp1	predictorvalue	Pr >  t
tsp12		1			.
tsp12		2			0.0078
tsp12		3			0.0065
hbsp1			1		.
hbsp1			2		0.6223
hbsp1			3		0.7156

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	3338	1.94	1.94	0.1639	0.1640

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	0 1
recipientsex	2	1 2
idnr	5908	210001535114 210001589111 210002448146 210003266137 210003440144 210004055143 210005505147 210007122112 210007993103 210008729108 210008750115 210011389114 210011623133 210012323142 210014212115 210014246115 210017556115 210019274121 210020706141 210020839106 ...

Number of Observations Read	8838
Number of Observations Used	8836

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z per Subject	1
Subjects (Blocks in V)	5908

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	33722.129323	.	721.255
1	5	33603.30147	118.82785265	91.46216
2	4	33599.644968	3.65650165	0.561063

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	33599.644752	0.00021647	0.215027

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.06869
Residual		2.5425

#### Fit Statistics

-2 Res Log Likelihood	33600
AIC (Smaller is Better)	33604
AICC (Smaller is Better)	33604
BIC (Smaller is Better)	33617
CAIC (Smaller is Better)	33619
HQIC (Smaller is Better)	33608

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				-0.1523	0.03302	8830	-4.61	<.0001
predictorvalue			0	0	.	.	.	.
predictorvalue			1	0.07037	0.07607	8830	0.93	0.3550
tsp11	1			0	.	.	.	.
tsp11	2			0.01843	0.006178	8830	2.98	0.0029
tsp11	3			-0.00046	0.000931	8830	-0.49	0.6238
tsp12		1		0	.	.	.	.
tsp12		2		-0.03770	0.006111	8830	-6.17	<.0001
tsp12		3		0.004985	0.000823	8830	6.06	<.0001

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	8830	0.86	0.86	0.3550	0.3550



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	0 1
recipientsex	2	1 2
idnr	5674	210001535114 210001589111 210002448146 210003266137 210003440144 210004055143 210005505147 210007122112 210007993103 210008729108 210008750115 210011389114 210011623133 210012323142 210014212115 210014246115 210017556115 210019274121 210020706141 210020839106 ...

Number of Observations Read	8838
Number of Observations Used	8340

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	12
Columns in Z per Subject	1
Subjects (Blocks in V)	5674

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	31878.55323	.	696.1499
1	5	31760.385551	118.16767955	92.75209
2	4	31756.128938	4.25661302	5.978345

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	4	31756.090954	0.03798371	0.131889
4	2	31756.090932	0.00002150	0.015045

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.04538
Residual		2.5696

#### Fit Statistics

-2 Res Log Likelihood	31756
AIC (Smaller is Better)	31760
AICC (Smaller is Better)	31760
BIC (Smaller is Better)	31773
CAIC (Smaller is Better)	31775
HQIC (Smaller is Better)	31765

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					-0.3498	0.3825	8332	-0.91
predictorvalue				0	0	.	.	.
predictorvalue				1	0.06889	0.07624	8332	0.90
tspl1	1				0	.	.	.
tspl1	2				0.01485	0.006383	8332	2.33
tspl1	3				-0.00009	0.000962	8332	-0.09

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.3605
predictorvalue				0	.
predictorvalue				1	0.3662
tspl1	1				.
tspl1	2				0.0201
tspl1	3				0.9292

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
tspl2		1			0	.	.	.
tspl2		2			-0.03605	0.006313	8332	-5.71
tspl2		3			0.004836	0.000852	8332	5.67
hbspl			1		0	.	.	.
hbspl			2		0.001523	0.002766	8332	0.55
hbspl			3		-0.00006	0.000101	8332	-0.62

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
tspl2		1			.
tspl2		2			<.0001
tspl2		3			<.0001
hbspl			1		.
hbspl			2		0.5819
hbspl			3		0.5381

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	8332	0.82	0.82	0.3662	0.3662

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	2	1 2
idnr	5464	210001535114 210001589111 210002448146 210003266137 210003440144 210004055143 210005505147 210007122112 210007993103 210008729108 210008750115 210011389114 210011623133 210012323142 210014212115 210014246115 210017556115 210019274121 210020706141 210020839106 ...

Number of Observations Read	8065
Number of Observations Used	8003

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	10
Columns in Z per Subject	1
Subjects (Blocks in V)	5464

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	30469.961839	.	636.3291
1	5	30364.527312	105.43452658	71.98762
2	2	30362.571397	1.95591506	27.06148
3	2	30362.185645	0.38575230	5.521027

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	2	30362.166402	0.01924348	0.727575
5	2	30362.166047	0.00035494	0.026757
6	3	30362.166046	0.00000048	0.00003

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.09624
Residual		2.4841

#### Fit Statistics

-2 Res Log Likelihood	30362
AIC (Smaller is Better)	30366
AICC (Smaller is Better)	30366
BIC (Smaller is Better)	30379
CAIC (Smaller is Better)	30381
HQIC (Smaller is Better)	30371

#### Solution for Fixed Effects

Effect	tspl1	tspl2	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				-0.1288	0.09257	7996	-1.39	0.1642
predspline			1	0	.	.	.	.
predspline			2	-0.00068	0.002358	7996	-0.29	0.7730
predspline			3	7.324E-6	0.000102	7996	0.07	0.9427
tspl1	1			0	.	.	.	.
tspl1	2			0.01970	0.006450	7996	3.05	0.0023
tspl1	3			-0.00045	0.000973	7996	-0.46	0.6454
tspl2		1		0	.	.	.	.
tspl2		2		-0.03576	0.006395	7996	-5.59	<.0001
tspl2		3		0.004754	0.000857	7996	5.55	<.0001

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	7996	0.24	0.12	0.8891	0.8891

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	2	1 2
idnr	5260	210001535114 210001589111 210002448146 210003266137 210003440144 210004055143 210005505147 210007122112 210007993103 210008729108 210008750115 210011389114 210011623133 210012323142 210014212115 210014246115 210017556115 210019274121 210020706141 210020839106 ...

Number of Observations Read	8065
Number of Observations Used	7571

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	13
Columns in Z per Subject	1
Subjects (Blocks in V)	5260

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	28839.815257	.	615.7401
1	5	28734.140241	105.67501559	74.22752
2	4	28731.256642	2.88359911	0.61579
3	2	28731.256332	0.00030996	0.228017

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	2	28731.256283	0.00004886	0.001867

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.07076
Residual		2.5014

#### Fit Statistics

-2 Res Log Likelihood	28731
AIC (Smaller is Better)	28735
AICC (Smaller is Better)	28735
BIC (Smaller is Better)	28748
CAIC (Smaller is Better)	28750
HQIC (Smaller is Better)	28740

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept					-0.4190	0.4056	7562	-1.03	0.3016
predspline				1	0	.	.	.	.
predspline				2	-0.00080	0.002401	7562	-0.33	0.7388
predspline				3	0.000022	0.000105	7562	0.21	0.8359
tspl1	1				0	.	.	.	.
tspl1	2				0.01616	0.006642	7562	2.43	0.0150
tspl1	3				-0.00014	0.001001	7562	-0.14	0.8916
tspl2		1			0	.	.	.	.
tspl2		2			-0.03412	0.006582	7562	-5.18	<.0001
tspl2		3			0.004626	0.000884	7562	5.24	<.0001
hbspl			1		0	.	.	.	.
hbspl			2		0.002194	0.002882	7562	0.76	0.4464
hbspl			3		-0.00008	0.000107	7562	-0.73	0.4641

**Now assessing with 6 hours pre-post-transfusion windows**

The HPMIXED Procedure

Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	7562	0.14	0.07	0.9302	0.9302



# Now assessing with 6 hours pre-post-transfusion windows

## The HPMIXED Procedure

### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

### Class Level Information

Class	Levels	Values
recipientsex	2	1 2
idnr	5673	210001535114 210001589111 210002448146 210003266137 210003440144 210004055143 210005505147 210007122112 210007993103 210008729108 210008750115 210011389114 210011623133 210012323142 210014212115 210014246115 210017556115 210019274121 210020706141 210020839106 ...

Number of Observations Read	8425
Number of Observations Used	8338

### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	10
Columns in Z per Subject	1
Subjects (Blocks in V)	5673

### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	31870.206968	.	695.6384
1	5	31752.243475	117.96349380	92.64404
2	4	31748.00264	4.24083437	5.856906
3	4	31747.966405	0.03623502	0.158854

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	2	31747.966374	0.00003089	0.017552

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.04602
Residual		2.5696

#### Fit Statistics

-2 Res Log Likelihood	31748
AIC (Smaller is Better)	31752
AICC (Smaller is Better)	31752
BIC (Smaller is Better)	31765
CAIC (Smaller is Better)	31767
HQIC (Smaller is Better)	31757

#### Solution for Fixed Effects

Effect	tspl1	tspl2	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				-0.3687	0.4349	8331	-0.85	0.3967
predspline			1	0	.	.	.	.
predspline			2	0.001700	0.003174	8331	0.54	0.5921
predspline			3	-0.00006	0.000104	8331	-0.58	0.5621
tspl1	1			0	.	.	.	.
tspl1	2			0.01491	0.006385	8331	2.34	0.0195
tspl1	3			-0.00010	0.000962	8331	-0.10	0.9205
tspl2		1		0	.	.	.	.
tspl2		2		-0.03611	0.006314	8331	-5.72	<.0001
tspl2		3		0.004843	0.000852	8331	5.68	<.0001

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	8331	0.34	0.17	0.8447	0.8448

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	2	1 2
idnr	5908	210001535114 210001589111 210002448146 210003266137 210003440144 210004055143 210005505147 210007122112 210007993103 210008729108 210008750115 210011389114 210011623133 210012323142 210014212115 210014246115 210017556115 210019274121 210020706141 210020839106 ...

Number of Observations Read	8838
Number of Observations Used	8836

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z per Subject	1
Subjects (Blocks in V)	5908

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	33724.165948	.	720.9554
1	5	33605.524748	118.64119987	91.18063
2	4	33601.90346	3.62128856	0.314215

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	33601.903392	0.00006750	0.119386

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.06949
Residual		2.5419

#### Fit Statistics

-2 Res Log Likelihood	33602
AIC (Smaller is Better)	33606
AICC (Smaller is Better)	33606
BIC (Smaller is Better)	33619
CAIC (Smaller is Better)	33621
HQIC (Smaller is Better)	33611

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				-0.1559	0.03711	8830	-4.20	<.0001
predictorvalue			1	0	.	.	.	.
predictorvalue			2	0.01467	0.03445	8830	0.43	0.6702
tsp11	1			0	.	.	.	.
tsp11	2			0.01847	0.006178	8830	2.99	0.0028
tsp11	3			-0.00047	0.000931	8830	-0.50	0.6164
tsp12		1		0	.	.	.	.
tsp12		2		-0.03770	0.006113	8830	-6.17	<.0001
tsp12		3		0.004989	0.000823	8830	6.06	<.0001

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	8830	0.18	0.18	0.6702	0.6702

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	2	1 2
idnr	5674	210001535114 210001589111 210002448146 210003266137 210003440144 210004055143 210005505147 210007122112 210007993103 210008729108 210008750115 210011389114 210011623133 210012323142 210014212115 210014246115 210017556115 210019274121 210020706141 210020839106 ...

Number of Observations Read	8838
Number of Observations Used	8340

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	12
Columns in Z per Subject	1
Subjects (Blocks in V)	5674

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	31880.109048	.	695.8783
1	5	31762.12884	117.98020830	92.47705
2	4	31757.911098	4.21774235	5.737088

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	4	31757.87652	0.03457775	0.178894
4	2	31757.876481	0.00003884	0.01921

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.04636
Residual		2.5688

#### Fit Statistics

-2 Res Log Likelihood	31758
AIC (Smaller is Better)	31762
AICC (Smaller is Better)	31762
BIC (Smaller is Better)	31775
CAIC (Smaller is Better)	31777
HQIC (Smaller is Better)	31767

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					-0.4241	0.4082	8332	-1.04
predictorvalue				1	0	.	.	.
predictorvalue				2	0.02246	0.04015	8332	0.56
tspl1	1				0	.	.	.
tspl1	2				0.01488	0.006384	8332	2.33
tspl1	3				-0.00010	0.000962	8332	-0.10

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.2988
predictorvalue				1	.
predictorvalue				2	0.5759
tspl1	1				.
tspl1	2				0.0198
tspl1	3				0.9190

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tsp11	tsp12	hbsp1	predictorvalue	Estimate	Standard Error	DF	t Value
tsp12		1			0	.	.	.
tsp12		2			-0.03600	0.006316	8332	-5.70
tsp12		3			0.004836	0.000852	8332	5.67
hbsp1			1		0	.	.	.
hbsp1			2		0.001990	0.002896	8332	0.69
hbsp1			3		-0.00006	0.000101	8332	-0.64

#### Solution for Fixed Effects

Effect	tsp11	tsp12	hbsp1	predictorvalue	Pr >  t
tsp12		1			.
tsp12		2			<.0001
tsp12		3			<.0001
hbsp1			1		.
hbsp1			2		0.4919
hbsp1			3		0.5245

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	8332	0.31	0.31	0.5759	0.5759

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	2	1 2
idnr	5904	210001535114 210001589111 210002448146 210003266137 210003440144 210004055143 210005505147 210007122112 210007993103 210008729108 210008750115 210011389114 210011623133 210012323142 210014212115 210014246115 210017556115 210019274121 210020706141 210020839106 ...

Number of Observations Read	8914
Number of Observations Used	8831

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	10
Columns in Z per Subject	1
Subjects (Blocks in V)	5904

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	33726.91185	.	722.0911
1	5	33607.813587	119.09826367	91.06216
2	4	33604.197486	3.61610032	0.388254
3	2	33604.197383	0.00010330	0.148078



## Now assessing with 6 hours pre-post-transfusion windows

The HPMIXED Procedure

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

### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.06849
Residual		2.5432

### Fit Statistics

-2 Res Log Likelihood	33604
AIC (Smaller is Better)	33608
AICC (Smaller is Better)	33608
BIC (Smaller is Better)	33622
CAIC (Smaller is Better)	33624
HQIC (Smaller is Better)	33613

### Solution for Fixed Effects

Effect	tspl1	tspl2	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				-0.06256	0.06354	8824	-0.98	0.3248
predspline			1	0	.	.	.	.
predspline			2	-0.00488	0.003899	8824	-1.25	0.2107
predspline			3	0.000159	0.000224	8824	0.71	0.4760
tspl1	1			0	.	.	.	.
tspl1	2			0.01850	0.006180	8824	2.99	0.0028
tspl1	3			-0.00047	0.000931	8824	-0.50	0.6153
tspl2		1		0	.	.	.	.
tspl2		2		-0.03759	0.006121	8824	-6.14	<.0001
tspl2		3		0.004977	0.000824	8824	6.04	<.0001

### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	8824	3.01	1.50	0.2221	0.2221

# Now assessing with 6 hours pre-post-transfusion windows

## The HPMIXED Procedure

### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

### Class Level Information

Class	Levels	Values
recipientsex	2	1 2
idnr	5670	210001535114 210001589111 210002448146 210003266137 210003440144 210004055143 210005505147 210007122112 210007993103 210008729108 210008750115 210011389114 210011623133 210012323142 210014212115 210014246115 210017556115 210019274121 210020706141 210020839106 ...

Number of Observations Read	8914
Number of Observations Used	8335

### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	13
Columns in Z per Subject	1
Subjects (Blocks in V)	5670

### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	31883.136077	.	696.8561
1	5	31764.73267	118.40340681	92.28246
2	4	31760.528514	4.20415670	5.781056
3	4	31760.493257	0.03525674	0.161262

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	2	31760.493225	0.00003175	0.017646

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.04558
Residual		2.5699

#### Fit Statistics

-2 Res Log Likelihood	31760
AIC (Smaller is Better)	31764
AICC (Smaller is Better)	31764
BIC (Smaller is Better)	31778
CAIC (Smaller is Better)	31780
HQIC (Smaller is Better)	31769

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept					-0.2561	0.3870	8326	-0.66	0.5081
predspline				1	0	.	.	.	.
predspline				2	-0.00545	0.003971	8326	-1.37	0.1696
predspline				3	0.000203	0.000230	8326	0.89	0.3761
tspl1	1				0	.	.	.	.
tspl1	2				0.01491	0.006385	8326	2.34	0.0196
tspl1	3				-0.00010	0.000963	8326	-0.10	0.9173
tspl2		1			0	.	.	.	.
tspl2		2			-0.03589	0.006322	8326	-5.68	<.0001
tspl2		3			0.004821	0.000853	8326	5.65	<.0001
hbspl			1		0	.	.	.	.
hbspl			2		0.001530	0.002767	8326	0.55	0.5805
hbspl			3		-0.00006	0.000101	8326	-0.63	0.5274

**Now assessing with 6 hours pre-post-transfusion windows**

The HPMIXED Procedure

Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	8326	2.97	1.49	0.2261	0.2262

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	6	0 1 5 10 20 99
recipientsex	2	1 2
idnr	5908	210001535114 210001589111 210002448146 210003266137 210003440144 210004055143 210005505147 210007122112 210007993103 210008729108 210008750115 210011389114 210011623133 210012323142 210014212115 210014246115 210017556115 210019274121 210020706141 210020839106 ...

Number of Observations Read	8842
Number of Observations Used	8836

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	13
Columns in Z per Subject	1
Subjects (Blocks in V)	5908

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	33735.398026	.	721.6851
1	5	33616.547787	118.85023892	91.03499
2	4	33612.938735	3.60905212	0.334857

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	33612.938659	0.00007666	0.12731

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.06913
Residual		2.5426

#### Fit Statistics

-2 Res Log Likelihood	33613
AIC (Smaller is Better)	33617
AICC (Smaller is Better)	33617
BIC (Smaller is Better)	33630
CAIC (Smaller is Better)	33632
HQIC (Smaller is Better)	33622

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				-0.1278	0.04757	8826	-2.69	0.0072
predictorvalue			0	0	.	.	.	.
predictorvalue			1	-0.02224	0.04855	8826	-0.46	0.6469
predictorvalue			5	-0.06665	0.05773	8826	-1.15	0.2483
predictorvalue			10	-0.03082	0.06414	8826	-0.48	0.6309
predictorvalue			20	0.1244	0.1461	8826	0.85	0.3945
predictorvalue			99	0.007967	0.05755	8826	0.14	0.8899
tsp11	1			0	.	.	.	.
tsp11	2			0.01830	0.006185	8826	2.96	0.0031
tsp11	3			-0.00043	0.000931	8826	-0.46	0.6437
tsp12		1		0	.	.	.	.
tsp12		2		-0.03810	0.006123	8826	-6.22	<.0001
tsp12		3		0.005029	0.000824	8826	6.10	<.0001

Now assessing with 6 hours pre-post-transfusion windows

The HPMIXED Procedure						
Type III Tests of Fixed Effects						
Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	5	8826	2.99	0.60	0.7015	0.7015

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	6	0 1 5 10 20 99
recipientsex	2	1 2
idnr	5674	210001535114 210001589111 210002448146 210003266137 210003440144 210004055143 210005505147 210007122112 210007993103 210008729108 210008750115 210011389114 210011623133 210012323142 210014212115 210014246115 210017556115 210019274121 210020706141 210020839106 ...

Number of Observations Read	8842
Number of Observations Used	8340

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	16
Columns in Z per Subject	1
Subjects (Blocks in V)	5674

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	31891.240878	.	696.8678
1	5	31772.929267	118.31161046	92.32669
2	4	31768.723715	4.20555287	5.787093



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	4	31768.688439	0.03527537	0.166091
4	2	31768.688406	0.00003362	0.018134

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.04579
Residual		2.5697

#### Fit Statistics

-2 Res Log Likelihood	31769
AIC (Smaller is Better)	31773
AICC (Smaller is Better)	31773
BIC (Smaller is Better)	31786
CAIC (Smaller is Better)	31788
HQIC (Smaller is Better)	31777

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					-0.3267	0.3855	8328	-0.85
predictorvalue				0	0	.	.	.
predictorvalue				1	-0.02972	0.04876	8328	-0.61
predictorvalue				5	-0.07274	0.05796	8328	-1.26
predictorvalue				10	-0.04189	0.06464	8328	-0.65
predictorvalue				20	0.1183	0.1479	8328	0.80

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.3967
predictorvalue				0	.
predictorvalue				1	0.5421
predictorvalue				5	0.2095
predictorvalue				10	0.5170
predictorvalue				20	0.4237

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
predictorvalue				99	0.01053	0.06423	8328	0.16
tspl1	1				0	.	.	.
tspl1	2				0.01473	0.006390	8328	2.31
tspl1	3				-0.00006	0.000963	8328	-0.07
tspl2		1			0	.	.	.
tspl2		2			-0.03630	0.006318	8328	-5.75
tspl2		3			0.004863	0.000852	8328	5.71
hbspl			1		0	.	.	.
hbspl			2		0.001581	0.002770	8328	0.57
hbspl			3		-0.00007	0.000101	8328	-0.66

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
predictorvalue				99	0.8698
tspl1	1				.
tspl1	2				0.0212
tspl1	3				0.9471
tspl2		1			.
tspl2		2			<.0001
tspl2		3			<.0001
hbspl			1		.
hbspl			2		0.5682
hbspl			3		0.5102

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	5	8328	3.28	0.66	0.6565	0.6565

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	4	0 180 365 999
recipientsex	2	1 2
idnr	5908	210001535114 210001589111 210002448146 210003266137 210003440144 210004055143 210005505147 210007122112 210007993103 210008729108 210008750115 210011389114 210011623133 210012323142 210014212115 210014246115 210017556115 210019274121 210020706141 210020839106 ...

Number of Observations Read	8840
Number of Observations Used	8836

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	11
Columns in Z per Subject	1
Subjects (Blocks in V)	5908

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	33730.698637	.	722.2691
1	5	33611.515665	119.18297113	91.42735
2	4	33607.857156	3.65850948	0.679757

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	33607.856837	0.00031852	0.261621
4	2	33607.856782	0.00005581	0.002073

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.06761
Residual		2.5439

#### Fit Statistics

-2 Res Log Likelihood	33608
AIC (Smaller is Better)	33612
AICC (Smaller is Better)	33612
BIC (Smaller is Better)	33625
CAIC (Smaller is Better)	33627
HQIC (Smaller is Better)	33617

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				-0.1495	0.03753	8828	-3.98	<.0001
predictorvalue			0	0	.	.	.	.
predictorvalue			180	-0.03446	0.05635	8828	-0.61	0.5409
predictorvalue			365	-0.03761	0.07150	8828	-0.53	0.5989
predictorvalue			999	0.02506	0.03838	8828	0.65	0.5139
tsp11	1			0	.	.	.	.
tsp11	2			0.01831	0.006181	8828	2.96	0.0031
tsp11	3			-0.00044	0.000931	8828	-0.47	0.6386
tsp12		1		0	.	.	.	.
tsp12		2		-0.03799	0.006116	8828	-6.21	<.0001
tsp12		3		0.005010	0.000823	8828	6.09	<.0001

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	3	8828	1.53	0.51	0.6758	0.6758

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	4	0 180 365 999
recipientsex	2	1 2
idnr	5674	210001535114 210001589111 210002448146 210003266137 210003440144 210004055143 210005505147 210007122112 210007993103 210008729108 210008750115 210011389114 210011623133 210012323142 210014212115 210014246115 210017556115 210019274121 210020706141 210020839106 ...

Number of Observations Read	8840
Number of Observations Used	8340

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	14
Columns in Z per Subject	1
Subjects (Blocks in V)	5674

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	31886.838679	.	697.329
1	5	31768.236088	118.60259092	92.73515
2	4	31763.974135	4.26195358	6.12267

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	4	31763.93401	0.04012457	0.097922
4	2	31763.933998	0.00001199	0.011617

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.04442
Residual		2.5709

#### Fit Statistics

-2 Res Log Likelihood	31764
AIC (Smaller is Better)	31768
AICC (Smaller is Better)	31768
BIC (Smaller is Better)	31781
CAIC (Smaller is Better)	31783
HQIC (Smaller is Better)	31773

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					-0.3571	0.3826	8330	-0.93
predictorvalue				0	0	.	.	.
predictorvalue				180	-0.03122	0.05661	8330	-0.55
predictorvalue				365	-0.03058	0.07202	8330	-0.42
predictorvalue				999	0.03438	0.04028	8330	0.85
tspl1	1				0	.	.	.

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.3507
predictorvalue				0	.
predictorvalue				180	0.5813
predictorvalue				365	0.6712
predictorvalue				999	0.3934
tspl1	1				.

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
tspl1	2				0.01476	0.006385	8330	2.31
tspl1	3				-0.00007	0.000963	8330	-0.07
tspl2		1			0	.	.	.
tspl2		2			-0.03622	0.006316	8330	-5.73
tspl2		3			0.004849	0.000852	8330	5.69
hbspl			1		0	.	.	.
hbspl			2		0.001576	0.002769	8330	0.57
hbspl			3		-0.00007	0.000101	8330	-0.64

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
tspl1	2				0.0208
tspl1	3				0.9406
tspl2		1			.
tspl2		2			<.0001
tspl2		3			<.0001
hbspl			1		.
hbspl			2		0.5695
hbspl			3		0.5206

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	3	8330	1.73	0.58	0.6296	0.6296

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	2	1 2
idnr	1449	210009873148 210012108105 210014500120 210014884130 210017449144 210020087126 210022666149 210034070122 210042741149 210047556153 210049843148 210057923127 210060575117 210064156104 210071505145 210075267140 210075814143 210084066119 210089244126 210091193125 ...

Number of Observations Read	2095
Number of Observations Used	2093

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z per Subject	1
Subjects (Blocks in V)	1449

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	27041.038207	.	202.5509
1	2	27001.561478	39.47672957	1.840775
2	4	27001.554116	0.00736112	1.370774



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	5	27001.552475	0.00164171	1.243036
4	4	27001.548923	0.00355211	0.908949
5	5	27001.548227	0.00069523	0.828267
6	4	27001.546711	0.00151651	0.617191
7	5	27001.546409	0.00030200	0.565923
8	4	27001.545743	0.00066570	0.432075
9	2	27001.544867	0.00087621	0

Convergence is assumed but all parameters are actively constrained.

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.02622
Residual		23613

#### Fit Statistics

-2 Res Log Likelihood	27002
AIC (Smaller is Better)	27004
AICC (Smaller is Better)	27004
BIC (Smaller is Better)	27009
CAIC (Smaller is Better)	27010
HQIC (Smaller is Better)	27006

#### Solution for Fixed Effects

Effect	tspl1	tspl2	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				-23.0863	12.3865	2087	-1.86	0.0625
predictorvalue		1		0	.	.	.	.
predictorvalue		2		-1.2993	6.8386	2087	-0.19	0.8493
tspl1	1			0	.	.	.	.
tspl1	2			-1.3995	1.3634	2087	-1.03	0.3048
tspl1	3			0.06505	0.1707	2087	0.38	0.7032
tspl2		1		0	.	.	.	.
tspl2		2		4.4203	1.4884	2087	2.97	0.0030
tspl2		3		-0.4334	0.1569	2087	-2.76	0.0058

Now assessing with 6 hours pre-post-transfusion windows

The HPMIXED Procedure						
Type III Tests of Fixed Effects						
Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	2087	0.04	0.04	0.8493	0.8493

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	2	1 2
idnr	1441	210009873148 210012108105 210014500120 210014884130 210017449144 210020087126 210022666149 210034070122 210042741149 210047556153 210049843148 210057923127 210060575117 210064156104 210071505145 210075267140 210075814143 210084066119 210089244126 210091193125 ...

Number of Observations Read	2095
Number of Observations Used	2081

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	12
Columns in Z per Subject	1
Subjects (Blocks in V)	1441

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	26894.45076	.	202.3592
1	2	26854.426559	40.02420035	2.141956
2	4	26854.416771	0.00978859	1.51928

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	5	26854.406793	0.00997729	0

Convergence is assumed but all parameters are actively constrained.

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.02629
Residual		23683

#### Fit Statistics

-2 Res Log Likelihood	26854
AIC (Smaller is Better)	26856
AICC (Smaller is Better)	26856
BIC (Smaller is Better)	26862
CAIC (Smaller is Better)	26863
HQIC (Smaller is Better)	26858

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					28.9059	72.9046	2073	0.40
predictorvalue				1	0	.	.	.
predictorvalue				2	-0.5064	6.8744	2073	-0.07
tspl1	1				0	.	.	.
tspl1	2				-1.3116	1.3682	2073	-0.96
tspl1	3				0.05238	0.1713	2073	0.31
tspl2		1			0	.	.	.

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.6918
predictorvalue				1	.
predictorvalue				2	0.9413
tspl1	1				.
tspl1	2				0.3379
tspl1	3				0.7598
tspl2		1			.

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
tspl2		2			4.4132	1.4944	2073	2.95
tspl2		3			-0.4399	0.1576	2073	-2.79
hbspl			1		0	.	.	.
hbspl			2		-0.3820	0.5297	2073	-0.72
hbspl			3		0.01190	0.06278	2073	0.19

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
tspl2		2			0.0032
tspl2		3			0.0053
hbspl			1		.
hbspl			2		0.4709
hbspl			3		0.8497

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	2073	0.01	0.01	0.9413	0.9413

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	0 1
recipientsex	2	1 2
idnr	2850	210004674105 210009873148 210012108105 210012696118 210014500120 210014884130 210017449144 210018477120 210018894116 210020087126 210022587101 210022666149 210024309139 210033821149 210034070122 210037456139 210039094126 210039758126 210042741149 210047556153 ...

Number of Observations Read	5899
Number of Observations Used	5897

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z per Subject	1
Subjects (Blocks in V)	2850

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	76152.670901	.	492.8292
1	5	76078.650998	74.01990263	43.05812
2	2	76077.850379	0.80061959	15.5582

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	76077.708984	0.14139441	2.797123
4	2	76077.703684	0.00530029	0.298202
5	2	76077.703621	0.00006277	0.007422

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	512.12
Residual		23002

#### Fit Statistics

-2 Res Log Likelihood	76078
AIC (Smaller is Better)	76082
AICC (Smaller is Better)	76082
BIC (Smaller is Better)	76094
CAIC (Smaller is Better)	76096
HQIC (Smaller is Better)	76086

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				-15.5499	6.9635	5891	-2.23	0.0256
predictorvalue			0	0	.	.	.	.
predictorvalue			1	-6.6011	8.4971	5891	-0.78	0.4373
tsp11	1			0	.	.	.	.
tsp11	2			-0.4645	0.7963	5891	-0.58	0.5597
tsp11	3			0.03823	0.09981	5891	0.38	0.7017
tsp12		1		0	.	.	.	.
tsp12		2		1.9352	0.8619	5891	2.25	0.0248
tsp12		3		-0.1826	0.09123	5891	-2.00	0.0453

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	5891	0.60	0.60	0.4372	0.4373

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	0 1
recipientsex	2	1 2
idnr	2678	210004674105 210009873148 210012108105 210012696118 210014500120 210014884130 210017449144 210018894116 210020087126 210022587101 210022666149 210024309139 210033821149 210034070122 210037456139 210039094126 210039758126 210042741149 210047556153 210049843148 ...

Number of Observations Read	5899
Number of Observations Used	5314

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	12
Columns in Z per Subject	1
Subjects (Blocks in V)	2678

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	68725.783654	.	456.6402
1	5	68655.337459	70.44619429	37.97785
2	2	68654.639018	0.69844075	14.3589



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	68654.500826	0.13819262	2.759899
4	2	68654.494791	0.00603526	0.33592
5	2	68654.494696	0.00009415	0.010523

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	480.53
Residual		23446

#### Fit Statistics

-2 Res Log Likelihood	68654
AIC (Smaller is Better)	68658
AICC (Smaller is Better)	68658
BIC (Smaller is Better)	68670
CAIC (Smaller is Better)	68672
HQIC (Smaller is Better)	68663

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					-11.8668	48.0628	5306	-0.25
predictorvalue				0	0	.	.	.
predictorvalue				1	-5.9790	8.6723	5306	-0.69
tspl1	1				0	.	.	.
tspl1	2				-0.2557	0.8463	5306	-0.30
tspl1	3				0.004475	0.1055	5306	0.04

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.8050
predictorvalue				0	.
predictorvalue				1	0.4906
tspl1	1				.
tspl1	2				0.7625
tspl1	3				0.9662

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tsp11	tsp12	hbsp1	predictorvalue	Estimate	Standard Error	DF	t Value
tsp12		1			0	.	.	.
tsp12		2			1.9157	0.9179	5306	2.09
tsp12		3			-0.1880	0.09714	5306	-1.94
hbsp1			1		0	.	.	.
hbsp1			2		-0.01805	0.3441	5306	-0.05
hbsp1			3		-0.00798	0.01327	5306	-0.60

#### Solution for Fixed Effects

Effect	tsp11	tsp12	hbsp1	predictorvalue	Pr >  t
tsp12		1			.
tsp12		2			0.0369
tsp12		3			0.0530
hbsp1			1		.
hbsp1			2		0.9582
hbsp1			3		0.5477

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	5306	0.48	0.48	0.4905	0.4906

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	2	1 2
idnr	2704	210004674105 210009873148 210012108105 210012696118 210014500120 210014884130 210017449144 210018477120 210018894116 210020087126 210022587101 210022666149 210024309139 210033821149 210034070122 210037456139 210039094126 210039758126 210042741149 210047556153 ...

Number of Observations Read	5529
Number of Observations Used	5467

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	10
Columns in Z per Subject	1
Subjects (Blocks in V)	2704

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	70568.347741	.	433.794
1	5	70507.636452	60.71128897	39.40697
2	2	70506.951647	0.68480482	12.2302
3	2	70506.869516	0.08213112	1.507826

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	2	70506.868165	0.00135085	0.082733
5	2	70506.868161	0.00000412	0.000647

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	821.51
Residual		22555

#### Fit Statistics

-2 Res Log Likelihood	70507
AIC (Smaller is Better)	70511
AICC (Smaller is Better)	70511
BIC (Smaller is Better)	70523
CAIC (Smaller is Better)	70525
HQIC (Smaller is Better)	70515

#### Solution for Fixed Effects

Effect	tspl1	tspl2	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				-23.7369	12.6508	5460	-1.88	0.0607
predspline			1	0	.	.	.	.
predspline			2	0.1704	0.2810	5460	0.61	0.5443
predspline			3	-0.01499	0.01189	5460	-1.26	0.2072
tspl1	1			0	.	.	.	.
tspl1	2			-0.5352	0.8293	5460	-0.65	0.5187
tspl1	3			0.1046	0.1032	5460	1.01	0.3110
tspl2		1		0	.	.	.	.
tspl2		2		2.2872	0.8964	5460	2.55	0.0108
tspl2		3		-0.1999	0.09474	5460	-2.11	0.0349

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	5460	2.82	1.41	0.2441	0.2441

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	2	1 2
idnr	2544	210004674105 210009873148 210012108105 210012696118 210014500120 210014884130 210017449144 210018894116 210020087126 210022587101 210022666149 210024309139 210033821149 210034070122 210037456139 210039094126 210039758126 210042741149 210047556153 210049843148 ...

Number of Observations Read	5529
Number of Observations Used	4941

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	13
Columns in Z per Subject	1
Subjects (Blocks in V)	2544

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	63857.627576	.	398.0524
1	2	63804.713043	52.91453290	5.485896
2	9	63801.2655	3.44754284	49.55019
3	3	63800.103703	1.16179717	11.78984

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	2	63800.006687	0.09701562	2.335839
5	2	63800.003085	0.00360184	0.193474
6	3	63800.003061	0.00002440	0.00261

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	868.91
Residual		22845

#### Fit Statistics

-2 Res Log Likelihood	63800
AIC (Smaller is Better)	63804
AICC (Smaller is Better)	63804
BIC (Smaller is Better)	63816
CAIC (Smaller is Better)	63818
HQIC (Smaller is Better)	63808

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept					-11.3747	50.5213	4932	-0.23	0.8219
predspline				1	0	.	.	.	.
predspline				2	0.2358	0.2922	4932	0.81	0.4197
predspline				3	-0.02236	0.01259	4932	-1.78	0.0758
tspl1	1				0	.	.	.	.
tspl1	2				-0.3511	0.8777	4932	-0.40	0.6891
tspl1	3				0.06421	0.1085	4932	0.59	0.5539
tspl2		1			0	.	.	.	.
tspl2		2			2.3549	0.9471	4932	2.49	0.0129
tspl2		3			-0.2140	0.1003	4932	-2.13	0.0329
hbspl			1		0	.	.	.	.
hbspl			2		-0.08950	0.3553	4932	-0.25	0.8011
hbspl			3		-0.00497	0.01384	4932	-0.36	0.7199

**Now assessing with 6 hours pre-post-transfusion windows**

The HPMIXED Procedure

Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	4932	5.77	2.88	0.0559	0.0559

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	2	1 2
idnr	2678	210004674105 210009873148 210012108105 210012696118 210014500120 210014884130 210017449144 210018894116 210020087126 210022587101 210022666149 210024309139 210033821149 210034070122 210037456139 210039094126 210039758126 210042741149 210047556153 210049843148 ...

Number of Observations Read	5399
Number of Observations Used	5312

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	10
Columns in Z per Subject	1
Subjects (Blocks in V)	2678

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	68708.464832	.	456.5749
1	2	68639.052089	69.41274275	0.406662
2	11	68637.275637	1.77645223	7.072365



## Now assessing with 6 hours pre-post-transfusion windows

The HPMIXED Procedure

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

### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	557.13
Residual		23380

### Fit Statistics

-2 Res Log Likelihood	68637
AIC (Smaller is Better)	68641
AICC (Smaller is Better)	68641
BIC (Smaller is Better)	68653
CAIC (Smaller is Better)	68655
HQIC (Smaller is Better)	68646

### Solution for Fixed Effects

Effect	tspl1	tspl2	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				-13.8579	48.9220	5305	-0.28	0.7770
predspline			1	0	.	.	.	.
predspline			2	-0.00582	0.3509	5305	-0.02	0.9868
predspline			3	-0.00831	0.01342	5305	-0.62	0.5358
tspl1	1			0	.	.	.	.
tspl1	2			-0.2655	0.8467	5305	-0.31	0.7538
tspl1	3			0.005155	0.1055	5305	0.05	0.9610
tspl2		1		0	.	.	.	.
tspl2		2		1.9181	0.9184	5305	2.09	0.0368
tspl2		3		-0.1884	0.09719	5305	-1.94	0.0527

### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	5305	1.67	0.83	0.4346	0.4347

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	2	1 2
idnr	2850	210004674105 210009873148 210012108105 210012696118 210014500120 210014884130 210017449144 210018477120 210018894116 210020087126 210022587101 210022666149 210024309139 210033821149 210034070122 210037456139 210039094126 210039758126 210042741149 210047556153 ...

Number of Observations Read	5899
Number of Observations Used	5897

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z per Subject	1
Subjects (Blocks in V)	2850

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	76154.753399	.	492.64
1	5	76080.750495	74.00290413	43.10279
2	2	76079.947758	0.80273685	15.57375

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	76079.805987	0.14177130	2.801937
4	2	76079.800664	0.00532293	0.29905
5	2	76079.8006	0.00006319	0.007459

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	512.53
Residual		23004

#### Fit Statistics

-2 Res Log Likelihood	76080
AIC (Smaller is Better)	76084
AICC (Smaller is Better)	76084
BIC (Smaller is Better)	76096
CAIC (Smaller is Better)	76098
HQIC (Smaller is Better)	76088

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				-15.7671	7.2048	5891	-2.19	0.0287
predictorvalue			1	0	.	.	.	.
predictorvalue			2	-0.3821	4.0088	5891	-0.10	0.9241
tsp11	1			0	.	.	.	.
tsp11	2			-0.4658	0.7964	5891	-0.58	0.5587
tsp11	3			0.03833	0.09982	5891	0.38	0.7010
tsp12		1		0	.	.	.	.
tsp12		2		1.9366	0.8619	5891	2.25	0.0247
tsp12		3		-0.1827	0.09124	5891	-2.00	0.0453

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	5891	0.01	0.01	0.9241	0.9241

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	2	1 2
idnr	2678	210004674105 210009873148 210012108105 210012696118 210014500120 210014884130 210017449144 210018894116 210020087126 210022587101 210022666149 210024309139 210033821149 210034070122 210037456139 210039094126 210039758126 210042741149 210047556153 210049843148 ...

Number of Observations Read	5899
Number of Observations Used	5314

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	12
Columns in Z per Subject	1
Subjects (Blocks in V)	2678

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	68727.217124	.	456.8317
1	5	68656.688546	70.52857876	37.93398
2	2	68655.991359	0.69718675	14.35416

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	68655.853123	0.13823608	2.762823
4	2	68655.847066	0.00605652	0.337214
5	2	68655.846971	0.00009504	0.010616

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	478.85
Residual		23448

#### Fit Statistics

-2 Res Log Likelihood	68656
AIC (Smaller is Better)	68660
AICC (Smaller is Better)	68660
BIC (Smaller is Better)	68672
CAIC (Smaller is Better)	68674
HQIC (Smaller is Better)	68664

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					-2.7915	51.2103	5306	-0.05
predictorvalue				1	0	.	.	.
predictorvalue				2	-2.6850	4.7765	5306	-0.56
tspl1	1				0	.	.	.
tspl1	2				-0.2638	0.8465	5306	-0.31
tspl1	3				0.005371	0.1055	5306	0.05

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.9565
predictorvalue				1	.
predictorvalue				2	0.5741
tspl1	1				.
tspl1	2				0.7554
tspl1	3				0.9594

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
tspl2		1			0	.	.	.
tspl2		2			1.9185	0.9179	5306	2.09
tspl2		3			-0.1881	0.09714	5306	-1.94
hbspl			1		0	.	.	.
hbspl			2		-0.07525	0.3605	5306	-0.21
hbspl			3		-0.00757	0.01330	5306	-0.57

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
tspl2		1			.
tspl2		2			0.0367
tspl2		3			0.0529
hbspl			1		.
hbspl			2		0.8347
hbspl			3		0.5695

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	5306	0.32	0.32	0.5740	0.5741

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	2	1 2
idnr	2849	210004674105 210009873148 210012108105 210012696118 210014500120 210014884130 210017449144 210018477120 210018894116 210020087126 210022587101 210022666149 210024309139 210033821149 210034070122 210037456139 210039094126 210039758126 210042741149 210047556153 ...

Number of Observations Read	5977
Number of Observations Used	5894

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	10
Columns in Z per Subject	1
Subjects (Blocks in V)	2849

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	76129.71004	.	491.7197
1	5	76056.06315	73.64688967	42.61808
2	2	76055.281048	0.78210172	15.27789
3	2	76055.145858	0.13518975	2.680945

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	2	76055.141059	0.00479973	0.273779
5	2	76055.141007	0.00005200	0.006306

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	525.76
Residual		23005

#### Fit Statistics

-2 Res Log Likelihood	76055
AIC (Smaller is Better)	76059
AICC (Smaller is Better)	76059
BIC (Smaller is Better)	76071
CAIC (Smaller is Better)	76073
HQIC (Smaller is Better)	76063

#### Solution for Fixed Effects

Effect	tspl1	tspl2	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				-20.9497	9.9571	5887	-2.10	0.0354
predspline			1	0	.	.	.	.
predspline			2	0.3234	0.4594	5887	0.70	0.4814
predspline			3	-0.01577	0.02583	5887	-0.61	0.5415
tspl1	1			0	.	.	.	.
tspl1	2			-0.4388	0.7979	5887	-0.55	0.5824
tspl1	3			0.03753	0.09989	5887	0.38	0.7071
tspl2		1		0	.	.	.	.
tspl2		2		1.9501	0.8632	5887	2.26	0.0239
tspl2		3		-0.1843	0.09145	5887	-2.02	0.0439

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	5887	0.51	0.25	0.7755	0.7755



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	2	1 2
idnr	2677	210004674105 210009873148 210012108105 210012696118 210014500120 210014884130 210017449144 210018894116 210020087126 210022587101 210022666149 210024309139 210033821149 210034070122 210037456139 210039094126 210039758126 210042741149 210047556153 210049843148 ...

Number of Observations Read	5977
Number of Observations Used	5311

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	13
Columns in Z per Subject	1
Subjects (Blocks in V)	2677

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	68702.236185	.	455.6647
1	5	68632.204129	70.03205684	37.33529
2	2	68631.532539	0.67158997	13.95926
3	2	68631.403734	0.12880428	2.588011

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	2	68631.398551	0.00518316	0.295421
5	2	68631.39848	0.00007072	0.008229

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	498.90
Residual		23445

#### Fit Statistics

-2 Res Log Likelihood	68631
AIC (Smaller is Better)	68635
AICC (Smaller is Better)	68635
BIC (Smaller is Better)	68647
CAIC (Smaller is Better)	68649
HQIC (Smaller is Better)	68640

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept					-17.9967	48.6183	5302	-0.37	0.7113
predspline				1	0	.	.	.	.
predspline				2	0.3998	0.4786	5302	0.84	0.4035
predspline				3	-0.02095	0.02739	5302	-0.76	0.4445
tspl1	1				0	.	.	.	.
tspl1	2				-0.2261	0.8480	5302	-0.27	0.7898
tspl1	3				0.003889	0.1055	5302	0.04	0.9706
tspl2		1			0	.	.	.	.
tspl2		2			1.9335	0.9193	5302	2.10	0.0355
tspl2		3			-0.1898	0.09737	5302	-1.95	0.0513
hbspl			1		0	.	.	.	.
hbspl			2		-0.01880	0.3443	5302	-0.05	0.9564
hbspl			3		-0.00791	0.01328	5302	-0.60	0.5517

**Now assessing with 6 hours pre-post-transfusion windows**

The HPMIXED Procedure

Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	5302	0.70	0.35	0.7053	0.7053

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	6	0 1 5 10 20 99
recipientsex	2	1 2
idnr	2850	210004674105 210009873148 210012108105 210012696118 210014500120 210014884130 210017449144 210018477120 210018894116 210020087126 210022587101 210022666149 210024309139 210033821149 210034070122 210037456139 210039094126 210039758126 210042741149 210047556153 ...

Number of Observations Read	5903
Number of Observations Used	5897

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	13
Columns in Z per Subject	1
Subjects (Blocks in V)	2850

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	76127.32073	.	492.8825
1	5	76053.342952	73.97777734	42.87922
2	2	76052.549786	0.79316655	15.48618

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	76052.409938	0.13984756	2.773489
4	2	76052.404741	0.00519748	0.293781
5	2	76052.40468	0.00006073	0.007225

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	513.04
Residual		23006

#### Fit Statistics

-2 Res Log Likelihood	76052
AIC (Smaller is Better)	76056
AICC (Smaller is Better)	76056
BIC (Smaller is Better)	76068
CAIC (Smaller is Better)	76070
HQIC (Smaller is Better)	76061

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				-20.6287	8.1841	5887	-2.52	0.0117
predictorvalue			0	0	.	.	.	.
predictorvalue			1	8.1372	5.8476	5887	1.39	0.1641
predictorvalue			5	8.3958	6.9741	5887	1.20	0.2287
predictorvalue			10	1.9015	7.7133	5887	0.25	0.8053
predictorvalue			20	11.5396	15.7128	5887	0.73	0.4627
predictorvalue			99	1.7613	6.5567	5887	0.27	0.7882
tsp11	1			0	.	.	.	.
tsp11	2			-0.4717	0.7972	5887	-0.59	0.5541
tsp11	3			0.03852	0.09987	5887	0.39	0.6997
tsp12		1		0	.	.	.	.
tsp12		2		1.9248	0.8624	5887	2.23	0.0256
tsp12		3		-0.1822	0.09127	5887	-2.00	0.0459

**Now assessing with 6 hours pre-post-transfusion windows**

The HPMIXED Procedure

Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	5	5887	3.36	0.67	0.6452	0.6452

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	6	0 1 5 10 20 99
recipientsex	2	1 2
idnr	2678	210004674105 210009873148 210012108105 210012696118 210014500120 210014884130 210017449144 210018894116 210020087126 210022587101 210022666149 210024309139 210033821149 210034070122 210037456139 210039094126 210039758126 210042741149 210047556153 210049843148 ...

Number of Observations Read	5903
Number of Observations Used	5314

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	16
Columns in Z per Subject	1
Subjects (Blocks in V)	2678

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	68699.031105	.	456.5403
1	5	68628.743815	70.28729030	37.60936
2	2	68628.060994	0.68282112	14.16417

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	68627.927425	0.13356840	2.679708
4	2	68627.921798	0.00562748	0.317261
5	2	68627.921715	0.00008286	0.009442

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	487.22
Residual		23442

#### Fit Statistics

-2 Res Log Likelihood	68628
AIC (Smaller is Better)	68632
AICC (Smaller is Better)	68632
BIC (Smaller is Better)	68644
CAIC (Smaller is Better)	68646
HQIC (Smaller is Better)	68636

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					-16.2107	48.4223	5302	-0.33
predictorvalue				0	0	.	.	.
predictorvalue				1	7.3827	5.9447	5302	1.24
predictorvalue				5	7.2798	7.0897	5302	1.03
predictorvalue				10	0.2963	7.8467	5302	0.04
predictorvalue				20	10.1055	15.8728	5302	0.64

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.7378
predictorvalue				0	.
predictorvalue				1	0.2143
predictorvalue				5	0.3046
predictorvalue				10	0.9699
predictorvalue				20	0.5244



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
predictorvalue				99	-3.1376	7.8896	5302	-0.40
tspl1	1				0	.	.	.
tspl1	2				-0.2662	0.8471	5302	-0.31
tspl1	3				0.006559	0.1055	5302	0.06
tspl2		1			0	.	.	.
tspl2		2			1.9166	0.9184	5302	2.09
tspl2		3			-0.1879	0.09718	5302	-1.93
hbspl			1		0	.	.	.
hbspl			2		-0.01778	0.3444	5302	-0.05
hbspl			3		-0.00769	0.01328	5302	-0.58

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
predictorvalue				99	0.6909
tspl1	1				.
tspl1	2				0.7534
tspl1	3				0.9504
tspl2		1			.
tspl2		2			0.0369
tspl2		3			0.0532
hbspl			1		.
hbspl			2		0.9588
hbspl			3		0.5627

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	5	5302	3.89	0.78	0.5647	0.5647

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	4	0 180 365 999
recipientsex	2	1 2
idnr	2850	210004674105 210009873148 210012108105 210012696118 210014500120 210014884130 210017449144 210018477120 210018894116 210020087126 210022587101 210022666149 210024309139 210033821149 210034070122 210037456139 210039094126 210039758126 210042741149 210047556153 ...

Number of Observations Read	5901
Number of Observations Used	5897

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	11
Columns in Z per Subject	1
Subjects (Blocks in V)	2850

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	76138.910352	.	491.5836
1	2	76066.970711	71.93964136	0.51492
2	11	76064.756909	2.21380139	24.01544

## Now assessing with 6 hours pre-post-transfusion windows

The HPMIXED Procedure

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

### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	739.34
Residual		22787

### Fit Statistics

-2 Res Log Likelihood	76065
AIC (Smaller is Better)	76069
AICC (Smaller is Better)	76069
BIC (Smaller is Better)	76081
CAIC (Smaller is Better)	76083
HQIC (Smaller is Better)	76073

### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				-13.0305	7.3567	5889	-1.77	0.0766
predictorvalue			0	0	.	.	.	.
predictorvalue			180	3.3648	6.7245	5889	0.50	0.6168
predictorvalue			365	-7.9267	8.4409	5889	-0.94	0.3477
predictorvalue			999	-6.5483	4.4471	5889	-1.47	0.1409
tsp11	1			0	.	.	.	.
tsp11	2			-0.5124	0.7967	5889	-0.64	0.5202
tsp11	3			0.04233	0.09984	5889	0.42	0.6716
tsp12		1		0	.	.	.	.
tsp12		2		1.9448	0.8626	5889	2.25	0.0242
tsp12		3		-0.1850	0.09125	5889	-2.03	0.0426

### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	3	5889	3.63	1.21	0.3045	0.3046

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	4	0 180 365 999
recipientsex	2	1 2
idnr	2678	210004674105 210009873148 210012108105 210012696118 210014500120 210014884130 210017449144 210018894116 210020087126 210022587101 210022666149 210024309139 210033821149 210034070122 210037456139 210039094126 210039758126 210042741149 210047556153 210049843148 ...

Number of Observations Read	5901
Number of Observations Used	5314

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	14
Columns in Z per Subject	1
Subjects (Blocks in V)	2678

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	68711.582714	.	455.5095
1	5	68641.587842	69.99487161	37.3773
2	2	68640.914918	0.67292428	13.95393

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	68640.786338	0.12857968	2.582208
4	2	68640.781186	0.00515200	0.293601
5	2	68640.781116	0.00006973	0.008123

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	500.36
Residual		23422

#### Fit Statistics

-2 Res Log Likelihood	68641
AIC (Smaller is Better)	68645
AICC (Smaller is Better)	68645
BIC (Smaller is Better)	68657
CAIC (Smaller is Better)	68659
HQIC (Smaller is Better)	68649

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					-12.2967	48.0545	5304	-0.26
predictorvalue				0	0	.	.	.
predictorvalue				180	3.5600	6.8043	5304	0.52
predictorvalue				365	-6.9286	8.5525	5304	-0.81
predictorvalue				999	-7.4913	4.8833	5304	-1.53
tspl1	1				0	.	.	.

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.7980
predictorvalue				0	.
predictorvalue				180	0.6009
predictorvalue				365	0.4179
predictorvalue				999	0.1251
tspl1	1				.

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
tspl1	2				-0.2717	0.8463	5304	-0.32
tspl1	3				0.007865	0.1055	5304	0.07
tspl2		1			0	.	.	.
tspl2		2			1.9373	0.9183	5304	2.11
tspl2		3			-0.1904	0.09716	5304	-1.96
hbspl			1		0	.	.	.
hbspl			2		-0.00158	0.3445	5304	-0.00
hbspl			3		-0.00797	0.01328	5304	-0.60

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
tspl1	2				0.7482
tspl1	3				0.9406
tspl2		1			.
tspl2		2			0.0349
tspl2		3			0.0500
hbspl			1		.
hbspl			2		0.9963
hbspl			3		0.5481

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	3	5304	3.67	1.22	0.2988	0.2989

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	3	0 1 2
idnr	23068	210000486129 210000556116 210000598144 210000801144 210000905111 210001535114 210002388128 210002429149 210002448146 210003060142 210003353100 210003574148 210003729131 210004055143 210004156135 210004170105 210004301110 210004315135 210004408139 210004558102 ...

Number of Observations Read	34720
Number of Observations Used	34718

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z per Subject	1
Subjects (Blocks in V)	23068

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	162128.75624	.	2727.779
1	5	161642.55686	486.19937222	400.237
2	4	161621.1279	21.42896918	28.88541

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	4	161620.86921	0.25868095	1.42364
4	2	161620.86845	0.00076600	0.230469

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.08740
Residual		6.0600

#### Fit Statistics

-2 Res Log Likelihood	161621
AIC (Smaller is Better)	161625
AICC (Smaller is Better)	161625
BIC (Smaller is Better)	161641
CAIC (Smaller is Better)	161643
HQIC (Smaller is Better)	161630

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				0.1757	0.04157	34712	4.23	<.0001
predictorvalue			1	0	.	.	.	.
predictorvalue			2	-0.01017	0.02722	34712	-0.37	0.7087
tsp11	1			0	.	.	.	.
tsp11	2			0.01425	0.005069	34712	2.81	0.0049
tsp11	3			-0.00196	0.000779	34712	-2.51	0.0119
tsp12		1		0	.	.	.	.
tsp12		2		-0.01826	0.005598	34712	-3.26	0.0011
tsp12		3		0.001199	0.000615	34712	1.95	0.0511

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	34712	0.14	0.14	0.7087	0.7087



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	3	0 1 2
idnr	23005	210000486129 210000556116 210000598144 210000801144 210000905111 210001535114 210002388128 210002429149 210002448146 210003060142 210003353100 210003574148 210003729131 210004055143 210004156135 210004170105 210004301110 210004315135 210004408139 210004558102 ...

Number of Observations Read	34720
Number of Observations Used	34558

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	12
Columns in Z per Subject	1
Subjects (Blocks in V)	23005

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	161390.84146	.	2718.668
1	5	160904.19236	486.64909987	402.6324
2	4	160882.17806	22.01430218	31.87627

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	4	160881.84991	0.32814155	1.885457
4	2	160881.84847	0.00144630	0.361447
5	2	160881.84841	0.00005625	0.006196

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.07907
Residual		6.0648

#### Fit Statistics

-2 Res Log Likelihood	160882
AIC (Smaller is Better)	160886
AICC (Smaller is Better)	160886
BIC (Smaller is Better)	160902
CAIC (Smaller is Better)	160904
HQIC (Smaller is Better)	160891

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					0.1948	0.2930	34550	0.66
predictorvalue				1	0	.	.	.
predictorvalue				2	-0.00987	0.02729	34550	-0.36
tspl1	1				0	.	.	.
tspl1	2				0.01407	0.005078	34550	2.77
tspl1	3				-0.00197	0.000780	34550	-2.52

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.5062
predictorvalue				1	.
predictorvalue				2	0.7175
tspl1	1				.
tspl1	2				0.0056
tspl1	3				0.0116

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
tspl2		1			0	.	.	.
tspl2		2			-0.01832	0.005609	34550	-3.27
tspl2		3			0.001223	0.000616	34550	1.98
hbspl			1		0	.	.	.
hbspl			2		-0.00013	0.002145	34550	-0.06
hbspl			3		0.000030	0.000199	34550	0.15

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
tspl2		1			.
tspl2		2			0.0011
tspl2		3			0.0472
hbspl			1		.
hbspl			2		0.9523
hbspl			3		0.8810

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	34550	0.13	0.13	0.7175	0.7175

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	0 1
recipientsex	3	0 1 2
idnr	45556	210000196120 210000486129 210000556116 210000598144 210000801144 210000905111 210000909149 210000954103 210001151104 210001534105 210001535114 210001682118 210001739105 210002063142 210002204152 210002319145 210002388128 210002390143 210002429149 210002448146 ...

Number of Observations Read	94743
Number of Observations Used	94741

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z per Subject	1
Subjects (Blocks in V)	45556

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	439660.66725	.	8127.325
1	5	438383.69408	1276.9731741	913.043
2	4	438351.86275	31.83132948	45.8367

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	4	438351.69119	0.17155609	1.558431
4	2	438351.69096	0.00022493	0.143534

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.04599
Residual		5.9344

#### Fit Statistics

-2 Res Log Likelihood	438352
AIC (Smaller is Better)	438356
AICC (Smaller is Better)	438356
BIC (Smaller is Better)	438373
CAIC (Smaller is Better)	438375
HQIC (Smaller is Better)	438361

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				0.1951	0.02247	94735	8.68	<.0001
predictorvalue			0	0	.	.	.	.
predictorvalue			1	0.08617	0.03364	94735	2.56	0.0104
tsp11	1			0	.	.	.	.
tsp11	2			0.01148	0.002996	94735	3.83	0.0001
tsp11	3			-0.00229	0.000470	94735	-4.87	<.0001
tsp12		1		0	.	.	.	.
tsp12		2		-0.01338	0.003304	94735	-4.05	<.0001
tsp12		3		0.000726	0.000365	94735	1.99	0.0470

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	94735	6.56	6.56	0.0104	0.0104

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	0 1
recipientsex	3	0 1 2
idnr	42708	210000196120 210000486129 210000556116 210000598144 210000801144 210000905111 210000954103 210001151104 210001534105 210001535114 210001682118 210001739105 210002063142 210002204152 210002319145 210002388128 210002390143 210002429149 210002448146 210002521130 ...

Number of Observations Read	94743
Number of Observations Used	85769

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	12
Columns in Z per Subject	1
Subjects (Blocks in V)	42708

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	399551.56895	.	7486.148
1	5	398356.63924	1194.9297146	876.2639
2	4	398323.32567	33.31356306	70.48126

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	4	398322.80821	0.51746281	4.493438
4	2	398322.80552	0.00269030	0.925272
5	2	398322.8054	0.00012184	0.019047

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.03280
Residual		6.0491

#### Fit Statistics

-2 Res Log Likelihood	398323
AIC (Smaller is Better)	398327
AICC (Smaller is Better)	398327
BIC (Smaller is Better)	398344
CAIC (Smaller is Better)	398346
HQIC (Smaller is Better)	398332

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					0.04836	0.1792	85761	0.27
predictorvalue				0	0	.	.	.
predictorvalue				1	0.09275	0.03413	85761	2.72
tspl1	1				0	.	.	.
tspl1	2				0.01258	0.003185	85761	3.95
tspl1	3				-0.00249	0.000494	85761	-5.03

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.7873
predictorvalue				0	.
predictorvalue				1	0.0066
tspl1	1				.
tspl1	2				<.0001
tspl1	3				<.0001

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tsp11	tsp12	hbsp1	predictorvalue	Estimate	Standard Error	DF	t Value
tsp12		1			0	.	.	.
tsp12		2			-0.01458	0.003524	85761	-4.14
tsp12		3			0.000929	0.000387	85761	2.40
hbsp1			1		0	.	.	.
hbsp1			2		0.000932	0.001286	85761	0.72
hbsp1			3		0.000033	0.000049	85761	0.67

#### Solution for Fixed Effects

Effect	tsp11	tsp12	hbsp1	predictorvalue	Pr >  t
tsp12		1			.
tsp12		2			<.0001
tsp12		3			0.0162
hbsp1			1		.
hbsp1			2		0.4689
hbsp1			3		0.5020

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	85761	7.38	7.38	0.0066	0.0066



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	3	0 1 2
idnr	42174	210000196120 210000486129 210000556116 210000598144 210000801144 210000905111 210000909149 210000954103 210001151104 210001534105 210001535114 210001682118 210001739105 210002063142 210002204152 210002319145 210002388128 210002390143 210002429149 210002448146 ...

Number of Observations Read	85461
Number of Observations Used	85399

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	10
Columns in Z per Subject	1
Subjects (Blocks in V)	42174

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	395938.25672	.	7218.478
1	5	394797.38924	1140.8674885	799.9659
2	4	394770.7086	26.68063676	11.5369
3	4	394770.69803	0.01056592	1.831671

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	2	394770.69775	0.00028180	0.035487

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.06571
Residual		5.8882

#### Fit Statistics

-2 Res Log Likelihood	394771
AIC (Smaller is Better)	394775
AICC (Smaller is Better)	394775
BIC (Smaller is Better)	394792
CAIC (Smaller is Better)	394794
HQIC (Smaller is Better)	394780

#### Solution for Fixed Effects

Effect	tspl1	tspl2	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				0.1513	0.04723	85392	3.20	0.0014
predspline			1	0	.	.	.	.
predspline			2	0.000503	0.001113	85392	0.45	0.6510
predspline			3	0.000015	0.000048	85392	0.31	0.7579
tspl1	1			0	.	.	.	.
tspl1	2			0.01265	0.003155	85392	4.01	<.0001
tspl1	3			-0.00231	0.000496	85392	-4.67	<.0001
tspl2		1		0	.	.	.	.
tspl2		2		-0.01334	0.003476	85392	-3.84	0.0001
tspl2		3		0.000783	0.000384	85392	2.04	0.0415

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	85392	2.54	1.27	0.2805	0.2805

# Now assessing with 6 hours pre-post-transfusion windows

## The HPMIXED Procedure

### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

### Class Level Information

Class	Levels	Values
recipientsex	3	0 1 2
idnr	39823	210000196120 210000486129 210000556116 210000598144 210000801144 210000905111 210000954103 210001151104 210001534105 210001535114 210001682118 210001739105 210002063142 210002204152 210002319145 210002388128 210002390143 210002429149 210002448146 210002521130 ...

Number of Observations Read	85461
Number of Observations Used	77865

### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	13
Columns in Z per Subject	1
Subjects (Blocks in V)	39823

### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	362485.70743	.	6694.306
1	5	361413.56237	1072.1450593	774.4629
2	4	361385.42364	28.13872870	33.87071
3	4	361385.3088	0.11483293	1.41419

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	2	361385.30858	0.00022327	0.112108

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.05401
Residual		6.0079

#### Fit Statistics

-2 Res Log Likelihood	361385
AIC (Smaller is Better)	361389
AICC (Smaller is Better)	361389
BIC (Smaller is Better)	361406
CAIC (Smaller is Better)	361408
HQIC (Smaller is Better)	361395

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept					0.003639	0.1918	77856	0.02	0.9849
predspline				1	0	.	.	.	.
predspline				2	0.000498	0.001157	77856	0.43	0.6667
predspline				3	0.000018	0.000051	77856	0.36	0.7166
tspl1	1				0	.	.	.	.
tspl1	2				0.01304	0.003342	77856	3.90	<.0001
tspl1	3				-0.00243	0.000519	77856	-4.68	<.0001
tspl2		1			0	.	.	.	.
tspl2		2			-0.01392	0.003695	77856	-3.77	0.0002
tspl2		3			0.000914	0.000405	77856	2.26	0.0241
hbspl			1		0	.	.	.	.
hbspl			2		0.000950	0.001350	77856	0.70	0.4814
hbspl			3		0.000033	0.000051	77856	0.64	0.5224

**Now assessing with 6 hours pre-post-transfusion windows**

The HPMIXED Procedure

Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	77856	2.66	1.33	0.2650	0.2650

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	3	0 1 2
idnr	42691	210000196120 210000486129 210000556116 210000598144 210000801144 210000905111 210000954103 210001151104 210001534105 210001535114 210001682118 210001739105 210002063142 210002204152 210002319145 210002388128 210002390143 210002429149 210002448146 210002521130 ...

Number of Observations Read	85810
Number of Observations Used	85723

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	10
Columns in Z per Subject	1
Subjects (Blocks in V)	42691

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	399348.21127	.	7480.939
1	5	398154.297	1193.9142702	876.4684
2	4	398120.94401	33.35298312	70.61122
3	4	398120.42403	0.51998557	4.515083

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	2	398120.42131	0.00272114	0.932294
5	2	398120.42118	0.00012403	0.019327

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.03282
Residual		6.0502

#### Fit Statistics

-2 Res Log Likelihood	398120
AIC (Smaller is Better)	398124
AICC (Smaller is Better)	398124
BIC (Smaller is Better)	398142
CAIC (Smaller is Better)	398144
HQIC (Smaller is Better)	398130

#### Solution for Fixed Effects

Effect	tspl1	tspl2	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				0.1071	0.2098	85716	0.51	0.6099
predspline			1	0	.	.	.	.
predspline			2	0.000544	0.001524	85716	0.36	0.7210
predspline			3	0.000043	0.000050	85716	0.85	0.3966
tspl1	1			0	.	.	.	.
tspl1	2			0.01245	0.003186	85716	3.91	<.0001
tspl1	3			-0.00246	0.000495	85716	-4.97	<.0001
tspl2		1		0	.	.	.	.
tspl2		2		-0.01466	0.003525	85716	-4.16	<.0001
tspl2		3		0.000934	0.000387	85716	2.41	0.0158

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	85716	6.99	3.49	0.0304	0.0304

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	3	0 1 2
idnr	45556	210000196120 210000486129 210000556116 210000598144 210000801144 210000905111 210000909149 210000954103 210001151104 210001534105 210001535114 210001682118 210001739105 210002063142 210002204152 210002319145 210002388128 210002390143 210002429149 210002448146 ...

Number of Observations Read	94742
Number of Observations Used	94740

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z per Subject	1
Subjects (Blocks in V)	45556

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	439651.87158	.	8125.113
1	5	438374.81086	1277.0607207	913.429
2	4	438342.93385	31.87700999	45.91171



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	4	438342.7614	0.17244406	1.506226
4	2	438342.76119	0.00021005	0.139405

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.04593
Residual		5.9341

#### Fit Statistics

-2 Res Log Likelihood	438343
AIC (Smaller is Better)	438347
AICC (Smaller is Better)	438347
BIC (Smaller is Better)	438364
CAIC (Smaller is Better)	438366
HQIC (Smaller is Better)	438352

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				0.2275	0.02358	94734	9.65	<.0001
predictorvalue		1		0	.	.	.	.
predictorvalue		2		-0.05760	0.01591	94734	-3.62	0.0003
tsp11	1			0	.	.	.	.
tsp11	2			0.01160	0.002997	94734	3.87	0.0001
tsp11	3			-0.00229	0.000470	94734	-4.86	<.0001
tsp12		1		0	.	.	.	.
tsp12		2		-0.01338	0.003304	94734	-4.05	<.0001
tsp12		3		0.000736	0.000365	94734	2.02	0.0438

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	94734	13.10	13.10	0.0003	0.0003

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	3	0 1 2
idnr	42708	210000196120 210000486129 210000556116 210000598144 210000801144 210000905111 210000954103 210001151104 210001534105 210001535114 210001682118 210001739105 210002063142 210002204152 210002319145 210002388128 210002390143 210002429149 210002448146 210002521130 ...

Number of Observations Read	94742
Number of Observations Used	85768

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	12
Columns in Z per Subject	1
Subjects (Blocks in V)	42708

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	399546.40221	.	7482.492
1	2	398321.24758	1225.1546254	2.18156
2	15	398318.73503	2.51254893	38.69407

## Now assessing with 6 hours pre-post-transfusion windows

The HPMIXED Procedure

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

### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.04227
Residual		6.0398

### Fit Statistics

-2 Res Log Likelihood	398319
AIC (Smaller is Better)	398323
AICC (Smaller is Better)	398323
BIC (Smaller is Better)	398340
CAIC (Smaller is Better)	398342
HQIC (Smaller is Better)	398328

### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					0.2581	0.1917	85760	1.35
predictorvalue				1	0	.	.	.
predictorvalue				2	-0.05657	0.01894	85760	-2.99
tspl1	1				0	.	.	.
tspl1	2				0.01264	0.003186	85760	3.97
tspl1	3				-0.00248	0.000495	85760	-5.02
tspl2		1			0	.	.	.
tspl2		2			-0.01466	0.003525	85760	-4.16
tspl2		3			0.000940	0.000387	85760	2.43
hbspl			1		0	.	.	.

### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.1781
predictorvalue				1	.
predictorvalue				2	0.0028
tspl1	1				.
tspl1	2				<.0001
tspl1	3				<.0001
tspl2		1			.
tspl2		2			<.0001
tspl2		3			0.0150
hbspl			1		.

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
hbspl			2		-0.00030	0.001351	85760	-0.22
hbspl			3		0.000041	0.000049	85760	0.85

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
hbspl			2		0.8267
hbspl			3		0.3955

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	85760	8.92	8.92	0.0028	0.0028

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	3	0 1 2
idnr	45538	210000196120 210000486129 210000556116 210000598144 210000801144 210000905111 210000909149 210000954103 210001151104 210001534105 210001535114 210001682118 210001739105 210002063142 210002204152 210002319145 210002388128 210002390143 210002429149 210002448146 ...

Number of Observations Read	94790
Number of Observations Used	94707

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	10
Columns in Z per Subject	1
Subjects (Blocks in V)	45538

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	439443.59531	.	8115.388
1	5	438168.7403	1274.8550149	913.5212
2	4	438136.81478	31.92551383	46.12025
3	4	438136.64103	0.17375283	1.620528

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	2	438136.64079	0.00024301	0.149379

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.04630
Residual		5.9290

#### Fit Statistics

-2 Res Log Likelihood	438137
AIC (Smaller is Better)	438141
AICC (Smaller is Better)	438141
BIC (Smaller is Better)	438158
CAIC (Smaller is Better)	438160
HQIC (Smaller is Better)	438146

#### Solution for Fixed Effects

Effect	tspl1	tspl2	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				0.02359	0.03950	94700	0.60	0.5503
predspline			1	0	.	.	.	.
predspline			2	0.006551	0.002067	94700	3.17	0.0015
predspline			3	-6.23E-6	0.000105	94700	-0.06	0.9526
tspl1	1			0	.	.	.	.
tspl1	2			0.01220	0.002997	94700	4.07	<.0001
tspl1	3			-0.00223	0.000470	94700	-4.73	<.0001
tspl2		1		0	.	.	.	.
tspl2		2		-0.01245	0.003305	94700	-3.77	0.0002
tspl2		3		0.000602	0.000365	94700	1.65	0.0995

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	94700	80.98	40.49	<.0001	<.0001

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	3	0 1 2
idnr	42690	210000196120 210000486129 210000556116 210000598144 210000801144 210000905111 210000954103 210001151104 210001534105 210001535114 210001682118 210001739105 210002063142 210002204152 210002319145 210002388128 210002390143 210002429149 210002448146 210002521130 ...

Number of Observations Read	94790
Number of Observations Used	85735

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	13
Columns in Z per Subject	1
Subjects (Blocks in V)	42690

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	399340.21026	.	7474.465
1	2	398117.21044	1222.9998169	2.206206
2	15	398114.66282	2.54761759	41.1844

## Now assessing with 6 hours pre-post-transfusion windows

The HPMIXED Procedure

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

### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.04315
Residual		6.0338

### Fit Statistics

-2 Res Log Likelihood	398115
AIC (Smaller is Better)	398119
AICC (Smaller is Better)	398119
BIC (Smaller is Better)	398136
CAIC (Smaller is Better)	398138
HQIC (Smaller is Better)	398124

### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept					-0.1331	0.1823	85726	-0.73	0.4655
predspline				1	0	.	.	.	.
predspline				2	0.006388	0.002142	85726	2.98	0.0029
predspline				3	5.513E-6	0.000110	85726	0.05	0.9601
tspl1	1				0	.	.	.	.
tspl1	2				0.01333	0.003187	85726	4.18	<.0001
tspl1	3				-0.00244	0.000494	85726	-4.94	<.0001
tspl2		1			0	.	.	.	.
tspl2		2			-0.01390	0.003526	85726	-3.94	<.0001
tspl2		3			0.000814	0.000387	85726	2.10	0.0354
hbspl			1		0	.	.	.	.
hbspl			2		0.001053	0.001286	85726	0.82	0.4130
hbspl			3		0.000032	0.000049	85726	0.65	0.5140

### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	85726	74.99	37.49	<.0001	<.0001



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	6	0 1 5 10 20 99
recipientsex	3	0 1 2
idnr	45556	210000196120 210000486129 210000556116 210000598144 210000801144 210000905111 210000909149 210000954103 210001151104 210001534105 210001535114 210001682118 210001739105 210002063142 210002204152 210002319145 210002388128 210002390143 210002429149 210002448146 ...

Number of Observations Read	94747
Number of Observations Used	94741

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	13
Columns in Z per Subject	1
Subjects (Blocks in V)	45556

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	439659.44579	.	8137.885
1	5	438377.35175	1282.0940402	921.3502
2	4	438344.63727	32.71447718	53.48757

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	4	438344.39498	0.24228745	0.1828
4	2	438344.39498	0.00000326	0.021028

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.04245
Residual		5.9363

#### Fit Statistics

-2 Res Log Likelihood	438344
AIC (Smaller is Better)	438348
AICC (Smaller is Better)	438348
BIC (Smaller is Better)	438366
CAIC (Smaller is Better)	438368
HQIC (Smaller is Better)	438354

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				0.1966	0.02762	94731	7.12	<.0001
predictorvalue			0	0	.	.	.	.
predictorvalue			1	-0.00340	0.02259	94731	-0.15	0.8803
predictorvalue			5	-0.05378	0.02698	94731	-1.99	0.0462
predictorvalue			10	-0.06176	0.03089	94731	-2.00	0.0456
predictorvalue			20	-0.2508	0.07289	94731	-3.44	0.0006
predictorvalue			99	0.05944	0.02562	94731	2.32	0.0204
tsp11	1			0	.	.	.	.
tsp11	2			0.01177	0.002997	94731	3.93	<.0001
tsp11	3			-0.00227	0.000470	94731	-4.83	<.0001
tsp12		1		0	.	.	.	.
tsp12		2		-0.01245	0.003309	94731	-3.76	0.0002
tsp12		3		0.000706	0.000365	94731	1.93	0.0532

**Now assessing with 6 hours pre-post-transfusion windows**

The HPMIXED Procedure

## Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	5	94731	35.22	7.04	<.0001	<.0001

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	6	0 1 5 10 20 99
recipientsex	3	0 1 2
idnr	42708	210000196120 210000486129 210000556116 210000598144 210000801144 210000905111 210000954103 210001151104 210001534105 210001535114 210001682118 210001739105 210002063142 210002204152 210002319145 210002388128 210002390143 210002429149 210002448146 210002521130 ...

Number of Observations Read	94747
Number of Observations Used	85769

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	16
Columns in Z per Subject	1
Subjects (Blocks in V)	42708

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	399553.18602	.	7493.433
1	5	398354.55574	1198.6302811	882.0916
2	4	398320.57975	33.97598934	75.66749

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	4	398319.96598	0.61376999	5.521266
4	2	398319.96167	0.00430571	1.290984
5	2	398319.96142	0.00025668	0.036912

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.02992
Residual		6.0506

#### Fit Statistics

-2 Res Log Likelihood	398320
AIC (Smaller is Better)	398324
AICC (Smaller is Better)	398324
BIC (Smaller is Better)	398341
CAIC (Smaller is Better)	398343
HQIC (Smaller is Better)	398329

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					0.07379	0.1805	85757	0.41
predictorvalue				0	0	.	.	.
predictorvalue				1	-0.00279	0.02289	85757	-0.12
predictorvalue				5	-0.04940	0.02736	85757	-1.81
predictorvalue				10	-0.06032	0.03138	85757	-1.92
predictorvalue				20	-0.2472	0.07400	85757	-3.34

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.6827
predictorvalue				0	.
predictorvalue				1	0.9032
predictorvalue				5	0.0710
predictorvalue				10	0.0546
predictorvalue				20	0.0008

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
predictorvalue				99	0.07628	0.03088	85757	2.47
tspl1	1				0	.	.	.
tspl1	2				0.01266	0.003185	85757	3.98
tspl1	3				-0.00248	0.000494	85757	-5.03
tspl2		1			0	.	.	.
tspl2		2			-0.01403	0.003526	85757	-3.98
tspl2		3			0.000915	0.000387	85757	2.37
hbspl			1		0	.	.	.
hbspl			2		0.000838	0.001287	85757	0.65
hbspl			3		0.000027	0.000049	85757	0.55

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
predictorvalue				99	0.0135
tspl1	1				.
tspl1	2				<.0001
tspl1	3				<.0001
tspl2		1			.
tspl2		2			<.0001
tspl2		3			0.0179
hbspl			1		.
hbspl			2		0.5150
hbspl			3		0.5832

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	5	85757	30.97	6.19	<.0001	<.0001

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	4	0 180 365 999
recipientsex	3	0 1 2
idnr	45556	210000196120 210000486129 210000556116 210000598144 210000801144 210000905111 210000909149 210000954103 210001151104 210001534105 210001535114 210001682118 210001739105 210002063142 210002204152 210002319145 210002388128 210002390143 210002429149 210002448146 ...

Number of Observations Read	94745
Number of Observations Used	94741

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	11
Columns in Z per Subject	1
Subjects (Blocks in V)	45556

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	439669.16436	.	8133.187
1	2	438362.05655	1307.1078161	3.421934
2	13	438356.80719	5.24936051	59.84524

## Now assessing with 6 hours pre-post-transfusion windows

The HPMIXED Procedure

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

### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.05496
Residual		5.9254

### Fit Statistics

-2 Res Log Likelihood	438357
AIC (Smaller is Better)	438361
AICC (Smaller is Better)	438361
BIC (Smaller is Better)	438378
CAIC (Smaller is Better)	438380
HQIC (Smaller is Better)	438366

### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				0.1728	0.02464	94733	7.01	<.0001
predictorvalue			0	0	.	.	.	.
predictorvalue			180	-0.00927	0.02651	94733	-0.35	0.7266
predictorvalue			365	0.005778	0.03506	94733	0.16	0.8691
predictorvalue			999	0.05859	0.01761	94733	3.33	0.0009
tsp11	1			0	.	.	.	.
tsp11	2			0.01163	0.002997	94733	3.88	0.0001
tsp11	3			-0.00228	0.000470	94733	-4.84	<.0001
tsp12		1		0	.	.	.	.
tsp12		2		-0.01286	0.003308	94733	-3.89	0.0001
tsp12		3		0.000708	0.000365	94733	1.94	0.0527

### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	3	94733	13.39	4.46	0.0039	0.0039



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	4	0 180 365 999
recipientsex	3	0 1 2
idnr	42708	210000196120 210000486129 210000556116 210000598144 210000801144 210000905111 210000954103 210001151104 210001534105 210001535114 210001682118 210001739105 210002063142 210002204152 210002319145 210002388128 210002390143 210002429149 210002448146 210002521130 ...

Number of Observations Read	94745
Number of Observations Used	85769

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	14
Columns in Z per Subject	1
Subjects (Blocks in V)	42708

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	399562.93915	.	7489.289
1	5	398366.16387	1196.7752715	878.5281
2	4	398332.58706	33.57681522	72.49583

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	4	398332.03302	0.55403994	4.886992
4	2	398332.02976	0.00325857	1.060068
5	2	398332.0296	0.00016512	0.024948

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.03160
Residual		6.0503

#### Fit Statistics

-2 Res Log Likelihood	398332
AIC (Smaller is Better)	398336
AICC (Smaller is Better)	398336
BIC (Smaller is Better)	398353
CAIC (Smaller is Better)	398355
HQIC (Smaller is Better)	398341

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					0.04322	0.1793	85759	0.24
predictorvalue				0	0	.	.	.
predictorvalue				180	-0.01219	0.02686	85759	-0.45
predictorvalue				365	0.001415	0.03552	85759	0.04
predictorvalue				999	0.05339	0.01916	85759	2.79
tspl1	1				0	.	.	.

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.8095
predictorvalue				0	.
predictorvalue				180	0.6500
predictorvalue				365	0.9682
predictorvalue				999	0.0053
tspl1	1				.

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
tspl1	2				0.01258	0.003185	85759	3.95
tspl1	3				-0.00248	0.000494	85759	-5.01
tspl2		1			0	.	.	.
tspl2		2			-0.01431	0.003526	85759	-4.06
tspl2		3			0.000914	0.000387	85759	2.36
hbspl			1		0	.	.	.
hbspl			2		0.000884	0.001288	85759	0.69
hbspl			3		0.000030	0.000049	85759	0.61

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
tspl1	2				<.0001
tspl1	3				<.0001
tspl2		1			.
tspl2		2			<.0001
tspl2		3			0.0181
hbspl			1		.
hbspl			2		0.4923
hbspl			3		0.5399

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	3	85759	9.70	3.23	0.0213	0.0213

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	3	0 1 2
idnr	21532	210000486129 210000598144 210000905111 210001428104 210001535114 210001589111 210002388128 210002429149 210002448146 210002985127 210003060142 210003353100 210003574148 210004055143 210004156135 210004170105 210004315135 210004408139 210004558102 210005070120 ...

Number of Observations Read	31966
Number of Observations Used	31964

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z per Subject	1
Subjects (Blocks in V)	21532

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	148337.65078	.	3193.911
1	5	147732.09891	605.55187189	423.0337
2	4	147708.16274	23.93616710	57.799

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	4	147707.2275	0.93523864	0

Convergence is assumed but all parameters are actively constrained.

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	6.594E-6
Residual		5.9390

#### Fit Statistics

-2 Res Log Likelihood	147707
AIC (Smaller is Better)	147709
AICC (Smaller is Better)	147709
BIC (Smaller is Better)	147717
CAIC (Smaller is Better)	147718
HQIC (Smaller is Better)	147712

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				0.1356	0.04264	31958	3.18	0.0015
predictorvalue			1	0	.	.	.	.
predictorvalue			2	0.006697	0.02787	31958	0.24	0.8101
tsp11	1			0	.	.	.	.
tsp11	2			-0.01041	0.005071	31958	-2.05	0.0401
tsp11	3			0.002404	0.000748	31958	3.21	0.0013
tsp12		1		0	.	.	.	.
tsp12		2		0.01826	0.005366	31958	3.40	0.0007
tsp12		3		-0.00244	0.000595	31958	-4.10	<.0001

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	31958	0.06	0.06	0.8101	0.8101

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	3	0 1 2
idnr	21472	210000486129 210000598144 210000905111 210001428104 210001535114 210001589111 210002388128 210002429149 210002448146 210002985127 210003060142 210003353100 210003574148 210004055143 210004156135 210004170105 210004315135 210004408139 210004558102 210005070120 ...

Number of Observations Read	31966
Number of Observations Used	31810

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	12
Columns in Z per Subject	1
Subjects (Blocks in V)	21472

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	147657.4018	.	3171.025
1	5	147055.16724	602.23455960	421.4735
2	4	147031.21831	23.94892754	57.81682

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	4	147030.26715	0.95115804	0

Convergence is assumed but all parameters are actively constrained.

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	6.596E-6
Residual		5.9409

#### Fit Statistics

-2 Res Log Likelihood	147030
AIC (Smaller is Better)	147032
AICC (Smaller is Better)	147032
BIC (Smaller is Better)	147040
CAIC (Smaller is Better)	147041
HQIC (Smaller is Better)	147035

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					-0.3358	0.3013	31802	-1.11
predictorvalue				1	0	.	.	.
predictorvalue				2	0.003846	0.02797	31802	0.14
tspl1	1				0	.	.	.
tspl1	2				-0.01025	0.005082	31802	-2.02
tspl1	3				0.002386	0.000750	31802	3.18
tspl2		1			0	.	.	.

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.2652
predictorvalue				1	.
predictorvalue				2	0.8906
tspl1	1				.
tspl1	2				0.0437
tspl1	3				0.0015
tspl2		1			.

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
tspl2		2			0.01882	0.005378	31802	3.50
tspl2		3			-0.00250	0.000596	31802	-4.19
hbspl			1		0	.	.	.
hbspl			2		0.003448	0.002204	31802	1.56
hbspl			3		-0.00021	0.000207	31802	-1.01

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
tspl2		2			0.0005
tspl2		3			<.0001
hbspl			1		.
hbspl			2		0.1177
hbspl			3		0.3142

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	31802	0.02	0.02	0.8906	0.8906



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	0 1
recipientsex	3	0 1 2
idnr	42616	210000196120 210000486129 210000598144 210000905111 210000954103 210001151104 210001428104 210001535114 210001589111 210001682118 210002204152 210002319145 210002388128 210002390143 210002429149 210002448146 210002521130 210002985127 210003039107 210003060142 ...

Number of Observations Read	86440
Number of Observations Used	86438

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z per Subject	1
Subjects (Blocks in V)	42616

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	400458.51105	.	8865.676
1	2	399027.71634	1430.7947181	0

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

Convergence is assumed but all parameters are actively constrained.

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	6.569E-6
Residual		5.9169

#### Fit Statistics

-2 Res Log Likelihood	399028
AIC (Smaller is Better)	399030
AICC (Smaller is Better)	399030
BIC (Smaller is Better)	399038
CAIC (Smaller is Better)	399039
HQIC (Smaller is Better)	399032

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				0.1446	0.02369	86432	6.10	<.0001
predictorvalue			0	0	.	.	.	.
predictorvalue			1	-0.02034	0.03519	86432	-0.58	0.5633
tsp11	1			0	.	.	.	.
tsp11	2			-0.00346	0.003059	86432	-1.13	0.2586
tsp11	3			0.001174	0.000456	86432	2.57	0.0101
tsp12		1		0	.	.	.	.
tsp12		2		0.01677	0.003236	86432	5.18	<.0001
tsp12		3		-0.00258	0.000359	86432	-7.19	<.0001

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	86432	0.33	0.33	0.5633	0.5633

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	0 1
recipientsex	3	0 1 2
idnr	40062	210000196120 210000486129 210000598144 210000905111 210000954103 210001151104 210001428104 210001535114 210001589111 210001682118 210002204152 210002319145 210002388128 210002390143 210002429149 210002448146 210002521130 210002985127 210003039107 210003060142 ...

Number of Observations Read	86440
Number of Observations Used	78701

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	12
Columns in Z per Subject	1
Subjects (Blocks in V)	40062

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	365295.89303	.	8145.413
1	5	364005.18301	1290.7100164	940.6117
2	4	363966.02393	39.15908471	112.3655

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	363965.16919	0.85474173	39.80787
4	5	363965.14901	0.02017590	36.47408
5	4	363965.10459	0.04442266	27.77548
6	5	363965.09556	0.00902411	25.65383
7	4	363965.07543	0.02013325	20.13524
8	2	363965.04655	0.02887657	0

Convergence is assumed but all parameters are actively constrained.

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	6.621E-6
Residual		5.9637

#### Fit Statistics

-2 Res Log Likelihood	363965
AIC (Smaller is Better)	363967
AICC (Smaller is Better)	363967
BIC (Smaller is Better)	363976
CAIC (Smaller is Better)	363977
HQIC (Smaller is Better)	363970

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					-0.3111	0.2061	78693	-1.51
predictorvalue				0	0	.	.	.
predictorvalue				1	-0.01782	0.03554	78693	-0.50
tspl1	1				0	.	.	.

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.1312
predictorvalue				0	.
predictorvalue				1	0.6162
tspl1	1				.

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
tspl1	2				-0.00639	0.003228	78693	-1.98
tspl1	3				0.001591	0.000478	78693	3.33
tspl2		1			0	.	.	.
tspl2		2			0.01888	0.003415	78693	5.53
tspl2		3			-0.00290	0.000378	78693	-7.68
hbspl			1		0	.	.	.
hbspl			2		0.003352	0.001492	78693	2.25
hbspl			3		-0.00009	0.000048	78693	-1.80

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
tspl1	2				0.0477
tspl1	3				0.0009
tspl2		1			.
tspl2		2			<.0001
tspl2		3			<.0001
hbspl			1		.
hbspl			2		0.0247
hbspl			3		0.0715

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	78693	0.25	0.25	0.6162	0.6162

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	3	0 1 2
idnr	39433	210000196120 210000486129 210000598144 210000905111 210000954103 210001151104 210001428104 210001535114 210001589111 210001682118 210002204152 210002319145 210002388128 210002390143 210002429149 210002448146 210002521130 210002985127 210003039107 210003060142 ...

Number of Observations Read	78012
Number of Observations Used	77950

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	10
Columns in Z per Subject	1
Subjects (Blocks in V)	39433

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	361066.05571	.	8020.825
1	2	359740.25377	1325.8019422	0

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

Convergence is assumed but all parameters are actively constrained.

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	6.558E-6
Residual		5.9067

#### Fit Statistics

-2 Res Log Likelihood	359740
AIC (Smaller is Better)	359742
AICC (Smaller is Better)	359742
BIC (Smaller is Better)	359751
CAIC (Smaller is Better)	359752
HQIC (Smaller is Better)	359745

#### Solution for Fixed Effects

Effect	tspl1	tspl2	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				0.1132	0.04939	77943	2.29	0.0219
predspline			1	0	.	.	.	.
predspline			2	0.000618	0.001160	77943	0.53	0.5941
predspline			3	-0.00002	0.000050	77943	-0.48	0.6322
tspl1	1			0	.	.	.	.
tspl1	2			-0.00317	0.003223	77943	-0.98	0.3256
tspl1	3			0.001374	0.000482	77943	2.85	0.0043
tspl2		1		0	.	.	.	.
tspl2		2		0.01674	0.003407	77943	4.91	<.0001
tspl2		3		-0.00246	0.000378	77943	-6.52	<.0001

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	77943	0.28	0.14	0.8675	0.8675

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	3	0 1 2
idnr	37326	210000196120 210000486129 210000598144 210000905111 210000954103 210001151104 210001428104 210001535114 210001589111 210001682118 210002204152 210002319145 210002388128 210002390143 210002429149 210002448146 210002521130 210002985127 210003039107 210003060142 ...

Number of Observations Read	78012
Number of Observations Used	71453

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	13
Columns in Z per Subject	1
Subjects (Blocks in V)	37326

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	331584.3435	.	7407.319
1	5	330380.02046	1204.3230346	842.7385
2	4	330344.76847	35.25199569	101.4727
3	2	330343.98153	0.78693838	36.74467



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	5	330343.96176	0.01977134	33.63522
5	4	330343.9183	0.04346284	25.52046
6	5	330343.9095	0.00879979	23.54308
7	4	330343.8899	0.01959512	18.39724
8	5	330343.88583	0.00407535	17.13495
9	4	330343.87661	0.00921608	13.86469
10	3	330343.86217	0.01444270	0

Convergence is assumed but all parameters are actively constrained.

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	6.609E-6
Residual		5.9526

#### Fit Statistics

-2 Res Log Likelihood	330344
AIC (Smaller is Better)	330346
AICC (Smaller is Better)	330346
BIC (Smaller is Better)	330354
CAIC (Smaller is Better)	330355
HQIC (Smaller is Better)	330349

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept					-0.4101	0.2199	71444	-1.86	0.0622
predspline				1	0	.	.	.	.
predspline				2	0.000368	0.001197	71444	0.31	0.7588
predspline				3	-0.00002	0.000052	71444	-0.36	0.7183
tspl1	1				0	.	.	.	.
tspl1	2				-0.00593	0.003388	71444	-1.75	0.0799
tspl1	3				0.001754	0.000503	71444	3.48	0.0005
tspl2		1			0	.	.	.	.
tspl2		2			0.01860	0.003582	71444	5.19	<.0001
tspl2		3			-0.00278	0.000397	71444	-7.02	<.0001
hbspl			1		0	.	.	.	.
hbspl			2		0.003954	0.001568	71444	2.52	0.0117
hbspl			3		-0.00010	0.000050	71444	-2.00	0.0455

**Now assessing with 6 hours pre-post-transfusion windows**

The HPMIXED Procedure

Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	71444	0.13	0.07	0.9368	0.9368

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	3	0 1 2
idnr	40045	210000196120 210000486129 210000598144 210000905111 210000954103 210001151104 210001428104 210001535114 210001589111 210001682118 210002204152 210002319145 210002388128 210002390143 210002429149 210002448146 210002521130 210002985127 210003039107 210003060142 ...

Number of Observations Read	78749
Number of Observations Used	78662

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	10
Columns in Z per Subject	1
Subjects (Blocks in V)	40045

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	365123.37161	.	8138.862
1	2	363793.97583	1329.3957786	0

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

Convergence is assumed but all parameters are actively constrained.

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	6.622E-6
Residual		5.9647

#### Fit Statistics

-2 Res Log Likelihood	363794
AIC (Smaller is Better)	363796
AICC (Smaller is Better)	363796
BIC (Smaller is Better)	363805
CAIC (Smaller is Better)	363806
HQIC (Smaller is Better)	363799

#### Solution for Fixed Effects

Effect	tspl1	tspl2	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				-0.3677	0.2419	78655	-1.52	0.1285
predspline			1	0	.	.	.	.
predspline			2	0.003777	0.001772	78655	2.13	0.0330
predspline			3	-0.00009	0.000051	78655	-1.69	0.0903
tspl1	1			0	.	.	.	.
tspl1	2			-0.00636	0.003229	78655	-1.97	0.0488
tspl1	3			0.001583	0.000479	78655	3.31	0.0009
tspl2		1		0	.	.	.	.
tspl2		2		0.01887	0.003416	78655	5.52	<.0001
tspl2		3		-0.00290	0.000378	78655	-7.66	<.0001

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	78655	4.99	2.49	0.0827	0.0827

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	3	0 1 2
idnr	42616	210000196120 210000486129 210000598144 210000905111 210000954103 210001151104 210001428104 210001535114 210001589111 210001682118 210002204152 210002319145 210002388128 210002390143 210002429149 210002448146 210002521130 210002985127 210003039107 210003060142 ...

Number of Observations Read	86439
Number of Observations Used	86437

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z per Subject	1
Subjects (Blocks in V)	42616

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	400454.8055	.	8866.124
1	5	399064.83072	1389.9747892	987.8818
2	4	399025.19311	39.63760479	123.7999

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	399024.22389	0.96922140	46.2417
4	5	399024.19735	0.02653614	42.28501
5	4	399024.13912	0.05823538	31.95903
6	5	399024.12737	0.01174883	29.44576
7	4	399024.10126	0.02610777	22.90259
8	2	399024.06483	0.03643563	0

Convergence is assumed but all parameters are actively constrained.

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	6.569E-6
Residual		5.9169

#### Fit Statistics

-2 Res Log Likelihood	399024
AIC (Smaller is Better)	399026
AICC (Smaller is Better)	399026
BIC (Smaller is Better)	399035
CAIC (Smaller is Better)	399036
HQIC (Smaller is Better)	399029

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				0.1476	0.02485	86431	5.94	<.0001
predictorvalue			1	0	.	.	.	.
predictorvalue			2	-0.00918	0.01655	86431	-0.55	0.5791
tsp11	1			0	.	.	.	.
tsp11	2			-0.00344	0.003059	86431	-1.12	0.2611
tsp11	3			0.001173	0.000456	86431	2.57	0.0101
tsp12		1		0	.	.	.	.
tsp12		2		0.01678	0.003235	86431	5.19	<.0001
tsp12		3		-0.00258	0.000359	86431	-7.18	<.0001

**Now assessing with 6 hours pre-post-transfusion windows**

The HPMIXED Procedure

Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	86431	0.31	0.31	0.5791	0.5791

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	3	0 1 2
idnr	40062	210000196120 210000486129 210000598144 210000905111 210000954103 210001151104 210001428104 210001535114 210001589111 210001682118 210002204152 210002319145 210002388128 210002390143 210002429149 210002448146 210002521130 210002985127 210003039107 210003060142 ...

Number of Observations Read	86439
Number of Observations Used	78700

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	12
Columns in Z per Subject	1
Subjects (Blocks in V)	40062

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	365292.33143	.	8146.266
1	5	364001.37864	1290.9527858	940.3822
2	4	363962.23955	39.13909505	112.2694



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	363961.38654	0.85300884	39.73869
4	5	363961.36645	0.02008322	36.41237
5	4	363961.32223	0.04422184	27.73332
6	5	363961.31325	0.00898453	25.61637
7	4	363961.2932	0.02004687	20.11022
8	5	363961.28901	0.00418778	18.75814
9	4	363961.27952	0.00949197	15.25715
10	3	363961.26443	0.01509234	0

Convergence is assumed but all parameters are actively constrained.

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	6.621E-6
Residual		5.9637

#### Fit Statistics

-2 Res Log Likelihood	363961
AIC (Smaller is Better)	363963
AICC (Smaller is Better)	363963
BIC (Smaller is Better)	363972
CAIC (Smaller is Better)	363973
HQIC (Smaller is Better)	363966

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					-0.2924	0.2179	78692	-1.34
predictorvalue				1	0	.	.	.
predictorvalue				2	-0.00540	0.01959	78692	-0.28

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.1797
predictorvalue				1	.
predictorvalue				2	0.7828

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
tspl1	1				0	.	.	.
tspl1	2				-0.00638	0.003228	78692	-1.98
tspl1	3				0.001590	0.000478	78692	3.32
tspl2		1			0	.	.	.
tspl2		2			0.01889	0.003415	78692	5.53
tspl2		3			-0.00290	0.000378	78692	-7.67
hbspl			1		0	.	.	.
hbspl			2		0.003230	0.001553	78692	2.08
hbspl			3		-0.00009	0.000048	78692	-1.78

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
tspl1	1				.
tspl1	2				0.0481
tspl1	3				0.0009
tspl2		1			.
tspl2		2			<.0001
tspl2		3			<.0001
hbspl			1		.
hbspl			2		0.0376
hbspl			3		0.0745

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	78692	0.08	0.08	0.7828	0.7828

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	3	0 1 2
idnr	42600	210000196120 210000486129 210000598144 210000905111 210000954103 210001151104 210001428104 210001535114 210001589111 210001682118 210002204152 210002319145 210002388128 210002390143 210002429149 210002448146 210002521130 210002985127 210003039107 210003060142 ...

Number of Observations Read	86491
Number of Observations Used	86408

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	10
Columns in Z per Subject	1
Subjects (Blocks in V)	42600

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	400327.5977	.	8862.967
1	5	398938.36881	1389.2288968	986.1865
2	4	398898.84456	39.52424434	124.0875
3	2	398897.86847	0.97608900	46.60547

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	5	398897.84132	0.02715152	42.60776
5	4	398897.78176	0.05956313	32.17466
6	5	398897.76975	0.01200725	29.63593
7	4	398897.74308	0.02666959	23.02576
8	5	398897.73756	0.00551773	21.40648
9	4	398897.72512	0.01244121	17.20786
10	2	398897.70598	0.01913895	0

Convergence is assumed but all parameters are actively constrained.

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	6.568E-6
Residual		5.9159

#### Fit Statistics

-2 Res Log Likelihood	398898
AIC (Smaller is Better)	398900
AICC (Smaller is Better)	398900
BIC (Smaller is Better)	398908
CAIC (Smaller is Better)	398909
HQIC (Smaller is Better)	398902

#### Solution for Fixed Effects

Effect	tspl1	tspl2	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				0.09644	0.03969	86401	2.43	0.0151
predspline			1	0	.	.	.	.
predspline			2	0.003851	0.002045	86401	1.88	0.0597
predspline			3	-0.00024	0.000110	86401	-2.21	0.0269
tspl1	1			0	.	.	.	.
tspl1	2			-0.00350	0.003060	86401	-1.14	0.2531
tspl1	3			0.001189	0.000456	86401	2.61	0.0092
tspl2		1		0	.	.	.	.
tspl2		2		0.01679	0.003236	86401	5.19	<.0001
tspl2		3		-0.00257	0.000359	86401	-7.16	<.0001

**Now assessing with 6 hours pre-post-transfusion windows**

The HPMIXED Procedure

Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	86401	5.15	2.58	0.0760	0.0760

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	3	0 1 2
idnr	40046	210000196120 210000486129 210000598144 210000905111 210000954103 210001151104 210001428104 210001535114 210001589111 210001682118 210002204152 210002319145 210002388128 210002390143 210002429149 210002448146 210002521130 210002985127 210003039107 210003060142 ...

Number of Observations Read	86491
Number of Observations Used	78671

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	13
Columns in Z per Subject	1
Subjects (Blocks in V)	40046

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	365165.7423	.	8142.588
1	5	363875.77748	1289.9648211	938.6733
2	4	363836.75055	39.02692463	112.7472
3	2	363835.8874	0.86315357	40.21976

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	5	363835.86662	0.02078000	36.84007
5	4	363835.82089	0.04572927	28.02111
6	5	363835.81161	0.00927975	25.87074
7	4	363835.79092	0.02069035	20.27642
8	5	363835.78661	0.00431514	18.90326
9	4	363835.77683	0.00977326	15.34709
10	3	363835.76137	0.01546015	0

Convergence is assumed but all parameters are actively constrained.

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	6.62E-6
Residual		5.9627

#### Fit Statistics

-2 Res Log Likelihood	363836
AIC (Smaller is Better)	363838
AICC (Smaller is Better)	363838
BIC (Smaller is Better)	363846
CAIC (Smaller is Better)	363847
HQIC (Smaller is Better)	363840

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept					-0.3676	0.2087	78662	-1.76	0.0781
predspline				1	0	.	.	.	.
predspline				2	0.003732	0.002110	78662	1.77	0.0769
predspline				3	-0.00023	0.000115	78662	-1.99	0.0465
tspl1	1				0	.	.	.	.
tspl1	2				-0.00642	0.003229	78662	-1.99	0.0468
tspl1	3				0.001608	0.000479	78662	3.36	0.0008
tspl2		1			0	.	.	.	.
tspl2		2			0.01894	0.003416	78662	5.54	<.0001
tspl2		3			-0.00290	0.000378	78662	-7.66	<.0001
hbspl			1		0	.	.	.	.
hbspl			2		0.003411	0.001493	78662	2.29	0.0223
hbspl			3		-0.00009	0.000048	78662	-1.82	0.0686

**Now assessing with 6 hours pre-post-transfusion windows**

The HPMIXED Procedure

Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	78662	4.02	2.01	0.1338	0.1338



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	6	0 1 5 10 20 99
recipientsex	3	0 1 2
idnr	42616	210000196120 210000486129 210000598144 210000905111 210000954103 210001151104 210001428104 210001535114 210001589111 210001682118 210002204152 210002319145 210002388128 210002390143 210002429149 210002448146 210002521130 210002985127 210003039107 210003060142 ...

Number of Observations Read	86444
Number of Observations Used	86438

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	13
Columns in Z per Subject	1
Subjects (Blocks in V)	42616

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	400474.72649	.	8863.152
1	5	399085.64937	1389.0771142	987.8688
2	4	399045.99535	39.65402003	124.2708

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	399045.01664	0.97870965	46.64761
4	5	399044.98946	0.02718620	42.64619
5	4	399044.92982	0.05963902	32.20321
6	5	399044.9178	0.01202231	29.66206
7	4	399044.89109	0.02670247	23.04555
8	5	399044.88557	0.00552470	21.42471
9	4	399044.85395	0.03161657	0

Convergence is assumed but all parameters are actively constrained.

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	6.569E-6
Residual		5.9169

#### Fit Statistics

-2 Res Log Likelihood	399045
AIC (Smaller is Better)	399047
AICC (Smaller is Better)	399047
BIC (Smaller is Better)	399056
CAIC (Smaller is Better)	399057
HQIC (Smaller is Better)	399050

#### Solution for Fixed Effects

Effect	tspl1	tspl2	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				0.1135	0.02891	86428	3.93	<.0001
predictorvalue			0	0	.	.	.	.
predictorvalue			1	0.04736	0.02352	86428	2.01	0.0440
predictorvalue			5	0.02211	0.02799	86428	0.79	0.4295
predictorvalue			10	0.03523	0.03177	86428	1.11	0.2675
predictorvalue			20	0.03279	0.07493	86428	0.44	0.6617
predictorvalue			99	0.03281	0.02683	86428	1.22	0.2213
tspl1	1			0	.	.	.	.
tspl1	2			-0.00349	0.003060	86428	-1.14	0.2547
tspl1	3			0.001174	0.000456	86428	2.57	0.0101
tspl2		1		0	.	.	.	.
tspl2		2		0.01679	0.003236	86428	5.19	<.0001
tspl2		3		-0.00258	0.000359	86428	-7.20	<.0001

**Now assessing with 6 hours pre-post-transfusion windows**

The HPMIXED Procedure

Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	5	86428	4.27	0.85	0.5117	0.5117

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	6	0 1 5 10 20 99
recipientsex	3	0 1 2
idnr	40062	210000196120 210000486129 210000598144 210000905111 210000954103 210001151104 210001428104 210001535114 210001589111 210001682118 210002204152 210002319145 210002388128 210002390143 210002429149 210002448146 210002521130 210002985127 210003039107 210003060142 ...

Number of Observations Read	86444
Number of Observations Used	78701

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	16
Columns in Z per Subject	1
Subjects (Blocks in V)	40062

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	365311.20781	.	8142.633
1	5	364021.45859	1289.7492283	940.4022
2	4	363982.29276	39.16582892	112.9202

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	363981.4272	0.86555665	40.25636
4	5	363981.30101	0.12618838	0

Convergence is assumed but all parameters are actively constrained.

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	6.621E-6
Residual		5.9637

#### Fit Statistics

-2 Res Log Likelihood	363981
AIC (Smaller is Better)	363983
AICC (Smaller is Better)	363983
BIC (Smaller is Better)	363992
CAIC (Smaller is Better)	363993
HQIC (Smaller is Better)	363986

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					-0.3530	0.2074	78689	-1.70
predictorvalue				0	0	.	.	.
predictorvalue				1	0.04907	0.02372	78689	2.07
predictorvalue				5	0.02543	0.02827	78689	0.90
predictorvalue				10	0.03587	0.03215	78689	1.12
predictorvalue				20	0.03695	0.07580	78689	0.49

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.0887
predictorvalue				0	.
predictorvalue				1	0.0386
predictorvalue				5	0.3684
predictorvalue				10	0.2645
predictorvalue				20	0.6259

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
predictorvalue				99	0.03970	0.03211	78689	1.24
tspl1	1				0	.	.	.
tspl1	2				-0.00643	0.003228	78689	-1.99
tspl1	3				0.001591	0.000478	78689	3.32
tspl2		1			0	.	.	.
tspl2		2			0.01890	0.003416	78689	5.53
tspl2		3			-0.00291	0.000378	78689	-7.69
hbspl			1		0	.	.	.
hbspl			2		0.003415	0.001493	78689	2.29
hbspl			3		-0.00009	0.000048	78689	-1.81

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
predictorvalue				99	0.2163
tspl1	1				.
tspl1	2				0.0465
tspl1	3				0.0009
tspl2		1			.
tspl2		2			<.0001
tspl2		3			<.0001
hbspl			1		.
hbspl			2		0.0222
hbspl			3		0.0704

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	5	78689	4.49	0.90	0.4806	0.4806

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	4	0 180 365 999
recipientsex	3	0 1 2
idnr	42616	210000196120 210000486129 210000598144 210000905111 210000954103 210001151104 210001428104 210001535114 210001589111 210001682118 210002204152 210002319145 210002388128 210002390143 210002429149 210002448146 210002521130 210002985127 210003039107 210003060142 ...

Number of Observations Read	86442
Number of Observations Used	86438

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	11
Columns in Z per Subject	1
Subjects (Blocks in V)	42616

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	400464.57481	.	8862.678
1	5	399075.7135	1388.8613055	988.4948
2	4	399036.01429	39.69921468	124.3255

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	399035.03487	0.97941046	46.66333
4	5	399034.87211	0.16276641	0

Convergence is assumed but all parameters are actively constrained.

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	6.569E-6
Residual		5.9167

#### Fit Statistics

-2 Res Log Likelihood	399035
AIC (Smaller is Better)	399037
AICC (Smaller is Better)	399037
BIC (Smaller is Better)	399046
CAIC (Smaller is Better)	399047
HQIC (Smaller is Better)	399040

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				0.1616	0.02553	86430	6.33	<.0001
predictorvalue			0	0	.	.	.	.
predictorvalue			180	-0.04741	0.02742	86430	-1.73	0.0838
predictorvalue			365	0.000612	0.03624	86430	0.02	0.9865
predictorvalue			999	-0.03114	0.01827	86430	-1.70	0.0883
tsp11	1			0	.	.	.	.
tsp11	2			-0.00350	0.003059	86430	-1.15	0.2520
tsp11	3			0.001175	0.000456	86430	2.58	0.0100
tsp12		1		0	.	.	.	.
tsp12		2		0.01672	0.003236	86430	5.17	<.0001
tsp12		3		-0.00258	0.000359	86430	-7.19	<.0001

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	3	86430	4.80	1.60	0.1868	0.1868



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	4	0 180 365 999
recipientsex	3	0 1 2
idnr	40062	210000196120 210000486129 210000598144 210000905111 210000954103 210001151104 210001428104 210001535114 210001589111 210001682118 210002204152 210002319145 210002388128 210002390143 210002429149 210002448146 210002521130 210002985127 210003039107 210003060142 ...

Number of Observations Read	86442
Number of Observations Used	78701

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	14
Columns in Z per Subject	1
Subjects (Blocks in V)	40062

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	365300.97982	.	8142.207
1	5	364011.56411	1289.4157104	940.8542
2	4	363972.36248	39.20163309	113.0513

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	363971.4947	0.86777554	40.33731
4	5	363971.47379	0.02091352	36.9458
5	4	363971.42777	0.04601900	28.09574
6	5	363971.41844	0.00933682	25.93788
7	4	363971.39762	0.02081549	20.32385
8	5	363971.36792	0.02970353	0

Convergence is assumed but all parameters are actively constrained.

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	6.621E-6
Residual		5.9635

#### Fit Statistics

-2 Res Log Likelihood	363971
AIC (Smaller is Better)	363973
AICC (Smaller is Better)	363973
BIC (Smaller is Better)	363982
CAIC (Smaller is Better)	363983
HQIC (Smaller is Better)	363976

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					-0.3107	0.2062	78691	-1.51
predictorvalue				0	0	.	.	.
predictorvalue				180	-0.04982	0.02765	78691	-1.80
predictorvalue				365	-0.00080	0.03657	78691	-0.02

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.1318
predictorvalue				0	.
predictorvalue				180	0.0716
predictorvalue				365	0.9826

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
predictorvalue				999	-0.03605	0.01981	78691	-1.82
tspl1	1				0	.	.	.
tspl1	2				-0.00642	0.003228	78691	-1.99
tspl1	3				0.001593	0.000478	78691	3.33
tspl2		1			0	.	.	.
tspl2		2			0.01884	0.003415	78691	5.52
tspl2		3			-0.00290	0.000378	78691	-7.67
hbspl			1		0	.	.	.
hbspl			2		0.003469	0.001494	78691	2.32
hbspl			3		-0.00009	0.000048	78691	-1.80

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
predictorvalue				999	0.0688
tspl1	1				.
tspl1	2				0.0469
tspl1	3				0.0009
tspl2		1			.
tspl2		2			<.0001
tspl2		3			<.0001
hbspl			1		.
hbspl			2		0.0202
hbspl			3		0.0722

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	3	78691	5.36	1.79	0.1471	0.1471

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	2	1 2
idnr	45	210017556115 210090060104 210153892132 210555901123 210599180109 210741270149 210775718123 211050666104 211316283138 211432577129 211750525146 211856815130 211858043148 212052315122 212139463131 212341804115 212401390100 212443366111 212547313109 212588538135 ...

Number of Observations Read	49
Number of Observations Used	47

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z per Subject	1
Subjects (Blocks in V)	45

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	799.49961545	.	1.363898
1	4	796.60172569	2.89788976	0.129401
2	2	796.56467328	0.03705240	0.040464

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	796.5608983	0.00377498	0.002433
4	2	796.56088495	0.00001335	0.000044
5	2	796.56088495	0.00000000	4.635E-8

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	6619274
Residual		216688

#### Fit Statistics

-2 Res Log Likelihood	796.56088
AIC (Smaller is Better)	800.56088
AICC (Smaller is Better)	800.87667
BIC (Smaller is Better)	804.17421
CAIC (Smaller is Better)	806.17421
HQIC (Smaller is Better)	801.90790

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				3238.26	1486.23	41	2.18	0.0351
predictorvalue			1	-735.22	854.85	41	-0.86	0.3948
predictorvalue			2	0	.	.	.	.
tsp11	1			0	.	.	.	.
tsp11	2			172.34	142.39	41	1.21	0.2331
tsp11	3			-22.5810	16.8067	41	-1.34	0.1865
tsp12		1		0	.	.	.	.
tsp12		2		-453.20	198.37	41	-2.28	0.0276
tsp12		3		37.9888	22.1458	41	1.72	0.0938

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	41	0.74	0.74	0.3898	0.3948

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	2	1 2
idnr	45	210017556115 210090060104 210153892132 210555901123 210599180109 210741270149 210775718123 211050666104 211316283138 211432577129 211750525146 211856815130 211858043148 212052315122 212139463131 212341804115 212401390100 212443366111 212547313109 212588538135 ...

Number of Observations Read	49
Number of Observations Used	47

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	12
Columns in Z per Subject	1
Subjects (Blocks in V)	45

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	783.85883008	.	1.076209
1	4	782.15203989	1.70679019	0.093612
2	4	782.12557426	0.02646563	0.001637

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	782.12556463	0.00000963	0.000222
4	2	782.12556445	0.00000018	6.3E-7

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	6711345
Residual		294958

#### Fit Statistics

-2 Res Log Likelihood	782.12556
AIC (Smaller is Better)	786.12556
AICC (Smaller is Better)	786.45890
BIC (Smaller is Better)	789.73889
CAIC (Smaller is Better)	791.73889
HQIC (Smaller is Better)	787.47258

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					1495.09	7024.75	39	0.21
predictorvalue				1	-760.71	870.85	39	-0.87
predictorvalue				2	0	.	.	.
tspl1	1				0	.	.	.
tspl1	2				186.87	146.99	39	1.27
tspl1	3				-24.4339	17.4582	39	-1.40

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.8326
predictorvalue				1	0.3877
predictorvalue				2	.
tspl1	1				.
tspl1	2				0.2112
tspl1	3				0.1695

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tsp11	tsp12	hbsp1	predictorvalue	Estimate	Standard Error	DF	t Value
tsp12		1			0	.	.	.
tsp12		2			-475.45	209.86	39	-2.27
tsp12		3			40.4566	23.7783	39	1.70
hbsp1			1		0	.	.	.
hbsp1			2		14.6272	54.3987	39	0.27
hbsp1			3		-3.2907	5.0108	39	-0.66

#### Solution for Fixed Effects

Effect	tsp11	tsp12	hbsp1	predictorvalue	Pr >  t
tsp12		1			.
tsp12		2			0.0291
tsp12		3			0.0968
hbsp1			1		.
hbsp1			2		0.7894
hbsp1			3		0.5152

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	39	0.76	0.76	0.3824	0.3877



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	0 1
recipientsex	2	1 2
idnr	89	210017556115 210090060104 210110029142 210111994131 210133984153 210153892132 210161928143 210253375115 210455763137 210555901123 210599180109 210664062150 210741270149 210775718123 210794304152 210948388129 210980178104 211050666104 211058649143 211163407100 ...

Number of Observations Read	100
Number of Observations Used	98

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z per Subject	1
Subjects (Blocks in V)	89

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	1797.541886	.	5.403822
1	4	1789.9826473	7.55923875	0.002757
2	2	1789.9826449	0.00000238	0.00057

## Now assessing with 6 hours pre-post-transfusion windows

The HPMIXED Procedure

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

### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	12021819
Residual		717119

### Fit Statistics

-2 Res Log Likelihood	1789.98264
AIC (Smaller is Better)	1793.98264
AICC (Smaller is Better)	1794.11748
BIC (Smaller is Better)	1798.95992
CAIC (Smaller is Better)	1800.95992
HQIC (Smaller is Better)	1795.98884

### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				1856.69	1255.04	92	1.48	0.1425
predictorvalue			0	0	.	.	.	.
predictorvalue			1	-16.6496	1522.27	92	-0.01	0.9913
tsp11	1			0	.	.	.	.
tsp11	2			186.57	119.72	92	1.56	0.1226
tsp11	3			-21.9178	16.8376	92	-1.30	0.1963
tsp12		1		0	.	.	.	.
tsp12		2		-277.04	168.80	92	-1.64	0.1042
tsp12		3		21.6885	18.0224	92	1.20	0.2319

### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	92	0.00	0.00	0.9913	0.9913

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	0 1
recipientsex	2	1 2
idnr	81	210017556115 210090060104 210110029142 210111994131 210133984153 210153892132 210253375115 210455763137 210555901123 210599180109 210664062150 210741270149 210775718123 210948388129 210980178104 211050666104 211058649143 211163407100 211316283138 211432577129 ...

Number of Observations Read	100
Number of Observations Used	89

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	12
Columns in Z per Subject	1
Subjects (Blocks in V)	81

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	1598.4810271	.	5.09865
1	4	1587.4003913	11.08063576	1.234772
2	4	1585.3903511	2.01004021	0.165508

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	1585.3363262	0.05402491	0.055429
4	2	1585.3290936	0.00723260	0.003249
5	2	1585.329068	0.00002559	0.000066
6	3	1585.329068	0.00000001	9.199E-9

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	11123100
Residual		134916

#### Fit Statistics

-2 Res Log Likelihood	1585.32907
AIC (Smaller is Better)	1589.32907
AICC (Smaller is Better)	1589.48291
BIC (Smaller is Better)	1594.11797
CAIC (Smaller is Better)	1596.11797
HQIC (Smaller is Better)	1591.25044

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					3899.88	3331.37	81	1.17
predictorvalue				0	0	.	.	.
predictorvalue				1	358.11	1445.52	81	0.25
tspl1	1				0	.	.	.
tspl1	2				102.97	118.89	81	0.87

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.2452
predictorvalue				0	.
predictorvalue				1	0.8050
tspl1	1				.
tspl1	2				0.3890

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
tspl1	3				-13.8164	16.6106	81	-0.83
tspl2		1			0	.	.	.
tspl2		2			-479.93	151.80	81	-3.16
tspl2		3			44.8702	14.7928	81	3.03
hbspl			1		0	.	.	.
hbspl			2		-1.8099	24.5816	81	-0.07
hbspl			3		-1.6379	2.1288	81	-0.77

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
tspl1	3				0.4080
tspl2		1			.
tspl2		2			0.0022
tspl2		3			0.0033
hbspl			1		.
hbspl			2		0.9415
hbspl			3		0.4439

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	81	0.06	0.06	0.8043	0.8050

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	2	1 2
idnr	80	210017556115 210090060104 210110029142 210111994131 210133984153 210153892132 210161928143 210253375115 210455763137 210555901123 210599180109 210664062150 210741270149 210775718123 210794304152 210948388129 210980178104 211050666104 211058649143 211163407100 ...

Number of Observations Read	149
Number of Observations Used	87

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	10
Columns in Z per Subject	1
Subjects (Blocks in V)	80

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	1596.9759383	.	4.828842
1	4	1585.7887947	11.18714351	1.272885
2	4	1582.243375	3.54541979	0.349152
3	4	1581.2955714	0.94780355	0.065668

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	4	1581.210792	0.08477939	0.006093
5	2	1581.2097604	0.00103167	0.001799
6	3	1581.2096575	0.00010283	0.000143
7	3	1581.2096568	0.00000067	9.47E-7

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	14393674
Residual		41856

#### Fit Statistics

-2 Res Log Likelihood	1581.20966
AIC (Smaller is Better)	1585.20966
AICC (Smaller is Better)	1585.36550
BIC (Smaller is Better)	1589.97371
CAIC (Smaller is Better)	1591.97371
HQIC (Smaller is Better)	1587.11970

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				5594.05	2265.13	80	2.47	0.0157
predspline			1	0	.	.	.	.
predspline			2	-66.5807	40.9470	80	-1.63	0.1079
predspline			3	2.8153	1.2500	80	2.25	0.0271
tsp11	1			0	.	.	.	.
tsp11	2			65.9593	106.38	80	0.62	0.5370
tsp11	3			-6.5452	17.5880	80	-0.37	0.7108
tsp12		1		0	.	.	.	.
tsp12		2		-402.90	164.38	80	-2.45	0.0164
tsp12		3		39.1522	13.3807	80	2.93	0.0045

Now assessing with 6 hours pre-post-transfusion windows

The HPMIXED Procedure						
Type III Tests of Fixed Effects						
Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	80	8.29	4.15	0.0158	0.0193



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	2	1 2
idnr	73	210017556115 210090060104 210110029142 210111994131 210133984153 210153892132 210253375115 210455763137 210555901123 210599180109 210664062150 210741270149 210775718123 210948388129 210980178104 211050666104 211058649143 211163407100 211316283138 211432577129 ...

Number of Observations Read	149
Number of Observations Used	80

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	13
Columns in Z per Subject	1
Subjects (Blocks in V)	73

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	1436.0929532	.	4.536972
1	4	1427.2998999	8.79305322	1.069477
2	4	1425.4982347	1.80166521	0.249235
3	4	1425.1972632	0.30097151	0.031914

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	2	1425.1898483	0.00741495	0.011146
5	2	1425.1887422	0.00110604	0.000818
6	3	1425.188736	0.00000621	9.59E-6

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	12013217
Residual		102667

#### Fit Statistics

-2 Res Log Likelihood	1425.18874
AIC (Smaller is Better)	1429.18874
AICC (Smaller is Better)	1429.36521
BIC (Smaller is Better)	1433.76965
CAIC (Smaller is Better)	1435.76965
HQIC (Smaller is Better)	1431.01431

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept					3607.11	3832.41	71	0.94	0.3498
predspline				1	0	.	.	.	.
predspline				2	-29.4916	44.4924	71	-0.66	0.5096
predspline				3	1.6082	1.4945	71	1.08	0.2855
tspl1	1				0	.	.	.	.
tspl1	2				124.17	136.10	71	0.91	0.3647
tspl1	3				-17.0191	19.6847	71	-0.86	0.3902
tspl2		1			0	.	.	.	.
tspl2		2			-512.21	169.96	71	-3.01	0.0036
tspl2		3			46.3818	15.5250	71	2.99	0.0039
hbspl			1		0	.	.	.	.
hbspl			2		8.7738	24.3442	71	0.36	0.7196
hbspl			3		-1.8550	2.1005	71	-0.88	0.3801

**Now assessing with 6 hours pre-post-transfusion windows**

The HPMIXED Procedure

Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	71	1.95	0.97	0.3775	0.3825

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	2	1 2
idnr	81	210017556115 210090060104 210110029142 210111994131 210133984153 210153892132 210253375115 210455763137 210555901123 210599180109 210664062150 210741270149 210775718123 210948388129 210980178104 211050666104 211058649143 211163407100 211316283138 211432577129 ...

Number of Observations Read	176
Number of Observations Used	89

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	10
Columns in Z per Subject	1
Subjects (Blocks in V)	81

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	1614.8115513	.	5.094279
1	4	1603.7601752	11.05137610	1.214129
2	4	1601.8308298	1.92934536	0.160451
3	2	1601.7806495	0.05018030	0.053095

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	2	1601.7741205	0.00652897	0.003021
5	2	1601.7740988	0.00002174	0.000059
6	3	1601.7740988	0.00000001	8.369E-9

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	10973886
Residual		136383

#### Fit Statistics

-2 Res Log Likelihood	1601.77410
AIC (Smaller is Better)	1605.77410
AICC (Smaller is Better)	1605.92600
BIC (Smaller is Better)	1610.56300
CAIC (Smaller is Better)	1612.56300
HQIC (Smaller is Better)	1607.69547

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				3782.09	3312.59	82	1.14	0.2569
predspline			1	0	.	.	.	.
predspline			2	-0.9690	24.4551	82	-0.04	0.9685
predspline			3	-1.7256	2.1104	82	-0.82	0.4159
tsp11	1			0	.	.	.	.
tsp11	2			104.05	118.17	82	0.88	0.3811
tsp11	3			-14.0068	16.4985	82	-0.85	0.3984
tsp12		1		0	.	.	.	.
tsp12		2		-476.92	150.68	82	-3.17	0.0022
tsp12		3		44.6759	14.7352	82	3.03	0.0033

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	82	2.63	1.32	0.2680	0.2736

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	2	1 2
idnr	89	210017556115 210090060104 210110029142 210111994131 210133984153 210153892132 210161928143 210253375115 210455763137 210555901123 210599180109 210664062150 210741270149 210775718123 210794304152 210948388129 210980178104 211050666104 211058649143 211163407100 ...

Number of Observations Read	100
Number of Observations Used	98

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z per Subject	1
Subjects (Blocks in V)	89

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	1798.5397112	.	5.294962
1	4	1791.3621247	7.17758649	0.076092
2	2	1791.3603223	0.00180243	0.016156

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	1791.3602365	0.00008575	0.000113
4	2	1791.3602365	0.00000000	1.689E-7

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	11865779
Residual		735461

#### Fit Statistics

-2 Res Log Likelihood	1791.36024
AIC (Smaller is Better)	1795.36024
AICC (Smaller is Better)	1795.49507
BIC (Smaller is Better)	1800.33751
CAIC (Smaller is Better)	1802.33751
HQIC (Smaller is Better)	1797.36643

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				1985.94	1257.48	92	1.58	0.1177
predictorvalue			1	0	.	.	.	.
predictorvalue			2	-451.59	533.23	92	-0.85	0.3993
tsp11	1			0	.	.	.	.
tsp11	2			188.99	119.30	92	1.58	0.1166
tsp11	3			-20.2353	16.8438	92	-1.20	0.2327
tsp12		1		0	.	.	.	.
tsp12		2		-259.13	168.89	92	-1.53	0.1284
tsp12		3		19.5020	18.1408	92	1.08	0.2852

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	92	0.72	0.72	0.3971	0.3993

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	2	1 2
idnr	81	210017556115 210090060104 210110029142 210111994131 210133984153 210153892132 210253375115 210455763137 210555901123 210599180109 210664062150 210741270149 210775718123 210948388129 210980178104 211050666104 211058649143 211163407100 211316283138 211432577129 ...

Number of Observations Read	100
Number of Observations Used	89

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	12
Columns in Z per Subject	1
Subjects (Blocks in V)	81

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	1599.3065878	.	4.987686
1	4	1589.4429077	9.86368009	1.081622
2	4	1588.0697794	1.37312832	0.146368



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	1588.0316716	0.03810776	0.051176
4	2	1588.0260116	0.00565999	0.003368
5	2	1588.0259862	0.00002538	0.000081
6	3	1588.0259862	0.00000001	1.79E-8

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	10860785
Residual		172339

#### Fit Statistics

-2 Res Log Likelihood	1588.02599
AIC (Smaller is Better)	1592.02599
AICC (Smaller is Better)	1592.17983
BIC (Smaller is Better)	1596.81488
CAIC (Smaller is Better)	1598.81488
HQIC (Smaller is Better)	1593.94735

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					3105.77	3562.06	81	0.87
predictorvalue				1	0	.	.	.
predictorvalue				2	-190.96	354.45	81	-0.54
tspl1	1				0	.	.	.
tspl1	2				115.71	121.27	81	0.95

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.3858
predictorvalue				1	.
predictorvalue				2	0.5915
tspl1	1				.
tspl1	2				0.3429

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
tspl1	3				-14.2045	16.5373	81	-0.86
tspl2		1			0	.	.	.
tspl2		2			-467.47	152.04	81	-3.07
tspl2		3			43.2073	15.1547	81	2.85
hbspl			1		0	.	.	.
hbspl			2		4.0396	26.3608	81	0.15
hbspl			3		-2.3903	2.3190	81	-1.03

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
tspl1	3				0.3929
tspl2		1			.
tspl2		2			0.0029
tspl2		3			0.0055
hbspl			1		.
hbspl			2		0.8786
hbspl			3		0.3057

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	81	0.29	0.29	0.5901	0.5915

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	2	1 2
idnr	89	210017556115 210090060104 210110029142 210111994131 210133984153 210153892132 210161928143 210253375115 210455763137 210555901123 210599180109 210664062150 210741270149 210775718123 210794304152 210948388129 210980178104 211050666104 211058649143 211163407100 ...

Number of Observations Read	181
Number of Observations Used	98

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	10
Columns in Z per Subject	1
Subjects (Blocks in V)	89

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	1791.7740897	.	4.248542
1	4	1785.6887151	6.08537461	0.306169
2	2	1785.6482232	0.04049193	0.079081
3	2	1785.64521	0.00301320	0.003027

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	2	1785.6452055	0.00000448	0.000031

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	11280463
Residual		630145

#### Fit Statistics

-2 Res Log Likelihood	1785.64521
AIC (Smaller is Better)	1789.64521
AICC (Smaller is Better)	1789.78157
BIC (Smaller is Better)	1794.62248
CAIC (Smaller is Better)	1796.62248
HQIC (Smaller is Better)	1791.65140

#### Solution for Fixed Effects

Effect	tspl1	tspl2	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				5773.71	1887.44	91	3.06	0.0029
predspline			1	0	.	.	.	.
predspline			2	-222.66	84.6543	91	-2.63	0.0100
predspline			3	11.0994	4.8982	91	2.27	0.0258
tspl1	1			0	.	.	.	.
tspl1	2			171.71	116.44	91	1.47	0.1437
tspl1	3			-18.2660	16.4135	91	-1.11	0.2687
tspl2		1		0	.	.	.	.
tspl2		2		-156.14	168.36	91	-0.93	0.3562
tspl2		3		7.8285	18.0349	91	0.43	0.6653

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	91	7.95	3.97	0.0188	0.0222

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	2	1 2
idnr	81	210017556115 210090060104 210110029142 210111994131 210133984153 210153892132 210253375115 210455763137 210555901123 210599180109 210664062150 210741270149 210775718123 210948388129 210980178104 211050666104 211058649143 211163407100 211316283138 211432577129 ...

Number of Observations Read	181
Number of Observations Used	89

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	13
Columns in Z per Subject	1
Subjects (Blocks in V)	81

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	1594.4674217	.	4.073379
1	4	1587.3198904	7.14753138	0.822782
2	4	1586.4850797	0.83481069	0.113371
3	2	1586.460709	0.02437064	0.041381

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	2	1586.4566873	0.00402176	0.00305
5	2	1586.4566645	0.00002275	0.000087
6	3	1586.4566645	0.00000002	3.001E-8

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	10290408
Residual		216786

#### Fit Statistics

-2 Res Log Likelihood	1586.45666
AIC (Smaller is Better)	1590.45666
AICC (Smaller is Better)	1590.61251
BIC (Smaller is Better)	1595.24556
CAIC (Smaller is Better)	1597.24556
HQIC (Smaller is Better)	1592.37803

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept					3114.93	3994.93	80	0.78	0.4379
predspline				1	0	.	.	.	.
predspline				2	-116.75	61.1883	80	-1.91	0.0600
predspline				3	5.8370	3.5102	80	1.66	0.1003
tspl1	1				0	.	.	.	.
tspl1	2				112.74	117.95	80	0.96	0.3420
tspl1	3				-14.2835	16.2521	80	-0.88	0.3821
tspl2		1			0	.	.	.	.
tspl2		2			-390.90	155.28	80	-2.52	0.0138
tspl2		3			33.5409	16.0257	80	2.09	0.0395
hbspl			1		0	.	.	.	.
hbspl			2		17.4938	29.7241	80	0.59	0.5578
hbspl			3		-2.8225	2.4016	80	-1.18	0.2434

Now assessing with 6 hours pre-post-transfusion windows

The HPMIXED Procedure						
Type III Tests of Fixed Effects						
Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	80	4.05	2.03	0.1320	0.1387

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	6	0 1 5 10 20 99
recipientsex	2	1 2
idnr	89	210017556115 210090060104 210110029142 210111994131 210133984153 210153892132 210161928143 210253375115 210455763137 210555901123 210599180109 210664062150 210741270149 210775718123 210794304152 210948388129 210980178104 211050666104 211058649143 211163407100 ...

Number of Observations Read	104
Number of Observations Used	98

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	13
Columns in Z per Subject	1
Subjects (Blocks in V)	89

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	1732.6092678	.	4.465941
1	4	1725.4294028	7.17986506	0.819599
2	4	1724.7635415	0.66586127	0.123874



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	4	1724.7319746	0.03156691	0.004983
4	2	1724.7319117	0.00006283	0.000759
5	2	1724.7319103	0.00000148	5.84E-6

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	13118483
Residual		333847

#### Fit Statistics

-2 Res Log Likelihood	1724.73191
AIC (Smaller is Better)	1728.73191
AICC (Smaller is Better)	1728.87309
BIC (Smaller is Better)	1733.70918
CAIC (Smaller is Better)	1735.70918
HQIC (Smaller is Better)	1730.73811

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				2163.01	1330.99	88	1.63	0.1077
predictorvalue			0	-372.67	559.30	88	-0.67	0.5070
predictorvalue			1	0	.	.	.	.
predictorvalue			5	-164.75	697.24	88	-0.24	0.8138
predictorvalue			10	398.25	409.18	88	0.97	0.3331
predictorvalue			20	-1775.01	3735.52	88	-0.48	0.6358
predictorvalue			99	-1735.21	750.56	88	-2.31	0.0231
tsp11	1			0	.	.	.	.
tsp11	2			220.56	120.18	88	1.84	0.0698
tsp11	3			-26.4059	16.9960	88	-1.55	0.1239
tsp12		1		0	.	.	.	.
tsp12		2		-327.99	167.12	88	-1.96	0.0528
tsp12		3		31.5371	17.3409	88	1.82	0.0724

**Now assessing with 6 hours pre-post-transfusion windows**

The HPMIXED Procedure

## Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	5	88	8.63	1.73	0.1246	0.1368

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	6	0 1 5 10 20 99
recipientsex	2	1 2
idnr	81	210017556115 210090060104 210110029142 210111994131 210133984153 210153892132 210253375115 210455763137 210555901123 210599180109 210664062150 210741270149 210775718123 210948388129 210980178104 211050666104 211058649143 211163407100 211316283138 211432577129 ...

Number of Observations Read	104
Number of Observations Used	89

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	16
Columns in Z per Subject	1
Subjects (Blocks in V)	81

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	1533.0522953	.	4.11795
1	4	1525.0659853	7.98631007	0.96631
2	4	1523.3846016	1.68138371	0.221466

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	4	1523.1539934	0.23060812	0.015014
4	2	1523.1526325	0.00136094	0.003003
5	2	1523.1525748	0.00005767	0.000046
6	3	1523.1525748	0.00000001	1.312E-8

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	11436913
Residual		109868

#### Fit Statistics

-2 Res Log Likelihood	1523.15257
AIC (Smaller is Better)	1527.15257
AICC (Smaller is Better)	1527.31474
BIC (Smaller is Better)	1531.94147
CAIC (Smaller is Better)	1533.94147
HQIC (Smaller is Better)	1529.07394

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					1485.17	3996.84	77	0.37
predictorvalue				0	-106.61	366.26	77	-0.29
predictorvalue				1	0	.	.	.
predictorvalue				5	428.50	490.03	77	0.87
predictorvalue				10	433.49	318.88	77	1.36

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.7112
predictorvalue				0	0.7718
predictorvalue				1	.
predictorvalue				5	0.3846
predictorvalue				10	0.1780

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
predictorvalue				20	-1162.43	3478.17	77	-0.33
predictorvalue				99	-617.65	1304.85	77	-0.47
tspl1	1				0	.	.	.
tspl1	2				114.13	122.39	77	0.93
tspl1	3				-15.0292	16.9856	77	-0.88
tspl2		1			0	.	.	.
tspl2		2			-469.08	154.08	77	-3.04
tspl2		3			46.2394	14.8840	77	3.11
hbspl			1		0	.	.	.
hbspl			2		13.2456	28.7191	77	0.46
hbspl			3		-1.9577	2.2088	77	-0.89

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
predictorvalue				20	0.7391
predictorvalue				99	0.6373
tspl1	1				.
tspl1	2				0.3540
tspl1	3				0.3790
tspl2		1			.
tspl2		2			0.0032
tspl2		3			0.0026
hbspl			1		.
hbspl			2		0.6459
hbspl			3		0.3782

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	5	77	3.45	0.69	0.6311	0.6326

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	4	0 180 365 999
recipientsex	2	1 2
idnr	89	210017556115 210090060104 210110029142 210111994131 210133984153 210153892132 210161928143 210253375115 210455763137 210555901123 210599180109 210664062150 210741270149 210775718123 210794304152 210948388129 210980178104 211050666104 211058649143 211163407100 ...

Number of Observations Read	102
Number of Observations Used	98

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	11
Columns in Z per Subject	1
Subjects (Blocks in V)	89

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	1766.830113	.	4.7188
1	4	1759.085574	7.74453903	0.612576
2	2	1758.8925569	0.19301708	0.243611

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	1758.8524602	0.04009668	0.026134
4	2	1758.8519667	0.00049346	0.001214
5	2	1758.8519657	0.00000107	6.28E-6

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	12412955
Residual		477434

#### Fit Statistics

-2 Res Log Likelihood	1758.85197
AIC (Smaller is Better)	1762.85197
AICC (Smaller is Better)	1762.98990
BIC (Smaller is Better)	1767.82924
CAIC (Smaller is Better)	1769.82924
HQIC (Smaller is Better)	1764.85816

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				1762.26	1331.76	90	1.32	0.1891
predictorvalue			0	773.75	554.50	90	1.40	0.1663
predictorvalue			180	0	.	.	.	.
predictorvalue			365	482.60	718.09	90	0.67	0.5033
predictorvalue			999	-467.92	590.46	90	-0.79	0.4302
tsp11	1			0	.	.	.	.
tsp11	2			146.99	121.68	90	1.21	0.2302
tsp11	3			-18.7712	16.9937	90	-1.10	0.2723
tsp12		1		0	.	.	.	.
tsp12		2		-266.10	170.44	90	-1.56	0.1220
tsp12		3		22.1903	18.3484	90	1.21	0.2297

**Now assessing with 6 hours pre-post-transfusion windows**

The HPMIXED Procedure

## Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	3	90	5.02	1.67	0.1705	0.1785



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	4	0 180 365 999
recipientsex	2	1 2
idnr	81	210017556115 210090060104 210110029142 210111994131 210133984153 210153892132 210253375115 210455763137 210555901123 210599180109 210664062150 210741270149 210775718123 210948388129 210980178104 211050666104 211058649143 211163407100 211316283138 211432577129 ...

Number of Observations Read	102
Number of Observations Used	89

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	14
Columns in Z per Subject	1
Subjects (Blocks in V)	81

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	1567.8091668	.	4.115725
1	4	1559.0120143	8.79715249	1.073257
2	4	1555.7903997	3.22161464	0.373969

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	4	1553.8299196	1.96048009	0.088522
4	4	1553.5372476	0.29267199	0.00893
5	2	1553.5329568	0.00429077	0.00278
6	3	1553.5324746	0.00048221	0.000259
7	3	1553.5324703	0.00000433	2.391E-6

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	11389995
Residual		15075

#### Fit Statistics

-2 Res Log Likelihood	1553.53247
AIC (Smaller is Better)	1557.53247
AICC (Smaller is Better)	1557.69037
BIC (Smaller is Better)	1562.32137
CAIC (Smaller is Better)	1564.32137
HQIC (Smaller is Better)	1559.45384

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					0	.	.	.
predictorvalue				0	5249.21	2083.96	79	2.52
predictorvalue				180	4864.48	2030.60	79	2.40
predictorvalue				365	4464.38	2144.90	79	2.08
predictorvalue				999	4662.80	2017.20	79	2.31

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					.
predictorvalue				0	0.0138
predictorvalue				180	0.0190
predictorvalue				365	0.0406
predictorvalue				999	0.0234

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
tspl1	1				0	.	.	.
tspl1	2				51.4441	115.90	79	0.44
tspl1	3				-17.9080	15.7912	79	-1.13
tspl2		1			0	.	.	.
tspl2		2			-486.23	154.99	79	-3.14
tspl2		3			46.5926	15.1272	79	3.08
hbspl			1		0	.	.	.
hbspl			2		-5.8651	14.1935	79	-0.41
hbspl			3		-1.1328	1.5387	79	-0.74

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
tspl1	1				.
tspl1	2				0.6584
tspl1	3				0.2602
tspl2		1			.
tspl2		2			0.0024
tspl2		3			0.0028
hbspl			1		.
hbspl			2		0.6806
hbspl			3		0.4638

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	3	79	37.49	12.50	<.0001	<.0001

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	3	0 1 2
idnr	23537	210000486129 210000556116 210000598144 210000801144 210000905111 210001535114 210002388128 210002429149 210002448146 210003060142 210003353100 210003574148 210003729131 210004055143 210004156135 210004170105 210004301110 210004315135 210004408139 210004558102 ...

Number of Observations Read	36021
Number of Observations Used	36019

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z per Subject	1
Subjects (Blocks in V)	23537

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	347060.15721	.	2245.596
1	5	346699.19668	360.96053816	270.7526
2	2	346691.97924	7.21743346	80.10998

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	346691.2142	0.76504591	8.149708
4	2	346691.20581	0.00839085	0.326467
5	2	346691.20579	0.00001359	0.001479

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	69.8608
Residual		819.87

#### Fit Statistics

-2 Res Log Likelihood	346691
AIC (Smaller is Better)	346695
AICC (Smaller is Better)	346695
BIC (Smaller is Better)	346711
CAIC (Smaller is Better)	346713
HQIC (Smaller is Better)	346700

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				-7.0336	0.4804	36013	-14.64	<.0001
predictorvalue			1	0	.	.	.	.
predictorvalue			2	-0.3984	0.3206	36013	-1.24	0.2140
tsp11	1			0	.	.	.	.
tsp11	2			0.7389	0.05895	36013	12.53	<.0001
tsp11	3			-0.1423	0.009156	36013	-15.54	<.0001
tsp12		1		0	.	.	.	.
tsp12		2		-0.2230	0.06344	36013	-3.51	0.0004
tsp12		3		0.05908	0.007093	36013	8.33	<.0001

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	36013	1.54	1.54	0.2140	0.2140

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	3	0 1 2
idnr	23471	210000486129 210000556116 210000598144 210000801144 210000905111 210001535114 210002388128 210002429149 210002448146 210003060142 210003353100 210003574148 210003729131 210004055143 210004156135 210004170105 210004301110 210004315135 210004408139 210004558102 ...

Number of Observations Read	36021
Number of Observations Used	35849

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	12
Columns in Z per Subject	1
Subjects (Blocks in V)	23471

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	345417.30634	.	2255.031
1	5	345048.81695	368.48938412	276.991
2	2	345041.13353	7.68342779	83.40167

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	345040.28285	0.85067691	8.984656
4	2	345040.27233	0.01052075	0.395305
5	2	345040.27231	0.00002056	0.002106

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	65.9926
Residual		822.62

#### Fit Statistics

-2 Res Log Likelihood	345040
AIC (Smaller is Better)	345044
AICC (Smaller is Better)	345044
BIC (Smaller is Better)	345060
CAIC (Smaller is Better)	345062
HQIC (Smaller is Better)	345050

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					1.2546	3.4456	35841	0.36
predictorvalue				1	0	.	.	.
predictorvalue				2	-0.3630	0.3216	35841	-1.13
tspl1	1				0	.	.	.
tspl1	2				0.7384	0.05905	35841	12.50
tspl1	3				-0.1416	0.009169	35841	-15.45

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.7158
predictorvalue				1	.
predictorvalue				2	0.2590
tspl1	1				.
tspl1	2				<.0001
tspl1	3				<.0001

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tsp11	tsp12	hbsp1	predictorvalue	Estimate	Standard Error	DF	t Value
tsp12		1			0	.	.	.
tsp12		2			-0.2249	0.06359	35841	-3.54
tsp12		3			0.05971	0.007110	35841	8.40
hbsp1			1		0	.	.	.
hbsp1			2		-0.06073	0.02522	35841	-2.41
hbsp1			3		0.002073	0.002342	35841	0.89

#### Solution for Fixed Effects

Effect	tsp11	tsp12	hbsp1	predictorvalue	Pr >  t
tsp12		1			.
tsp12		2			0.0004
tsp12		3			<.0001
hbsp1			1		.
hbsp1			2		0.0161
hbsp1			3		0.3761

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	35841	1.27	1.27	0.2590	0.2590



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	0 1
recipientsex	3	0 1 2
idnr	46258	210000196120 210000486129 210000556116 210000598144 210000801144 210000905111 210000909149 210000954103 210001534105 210001535114 210001682118 210001739105 210002063142 210002204152 210002388128 210002390143 210002429149 210002448146 210002521130 210002999135 ...

Number of Observations Read	97976
Number of Observations Used	97974

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z per Subject	1
Subjects (Blocks in V)	46258

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	942802.50436	.	5909.908
1	5	942071.40657	731.09779193	348.0212
2	2	942068.39036	3.01620726	53.4466

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	942068.31577	0.07459223	1.104386
4	2	942068.31573	0.00003199	0.003792

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	83.9620
Residual		804.60

#### Fit Statistics

-2 Res Log Likelihood	942068
AIC (Smaller is Better)	942072
AICC (Smaller is Better)	942072
BIC (Smaller is Better)	942090
CAIC (Smaller is Better)	942092
HQIC (Smaller is Better)	942078

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				-7.6114	0.2707	97968	-28.11	<.0001
predictorvalue			0	0	.	.	.	.
predictorvalue			1	-0.5155	0.4008	97968	-1.29	0.1983
tsp11	1			0	.	.	.	.
tsp11	2			0.7252	0.03531	97968	20.54	<.0001
tsp11	3			-0.1293	0.005565	97968	-23.24	<.0001
tsp12		1		0	.	.	.	.
tsp12		2		-0.2030	0.03816	97968	-5.32	<.0001
tsp12		3		0.05670	0.004275	97968	13.26	<.0001

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	97968	1.65	1.65	0.1983	0.1983

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	0 1
recipientsex	3	0 1 2
idnr	43396	210000196120 210000486129 210000556116 210000598144 210000801144 210000905111 210000954103 210001534105 210001535114 210001682118 210001739105 210002063142 210002204152 210002388128 210002390143 210002429149 210002448146 210002521130 210002999135 210003039107 ...

Number of Observations Read	97976
Number of Observations Used	88815

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	12
Columns in Z per Subject	1
Subjects (Blocks in V)	43396

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	855318.89161	.	5467.614
1	5	854619.87111	699.02050417	368.6705
2	2	854616.00225	3.86885770	64.78297

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	854615.87503	0.12721737	1.832187
4	2	854615.87493	0.00010256	0.010065

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	80.6163
Residual		812.44

#### Fit Statistics

-2 Res Log Likelihood	854616
AIC (Smaller is Better)	854620
AICC (Smaller is Better)	854620
BIC (Smaller is Better)	854637
CAIC (Smaller is Better)	854639
HQIC (Smaller is Better)	854625

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					-3.1505	2.1162	88807	-1.49
predictorvalue				0	0	.	.	.
predictorvalue				1	-0.3847	0.4047	88807	-0.95
tspl1	1				0	.	.	.
tspl1	2				0.7403	0.03729	88807	19.85
tspl1	3				-0.1323	0.005820	88807	-22.74

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.1365
predictorvalue				0	.
predictorvalue				1	0.3418
tspl1	1				.
tspl1	2				<.0001
tspl1	3				<.0001

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tsp11	tsp12	hbsp1	predictorvalue	Estimate	Standard Error	DF	t Value
tsp12		1			0	.	.	.
tsp12		2			-0.2281	0.04035	88807	-5.65
tsp12		3			0.06005	0.004492	88807	13.37
hbsp1			1		0	.	.	.
hbsp1			2		-0.03085	0.01519	88807	-2.03
hbsp1			3		-0.00017	0.000574	88807	-0.29

#### Solution for Fixed Effects

Effect	tsp11	tsp12	hbsp1	predictorvalue	Pr >  t
tsp12		1			.
tsp12		2			<.0001
tsp12		3			<.0001
hbsp1			1		.
hbsp1			2		0.0422
hbsp1			3		0.7725

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	88807	0.90	0.90	0.3418	0.3418

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	3	0 1 2
idnr	42849	210000196120 210000486129 210000556116 210000598144 210000801144 210000905111 210000909149 210000954103 210001534105 210001535114 210001682118 210001739105 210002063142 210002204152 210002388128 210002390143 210002429149 210002448146 210002521130 210002999135 ...

Number of Observations Read	88451
Number of Observations Used	88389

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	10
Columns in Z per Subject	1
Subjects (Blocks in V)	42849

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	850151.0974	.	5265.601
1	5	849488.9352	662.16219145	343.273
2	2	849485.5416	3.39360573	56.8337
3	2	849485.44329	0.09830717	1.383719

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	2	849485.44323	0.00005862	0.006089

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	86.1617
Residual		798.12

#### Fit Statistics

-2 Res Log Likelihood	849485
AIC (Smaller is Better)	849489
AICC (Smaller is Better)	849489
BIC (Smaller is Better)	849507
CAIC (Smaller is Better)	849509
HQIC (Smaller is Better)	849495

#### Solution for Fixed Effects

Effect	tspl1	tspl2	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				-7.0481	0.5642	88382	-12.49	<.0001
predspline			1	0	.	.	.	.
predspline			2	-0.01436	0.01328	88382	-1.08	0.2796
predspline			3	0.000782	0.000570	88382	1.37	0.1699
tspl1	1			0	.	.	.	.
tspl1	2			0.7224	0.03712	88382	19.46	<.0001
tspl1	3			-0.1304	0.005864	88382	-22.23	<.0001
tspl2		1		0	.	.	.	.
tspl2		2		-0.2062	0.04004	88382	-5.15	<.0001
tspl2		3		0.05580	0.004486	88382	12.44	<.0001

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	88382	1.97	0.98	0.3739	0.3739

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	3	0 1 2
idnr	40487	210000196120 210000486129 210000556116 210000598144 210000801144 210000905111 210000954103 210001534105 210001535114 210001682118 210001739105 210002063142 210002204152 210002388128 210002390143 210002429149 210002448146 210002521130 210002999135 210003039107 ...

Number of Observations Read	88451
Number of Observations Used	80682

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	13
Columns in Z per Subject	1
Subjects (Blocks in V)	40487

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	776846.80244	.	4914.18
1	5	776212.61361	634.18883546	358.5498
2	2	776208.45561	4.15800135	66.72502
3	2	776208.30108	0.15452144	2.132102



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	2	776208.30093	0.00015926	0.014119

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	83.0821
Residual		808.20

#### Fit Statistics

-2 Res Log Likelihood	776208
AIC (Smaller is Better)	776212
AICC (Smaller is Better)	776212
BIC (Smaller is Better)	776230
CAIC (Smaller is Better)	776232
HQIC (Smaller is Better)	776218

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept					-2.2075	2.2653	80673	-0.97	0.3298
predspline				1	0	.	.	.	.
predspline				2	-0.01985	0.01371	80673	-1.45	0.1476
predspline				3	0.000896	0.000600	80673	1.49	0.1357
tspl1	1				0	.	.	.	.
tspl1	2				0.7328	0.03910	80673	18.74	<.0001
tspl1	3				-0.1325	0.006114	80673	-21.67	<.0001
tspl2		1			0	.	.	.	.
tspl2		2			-0.2232	0.04223	80673	-5.29	<.0001
tspl2		3			0.05862	0.004704	80673	12.46	<.0001
hbspl			1		0	.	.	.	.
hbspl			2		-0.03227	0.01594	80673	-2.02	0.0429
hbspl			3		-0.00029	0.000605	80673	-0.48	0.6330

Now assessing with 6 hours pre-post-transfusion windows

The HPMIXED Procedure						
Type III Tests of Fixed Effects						
Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	80673	2.31	1.15	0.3157	0.3157

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	3	0 1 2
idnr	43379	210000196120 210000486129 210000556116 210000598144 210000801144 210000905111 210000954103 210001534105 210001535114 210001682118 210001739105 210002063142 210002204152 210002388128 210002390143 210002429149 210002448146 210002521130 210002999135 210003039107 ...

Number of Observations Read	88855
Number of Observations Used	88768

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	10
Columns in Z per Subject	1
Subjects (Blocks in V)	43379

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	854874.38166	.	5463.316
1	5	854176.39127	697.99039107	367.9699
2	2	854172.53753	3.85373914	64.58179
3	2	854172.41114	0.12639336	1.820871

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	2	854172.41104	0.00010124	0.009957

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	80.7439
Residual		812.41

#### Fit Statistics

-2 Res Log Likelihood	854172
AIC (Smaller is Better)	854176
AICC (Smaller is Better)	854176
BIC (Smaller is Better)	854194
CAIC (Smaller is Better)	854196
HQIC (Smaller is Better)	854182

#### Solution for Fixed Effects

Effect	tspl1	tspl2	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				-3.8047	2.4767	88761	-1.54	0.1245
predspline			1	0	.	.	.	.
predspline			2	-0.02612	0.01799	88761	-1.45	0.1466
predspline			3	-0.00039	0.000595	88761	-0.65	0.5147
tspl1	1			0	.	.	.	.
tspl1	2			0.7402	0.03730	88761	19.85	<.0001
tspl1	3			-0.1323	0.005822	88761	-22.72	<.0001
tspl2		1		0	.	.	.	.
tspl2		2		-0.2277	0.04036	88761	-5.64	<.0001
tspl2		3		0.06008	0.004493	88761	13.37	<.0001

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	88761	21.24	10.62	<.0001	<.0001

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	3	0 1 2
idnr	46258	210000196120 210000486129 210000556116 210000598144 210000801144 210000905111 210000909149 210000954103 210001534105 210001535114 210001682118 210001739105 210002063142 210002204152 210002388128 210002390143 210002429149 210002448146 210002521130 210002999135 ...

Number of Observations Read	97975
Number of Observations Used	97973

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z per Subject	1
Subjects (Blocks in V)	46258

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	942796.43133	.	5908.361
1	5	942065.43825	730.99308007	348.0739
2	2	942062.41989	3.01836414	53.46213

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	942062.34522	0.07466731	1.104949
4	2	942062.34519	0.00003204	0.003796

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	84.0032
Residual		804.58

#### Fit Statistics

-2 Res Log Likelihood	942062
AIC (Smaller is Better)	942066
AICC (Smaller is Better)	942066
BIC (Smaller is Better)	942084
CAIC (Smaller is Better)	942086
HQIC (Smaller is Better)	942072

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				-7.6385	0.2845	97967	-26.85	<.0001
predictorvalue			1	0	.	.	.	.
predictorvalue			2	-0.01252	0.1903	97967	-0.07	0.9475
tsp11	1			0	.	.	.	.
tsp11	2			0.7255	0.03531	97967	20.54	<.0001
tsp11	3			-0.1294	0.005565	97967	-23.25	<.0001
tsp12		1		0	.	.	.	.
tsp12		2		-0.2028	0.03817	97967	-5.31	<.0001
tsp12		3		0.05668	0.004275	97967	13.26	<.0001

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	97967	0.00	0.00	0.9475	0.9475

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	3	0 1 2
idnr	43396	210000196120 210000486129 210000556116 210000598144 210000801144 210000905111 210000954103 210001534105 210001535114 210001682118 210001739105 210002063142 210002204152 210002388128 210002390143 210002429149 210002448146 210002521130 210002999135 210003039107 ...

Number of Observations Read	97975
Number of Observations Used	88814

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	12
Columns in Z per Subject	1
Subjects (Blocks in V)	43396

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	855307.52211	.	5465.846
1	5	854608.3273	699.19481246	369.0179
2	2	854604.44714	3.88016229	64.88635

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	854604.31937	0.12776686	1.83796
4	2	854604.31927	0.00010326	0.01012

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	80.6231
Residual		812.40

#### Fit Statistics

-2 Res Log Likelihood	854604
AIC (Smaller is Better)	854608
AICC (Smaller is Better)	854608
BIC (Smaller is Better)	854626
CAIC (Smaller is Better)	854628
HQIC (Smaller is Better)	854614

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					-1.4585	2.2647	88806	-0.64
predictorvalue				1	0	.	.	.
predictorvalue				2	-0.4794	0.2245	88806	-2.14
tspl1	1				0	.	.	.
tspl1	2				0.7414	0.03729	88806	19.88
tspl1	3				-0.1324	0.005820	88806	-22.75

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.5196
predictorvalue				1	.
predictorvalue				2	0.0327
tspl1	1				.
tspl1	2				<.0001
tspl1	3				<.0001



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
tspl2		1			0	.	.	.
tspl2		2			-0.2278	0.04035	88806	-5.65
tspl2		3			0.06009	0.004492	88806	13.38
hbspl			1		0	.	.	.
hbspl			2		-0.04128	0.01596	88806	-2.59
hbspl			3		-0.00009	0.000575	88806	-0.15

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
tspl2		1			.
tspl2		2			<.0001
tspl2		3			<.0001
hbspl			1		.
hbspl			2		0.0097
hbspl			3		0.8773

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	88806	4.56	4.56	0.0327	0.0327

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	3	0 1 2
idnr	46239	210000196120 210000486129 210000556116 210000598144 210000801144 210000905111 210000909149 210000954103 210001534105 210001535114 210001682118 210001739105 210002063142 210002204152 210002388128 210002390143 210002429149 210002448146 210002521130 210002999135 ...

Number of Observations Read	98022
Number of Observations Used	97939

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	10
Columns in Z per Subject	1
Subjects (Blocks in V)	46239

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	942347.23957	.	5936.691
1	5	941606.48587	740.75369483	364.0233
2	2	941603.14812	3.33775009	58.51629
3	2	941603.05725	0.09087060	1.344925

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	2	941603.0572	0.00004825	0.005414

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	81.9727
Residual		804.85

#### Fit Statistics

-2 Res Log Likelihood	941603
AIC (Smaller is Better)	941607
AICC (Smaller is Better)	941607
BIC (Smaller is Better)	941625
CAIC (Smaller is Better)	941627
HQIC (Smaller is Better)	941613

#### Solution for Fixed Effects

Effect	tspl1	tspl2	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				-9.4270	0.4792	97932	-19.67	<.0001
predspline			1	0	.	.	.	.
predspline			2	0.02674	0.02530	97932	1.06	0.2904
predspline			3	0.004308	0.001281	97932	3.36	0.0008
tspl1	1			0	.	.	.	.
tspl1	2			0.7318	0.03530	97932	20.73	<.0001
tspl1	3			-0.1284	0.005563	97932	-23.08	<.0001
tspl2		1		0	.	.	.	.
tspl2		2		-0.1895	0.03816	97932	-4.96	<.0001
tspl2		3		0.05489	0.004275	97932	12.84	<.0001

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	97932	155.91	77.95	<.0001	<.0001

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	3	0 1 2
idnr	43377	210000196120 210000486129 210000556116 210000598144 210000801144 210000905111 210000954103 210001534105 210001535114 210001682118 210001739105 210002063142 210002204152 210002388128 210002390143 210002429149 210002448146 210002521130 210002999135 210003039107 ...

Number of Observations Read	98022
Number of Observations Used	88780

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	13
Columns in Z per Subject	1
Subjects (Blocks in V)	43377

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	854888.34746	.	5486.985
1	5	854182.23597	706.11149394	381.6759
2	2	854178.04902	4.18694936	69.63561
3	2	854177.89983	0.14919134	2.153148

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	2	854177.89968	0.00014390	0.013527

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	78.9431
Residual		812.60

#### Fit Statistics

-2 Res Log Likelihood	854178
AIC (Smaller is Better)	854182
AICC (Smaller is Better)	854182
BIC (Smaller is Better)	854199
CAIC (Smaller is Better)	854201
HQIC (Smaller is Better)	854187

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept					-4.9261	2.1539	88771	-2.29	0.0222
predspline				1	0	.	.	.	.
predspline				2	0.02228	0.02603	88771	0.86	0.3921
predspline				3	0.004259	0.001336	88771	3.19	0.0014
tspl1	1				0	.	.	.	.
tspl1	2				0.7472	0.03728	88771	20.04	<.0001
tspl1	3				-0.1316	0.005818	88771	-22.63	<.0001
tspl2		1			0	.	.	.	.
tspl2		2			-0.2170	0.04034	88771	-5.38	<.0001
tspl2		3			0.05838	0.004493	88771	12.99	<.0001
hbspl			1		0	.	.	.	.
hbspl			2		-0.02988	0.01518	88771	-1.97	0.0490
hbspl			3		-0.00017	0.000574	88771	-0.29	0.7688

**Now assessing with 6 hours pre-post-transfusion windows**

The HPMIXED Procedure

Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	88771	127.85	63.92	<.0001	<.0001

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	6	0 1 5 10 20 99
recipientsex	3	0 1 2
idnr	46258	210000196120 210000486129 210000556116 210000598144 210000801144 210000905111 210000909149 210000954103 210001534105 210001535114 210001682118 210001739105 210002063142 210002204152 210002388128 210002390143 210002429149 210002448146 210002521130 210002999135 ...

Number of Observations Read	97980
Number of Observations Used	97974

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	13
Columns in Z per Subject	1
Subjects (Blocks in V)	46258

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	942780.54222	.	5918.702
1	5	942046.74153	733.80068395	349.6657
2	2	942043.69292	3.04861808	53.88991

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	942043.61696	0.07595870	1.123685
4	2	942043.61692	0.00003324	0.00391

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	83.5049
Residual		804.76

#### Fit Statistics

-2 Res Log Likelihood	942044
AIC (Smaller is Better)	942048
AICC (Smaller is Better)	942048
BIC (Smaller is Better)	942065
CAIC (Smaller is Better)	942067
HQIC (Smaller is Better)	942053

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				-7.6019	0.3320	97964	-22.90	<.0001
predictorvalue			0	0	.	.	.	.
predictorvalue			1	-0.5221	0.2689	97964	-1.94	0.0521
predictorvalue			5	-0.6046	0.3223	97964	-1.88	0.0607
predictorvalue			10	-0.09970	0.3709	97964	-0.27	0.7881
predictorvalue			20	0.7578	0.8685	97964	0.87	0.3829
predictorvalue			99	0.7799	0.3090	97964	2.52	0.0116
tsp11	1			0	.	.	.	.
tsp11	2			0.7294	0.03532	97964	20.65	<.0001
tsp11	3			-0.1295	0.005565	97964	-23.27	<.0001
tsp12		1		0	.	.	.	.
tsp12		2		-0.1961	0.03819	97964	-5.14	<.0001
tsp12		3		0.05641	0.004275	97964	13.20	<.0001



**Now assessing with 6 hours pre-post-transfusion windows**

The HPMIXED Procedure

Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	5	97964	27.82	5.56	<.0001	<.0001

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	6	0 1 5 10 20 99
recipientsex	3	0 1 2
idnr	43396	210000196120 210000486129 210000556116 210000598144 210000801144 210000905111 210000954103 210001534105 210001535114 210001682118 210001739105 210002063142 210002204152 210002388128 210002390143 210002429149 210002448146 210002521130 210002999135 210003039107 ...

Number of Observations Read	97980
Number of Observations Used	88815

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	16
Columns in Z per Subject	1
Subjects (Blocks in V)	43396

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	855303.36348	.	5469.808
1	5	854604.18886	699.17461883	367.3337
2	2	854600.35272	3.83613419	64.32718

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	854600.2275	0.12522528	1.805815
4	2	854600.2274	0.00009940	0.009808

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	80.5961
Residual		812.33

#### Fit Statistics

-2 Res Log Likelihood	854600
AIC (Smaller is Better)	854604
AICC (Smaller is Better)	854604
BIC (Smaller is Better)	854622
CAIC (Smaller is Better)	854624
HQIC (Smaller is Better)	854610

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					-2.9071	2.1317	88803	-1.36
predictorvalue				0	0	.	.	.
predictorvalue				1	-0.5993	0.2713	88803	-2.21
predictorvalue				5	-0.7438	0.3254	88803	-2.29
predictorvalue				10	-0.2374	0.3752	88803	-0.63
predictorvalue				20	0.5335	0.8773	88803	0.61

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.1727
predictorvalue				0	.
predictorvalue				1	0.0272
predictorvalue				5	0.0223
predictorvalue				10	0.5268
predictorvalue				20	0.5431

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
predictorvalue				99	0.5380	0.3702	88803	1.45
tspl1	1				0	.	.	.
tspl1	2				0.7420	0.03729	88803	19.90
tspl1	3				-0.1325	0.005820	88803	-22.77
tspl2		1			0	.	.	.
tspl2		2			-0.2249	0.04036	88803	-5.57
tspl2		3			0.05981	0.004492	88803	13.32
hbspl			1		0	.	.	.
hbspl			2		-0.03076	0.01520	88803	-2.02
hbspl			3		-0.00020	0.000575	88803	-0.35

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
predictorvalue				99	0.1461
tspl1	1				.
tspl1	2				<.0001
tspl1	3				<.0001
tspl2		1			.
tspl2		2			<.0001
tspl2		3			<.0001
hbspl			1		.
hbspl			2		0.0430
hbspl			3		0.7248

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	5	88803	17.45	3.49	0.0037	0.0037

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	4	0 180 365 999
recipientsex	3	0 1 2
idnr	46258	210000196120 210000486129 210000556116 210000598144 210000801144 210000905111 210000909149 210000954103 210001534105 210001535114 210001682118 210001739105 210002063142 210002204152 210002388128 210002390143 210002429149 210002448146 210002521130 210002999135 ...

Number of Observations Read	97978
Number of Observations Used	97974

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	11
Columns in Z per Subject	1
Subjects (Blocks in V)	46258

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	942786.64074	.	5913.403
1	5	942055.1643	731.47644091	345.4247
2	2	942052.19875	2.96554970	52.62663

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	942052.12663	0.07212455	1.068653
4	2	942052.1266	0.00002991	0.003574

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	83.9393
Residual		804.47

#### Fit Statistics

-2 Res Log Likelihood	942052
AIC (Smaller is Better)	942056
AICC (Smaller is Better)	942056
BIC (Smaller is Better)	942074
CAIC (Smaller is Better)	942076
HQIC (Smaller is Better)	942062

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				-8.0494	0.2943	97966	-27.35	<.0001
predictorvalue			0	0	.	.	.	.
predictorvalue			180	0.3199	0.3145	97966	1.02	0.3091
predictorvalue			365	-0.3950	0.4160	97966	-0.95	0.3423
predictorvalue			999	0.8503	0.2121	97966	4.01	<.0001
tsp11	1			0	.	.	.	.
tsp11	2			0.7275	0.03531	97966	20.60	<.0001
tsp11	3			-0.1294	0.005565	97966	-23.25	<.0001
tsp12		1		0	.	.	.	.
tsp12		2		-0.1975	0.03818	97966	-5.17	<.0001
tsp12		3		0.05650	0.004275	97966	13.22	<.0001

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	3	97966	19.67	6.56	0.0002	0.0002

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	4	0 180 365 999
recipientsex	3	0 1 2
idnr	43396	210000196120 210000486129 210000556116 210000598144 210000801144 210000905111 210000954103 210001534105 210001535114 210001682118 210001739105 210002063142 210002204152 210002388128 210002390143 210002429149 210002448146 210002521130 210002999135 210003039107 ...

Number of Observations Read	97978
Number of Observations Used	88815

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	14
Columns in Z per Subject	1
Subjects (Blocks in V)	43396

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	855306.05347	.	5468.01
1	5	854607.94088	698.11259197	364.8066
2	2	854604.16523	3.77564220	63.44669

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	854604.04378	0.12145811	1.752738
4	2	854604.04368	0.00009338	0.009293

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	80.8280
Residual		812.16

#### Fit Statistics

-2 Res Log Likelihood	854604
AIC (Smaller is Better)	854608
AICC (Smaller is Better)	854608
BIC (Smaller is Better)	854625
CAIC (Smaller is Better)	854627
HQIC (Smaller is Better)	854614

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					-3.3112	2.1165	88805	-1.56
predictorvalue				0	0	.	.	.
predictorvalue				180	0.4372	0.3171	88805	1.38
predictorvalue				365	-0.2250	0.4196	88805	-0.54
predictorvalue				999	0.8046	0.2288	88805	3.52
tspl1	1				0	.	.	.

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.1177
predictorvalue				0	.
predictorvalue				180	0.1680
predictorvalue				365	0.5919
predictorvalue				999	0.0004
tspl1	1				.



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
tspl1	2				0.7413	0.03728	88805	19.88
tspl1	3				-0.1324	0.005820	88805	-22.76
tspl2		1			0	.	.	.
tspl2		2			-0.2247	0.04035	88805	-5.57
tspl2		3			0.05987	0.004492	88805	13.33
hbspl			1		0	.	.	.
hbspl			2		-0.03224	0.01521	88805	-2.12
hbspl			3		-0.00019	0.000574	88805	-0.33

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
tspl1	2				<.0001
tspl1	3				<.0001
tspl2		1			.
tspl2		2			<.0001
tspl2		3			<.0001
hbspl			1		.
hbspl			2		0.0340
hbspl			3		0.7397

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	3	88805	14.38	4.79	0.0024	0.0024

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	2	1 2
idnr	845	210004558102 210010801153 210019139111 210027518117 210044796127 210053300137 210060044120 210062976152 210064914109 210066618114 210076594115 210080070111 210091815112 210094177125 210100198145 210105856148 210112021118 210112087137 210122440146 210138083126 ...

Number of Observations Read	940
Number of Observations Used	938

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z per Subject	1
Subjects (Blocks in V)	845

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	4636.2696307	.	49.38778
1	2	4629.6797285	6.58990224	10.98651
2	4	4628.6170509	1.06267762	3.554344

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	4628.5773088	0.03974209	1.754782
4	2	4628.5623248	0.01498398	0.103738
5	2	4628.5622745	0.00005029	0.003569
6	3	4628.5622744	0.00000006	6.631E-6

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	1.1651
Residual		6.7616

#### Fit Statistics

-2 Res Log Likelihood	4628.56227
AIC (Smaller is Better)	4632.56227
AICC (Smaller is Better)	4632.57519
BIC (Smaller is Better)	4642.04095
CAIC (Smaller is Better)	4644.04095
HQIC (Smaller is Better)	4636.19412

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				0.05162	0.2630	932	0.20	0.8444
predictorvalue			1	0	.	.	.	.
predictorvalue			2	-0.02278	0.1891	932	-0.12	0.9041
tsp11	1			0	.	.	.	.
tsp11	2			0.03863	0.03766	932	1.03	0.3053
tsp11	3			-0.01423	0.006254	932	-2.28	0.0231
tsp12		1		0	.	.	.	.
tsp12		2		0.06758	0.03596	932	1.88	0.0605
tsp12		3		-0.00968	0.005333	932	-1.82	0.0698

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	932	0.01	0.01	0.9041	0.9041

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	2	1 2
idnr	845	210004558102 210010801153 210019139111 210027518117 210044796127 210053300137 210060044120 210062976152 210064914109 210066618114 210076594115 210080070111 210091815112 210094177125 210100198145 210105856148 210112021118 210112087137 210122440146 210138083126 ...

Number of Observations Read	940
Number of Observations Used	936

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	12
Columns in Z per Subject	1
Subjects (Blocks in V)	845

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	4644.3742907	.	50.19913
1	2	4637.4016954	6.97259528	10.24308
2	4	4636.462239	0.93945638	3.5601

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	4636.4211354	0.04110357	1.728177
4	2	4636.40615	0.01498543	0.111041
5	2	4636.4060908	0.00005925	0.004124
6	3	4636.4060907	0.00000008	8.951E-6

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	1.1127
Residual		6.8217

#### Fit Statistics

-2 Res Log Likelihood	4636.40609
AIC (Smaller is Better)	4640.40609
AICC (Smaller is Better)	4640.41906
BIC (Smaller is Better)	4649.88476
CAIC (Smaller is Better)	4651.88476
HQIC (Smaller is Better)	4644.03794

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					1.5981	2.1231	928	0.75
predictorvalue				1	0	.	.	.
predictorvalue				2	-0.02241	0.1895	928	-0.12
tspl1	1				0	.	.	.
tspl1	2				0.04017	0.03772	928	1.07

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.4518
predictorvalue				1	.
predictorvalue				2	0.9059
tspl1	1				.
tspl1	2				0.2871

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
tspl1	3				-0.01440	0.006259	928	-2.30
tspl2		1			0	.	.	.
tspl2		2			0.06614	0.03603	928	1.84
tspl2		3			-0.00922	0.005346	928	-1.72
hbspl			1		0	.	.	.
hbspl			2		-0.01183	0.01566	928	-0.76
hbspl			3		0.002296	0.001456	928	1.58

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
tspl1	3				0.0216
tspl2		1			.
tspl2		2			0.0667
tspl2		3			0.0851
hbspl			1		.
hbspl			2		0.4502
hbspl			3		0.1153

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	928	0.01	0.01	0.9059	0.9059

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	0 1
recipientsex	3	0 1 2
idnr	1873	210004558102 210010801153 210012432150 210019139111 210021584149 210026050112 210027518117 210029715130 210032279130 210044796127 210053300137 210055237145 210060044120 210062976152 210063527113 210064914109 210066618114 210068927151 210075511106 210075578130 ...

Number of Observations Read	2344
Number of Observations Used	2342

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z per Subject	1
Subjects (Blocks in V)	1873

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	11600.022975	.	120.2753
1	3	11590.504561	9.51841335	22.12751
2	2	11590.113305	0.39125574	2.341176

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	11590.109073	0.00423259	0.086114
4	2	11590.109067	0.00000571	0.000286

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	1.7020
Residual		6.5292

#### Fit Statistics

-2 Res Log Likelihood	11590
AIC (Smaller is Better)	11594
AICC (Smaller is Better)	11594
BIC (Smaller is Better)	11605
CAIC (Smaller is Better)	11607
HQIC (Smaller is Better)	11598

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				0.3389	0.1527	2336	2.22	0.0266
predictorvalue			0	0	.	.	.	.
predictorvalue			1	-0.1686	0.2412	2336	-0.70	0.4848
tsp11	1			0	.	.	.	.
tsp11	2			0.01793	0.02384	2336	0.75	0.4521
tsp11	3			-0.00957	0.004248	2336	-2.25	0.0244
tsp12		1		0	.	.	.	.
tsp12		2		0.000878	0.02324	2336	0.04	0.9699
tsp12		3		-0.00198	0.003451	2336	-0.57	0.5662

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	2336	0.49	0.49	0.4847	0.4848



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	0 1
recipientsex	3	0 1 2
idnr	1757	210004558102 210010801153 210012432150 210019139111 210021584149 210026050112 210027518117 210029715130 210032279130 210044796127 210053300137 210055237145 210060044120 210062976152 210063527113 210064914109 210066618114 210068927151 210075511106 210075578130 ...

Number of Observations Read	2344
Number of Observations Used	2185

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	12
Columns in Z per Subject	1
Subjects (Blocks in V)	1757

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	10691.248722	.	120.2887
1	3	10680.715066	10.53365595	20.05212
2	2	10680.350617	0.36444850	2.619028

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	10680.344623	0.00599374	0.116213
4	2	10680.344612	0.00001174	0.000568

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	1.4432
Residual		6.2070

#### Fit Statistics

-2 Res Log Likelihood	10680
AIC (Smaller is Better)	10684
AICC (Smaller is Better)	10684
BIC (Smaller is Better)	10695
CAIC (Smaller is Better)	10697
HQIC (Smaller is Better)	10688

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					-2.3611	1.6950	2177	-1.39
predictorvalue				0	0	.	.	.
predictorvalue				1	-0.1627	0.2337	2177	-0.70
tspl1	1				0	.	.	.
tspl1	2				0.01586	0.02386	2177	0.66
tspl1	3				-0.00938	0.004282	2177	-2.19

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.1638
predictorvalue				0	.
predictorvalue				1	0.4864
tspl1	1				.
tspl1	2				0.5062
tspl1	3				0.0286

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
tspl2		1			0	.	.	.
tspl2		2			-0.00159	0.02311	2177	-0.07
tspl2		3			-0.00331	0.003440	2177	-0.96
hbspl			1		0	.	.	.
hbspl			2		0.02029	0.01251	2177	1.62
hbspl			3		-0.00062	0.000350	2177	-1.79

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
tspl2		1			.
tspl2		2			0.9450
tspl2		3			0.3356
hbspl			1		.
hbspl			2		0.1050
hbspl			3		0.0741

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	2177	0.48	0.48	0.4863	0.4864

# Now assessing with 6 hours pre-post-transfusion windows

## The HPMIXED Procedure

### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

### Class Level Information

Class	Levels	Values
recipientsex	3	0 1 2
idnr	1679	210004558102 210010801153 210012432150 210019139111 210021584149 210026050112 210027518117 210029715130 210032279130 210044796127 210053300137 210055237145 210060044120 210062976152 210063527113 210064914109 210066618114 210068927151 210075511106 210075578130 ...

Number of Observations Read	2125
Number of Observations Used	2063

### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	10
Columns in Z per Subject	1
Subjects (Blocks in V)	1679

### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	10219.995605	.	116.754
1	3	10210.266244	9.72936082	22.07384
2	2	10209.817168	0.44907631	3.209673
3	2	10209.808101	0.00906698	0.179938

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	2	10209.808073	0.00002832	0.001204

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	1.4799
Residual		6.6327

#### Fit Statistics

-2 Res Log Likelihood	10210
AIC (Smaller is Better)	10214
AICC (Smaller is Better)	10214
BIC (Smaller is Better)	10225
CAIC (Smaller is Better)	10227
HQIC (Smaller is Better)	10218

#### Solution for Fixed Effects

Effect	tspl1	tspl2	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				0.5451	0.3417	2056	1.60	0.1108
predspline			1	0	.	.	.	.
predspline			2	-0.00676	0.008352	2056	-0.81	0.4187
predspline			3	7.642E-6	0.000353	2056	0.02	0.9827
tspl1	1			0	.	.	.	.
tspl1	2			0.04185	0.02531	2056	1.65	0.0984
tspl1	3			-0.01269	0.004519	2056	-2.81	0.0050
tspl2		1		0	.	.	.	.
tspl2		2		0.006846	0.02471	2056	0.28	0.7818
tspl2		3		-0.00246	0.003660	2056	-0.67	0.5009

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	2056	2.95	1.48	0.2283	0.2285

# Now assessing with 6 hours pre-post-transfusion windows

## The HPMIXED Procedure

### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

### Class Level Information

Class	Levels	Values
recipientsex	3	0 1 2
idnr	1594	210004558102 210010801153 210012432150 210019139111 210021584149 210026050112 210027518117 210029715130 210032279130 210044796127 210053300137 210055237145 210060044120 210062976152 210063527113 210064914109 210066618114 210068927151 210075511106 210075578130 ...

Number of Observations Read	2125
Number of Observations Used	1948

### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	13
Columns in Z per Subject	1
Subjects (Blocks in V)	1594

### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	9473.6010728	.	120.1445
1	3	9462.3309302	11.27014267	19.64135
2	2	9461.9242119	0.40671823	3.740933
3	2	9461.9101355	0.01407643	0.269459

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	2	9461.9100633	0.00007226	0.002959
5	2	9461.9100632	0.00000001	2.255E-6

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	1.1581
Residual		6.1394

#### Fit Statistics

-2 Res Log Likelihood	9461.91006
AIC (Smaller is Better)	9465.91006
AICC (Smaller is Better)	9465.91626
BIC (Smaller is Better)	9476.65807
CAIC (Smaller is Better)	9478.65807
HQIC (Smaller is Better)	9469.90191

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept					-1.6710	1.8037	1939	-0.93	0.3543
predspline				1	0	.	.	.	.
predspline				2	-0.00300	0.008042	1939	-0.37	0.7094
predspline				3	-0.00033	0.000348	1939	-0.95	0.3448
tspl1	1				0	.	.	.	.
tspl1	2				0.04261	0.02485	1939	1.71	0.0865
tspl1	3				-0.01291	0.004496	1939	-2.87	0.0041
tspl2		1			0	.	.	.	.
tspl2		2			0.003414	0.02409	1939	0.14	0.8873
tspl2		3			-0.00380	0.003554	1939	-1.07	0.2847
hbspl			1		0	.	.	.	.
hbspl			2		0.01604	0.01317	1939	1.22	0.2236
hbspl			3		-0.00049	0.000370	1939	-1.33	0.1834

**Now assessing with 6 hours pre-post-transfusion windows**

The HPMIXED Procedure

Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	1939	7.50	3.75	0.0235	0.0237



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	3	0 1 2
idnr	1757	210004558102 210010801153 210012432150 210019139111 210021584149 210026050112 210027518117 210029715130 210032279130 210044796127 210053300137 210055237145 210060044120 210062976152 210063527113 210064914109 210066618114 210068927151 210075511106 210075578130 ...

Number of Observations Read	2272
Number of Observations Used	2185

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	10
Columns in Z per Subject	1
Subjects (Blocks in V)	1757

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	10690.574594	.	119.8749
1	3	10680.128752	10.44584210	20.06848
2	2	10679.765001	0.36375104	2.585336
3	2	10679.75918	0.00582113	0.113092

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	2	10679.759169	0.00001109	0.000538

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	1.4509
Residual		6.1981

#### Fit Statistics

-2 Res Log Likelihood	10680
AIC (Smaller is Better)	10684
AICC (Smaller is Better)	10684
BIC (Smaller is Better)	10695
CAIC (Smaller is Better)	10697
HQIC (Smaller is Better)	10688

#### Solution for Fixed Effects

Effect	tspl1	tspl2	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				-2.3578	1.6947	2178	-1.39	0.1643
predspline			1	0	.	.	.	.
predspline			2	0.02017	0.01251	2178	1.61	0.1069
predspline			3	-0.00062	0.000350	2178	-1.78	0.0746
tspl1	1			0	.	.	.	.
tspl1	2			0.01593	0.02385	2178	0.67	0.5043
tspl1	3			-0.00944	0.004281	2178	-2.20	0.0276
tspl2		1		0	.	.	.	.
tspl2		2		-0.00109	0.02310	2178	-0.05	0.9624
tspl2		3		-0.00331	0.003439	2178	-0.96	0.3365

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	2178	3.20	1.60	0.2023	0.2025

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	3	0 1 2
idnr	1873	210004558102 210010801153 210012432150 210019139111 210021584149 210026050112 210027518117 210029715130 210032279130 210044796127 210053300137 210055237145 210060044120 210062976152 210063527113 210064914109 210066618114 210068927151 210075511106 210075578130 ...

Number of Observations Read	2344
Number of Observations Used	2342

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z per Subject	1
Subjects (Blocks in V)	1873

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	11601.361185	.	119.8827
1	3	11591.93263	9.42855518	22.16659
2	2	11591.541879	0.39075076	2.308589

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	11591.537782	0.00409681	0.083683
4	2	11591.537777	0.00000537	0.00027

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	1.7094
Residual		6.5225

#### Fit Statistics

-2 Res Log Likelihood	11592
AIC (Smaller is Better)	11596
AICC (Smaller is Better)	11596
BIC (Smaller is Better)	11607
CAIC (Smaller is Better)	11609
HQIC (Smaller is Better)	11600

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				0.2840	0.1632	2336	1.74	0.0820
predictorvalue			1	0	.	.	.	.
predictorvalue			2	0.08256	0.1179	2336	0.70	0.4839
tsp11	1			0	.	.	.	.
tsp11	2			0.01770	0.02384	2336	0.74	0.4578
tsp11	3			-0.00962	0.004248	2336	-2.27	0.0236
tsp12		1		0	.	.	.	.
tsp12		2		0.001836	0.02324	2336	0.08	0.9371
tsp12		3		-0.00200	0.003451	2336	-0.58	0.5621

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	2336	0.49	0.49	0.4839	0.4839

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	3	0 1 2
idnr	1757	210004558102 210010801153 210012432150 210019139111 210021584149 210026050112 210027518117 210029715130 210032279130 210044796127 210053300137 210055237145 210060044120 210062976152 210063527113 210064914109 210066618114 210068927151 210075511106 210075578130 ...

Number of Observations Read	2344
Number of Observations Used	2185

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	12
Columns in Z per Subject	1
Subjects (Blocks in V)	1757

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	10691.976493	.	119.9499
1	3	10681.539964	10.43652889	20.14698
2	2	10681.17419	0.36577491	2.589492

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	10681.168364	0.00582578	0.113399
4	2	10681.168353	0.00001112	0.000539

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	1.4498
Residual		6.1999

#### Fit Statistics

-2 Res Log Likelihood	10681
AIC (Smaller is Better)	10685
AICC (Smaller is Better)	10685
BIC (Smaller is Better)	10696
CAIC (Smaller is Better)	10698
HQIC (Smaller is Better)	10689

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					-2.7437	1.7502	2177	-1.57
predictorvalue				1	0	.	.	.
predictorvalue				2	0.1179	0.1335	2177	0.88
tspl1	1				0	.	.	.
tspl1	2				0.01575	0.02385	2177	0.66
tspl1	3				-0.00950	0.004282	2177	-2.22

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.1171
predictorvalue				1	.
predictorvalue				2	0.3770
tspl1	1				.
tspl1	2				0.5092
tspl1	3				0.0266

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
tspl2		1			0	.	.	.
tspl2		2			-0.00051	0.02311	2177	-0.02
tspl2		3			-0.00334	0.003440	2177	-0.97
hbspl			1		0	.	.	.
hbspl			2		0.02243	0.01277	2177	1.76
hbspl			3		-0.00063	0.000350	2177	-1.79

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
tspl2		1			.
tspl2		2			0.9824
tspl2		3			0.3320
hbspl			1		.
hbspl			2		0.0791
hbspl			3		0.0735

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	2177	0.78	0.78	0.3769	0.3770

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	3	0 1 2
idnr	1873	210004558102 210010801153 210012432150 210019139111 210021584149 210026050112 210027518117 210029715130 210032279130 210044796127 210053300137 210055237145 210060044120 210062976152 210063527113 210064914109 210066618114 210068927151 210075511106 210075578130 ...

Number of Observations Read	2424
Number of Observations Used	2341

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	10
Columns in Z per Subject	1
Subjects (Blocks in V)	1873

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	11616.30384	.	119.7406
1	3	11606.887903	9.41593721	22.15837
2	2	11606.496748	0.39115441	2.317055
3	2	11606.492614	0.00413387	0.084353



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	2	11606.492609	0.00000546	0.000274

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	1.7112
Residual		6.5286

#### Fit Statistics

-2 Res Log Likelihood	11606
AIC (Smaller is Better)	11610
AICC (Smaller is Better)	11610
BIC (Smaller is Better)	11622
CAIC (Smaller is Better)	11624
HQIC (Smaller is Better)	11615

#### Solution for Fixed Effects

Effect	tspl1	tspl2	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				0.2324	0.2814	2334	0.83	0.4088
predspline			1	0	.	.	.	.
predspline			2	0.006784	0.01479	2334	0.46	0.6464
predspline			3	-0.00038	0.000804	2334	-0.48	0.6322
tspl1	1			0	.	.	.	.
tspl1	2			0.01843	0.02389	2334	0.77	0.4406
tspl1	3			-0.00965	0.004253	2334	-2.27	0.0233
tspl2		1		0	.	.	.	.
tspl2		2		0.001578	0.02337	2334	0.07	0.9462
tspl2		3		-0.00195	0.003460	2334	-0.56	0.5727

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	2334	0.23	0.12	0.8913	0.8913

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	3	0 1 2
idnr	1757	210004558102 210010801153 210012432150 210019139111 210021584149 210026050112 210027518117 210029715130 210032279130 210044796127 210053300137 210055237145 210060044120 210062976152 210063527113 210064914109 210066618114 210068927151 210075511106 210075578130 ...

Number of Observations Read	2424
Number of Observations Used	2184

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	13
Columns in Z per Subject	1
Subjects (Blocks in V)	1757

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	10707.656856	.	119.791
1	3	10697.219874	10.43698190	20.08951
2	2	10696.854682	0.36519132	2.603633
3	2	10696.848769	0.00591361	0.114819

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	2	10696.848757	0.00001145	0.000554

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	1.4513
Residual		6.2077

#### Fit Statistics

-2 Res Log Likelihood	10697
AIC (Smaller is Better)	10701
AICC (Smaller is Better)	10701
BIC (Smaller is Better)	10712
CAIC (Smaller is Better)	10714
HQIC (Smaller is Better)	10705

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept					-2.4317	1.7093	2175	-1.42	0.1550
predspline				1	0	.	.	.	.
predspline				2	0.005163	0.01453	2175	0.36	0.7223
predspline				3	-0.00025	0.000799	2175	-0.31	0.7564
tspl1	1				0	.	.	.	.
tspl1	2				0.01642	0.02391	2175	0.69	0.4922
tspl1	3				-0.00948	0.004286	2175	-2.21	0.0270
tspl2		1			0	.	.	.	.
tspl2		2			-0.00061	0.02323	2175	-0.03	0.9791
tspl2		3			-0.00332	0.003448	2175	-0.96	0.3361
hbspl			1		0	.	.	.	.
hbspl			2		0.02011	0.01251	2175	1.61	0.1082
hbspl			3		-0.00062	0.000350	2175	-1.78	0.0753

Now assessing with 6 hours pre-post-transfusion windows

The HPMIXED Procedure						
Type III Tests of Fixed Effects						
Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	2175	0.13	0.06	0.9373	0.9373

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	6	0 1 5 10 20 99
recipientsex	3	0 1 2
idnr	1873	210004558102 210010801153 210012432150 210019139111 210021584149 210026050112 210027518117 210029715130 210032279130 210044796127 210053300137 210055237145 210060044120 210062976152 210063527113 210064914109 210066618114 210068927151 210075511106 210075578130 ...

Number of Observations Read	2348
Number of Observations Used	2342

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	13
Columns in Z per Subject	1
Subjects (Blocks in V)	1873

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	11599.162559	.	118.6833
1	3	11589.86408	9.29847959	21.83684
2	2	11589.484313	0.37976688	2.212231

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	11589.480542	0.00377106	0.077277
4	2	11589.480537	0.00000459	0.000234

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	1.7265
Residual		6.5020

#### Fit Statistics

-2 Res Log Likelihood	11589
AIC (Smaller is Better)	11593
AICC (Smaller is Better)	11593
BIC (Smaller is Better)	11605
CAIC (Smaller is Better)	11607
HQIC (Smaller is Better)	11598

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				0.05520	0.5870	2332	0.09	0.9251
predictorvalue			0	0.2349	0.5830	2332	0.40	0.6870
predictorvalue			1	0.3267	0.5775	2332	0.57	0.5717
predictorvalue			5	-0.02387	0.5892	2332	-0.04	0.9677
predictorvalue			10	0.4452	0.6048	2332	0.74	0.4617
predictorvalue			20	0	.	.	.	.
predictorvalue			99	0.4047	0.5880	2332	0.69	0.4914
tsp11	1			0	.	.	.	.
tsp11	2			0.01771	0.02384	2332	0.74	0.4577
tsp11	3			-0.00935	0.004251	2332	-2.20	0.0280
tsp12		1		0	.	.	.	.
tsp12		2		0.000520	0.02325	2332	0.02	0.9822
tsp12		3		-0.00184	0.003455	2332	-0.53	0.5940

**Now assessing with 6 hours pre-post-transfusion windows**

The HPMIXED Procedure

## Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	5	2332	5.96	1.19	0.3101	0.3105

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	6	0 1 5 10 20 99
recipientsex	3	0 1 2
idnr	1757	210004558102 210010801153 210012432150 210019139111 210021584149 210026050112 210027518117 210029715130 210032279130 210044796127 210053300137 210055237145 210060044120 210062976152 210063527113 210064914109 210066618114 210068927151 210075511106 210075578130 ...

Number of Observations Read	2348
Number of Observations Used	2185

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	16
Columns in Z per Subject	1
Subjects (Blocks in V)	1757

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	10691.171481	.	119.1106
1	3	10680.809024	10.36245745	19.88675
2	2	10680.45139	0.35763352	2.516824



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	10680.445864	0.00552648	0.107582
4	2	10680.445854	0.00001005	0.000492

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	1.4604
Residual		6.1893

#### Fit Statistics

-2 Res Log Likelihood	10680
AIC (Smaller is Better)	10684
AICC (Smaller is Better)	10684
BIC (Smaller is Better)	10695
CAIC (Smaller is Better)	10697
HQIC (Smaller is Better)	10688

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					-2.6216	1.7979	2173	-1.46
predictorvalue				0	0.2546	0.5636	2173	0.45
predictorvalue				1	0.3415	0.5580	2173	0.61
predictorvalue				5	0.01625	0.5694	2173	0.03
predictorvalue				10	0.4693	0.5843	2173	0.80
predictorvalue				20	0	.	.	.

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.1449
predictorvalue				0	0.6514
predictorvalue				1	0.5406
predictorvalue				5	0.9772
predictorvalue				10	0.4219
predictorvalue				20	.

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
predictorvalue				99	0.3571	0.5794	2173	0.62
tspl1	1				0	.	.	.
tspl1	2				0.01558	0.02388	2173	0.65
tspl1	3				-0.00916	0.004288	2173	-2.14
tspl2		1			0	.	.	.
tspl2		2			-0.00232	0.02314	2173	-0.10
tspl2		3			-0.00311	0.003446	2173	-0.90
hbspl			1		0	.	.	.
hbspl			2		0.02009	0.01253	2173	1.60
hbspl			3		-0.00062	0.000350	2173	-1.77

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
predictorvalue				99	0.5377
tspl1	1				.
tspl1	2				0.5142
tspl1	3				0.0327
tspl2		1			.
tspl2		2			0.9201
tspl2		3			0.3668
hbspl			1		.
hbspl			2		0.1090
hbspl			3		0.0773

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	5	2173	5.07	1.01	0.4079	0.4082

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	4	0 180 365 999
recipientsex	3	0 1 2
idnr	1873	210004558102 210010801153 210012432150 210019139111 210021584149 210026050112 210027518117 210029715130 210032279130 210044796127 210053300137 210055237145 210060044120 210062976152 210063527113 210064914109 210066618114 210068927151 210075511106 210075578130 ...

Number of Observations Read	2346
Number of Observations Used	2342

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	11
Columns in Z per Subject	1
Subjects (Blocks in V)	1873

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	11596.016873	.	119.4093
1	3	11586.609598	9.40727541	21.94008
2	2	11586.225278	0.38431976	2.270234

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	11586.221299	0.00397919	0.081217
4	2	11586.221294	0.00000508	0.000257

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	1.7120
Residual		6.5013

#### Fit Statistics

-2 Res Log Likelihood	11586
AIC (Smaller is Better)	11590
AICC (Smaller is Better)	11590
BIC (Smaller is Better)	11601
CAIC (Smaller is Better)	11603
HQIC (Smaller is Better)	11594

#### Solution for Fixed Effects

Effect	tspl1	tspl2	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				0.2016	0.1641	2334	1.23	0.2195
predictorvalue			0	0	.	.	.	.
predictorvalue			180	0.5448	0.1962	2334	2.78	0.0055
predictorvalue			365	0.1765	0.2714	2334	0.65	0.5157
predictorvalue			999	0.1662	0.1298	2334	1.28	0.2005
tspl1	1			0	.	.	.	.
tspl1	2			0.01850	0.02382	2334	0.78	0.4374
tspl1	3			-0.00982	0.004243	2334	-2.32	0.0207
tspl2		1		0	.	.	.	.
tspl2		2		-0.00116	0.02324	2334	-0.05	0.9604
tspl2		3		-0.00168	0.003451	2334	-0.49	0.6271

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	3	2334	7.96	2.65	0.0468	0.0471

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	4	0 180 365 999
recipientsex	3	0 1 2
idnr	1757	210004558102 210010801153 210012432150 210019139111 210021584149 210026050112 210027518117 210029715130 210032279130 210044796127 210053300137 210055237145 210060044120 210062976152 210063527113 210064914109 210066618114 210068927151 210075511106 210075578130 ...

Number of Observations Read	2346
Number of Observations Used	2185

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	14
Columns in Z per Subject	1
Subjects (Blocks in V)	1757

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	10686.787342	.	119.5511
1	3	10676.335976	10.45136536	19.87064
2	2	10675.977669	0.35830765	2.553892

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	10675.971959	0.00570936	0.110806
4	2	10675.971949	0.00001070	0.000522

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	1.4503
Residual		6.1799

#### Fit Statistics

-2 Res Log Likelihood	10676
AIC (Smaller is Better)	10680
AICC (Smaller is Better)	10680
BIC (Smaller is Better)	10691
CAIC (Smaller is Better)	10693
HQIC (Smaller is Better)	10684

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					-2.2755	1.6935	2175	-1.34
predictorvalue				0	0	.	.	.
predictorvalue				180	0.5529	0.1903	2175	2.91
predictorvalue				365	0.1059	0.2631	2175	0.40
predictorvalue				999	0.1212	0.1323	2175	0.92
tspl1	1				0	.	.	.

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.1792
predictorvalue				0	.
predictorvalue				180	0.0037
predictorvalue				365	0.6875
predictorvalue				999	0.3598
tspl1	1				.

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
tspl1	2				0.01680	0.02384	2175	0.70
tspl1	3				-0.00965	0.004277	2175	-2.26
tspl2		1			0	.	.	.
tspl2		2			-0.00405	0.02309	2175	-0.18
tspl2		3			-0.00294	0.003438	2175	-0.86
hbspl			1		0	.	.	.
hbspl			2		0.01883	0.01250	2175	1.51
hbspl			3		-0.00060	0.000349	2175	-1.72

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
tspl1	2				0.4810
tspl1	3				0.0242
tspl2		1			.
tspl2		2			0.8609
tspl2		3			0.3921
hbspl			1		.
hbspl			2		0.1322
hbspl			3		0.0864

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	3	2175	8.45	2.82	0.0375	0.0378

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	2	1 2
idnr	409	210010383144 210055382136 210064564128 210076264137 210103138128 210110023152 210112733112 210123723103 210125958104 210184988105 210192973107 210201678131 210209806124 210225733128 210248189152 210276216123 210277848102 210287007147 210297962119 210300795128 ...

Number of Observations Read	444
Number of Observations Used	442

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z per Subject	1
Subjects (Blocks in V)	409

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	-266.6614186	.	9.362547
1	2	-269.103312	2.44189334	0.242815
2	2	-269.1048867	0.00157477	0.006185



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	-269.1048877	0.00000102	3.518E-6

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.02150
Residual		0.008218

#### Fit Statistics

-2 Res Log Likelihood	-269.10489
AIC (Smaller is Better)	-265.10489
AICC (Smaller is Better)	-265.07717
BIC (Smaller is Better)	-257.07746
CAIC (Smaller is Better)	-255.07746
HQIC (Smaller is Better)	-261.92872

#### Solution for Fixed Effects

Effect	tspl1	tspl2	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				0.01318	0.02139	436	0.62	0.5382
predictorvalue			1	-0.02718	0.01558	436	-1.74	0.0818
predictorvalue			2	0	.	.	.	.
tspl1	1			0	.	.	.	.
tspl1	2			-0.00271	0.003368	436	-0.80	0.4220
tspl1	3			0.000095	0.000624	436	0.15	0.8789
tspl2		1		0	.	.	.	.
tspl2		2		0.007673	0.003093	436	2.48	0.0135
tspl2		3		-0.00028	0.000432	436	-0.66	0.5102

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	436	3.04	3.04	0.0811	0.0818

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	2	1 2
idnr	408	210010383144 210055382136 210064564128 210076264137 210103138128 210110023152 210112733112 210123723103 210125958104 210184988105 210192973107 210201678131 210209806124 210225733128 210248189152 210276216123 210277848102 210287007147 210297962119 210300795128 ...

Number of Observations Read	444
Number of Observations Used	441

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	12
Columns in Z per Subject	1
Subjects (Blocks in V)	408

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	-238.2888179	.	9.023578
1	2	-240.6241944	2.33537648	0.143107
2	2	-240.6247532	0.00055882	0.004384

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	-240.6247537	0.00000053	1.216E-6

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.02149
Residual		0.008306

#### Fit Statistics

-2 Res Log Likelihood	-240.62475
AIC (Smaller is Better)	-236.62475
AICC (Smaller is Better)	-236.59685
BIC (Smaller is Better)	-228.60222
CAIC (Smaller is Better)	-226.60222
HQIC (Smaller is Better)	-233.45021

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					-0.2122	0.1861	433	-1.14
predictorvalue				1	-0.02675	0.01564	433	-1.71
predictorvalue				2	0	.	.	.
tspl1	1				0	.	.	.
tspl1	2				-0.00228	0.003404	433	-0.67
tspl1	3				0.000049	0.000628	433	0.08
tspl2		1			0	.	.	.

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.2548
predictorvalue				1	0.0879
predictorvalue				2	.
tspl1	1				.
tspl1	2				0.5041
tspl1	3				0.9376
tspl2		1			.

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
tspl2		2			0.007762	0.003118	433	2.49
tspl2		3			-0.00029	0.000435	433	-0.68
hbspl			1		0	.	.	.
hbspl			2		0.001657	0.001366	433	1.21
hbspl			3		-0.00009	0.000124	433	-0.75

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
tspl2		2			0.0132
tspl2		3			0.4996
hbspl			1		.
hbspl			2		0.2260
hbspl			3		0.4544

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	433	2.93	2.93	0.0872	0.0879

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	0 1
recipientsex	2	1 2
idnr	1097	210010383144 210011991106 210020564134 210020940136 210022587101 210023828152 210029825100 210030310106 210031481100 210038083119 210042741149 210045731125 210047496147 210055382136 210064564128 210076158126 210076264137 210085320105 210086773112 210091517149 ...

Number of Observations Read	1347
Number of Observations Used	1345

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z per Subject	1
Subjects (Blocks in V)	1097

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	-730.3535258	.	108.7651
1	2	-740.5144127	10.16088691	7.613177
2	4	-742.0544971	1.54008444	29.77204

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	-743.1744297	1.11993257	8.012434
4	2	-743.319414	0.14498431	2.327043
5	2	-743.3304541	0.01104007	0.397317
6	3	-743.3307672	0.00031316	0.013922
7	3	-743.3307676	0.00000039	0.000015

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.002382
Residual		0.02986

#### Fit Statistics

-2 Res Log Likelihood	-743.33077
AIC (Smaller is Better)	-739.33077
AICC (Smaller is Better)	-739.32179
BIC (Smaller is Better)	-729.33010
CAIC (Smaller is Better)	-727.33010
HQIC (Smaller is Better)	-735.54694

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				0.004005	0.01249	1339	0.32	0.7486
predictorvalue			0	0	.	.	.	.
predictorvalue			1	0.003936	0.02364	1339	0.17	0.8678
tsp11	1			0	.	.	.	.
tsp11	2			0.000034	0.001889	1339	0.02	0.9855
tsp11	3			-0.00003	0.000309	1339	-0.08	0.9331
tsp12		1		0	.	.	.	.
tsp12		2		0.004281	0.001852	1339	2.31	0.0210
tsp12		3		-0.00047	0.000260	1339	-1.81	0.0700

**Now assessing with 6 hours pre-post-transfusion windows**

The HPMIXED Procedure

Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	1339	0.03	0.03	0.8678	0.8678

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	0 1
recipientsex	2	1 2
idnr	996	210010383144 210011991106 210020564134 210020940136 210022587101 210023828152 210029825100 210030310106 210031481100 210038083119 210042741149 210045731125 210047496147 210055382136 210064564128 210076264137 210085320105 210086773112 210091517149 210097789141 ...

Number of Observations Read	1347
Number of Observations Used	1198

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	12
Columns in Z per Subject	1
Subjects (Blocks in V)	996

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	-594.4378999	.	102.2188
1	2	-605.6463276	11.20842767	2.603481
2	7	-607.0219862	1.37565863	4.175649



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	3	-607.0558961	0.03390994	1.752184
4	2	-607.0650218	0.00912571	0.175086
5	2	-607.0651081	0.00008628	0.009148
6	3	-607.0651084	0.00000023	0.000043

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.001767
Residual		0.03097

#### Fit Statistics

-2 Res Log Likelihood	-607.06511
AIC (Smaller is Better)	-603.06511
AICC (Smaller is Better)	-603.05500
BIC (Smaller is Better)	-593.25761
CAIC (Smaller is Better)	-591.25761
HQIC (Smaller is Better)	-599.33685

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					-0.08064	0.08831	1190	-0.91
predictorvalue				0	0	.	.	.
predictorvalue				1	0.003770	0.02389	1190	0.16
tspl1	1				0	.	.	.
tspl1	2				0.000331	0.002018	1190	0.16

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.3613
predictorvalue				0	.
predictorvalue				1	0.8746
tspl1	1				.
tspl1	2				0.8697

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
tspl1	3				-0.00020	0.000334	1190	-0.61
tspl2		1			0	.	.	.
tspl2		2			0.004677	0.001976	1190	2.37
tspl2		3			-0.00041	0.000278	1190	-1.47
hbspl			1		0	.	.	.
hbspl			2		0.000581	0.000627	1190	0.93
hbspl			3		-7.04E-7	0.000047	1190	-0.01

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
tspl1	3				0.5452
tspl2		1			.
tspl2		2			0.0181
tspl2		3			0.1425
hbspl			1		.
hbspl			2		0.3543
hbspl			3		0.9880

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	1190	0.02	0.02	0.8746	0.8746

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	2	1 2
idnr	976	210010383144 210011991106 210020564134 210020940136 210022587101 210023828152 210030310106 210031481100 210042741149 210045731125 210047496147 210055382136 210064564128 210076158126 210076264137 210085320105 210086773112 210097789141 210103138128 210110023152 ...

Number of Observations Read	1233
Number of Observations Used	1171

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	10
Columns in Z per Subject	1
Subjects (Blocks in V)	976

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	-679.5036736	.	99.63621
1	5	-689.5621856	10.05851199	12.28702
2	2	-689.7809191	0.21873355	4.19297
3	2	-689.8136197	0.03270058	0.561953

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	2	-689.8142629	0.00064317	0.03557
5	2	-689.8142655	0.00000262	0.000348

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.001785
Residual		0.02838

#### Fit Statistics

-2 Res Log Likelihood	-689.81427
AIC (Smaller is Better)	-685.81427
AICC (Smaller is Better)	-685.80393
BIC (Smaller is Better)	-676.04734
CAIC (Smaller is Better)	-674.04734
HQIC (Smaller is Better)	-682.09778

#### Solution for Fixed Effects

Effect	tspl1	tspl2	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				0.000882	0.02808	1164	0.03	0.9749
predspline			1	0	.	.	.	.
predspline			2	0.000300	0.000678	1164	0.44	0.6579
predspline			3	-0.00003	0.000028	1164	-1.12	0.2630
tspl1	1			0	.	.	.	.
tspl1	2			0.000727	0.001958	1164	0.37	0.7104
tspl1	3			-0.00008	0.000318	1164	-0.24	0.8088
tspl2		1		0	.	.	.	.
tspl2		2		0.003942	0.001905	1164	2.07	0.0387
tspl2		3		-0.00058	0.000269	1164	-2.17	0.0300

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	1164	2.82	1.41	0.2441	0.2445

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	2	1 2
idnr	906	210010383144 210011991106 210020564134 210020940136 210022587101 210023828152 210030310106 210031481100 210042741149 210045731125 210047496147 210055382136 210064564128 210076264137 210085320105 210086773112 210097789141 210103138128 210110023152 210112733112 ...

Number of Observations Read	1233
Number of Observations Used	1071

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	13
Columns in Z per Subject	1
Subjects (Blocks in V)	906

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	-606.8168259	.	92.64996
1	5	-616.0140211	9.19719520	12.77512
2	2	-616.2723237	0.25830258	4.79027
3	2	-616.3217328	0.04940911	0.826512

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	2	-616.3234193	0.00168649	0.080286
5	2	-616.3234357	0.00001647	0.001664
6	3	-616.3234357	0.00000001	4.908E-7

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.001439
Residual		0.02811

#### Fit Statistics

-2 Res Log Likelihood	-616.32344
AIC (Smaller is Better)	-612.32344
AICC (Smaller is Better)	-612.31210
BIC (Smaller is Better)	-602.70536
CAIC (Smaller is Better)	-600.70536
HQIC (Smaller is Better)	-608.65043

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept					-0.08079	0.09075	1062	-0.89	0.3736
predspline				1	0	.	.	.	.
predspline				2	0.000339	0.000687	1062	0.49	0.6219
predspline				3	-0.00004	0.000029	1062	-1.24	0.2147
tspl1	1				0	.	.	.	.
tspl1	2				0.000677	0.002022	1062	0.33	0.7378
tspl1	3				-0.00020	0.000331	1062	-0.62	0.5373
tspl2		1			0	.	.	.	.
tspl2		2			0.004320	0.001977	1062	2.19	0.0291
tspl2		3			-0.00053	0.000283	1062	-1.87	0.0624
hbspl			1		0	.	.	.	.
hbspl			2		0.000577	0.000632	1062	0.91	0.3617
hbspl			3		-0.00005	0.000047	1062	-0.99	0.3236

**Now assessing with 6 hours pre-post-transfusion windows**

The HPMIXED Procedure

Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	1062	3.31	1.65	0.1911	0.1916

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	2	1 2
idnr	996	210010383144 210011991106 210020564134 210020940136 210022587101 210023828152 210029825100 210030310106 210031481100 210038083119 210042741149 210045731125 210047496147 210055382136 210064564128 210076264137 210085320105 210086773112 210091517149 210097789141 ...

Number of Observations Read	1285
Number of Observations Used	1198

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	10
Columns in Z per Subject	1
Subjects (Blocks in V)	996

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	-600.0182114	.	102.3418
1	2	-611.2622609	11.24404951	2.587774
2	7	-612.6336516	1.37139069	3.891175
3	3	-612.6636898	0.03003820	1.610955



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	2	-612.6713898	0.00769996	0.151448
5	2	-612.6714545	0.00006470	0.007244
6	3	-612.6714546	0.00000015	0.00003

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.001760
Residual		0.03095

#### Fit Statistics

-2 Res Log Likelihood	-612.67145
AIC (Smaller is Better)	-608.67145
AICC (Smaller is Better)	-608.66135
BIC (Smaller is Better)	-598.86396
CAIC (Smaller is Better)	-596.86396
HQIC (Smaller is Better)	-604.94320

#### Solution for Fixed Effects

Effect	tspl1	tspl2	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				-0.08009	0.08821	1191	-0.91	0.3640
predspline			1	0	.	.	.	.
predspline			2	0.000579	0.000626	1191	0.92	0.3555
predspline			3	-6.22E-7	0.000047	1191	-0.01	0.9894
tspl1	1			0	.	.	.	.
tspl1	2			0.000319	0.002015	1191	0.16	0.8743
tspl1	3			-0.00020	0.000334	1191	-0.60	0.5482
tspl2		1		0	.	.	.	.
tspl2		2		0.004665	0.001974	1191	2.36	0.0183
tspl2		3		-0.00041	0.000278	1191	-1.47	0.1428

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	1191	1.69	0.84	0.4297	0.4300

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	2	1 2
idnr	1097	210010383144 210011991106 210020564134 210020940136 210022587101 210023828152 210029825100 210030310106 210031481100 210038083119 210042741149 210045731125 210047496147 210055382136 210064564128 210076158126 210076264137 210085320105 210086773112 210091517149 ...

Number of Observations Read	1347
Number of Observations Used	1345

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	9
Columns in Z per Subject	1
Subjects (Blocks in V)	1097

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	-729.2403455	.	108.5499
1	2	-739.2720268	10.03168134	7.734701
2	4	-740.7287769	1.45675007	31.61805

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	-742.1032055	1.37442861	4.386015
4	2	-742.1424194	0.03921390	1.143727
5	2	-742.1450589	0.00263950	0.084425
6	3	-742.145073	0.00001412	0.001385
7	3	-742.145073	0.00000000	3.383E-7

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.002404
Residual		0.02982

#### Fit Statistics

-2 Res Log Likelihood	-742.14507
AIC (Smaller is Better)	-738.14507
AICC (Smaller is Better)	-738.13609
BIC (Smaller is Better)	-728.14440
CAIC (Smaller is Better)	-726.14440
HQIC (Smaller is Better)	-734.36124

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				0.000202	0.01347	1339	0.02	0.9880
predictorvalue			1	0	.	.	.	.
predictorvalue			2	0.007574	0.009875	1339	0.77	0.4432
tsp11	1			0	.	.	.	.
tsp11	2			-2.29E-6	0.001887	1339	-0.00	0.9990
tsp11	3			-0.00001	0.000310	1339	-0.04	0.9707
tsp12		1		0	.	.	.	.
tsp12		2		0.004363	0.001854	1339	2.35	0.0188
tsp12		3		-0.00048	0.000260	1339	-1.84	0.0662

**Now assessing with 6 hours pre-post-transfusion windows**

The HPMIXED Procedure

## Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	1339	0.59	0.59	0.4431	0.4432

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	2	1 2
recipientsex	2	1 2
idnr	996	210010383144 210011991106 210020564134 210020940136 210022587101 210023828152 210029825100 210030310106 210031481100 210038083119 210042741149 210045731125 210047496147 210055382136 210064564128 210076264137 210085320105 210086773112 210091517149 210097789141 ...

Number of Observations Read	1347
Number of Observations Used	1198

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	12
Columns in Z per Subject	1
Subjects (Blocks in V)	996

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	-595.8679169	.	101.9367
1	2	-606.9523788	11.08446186	2.719089
2	7	-608.323523	1.37114422	6.327665

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	3	-608.3941697	0.07064666	2.70478
4	2	-608.4162888	0.02211912	0.387103
5	2	-608.4167065	0.00041771	0.032719
6	3	-608.4167095	0.00000296	0.000334

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.001793
Residual		0.03087

#### Fit Statistics

-2 Res Log Likelihood	-608.41671
AIC (Smaller is Better)	-604.41671
AICC (Smaller is Better)	-604.40660
BIC (Smaller is Better)	-594.60921
CAIC (Smaller is Better)	-592.60921
HQIC (Smaller is Better)	-600.68845

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					-0.1517	0.09803	1190	-1.55
predictorvalue				1	0	.	.	.
predictorvalue				2	0.01969	0.01178	1190	1.67
tspl1	1				0	.	.	.
tspl1	2				0.000396	0.002014	1190	0.20

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.1220
predictorvalue				1	.
predictorvalue				2	0.0950
tspl1	1				.
tspl1	2				0.8443

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
tspl1	3				-0.00019	0.000333	1190	-0.56
tspl2		1			0	.	.	.
tspl2		2			0.004798	0.001974	1190	2.43
tspl2		3			-0.00042	0.000278	1190	-1.51
hbspl			1		0	.	.	.
hbspl			2		0.001008	0.000677	1190	1.49
hbspl			3		-7.54E-6	0.000047	1190	-0.16

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
tspl1	3				0.5768
tspl2		1			.
tspl2		2			0.0152
tspl2		3			0.1325
hbspl			1		.
hbspl			2		0.1365
hbspl			3		0.8729

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	1	1190	2.79	2.79	0.0948	0.0950

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	2	1 2
idnr	1097	210010383144 210011991106 210020564134 210020940136 210022587101 210023828152 210029825100 210030310106 210031481100 210038083119 210042741149 210045731125 210047496147 210055382136 210064564128 210076158126 210076264137 210085320105 210086773112 210091517149 ...

Number of Observations Read	1428
Number of Observations Used	1345

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	10
Columns in Z per Subject	1
Subjects (Blocks in V)	1097

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	-706.2326551	.	108.7146
1	2	-716.4725499	10.23989482	7.640695
2	4	-717.9142082	1.44165825	30.48458
3	2	-719.1869798	1.27277163	5.362251



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	2	-719.2480064	0.06102658	1.443959
5	2	-719.2522899	0.00428353	0.141983
6	3	-719.2523304	0.00004050	0.003051
7	3	-719.2523304	0.00000002	7.501E-7

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.002377
Residual		0.02988

#### Fit Statistics

-2 Res Log Likelihood	-719.25233
AIC (Smaller is Better)	-715.25233
AICC (Smaller is Better)	-715.24334
BIC (Smaller is Better)	-705.25166
CAIC (Smaller is Better)	-703.25166
HQIC (Smaller is Better)	-711.46850

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				0.01410	0.03793	1338	0.37	0.7101
predspline			1	0	.	.	.	.
predspline			2	-0.00059	0.001962	1338	-0.30	0.7623
predspline			3	0.000031	0.000092	1338	0.33	0.7385
tsp11	1			0	.	.	.	.
tsp11	2			5.319E-6	0.001892	1338	0.00	0.9978
tsp11	3			-0.00002	0.000310	1338	-0.07	0.9424
tsp12		1		0	.	.	.	.
tsp12		2		0.004328	0.001860	1338	2.33	0.0201
tsp12		3		-0.00048	0.000260	1338	-1.83	0.0679

**Now assessing with 6 hours pre-post-transfusion windows**

The HPMIXED Procedure

Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	1338	0.11	0.06	0.9443	0.9443

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
recipientsex	2	1 2
idnr	996	210010383144 210011991106 210020564134 210020940136 210022587101 210023828152 210029825100 210030310106 210031481100 210038083119 210042741149 210045731125 210047496147 210055382136 210064564128 210076264137 210085320105 210086773112 210091517149 210097789141 ...

Number of Observations Read	1428
Number of Observations Used	1198

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	13
Columns in Z per Subject	1
Subjects (Blocks in V)	996

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	-570.5046155	.	102.4201
1	2	-581.9034762	11.39886074	2.534929
2	7	-583.2228931	1.31941685	3.332979
3	3	-583.2462643	0.02337124	1.322172

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
4	2	-583.2515193	0.00525502	0.111086
5	2	-583.2515549	0.00003554	0.004445
6	3	-583.2515549	0.00000006	0.000014

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.001729
Residual		0.03103

#### Fit Statistics

-2 Res Log Likelihood	-583.25155
AIC (Smaller is Better)	-579.25155
AICC (Smaller is Better)	-579.24144
BIC (Smaller is Better)	-569.44406
CAIC (Smaller is Better)	-567.44406
HQIC (Smaller is Better)	-575.52330

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predspline	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept					-0.06495	0.09478	1189	-0.69	0.4933
predspline				1	0	.	.	.	.
predspline				2	-0.00088	0.002070	1189	-0.43	0.6709
predspline				3	0.000036	0.000097	1189	0.37	0.7102
tspl1	1				0	.	.	.	.
tspl1	2				0.000343	0.002021	1189	0.17	0.8652
tspl1	3				-0.00020	0.000334	1189	-0.61	0.5422
tspl2		1			0	.	.	.	.
tspl2		2			0.004725	0.001986	1189	2.38	0.0175
tspl2		3			-0.00042	0.000279	1189	-1.49	0.1367
hbspl			1		0	.	.	.	.
hbspl			2		0.000589	0.000628	1189	0.94	0.3481
hbspl			3		-6.42E-7	0.000047	1189	-0.01	0.9891

Now assessing with 6 hours pre-post-transfusion windows

The HPMIXED Procedure						
Type III Tests of Fixed Effects						
Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predspline	2	1189	0.19	0.10	0.9073	0.9073

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	6	0 1 5 10 20 99
recipientsex	2	1 2
idnr	1097	210010383144 210011991106 210020564134 210020940136 210022587101 210023828152 210029825100 210030310106 210031481100 210038083119 210042741149 210045731125 210047496147 210055382136 210064564128 210076158126 210076264137 210085320105 210086773112 210091517149 ...

Number of Observations Read	1351
Number of Observations Used	1345

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	13
Columns in Z per Subject	1
Subjects (Blocks in V)	1097

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	-710.6655046	.	107.6108
1	2	-720.5079426	9.84243803	8.445567
2	4	-720.8903088	0.38236621	44.18426

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	4	-723.4386946	2.54838573	4.54928
4	2	-723.474263	0.03556845	1.10706
5	2	-723.4766272	0.00236419	0.057487
6	3	-723.4766337	0.00000651	0.000247
7	3	-723.4766337	0.00000000	8.975E-7

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.002472
Residual		0.02973

#### Fit Statistics

-2 Res Log Likelihood	-723.47663
AIC (Smaller is Better)	-719.47663
AICC (Smaller is Better)	-719.46762
BIC (Smaller is Better)	-709.47596
CAIC (Smaller is Better)	-707.47596
HQIC (Smaller is Better)	-715.69280

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				0.001949	0.01460	1335	0.13	0.8938
predictorvalue			0	0.01231	0.01456	1335	0.85	0.3979
predictorvalue			1	0	.	.	.	.
predictorvalue			5	0.01550	0.01421	1335	1.09	0.2755
predictorvalue			10	-0.02532	0.01853	1335	-1.37	0.1721
predictorvalue			20	-0.00127	0.04744	1335	-0.03	0.9786
predictorvalue			99	-0.00484	0.01373	1335	-0.35	0.7246
tsp11	1			0	.	.	.	.
tsp11	2			0.000229	0.001891	1335	0.12	0.9038
tsp11	3			-0.00005	0.000310	1335	-0.16	0.8699
tsp12		1		0	.	.	.	.
tsp12		2		0.004229	0.001861	1335	2.27	0.0232
tsp12		3		-0.00047	0.000261	1335	-1.81	0.0700

**Now assessing with 6 hours pre-post-transfusion windows**

The HPMIXED Procedure

## Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	5	1335	5.55	1.11	0.3528	0.3534



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	6	0 1 5 10 20 99
recipientsex	2	1 2
idnr	996	210010383144 210011991106 210020564134 210020940136 210022587101 210023828152 210029825100 210030310106 210031481100 210038083119 210042741149 210045731125 210047496147 210055382136 210064564128 210076264137 210085320105 210086773112 210091517149 210097789141 ...

Number of Observations Read	1351
Number of Observations Used	1198

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	16
Columns in Z per Subject	1
Subjects (Blocks in V)	996

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	-575.5415475	.	100.6724
1	2	-586.1952045	10.65365700	3.431668
2	9	-587.8309705	1.63576609	2.616741

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	3	-587.8463679	0.01539734	0.726057
4	2	-587.847791	0.00142310	0.040767
5	2	-587.8477954	0.00000440	0.000718
6	3	-587.8477954	0.00000000	6.848E-7

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.001925
Residual		0.03078

#### Fit Statistics

-2 Res Log Likelihood	-587.84780
AIC (Smaller is Better)	-583.84780
AICC (Smaller is Better)	-583.83765
BIC (Smaller is Better)	-574.04030
CAIC (Smaller is Better)	-572.04030
HQIC (Smaller is Better)	-580.11954

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					-0.07891	0.08838	1186	-0.89
predictorvalue				0	0	.	.	.
predictorvalue				1	-0.01333	0.01477	1186	-0.90
predictorvalue				5	0.003417	0.01626	1186	0.21
predictorvalue				10	-0.03987	0.02031	1186	-1.96

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.3722
predictorvalue				0	.
predictorvalue				1	0.3668
predictorvalue				5	0.8336
predictorvalue				10	0.0499

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
predictorvalue				20	-0.01314	0.04848	1186	-0.27
predictorvalue				99	-0.01273	0.01874	1186	-0.68
tspl1	1				0	.	.	.
tspl1	2				0.000565	0.002021	1186	0.28
tspl1	3				-0.00024	0.000335	1186	-0.70
tspl2		1			0	.	.	.
tspl2		2			0.004525	0.001982	1186	2.28
tspl2		3			-0.00040	0.000280	1186	-1.44
hbspl			1		0	.	.	.
hbspl			2		0.000638	0.000627	1186	1.02
hbspl			3		-1.65E-6	0.000047	1186	-0.04

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
predictorvalue				20	0.7864
predictorvalue				99	0.4971
tspl1	1				.
tspl1	2				0.7798
tspl1	3				0.4831
tspl2		1			.
tspl2		2			0.0226
tspl2		3			0.1499
hbspl			1		.
hbspl			2		0.3097
hbspl			3		0.9720

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	5	1186	5.56	1.11	0.3514	0.3521

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	4	0 180 365 999
recipientsex	2	1 2
idnr	1097	210010383144 210011991106 210020564134 210020940136 210022587101 210023828152 210029825100 210030310106 210031481100 210038083119 210042741149 210045731125 210047496147 210055382136 210064564128 210076158126 210076264137 210085320105 210086773112 210091517149 ...

Number of Observations Read	1349
Number of Observations Used	1345

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	11
Columns in Z per Subject	1
Subjects (Blocks in V)	1097

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	-716.7866941	.	108.5959
1	2	-726.9548793	10.16818523	7.857721
2	4	-728.1651433	1.21026398	33.96615

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	2	-729.7596773	1.59453402	3.671889
4	2	-729.7837102	0.02403293	0.812952
5	2	-729.7850101	0.00129987	0.036551
6	3	-729.7850128	0.00000267	0.000105

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.002400
Residual		0.02988

#### Fit Statistics

-2 Res Log Likelihood	-729.78501
AIC (Smaller is Better)	-725.78501
AICC (Smaller is Better)	-725.77602
BIC (Smaller is Better)	-715.78434
CAIC (Smaller is Better)	-713.78434
HQIC (Smaller is Better)	-722.00118

#### Solution for Fixed Effects

Effect	tsp11	tsp12	predictorvalue	Estimate	Standard Error	DF	t Value	Pr >  t
Intercept				0.005832	0.01395	1337	0.42	0.6759
predictorvalue			0	-0.00329	0.01082	1337	-0.30	0.7612
predictorvalue			180	0.005923	0.01624	1337	0.36	0.7154
predictorvalue			365	-0.00668	0.02233	1337	-0.30	0.7650
predictorvalue			999	0	.	.	.	.
tsp11	1			0	.	.	.	.
tsp11	2			-0.00002	0.001890	1337	-0.01	0.9924
tsp11	3			-0.00002	0.000309	1337	-0.06	0.9517
tsp12		1		0	.	.	.	.
tsp12		2		0.004198	0.001856	1337	2.26	0.0238
tsp12		3		-0.00046	0.000260	1337	-1.77	0.0775

Now assessing with 6 hours pre-post-transfusion windows

The HPMIXED Procedure						
Type III Tests of Fixed Effects						
Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	3	1337	0.42	0.14	0.9367	0.9367

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Model Information

Data Set	WORK.CURRENT
Response Variable	deltavalue
Estimation Method	Restricted Maximum Likelihood (REML)
Degrees of Freedom Method	Residual

#### Class Level Information

Class	Levels	Values
predictorvalue	4	0 180 365 999
recipientsex	2	1 2
idnr	996	210010383144 210011991106 210020564134 210020940136 210022587101 210023828152 210029825100 210030310106 210031481100 210038083119 210042741149 210045731125 210047496147 210055382136 210064564128 210076264137 210085320105 210086773112 210091517149 210097789141 ...

Number of Observations Read	1349
Number of Observations Used	1198

#### Dimensions

G-side Cov. Parameters	1
R-side Cov. Parameters	1
Columns in X	14
Columns in Z per Subject	1
Subjects (Blocks in V)	996

#### Optimization Information

Optimization Technique	Dual Quasi-Newton
Parameters in Optimization	1
Lower Boundaries	1
Upper Boundaries	0
Residual Variance	Profiled

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
0	4	-581.4548238	.	102.0954
1	2	-592.7228185	11.26799471	2.791978
2	7	-593.9810254	1.25820685	8.313632

## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Iteration History

Iteration	Evaluations	Objective Function	Change	Max Gradient
3	3	-594.1015869	0.12056153	3.317235
4	2	-594.136147	0.03456013	0.615812
5	2	-594.1372259	0.00107888	0.070045
6	3	-594.1372397	0.00001378	0.001184
7	3	-594.1372397	0.00000000	2.745E-7

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

#### Covariance Parameter Estimates

Cov Parm	Subject	Estimate
UN(1,1)	idnr	0.001777
Residual		0.03100

#### Fit Statistics

-2 Res Log Likelihood	-594.13724
AIC (Smaller is Better)	-590.13724
AICC (Smaller is Better)	-590.12711
BIC (Smaller is Better)	-580.32975
CAIC (Smaller is Better)	-578.32975
HQIC (Smaller is Better)	-586.40898

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
Intercept					-0.08508	0.08860	1188	-0.96
predictorvalue				0	0	.	.	.
predictorvalue				180	0.008657	0.01632	1188	0.53
predictorvalue				365	-0.00611	0.02248	1188	-0.27
predictorvalue				999	0.008005	0.01190	1188	0.67

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
Intercept					0.3371
predictorvalue				0	.
predictorvalue				180	0.5958
predictorvalue				365	0.7858
predictorvalue				999	0.5012



## Now assessing with 6 hours pre-post-transfusion windows

### The HPMIXED Procedure

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Estimate	Standard Error	DF	t Value
tspl1	1				0	.	.	.
tspl1	2				0.000268	0.002019	1188	0.13
tspl1	3				-0.00019	0.000334	1188	-0.57
tspl2		1			0	.	.	.
tspl2		2			0.004589	0.001978	1188	2.32
tspl2		3			-0.00040	0.000279	1188	-1.43
hbspl			1		0	.	.	.
hbspl			2		0.000594	0.000629	1188	0.94
hbspl			3		-1.23E-6	0.000047	1188	-0.03

#### Solution for Fixed Effects

Effect	tspl1	tspl2	hbspl	predictorvalue	Pr >  t
tspl1	1				.
tspl1	2				0.8943
tspl1	3				0.5681
tspl2		1			.
tspl2		2			0.0205
tspl2		3			0.1535
hbspl			1		.
hbspl			2		0.3452
hbspl			3		0.9791

#### Type III Tests of Fixed Effects

Effect	Num DF	Den DF	Chi-Square	F Value	Pr > ChiSq	Pr > F
predictorvalue	3	1188	0.79	0.26	0.8526	0.8526

## Now assessing with 6 hours pre-post-transfusion windows

## The FREQ Procedure

Reason	Frequency	Percent	Cumulative Frequency	Cumulative Percent
Convergence criterion (ABSGCONV=0.00001) sati	1	0.33	1	0.33
Convergence criterion (FCONV=2.220446E-16) sa	1	0.33	2	0.67
Convergence criterion (GCONV=1E-8) satisfied.	234	78.00	236	78.67
Convergence is assumed but all parameters are	64	21.33	300	100.00

Frequency  
Percent  
Row Pct  
Col Pct

Table of adjusted by Reason					
adjusted	Reason				
	Convergence criterion (ABSGCONV=0.00001) sati	Convergence criterion (FCONV=2.220446E-16) sa	Convergence criterion (GCONV=1E-8) satisfied.	Convergence is assumed but all parameters are	Total
<b>0</b>	0	1	126	33	160
	0.00	0.33	42.00	11.00	53.33
	0.00	0.63	78.75	20.63	
	0.00	100.00	53.85	51.56	
<b>1</b>	1	0	108	31	140
	0.33	0.00	36.00	10.33	46.67
	0.71	0.00	77.14	22.14	
	100.00	0.00	46.15	48.44	
<b>Total</b>	1	1	234	64	300
	0.33	0.33	78.00	21.33	100.00

Now assessing with 6 hours pre-post-transfusion windows

The Multitest Procedure

adjusted=0

P-Value Adjustment Information	
P-Value Adjustment	False Discovery Rate

## Now assessing with 6 hours pre-post-transfusion windows

## The Multitest Procedure

adjusted=0

p-Values			
Test	idnr	probF	False Discovery Rate
1	1	<.0001	<.0001
2	2	<.0001	<.0001
3	3	<.0001	<.0001
4	4	<.0001	<.0001
5	5	<.0001	<.0001
6	6	<.0001	<.0001
7	7	<.0001	<.0001
8	8	<.0001	<.0001
9	9	<.0001	<.0001
10	10	<.0001	0.0004
11	11	<.0001	0.0004
12	12	<.0001	0.0005
13	13	0.0002	0.0020
14	14	0.0002	0.0023
15	15	0.0003	0.0032
16	16	0.0008	0.0078
17	17	0.0039	0.0365
18	18	0.0042	0.0373
19	19	0.0077	0.0645
20	20	0.0104	0.0834
21	21	0.0175	0.1332
22	22	0.0193	0.1346
23	23	0.0193	0.1346
24	24	0.0222	0.1467
25	25	0.0229	0.1467
26	26	0.0304	0.1832
27	27	0.0309	0.1832
28	28	0.0341	0.1947
29	29	0.0401	0.2176
30	30	0.0408	0.2176
31	31	0.0471	0.2431
32	32	0.0515	0.2577
33	33	0.0760	0.3674
34	34	0.0818	0.3674
35	35	0.0825	0.3674
36	36	0.0827	0.3674

## Now assessing with 6 hours pre-post-transfusion windows

## The Multitest Procedure

adjusted=0

p-Values			
Test	idnr	probF	False Discovery Rate
37	37	0.0859	0.3713
38	38	0.0915	0.3797
39	39	0.0971	0.3797
40	40	0.0986	0.3797
41	41	0.1004	0.3797
42	42	0.1009	0.3797
43	43	0.1021	0.3797
44	44	0.1060	0.3854
45	45	0.1141	0.4058
46	46	0.1181	0.4109
47	47	0.1285	0.4375
48	48	0.1368	0.4502
49	49	0.1379	0.4502
50	50	0.1414	0.4518
51	51	0.1440	0.4518
52	52	0.1563	0.4766
53	53	0.1579	0.4766
54	54	0.1665	0.4934
55	55	0.1735	0.4979
56	56	0.1743	0.4979
57	57	0.1785	0.5001
58	58	0.1834	0.5001
59	59	0.1868	0.5001
60	60	0.1875	0.5001
61	61	0.1918	0.5031
62	62	0.1983	0.5062
63	63	0.2020	0.5062
64	64	0.2025	0.5062
65	65	0.2111	0.5188
66	66	0.2140	0.5188
67	67	0.2221	0.5305
68	68	0.2285	0.5359
69	69	0.2370	0.5359
70	70	0.2379	0.5359
71	71	0.2417	0.5359
72	72	0.2441	0.5359

## Now assessing with 6 hours pre-post-transfusion windows

## The Multitest Procedure

adjusted=0

p-Values			
Test	idnr	probF	False Discovery Rate
73	73	0.2445	0.5359
74	74	0.2621	0.5666
75	75	0.2736	0.5836
76	76	0.2805	0.5905
77	77	0.3046	0.6215
78	78	0.3105	0.6215
79	79	0.3113	0.6215
80	80	0.3116	0.6215
81	81	0.3146	0.6215
82	82	0.3187	0.6218
83	83	0.3423	0.6598
84	84	0.3534	0.6645
85	85	0.3550	0.6645
86	86	0.3610	0.6645
87	87	0.3613	0.6645
88	88	0.3739	0.6718
89	89	0.3775	0.6718
90	90	0.3779	0.6718
91	91	0.3948	0.6874
92	92	0.3993	0.6874
93	93	0.3995	0.6874
94	94	0.4099	0.6977
95	95	0.4198	0.6994
96	96	0.4221	0.6994
97	97	0.4300	0.6994
98	98	0.4347	0.6994
99	99	0.4373	0.6994
100	100	0.4432	0.6994
101	101	0.4474	0.6994
102	102	0.4479	0.6994
103	103	0.4503	0.6994
104	104	0.4710	0.7246
105	105	0.4839	0.7249
106	106	0.4842	0.7249
107	107	0.4848	0.7249
108	108	0.5117	0.7580

## Now assessing with 6 hours pre-post-transfusion windows

## The Multitest Procedure

adjusted=0

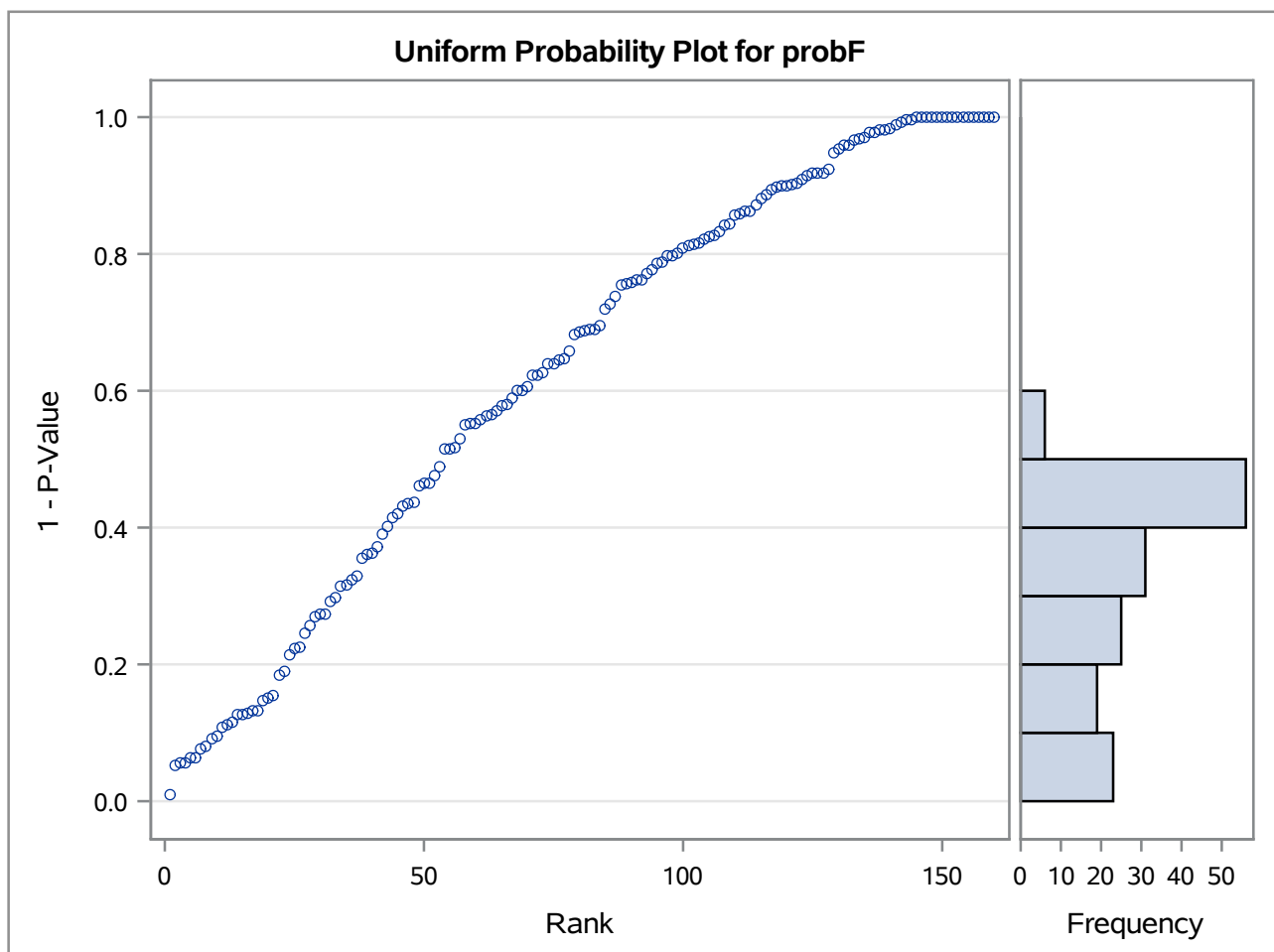
p-Values			
Test	idnr	probF	False Discovery Rate
109	109	0.5245	0.7699
110	110	0.5353	0.7703
111	111	0.5355	0.7703
112	112	0.5392	0.7703
113	113	0.5633	0.7916
114	114	0.5640	0.7916
115	115	0.5692	0.7919
116	116	0.5791	0.7987
117	117	0.5857	0.8010
118	118	0.5983	0.8113
119	119	0.6096	0.8196
120	120	0.6273	0.8363
121	121	0.6370	0.8385
122	122	0.6393	0.8385
123	123	0.6452	0.8393
124	124	0.6702	0.8633
125	125	0.6758	0.8633
126	126	0.6837	0.8633
127	127	0.6852	0.8633
128	128	0.7015	0.8769
129	129	0.7087	0.8790
130	130	0.7261	0.8854
131	131	0.7269	0.8854
132	132	0.7304	0.8854
133	133	0.7430	0.8938
134	134	0.7549	0.9013
135	135	0.7755	0.9140
136	136	0.7769	0.9140
137	137	0.7858	0.9178
138	138	0.8101	0.9392
139	139	0.8161	0.9393
140	140	0.8448	0.9507
141	141	0.8493	0.9507
142	142	0.8528	0.9507
143	143	0.8675	0.9507
144	144	0.8678	0.9507

## Now assessing with 6 hours pre-post-transfusion windows

### The Multitest Procedure

adjusted=0

p-Values			
Test	idnr	probF	False Discovery Rate
145	145	0.8718	0.9507
146	146	0.8726	0.9507
147	147	0.8738	0.9507
148	148	0.8837	0.9507
149	149	0.8891	0.9507
150	150	0.8913	0.9507
151	151	0.9041	0.9535
152	152	0.9084	0.9535
153	153	0.9203	0.9535
154	154	0.9241	0.9535
155	155	0.9367	0.9535
156	156	0.9367	0.9535
157	157	0.9434	0.9535
158	158	0.9443	0.9535
159	159	0.9475	0.9535
160	160	0.9913	0.9913

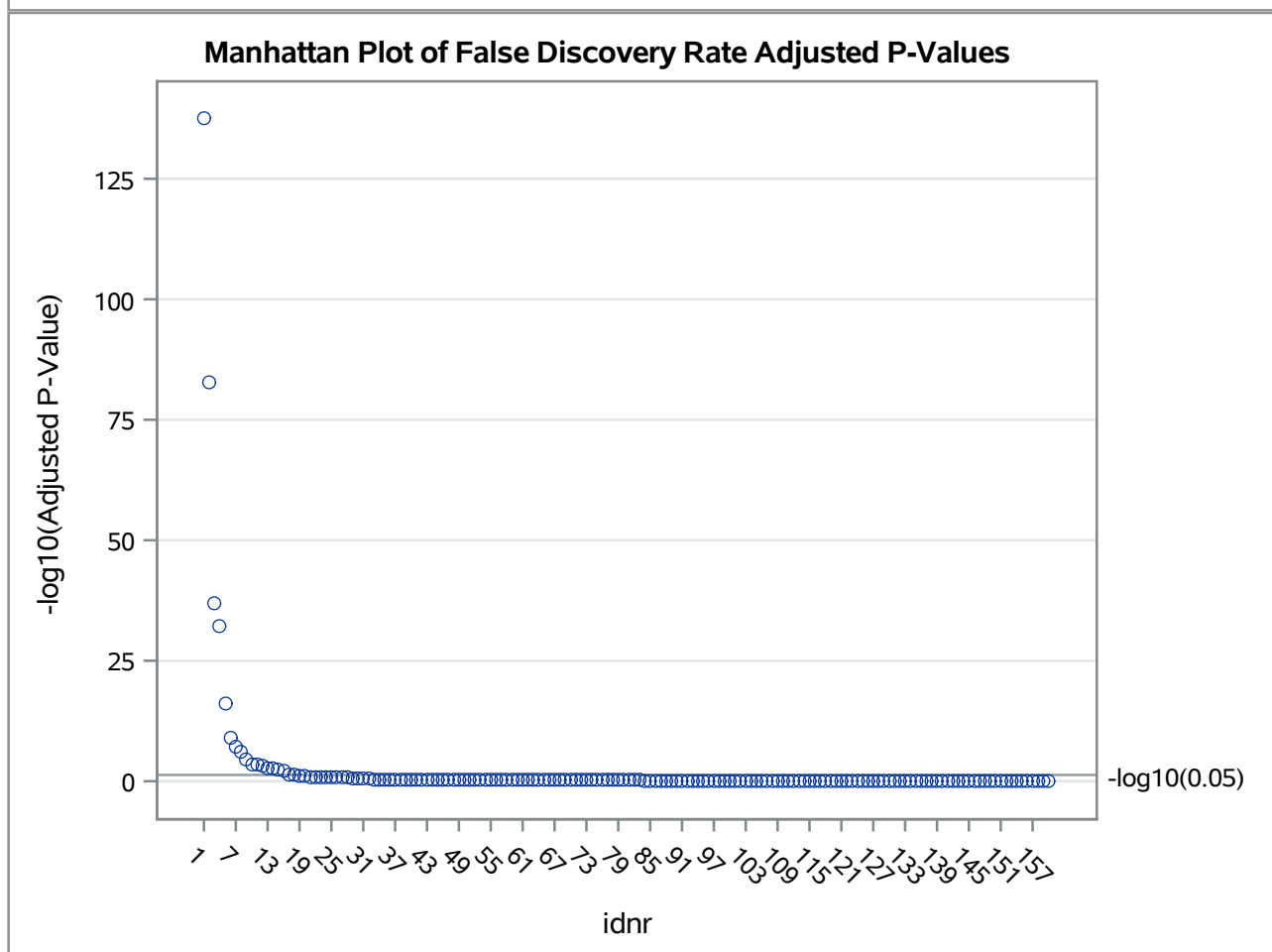
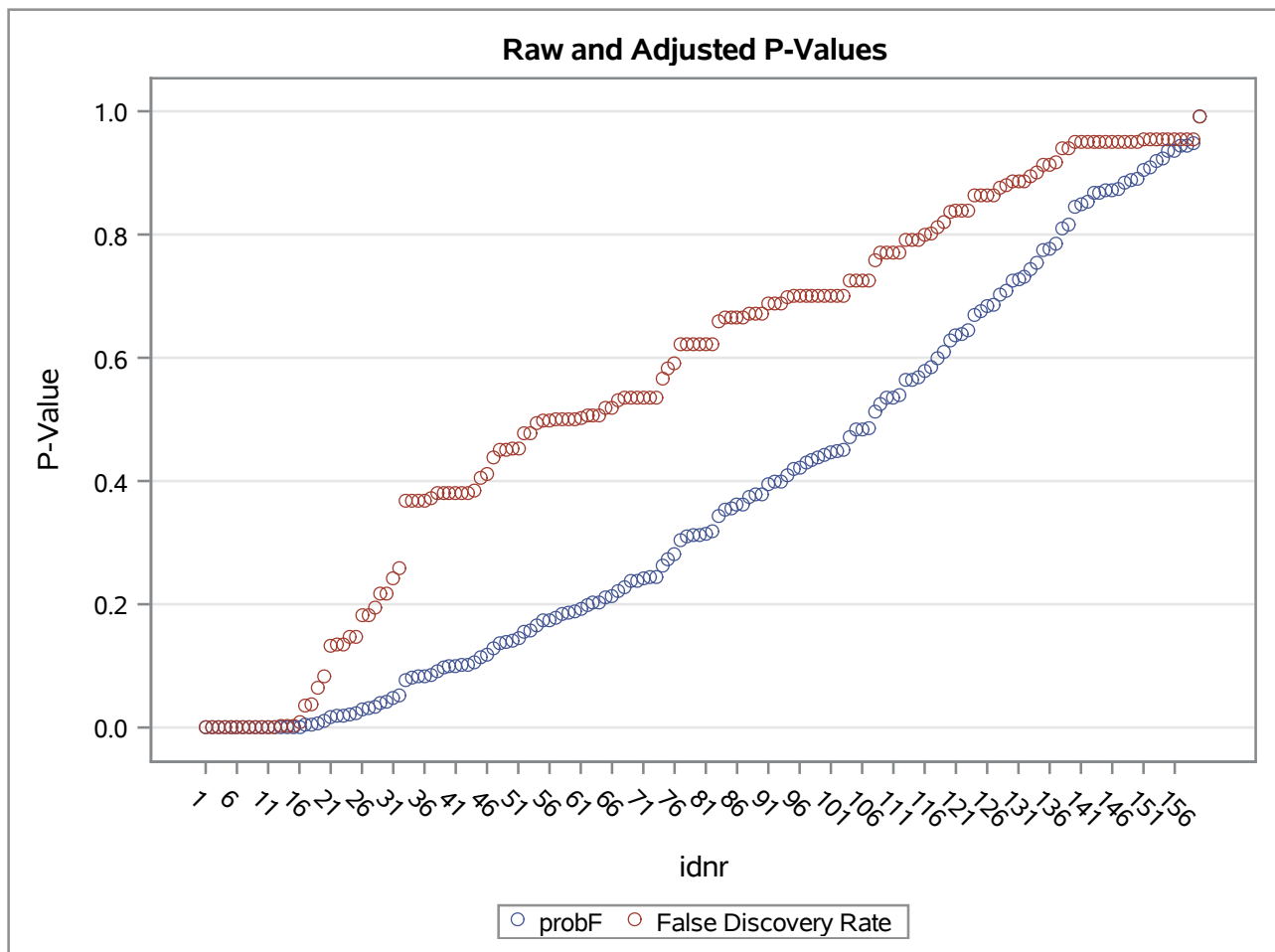




## Now assessing with 6 hours pre-post-transfusion windows

## The Multitest Procedure

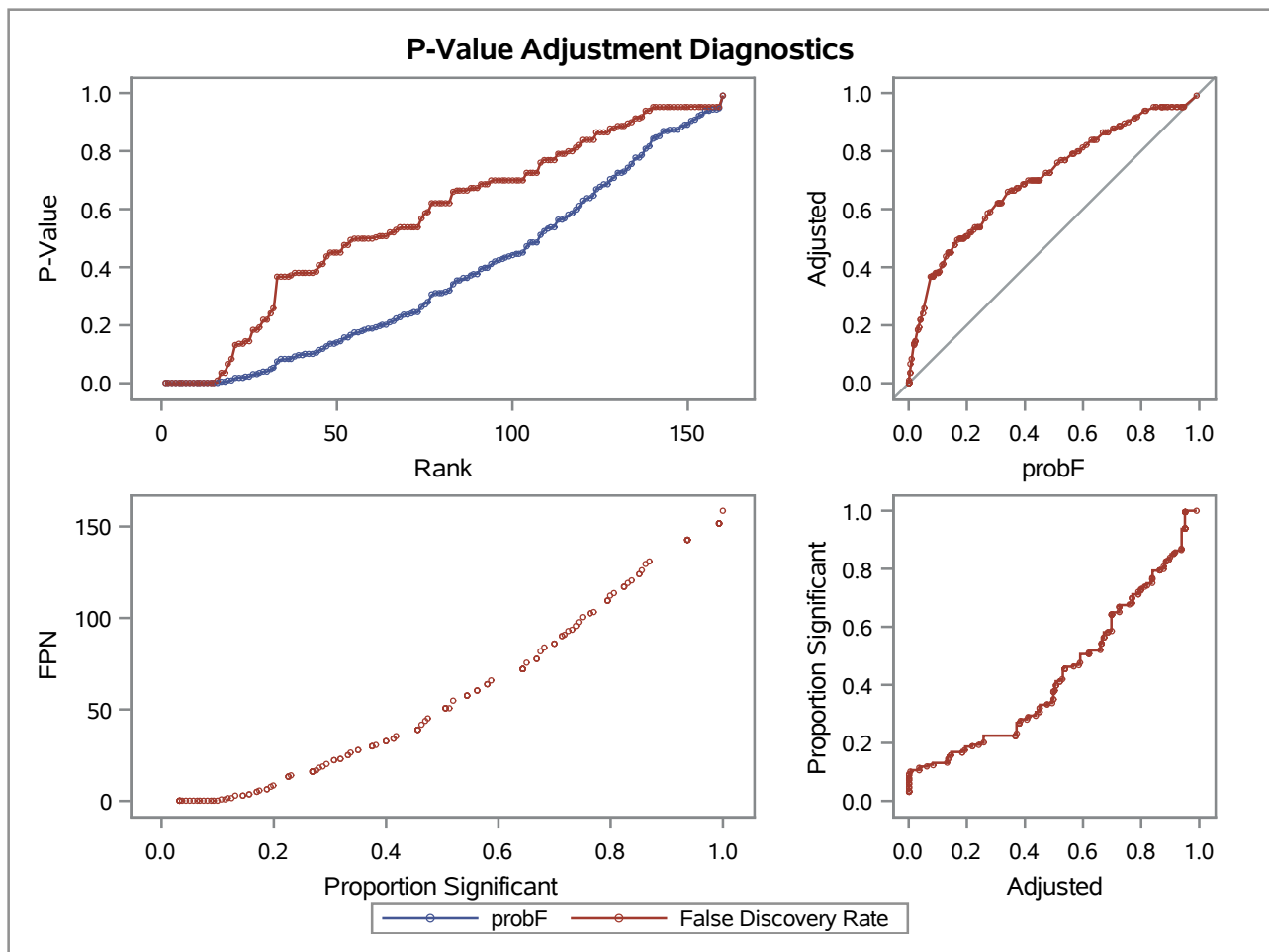
adjusted=0



## Now assessing with 6 hours pre-post-transfusion windows

## The Multitest Procedure

adjusted=0



Now assessing with 6 hours pre-post-transfusion windows

The Multitest Procedure

adjusted=1

P-Value Adjustment Information	
P-Value Adjustment	False Discovery Rate

## Now assessing with 6 hours pre-post-transfusion windows

## The Multitest Procedure

adjusted=1

p-Values			
Test	idnr	probF	False Discovery Rate
1	161	<.0001	<.0001
2	162	<.0001	<.0001
3	163	<.0001	<.0001
4	164	<.0001	<.0001
5	165	<.0001	<.0001
6	166	<.0001	0.0002
7	167	<.0001	0.0003
8	168	<.0001	0.0015
9	169	0.0004	0.0067
10	170	0.0011	0.0155
11	171	0.0024	0.0310
12	172	0.0028	0.0328
13	173	0.0030	0.0328
14	174	0.0037	0.0373
15	175	0.0066	0.0614
16	176	0.0173	0.1514
17	177	0.0213	0.1657
18	178	0.0224	0.1657
19	179	0.0231	0.1657
20	180	0.0237	0.1657
21	181	0.0327	0.2150
22	182	0.0338	0.2150
23	183	0.0378	0.2300
24	184	0.0559	0.3253
25	185	0.0612	0.3253
26	186	0.0620	0.3253
27	187	0.0644	0.3253
28	188	0.0651	0.3253
29	189	0.0691	0.3335
30	190	0.0737	0.3439
31	191	0.0879	0.3883
32	192	0.0891	0.3883
33	193	0.0936	0.3883
34	194	0.0950	0.3883
35	195	0.1005	0.3883
36	196	0.1031	0.3883

## Now assessing with 6 hours pre-post-transfusion windows

## The Multitest Procedure

adjusted=1

p-Values			
Test	idnr	probF	False Discovery Rate
37	197	0.1066	0.3883
38	198	0.1072	0.3883
39	199	0.1082	0.3883
40	200	0.1303	0.4458
41	201	0.1338	0.4458
42	202	0.1352	0.4458
43	203	0.1387	0.4458
44	204	0.1401	0.4458
45	205	0.1471	0.4577
46	206	0.1640	0.4873
47	207	0.1677	0.4873
48	208	0.1692	0.4873
49	209	0.1706	0.4873
50	210	0.1766	0.4934
51	211	0.1797	0.4934
52	212	0.1916	0.5115
53	213	0.1936	0.5115
54	214	0.2009	0.5153
55	215	0.2024	0.5153
56	216	0.2080	0.5199
57	217	0.2262	0.5501
58	218	0.2279	0.5501
59	219	0.2355	0.5589
60	220	0.2590	0.5985
61	221	0.2634	0.5985
62	222	0.2650	0.5985
63	223	0.2950	0.6538
64	224	0.2989	0.6538
65	225	0.3135	0.6591
66	226	0.3142	0.6591
67	227	0.3157	0.6591
68	228	0.3201	0.6591
69	229	0.3418	0.6862
70	230	0.3479	0.6862
71	231	0.3521	0.6862
72	232	0.3593	0.6862

## Now assessing with 6 hours pre-post-transfusion windows

## The Multitest Procedure

adjusted=1

p-Values			
Test	idnr	probF	False Discovery Rate
73	233	0.3662	0.6862
74	234	0.3668	0.6862
75	235	0.3744	0.6862
76	236	0.3770	0.6862
77	237	0.3774	0.6862
78	238	0.3825	0.6865
79	239	0.3877	0.6871
80	240	0.4016	0.7028
81	241	0.4082	0.7055
82	242	0.4140	0.7068
83	243	0.4236	0.7146
84	244	0.4302	0.7169
85	245	0.4527	0.7341
86	246	0.4561	0.7341
87	247	0.4562	0.7341
88	248	0.4693	0.7466
89	249	0.4806	0.7547
90	250	0.4864	0.7547
91	251	0.4906	0.7547
92	252	0.4980	0.7579
93	253	0.5168	0.7779
94	254	0.5434	0.8094
95	255	0.5647	0.8216
96	256	0.5741	0.8216
97	257	0.5759	0.8216
98	258	0.5800	0.8216
99	259	0.5890	0.8216
100	260	0.5915	0.8216
101	261	0.5960	0.8216
102	262	0.6002	0.8216
103	263	0.6046	0.8216
104	264	0.6130	0.8216
105	265	0.6162	0.8216
106	266	0.6296	0.8277
107	267	0.6326	0.8277
108	268	0.6397	0.8292

## Now assessing with 6 hours pre-post-transfusion windows

## The Multitest Procedure

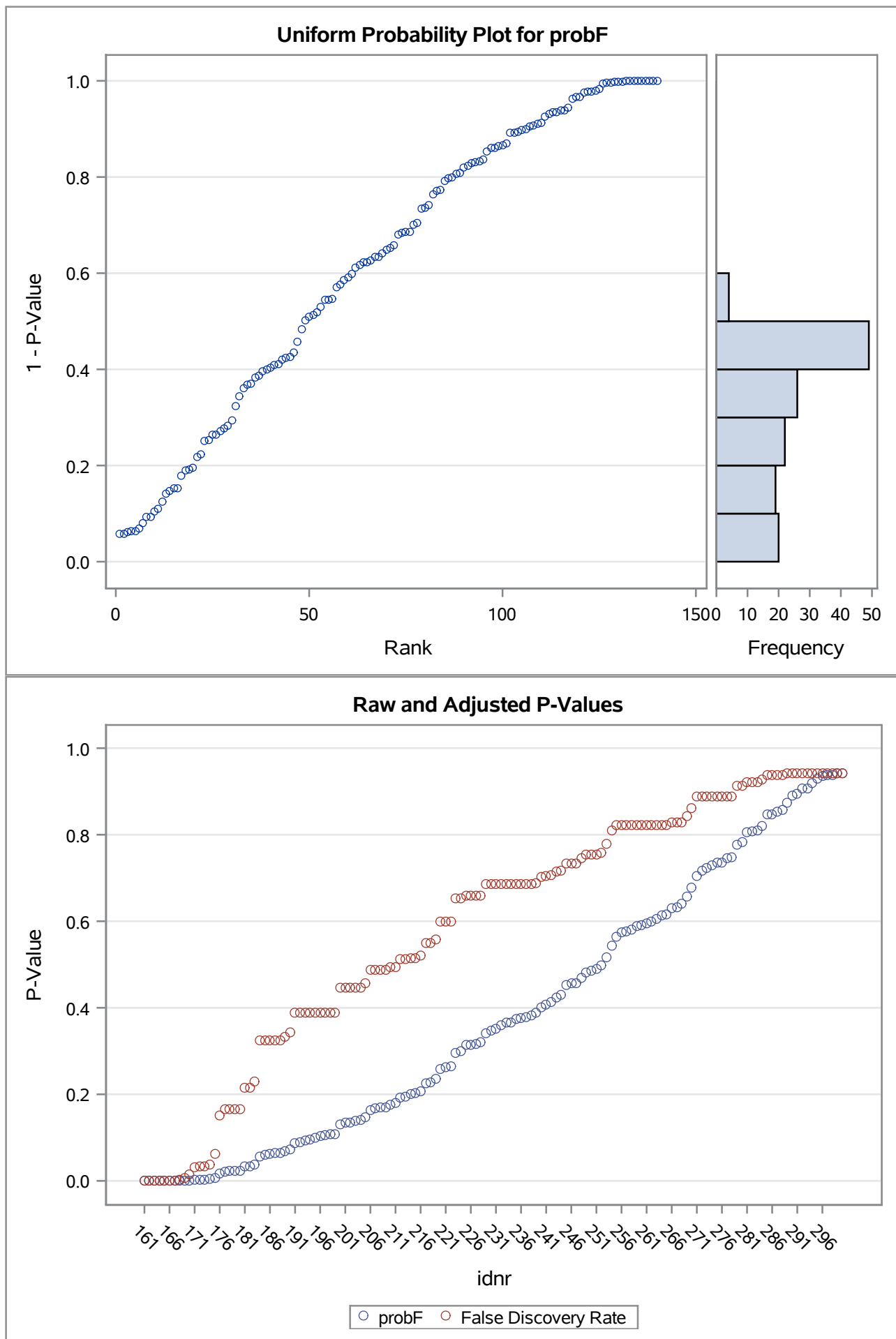
adjusted=1

p-Values			
Test	idnr	probF	False Discovery Rate
109	269	0.6565	0.8433
110	270	0.6767	0.8612
111	271	0.7053	0.8880
112	272	0.7175	0.8880
113	273	0.7226	0.8880
114	274	0.7284	0.8880
115	275	0.7358	0.8880
116	276	0.7360	0.8880
117	277	0.7462	0.8880
118	278	0.7484	0.8880
119	279	0.7767	0.9133
120	280	0.7828	0.9133
121	281	0.8050	0.9214
122	282	0.8083	0.9214
123	283	0.8095	0.9214
124	284	0.8210	0.9269
125	285	0.8470	0.9381
126	286	0.8471	0.9381
127	287	0.8526	0.9381
128	288	0.8577	0.9381
129	289	0.8746	0.9422
130	290	0.8906	0.9422
131	291	0.8949	0.9422
132	292	0.9059	0.9422
133	293	0.9073	0.9422
134	294	0.9189	0.9422
135	295	0.9302	0.9422
136	296	0.9368	0.9422
137	297	0.9373	0.9422
138	298	0.9385	0.9422
139	299	0.9413	0.9422
140	300	0.9422	0.9422

## Now assessing with 6 hours pre-post-transfusion windows

## The Multitest Procedure

adjusted=1



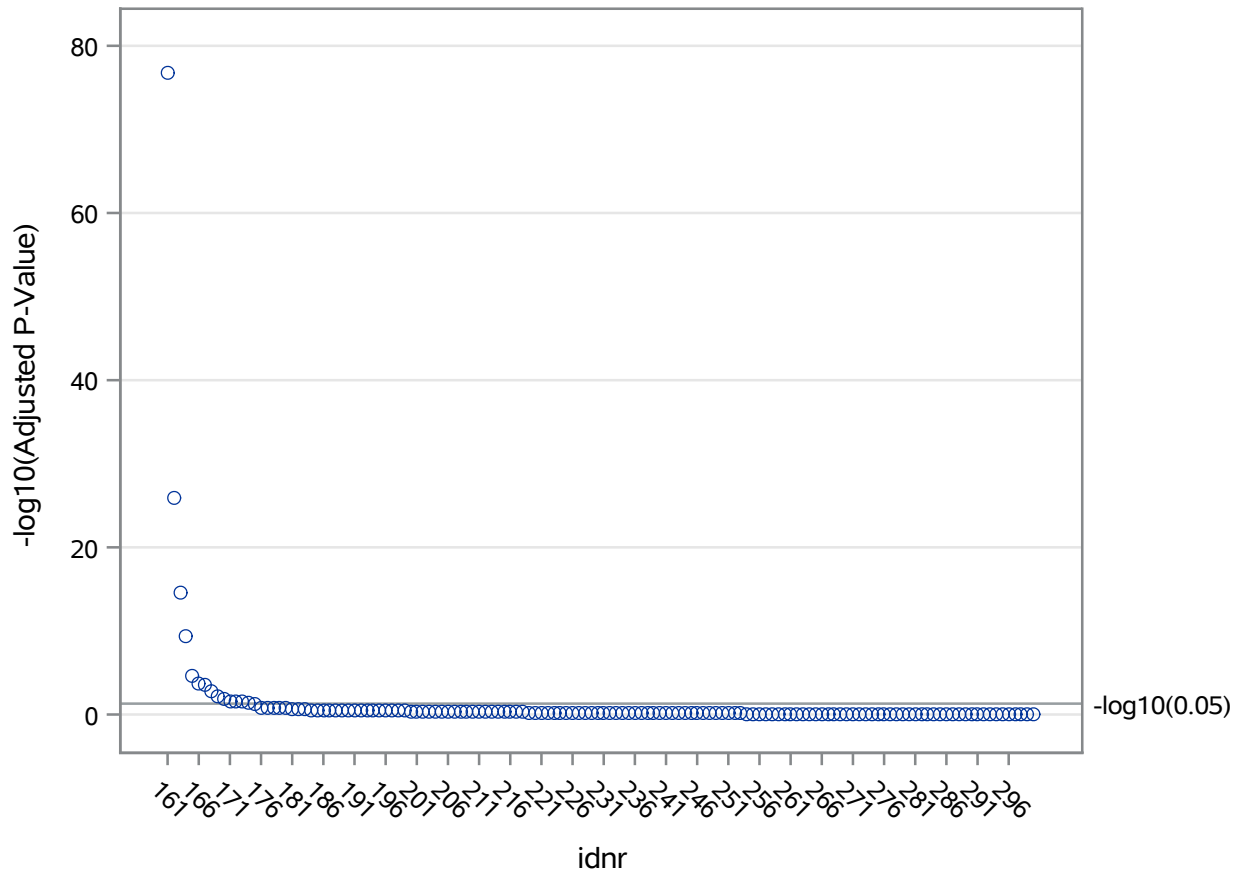


## Now assessing with 6 hours pre-post-transfusion windows

## The Multitest Procedure

adjusted=1

Manhattan Plot of False Discovery Rate Adjusted P-Values



P-Value Adjustment Diagnostics

