***g004.sas: Separate mixed models for rsfMRI and comparative***
***1. rsfMRI***

***The NLMIXED Procedure***

| *Specifications* | |
|---|---|
| *Data Set* | WORK.A |
| *Dependent Variable* | y1d |
| *Distribution for Dependent Variable* | Binomial |
| *Random Effects* | u |
| *Distribution for Random Effects* | Normal |
| *Subject Variable* | id |
| *Optimization Technique* | Dual Quasi-Newton |
| *Integration Method* | Adaptive Gaussian Quadrature |

| *Dimensions* | |
|---|---|
| *Observations Used* | 25 |
| *Observations Not Used* | 0 |
| *Total Observations* | 25 |
| *Subjects* | 25 |
| *Max Obs per Subject* | 1 |
| *Parameters* | 2 |
| *Quadrature Points* | 25 |

*Initial Parameters*

| *beta* | *log_sigma* | *Negative Log Likelihood* |
|---|---|---|
| 2.1 | 0.33 | 46.5471807 |

*Iteration History*

| *Iteration* | *Calls* | *Negative Log Likelihood* | *Difference* | *Maximum Gradient* | *Slope* |
|---|---|---|---|---|---|
| *1* | 5 | 46.3972952 | 0.149885 | 0.99921 | -10.7322 |
| *2* | 8 | 46.3397697 | 0.057525 | 0.11979 | -6.36809 |
| *3* | 10 | 46.3392704 | 0.000499 | 0.007571 | -0.00106 |
| *4* | 12 | 46.3392688 | 1.649E-6 | 0.000069 | -3.31E-6 |
| *5* | 14 | 46.3392688 | 8.79E-10 | 0.000011 | -1.54E-9 |

NOTE: GCONV convergence criterion satisfied.

***g004.sas: Separate mixed models for rsfMRI and comparative***
***1. rsfMRI***

***The NLMIXED Procedure***

| *Fit Statistics* | |
|---|---|
| *-2 Log Likelihood* | 92.7 |
| *AIC (smaller is better)* | 96.7 |
| *AICC (smaller is better)* | 97.2 |
| *BIC (smaller is better)* | 99.1 |

*Parameter Estimates*

| *Parameter* | *Estimate* | *Standard Error* | *DF* | *t Value* | *Pr > \|t\|* | *95% Confidence Limits* | | *Gradient* |
|---|---|---|---|---|---|---|---|---|
| *beta* | 2.3741 | 0.4890 | 24 | 4.85 | <.0001 | 1.3648 | 3.3834 | -8.17E-6 |
| *log_sigma* | 0.4625 | 0.2667 | 24 | 1.73 | 0.0957 | -0.08791 | 1.0129 | -0.00001 |

*Covariance Matrix of Parameter Estimates*

| | *beta* | *log_sigma* |
|---|---|---|
| *beta* | 0.2391 | 0.07167 |
| *log_sigma* | 0.07167 | 0.07112 |

*Correlation Matrix of Parameter Estimates*

| | *beta* | *log_sigma* |
|---|---|---|
| *beta* | 1.0000 | 0.5495 |
| *log_sigma* | 0.5495 | 1.0000 |

***g004.sas: Separate mixed models for rsfMRI and comparative***
***1. rsfMRI***

| Obs | id | n | p1raw | p1 | p1l | p1u |
|---|---|---|---|---|---|---|
| 1 | Anzellotti 2010 | 1 | 1.00000 | 0.92796 | 0.34818 | 0.99679 |
| 2 | Song 2006 | 2 | 1.00000 | 0.93665 | 0.41690 | 0.99674 |
| 3 | Wang 2007 | 2 | 1.00000 | 0.93665 | 0.41690 | 0.99674 |
| 4 | Tavares 2017 | 3 | 1.00000 | 0.94297 | 0.47123 | 0.99675 |
| 5 | Weaver 2013 | 4 | 0.75000 | 0.82892 | 0.36427 | 0.97617 |
| 6 | Gnanadas 2017 | 6 | 0.83333 | 0.86658 | 0.46774 | 0.97959 |
| 7 | Morgan 2003 | 6 | 1.00000 | 0.95500 | 0.58313 | 0.99690 |
| 8 | Stufflebeam 2011 | 6 | 0.83333 | 0.86658 | 0.46774 | 0.97959 |
| 9 | Zhao 2019 | 6 | 1.00000 | 0.95500 | 0.58313 | 0.99690 |
| 10 | vanHoudt 2015 | 7 | 1.00000 | 0.95772 | 0.60976 | 0.99696 |
| 11 | Jann 2008 | 8 | 1.00000 | 0.96007 | 0.63289 | 0.99703 |
| 12 | Kang 2003 | 8 | 1.00000 | 0.96007 | 0.63289 | 0.99703 |
| 13 | Hunyadi 2014 | 10 | 0.70000 | 0.75048 | 0.42928 | 0.92323 |
| 14 | Yang 2015 | 11 | 1.00000 | 0.96549 | 0.68722 | 0.99720 |
| 15 | Hunyadi 2015b | 12 | 1.00000 | 0.96692 | 0.70163 | 0.99726 |
| 16 | Hunyadi 2015a | 18 | 0.61111 | 0.64979 | 0.40951 | 0.83233 |
| 17 | Su 2015 | 21 | 1.00000 | 0.97537 | 0.78675 | 0.99765 |
| 18 | Barron 2014 | 23 | 1.00000 | 0.97660 | 0.79905 | 0.99772 |
| 19 | Lee 2014 | 29 | 0.79310 | 0.80608 | 0.62055 | 0.91354 |
| 20 | Reyes 2016 | 34 | 0.91176 | 0.91216 | 0.76228 | 0.97112 |
| 21 | Boerwinkle 2017 | 36 | 0.94444 | 0.94024 | 0.80411 | 0.98369 |
| 22 | Chen 2017 | 42 | 0.76190 | 0.77276 | 0.61810 | 0.87723 |
| 23 | Bettus 2010 | 44 | 0.59091 | 0.60834 | 0.45295 | 0.74448 |
| 24 | Khoo 2019 | 49 | 0.48980 | 0.50873 | 0.36596 | 0.65008 |
| 25 | Boerwinkle 2019 | 64 | 0.39063 | 0.40765 | 0.28984 | 0.53713 |

***g004.sas: Separate mixed models for rsfMRI and comparative***
***2. Comparative***

***The NLMIXED Procedure***

| *Specifications* | |
|---|---|
| *Data Set* | WORK.A |
| *Dependent Variable* | yd1 |
| *Distribution for Dependent Variable* | Binomial |
| *Random Effects* | u |
| *Distribution for Random Effects* | Normal |
| *Subject Variable* | id |
| *Optimization Technique* | Dual Quasi-Newton |
| *Integration Method* | Adaptive Gaussian Quadrature |

| *Dimensions* | |
|---|---|
| *Observations Used* | 25 |
| *Observations Not Used* | 0 |
| *Total Observations* | 25 |
| *Subjects* | 25 |
| *Max Obs per Subject* | 1 |
| *Parameters* | 2 |
| *Quadrature Points* | 25 |

*Initial Parameters*

| *beta* | *log_sigma* | *Negative Log Likelihood* |
|---|---|---|
| 2.1 | 0.33 | 48.4687264 |

*Iteration History*

| *Iteration* | *Calls* | *Negative Log Likelihood* | *Difference* | *Maximum Gradient* | *Slope* |
|---|---|---|---|---|---|
| *1* | 5 | 48.3458543 | 0.122872 | 1.13705 | -9.72288 |
| *2* | 8 | 48.2771755 | 0.068679 | 0.12540 | -7.76176 |
| *3* | 10 | 48.2763505 | 0.000825 | 0.010710 | -0.00175 |
| *4* | 12 | 48.2763433 | 7.163E-6 | 0.000445 | -0.00001 |
| *5* | 14 | 48.2763433 | 6.354E-9 | 1.161E-6 | -1.27E-8 |

NOTE: GCONV convergence criterion satisfied.

***g004.sas: Separate mixed models for rsfMRI and comparative***
***2. Comparative***

***The NLMIXED Procedure***

| *Fit Statistics* | |
|---|---|
| *-2 Log Likelihood* | 96.6 |
| *AIC (smaller is better)* | 100.6 |
| *AICC (smaller is better)* | 101.1 |
| *BIC (smaller is better)* | 103.0 |

*Parameter Estimates*

| *Parameter* | *Estimate* | *Standard Error* | *DF* | *t Value* | *Pr > \|t\|* | *95% Confidence Limits* | | *Gradient* |
|---|---|---|---|---|---|---|---|---|
| *beta* | 1.8878 | 0.3625 | 24 | 5.21 | <.0001 | 1.1395 | 2.6360 | 1.135E-6 |
| *log_sigma* | 0.1986 | 0.2448 | 24 | 0.81 | 0.4253 | -0.3068 | 0.7039 | -1.16E-6 |

*Covariance Matrix of Parameter Estimates*

| | *beta* | *log_sigma* |
|---|---|---|
| *beta* | 0.1314 | 0.04238 |
| *log_sigma* | 0.04238 | 0.05995 |

*Correlation Matrix of Parameter Estimates*

| | *beta* | *log_sigma* |
|---|---|---|
| *beta* | 1.0000 | 0.4774 |
| *log_sigma* | 0.4774 | 1.0000 |

***g004.sas: Separate mixed models for rsfMRI and comparative***
***2. Comparative***

| Obs | id | n | p2raw | p2 | p2l | p2u |
|---|---|---|---|---|---|---|
| 1 | Anzellotti 2010 | 1 | 1.00000 | 0.88660 | 0.40054 | 0.98919 |
| 2 | Song 2006 | 2 | 1.00000 | 0.89915 | 0.45920 | 0.98943 |
| 3 | Wang 2007 | 2 | 1.00000 | 0.89915 | 0.45920 | 0.98943 |
| 4 | Tavares 2017 | 3 | 1.00000 | 0.90854 | 0.50567 | 0.98974 |
| 5 | Weaver 2013 | 4 | 1.00000 | 0.91591 | 0.54359 | 0.99006 |
| 6 | Gnanadas 2017 | 6 | 0.83333 | 0.85026 | 0.49613 | 0.97037 |
| 7 | Morgan 2003 | 6 | 1.00000 | 0.92691 | 0.60219 | 0.99067 |
| 8 | Stufflebeam 2011 | 6 | 1.00000 | 0.92691 | 0.60219 | 0.99067 |
| 9 | Zhao 2019 | 6 | 1.00000 | 0.92691 | 0.60219 | 0.99067 |
| 10 | vanHoudt 2015 | 7 | 1.00000 | 0.93116 | 0.62543 | 0.99096 |
| 11 | Jann 2008 | 8 | 1.00000 | 0.93483 | 0.64573 | 0.99122 |
| 12 | Kang 2003 | 8 | 0.87500 | 0.87222 | 0.55921 | 0.97350 |
| 13 | Hunyadi 2014 | 10 | 0.70000 | 0.75224 | 0.44967 | 0.91858 |
| 14 | Yang 2015 | 11 | 0.81818 | 0.83462 | 0.55218 | 0.95382 |
| 15 | Hunyadi 2015b | 12 | 0.75000 | 0.78365 | 0.50512 | 0.92782 |
| 16 | Hunyadi 2015a | 18 | 0.61111 | 0.65729 | 0.42286 | 0.83390 |
| 17 | Su 2015 | 21 | 1.00000 | 0.95929 | 0.78442 | 0.99349 |
| 18 | Barron 2014 | 23 | 0.91304 | 0.90301 | 0.72093 | 0.97106 |
| 19 | Lee 2014 | 29 | 0.89655 | 0.89149 | 0.72839 | 0.96179 |
| 20 | Reyes 2016 | 34 | 0.91176 | 0.90461 | 0.75906 | 0.96616 |
| 21 | Boerwinkle 2017 | 36 | 0.80556 | 0.81332 | 0.65375 | 0.90953 |
| 22 | Chen 2017 | 42 | 0.85714 | 0.85850 | 0.71910 | 0.93498 |
| 23 | Bettus 2010 | 44 | 0.50000 | 0.52718 | 0.37684 | 0.67275 |
| 24 | Khoo 2019 | 49 | 0.46939 | 0.49553 | 0.35461 | 0.63716 |
| 25 | Boerwinkle 2019 | 64 | 0.35938 | 0.38416 | 0.26918 | 0.51373 |

***g004.sas: Separate mixed models for rsfMRI and comparative***
***Both***

| Obs | id | n | p1raw | p1 | p1l | p1u | p2raw | p2 | p2l | p2u |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Anzellotti 2010 | 1 | 1.00000 | 0.92796 | 0.34818 | 0.99679 | 1.00000 | 0.88660 | 0.40054 | 0.98919 |
| 2 | Song 2006 | 2 | 1.00000 | 0.93665 | 0.41690 | 0.99674 | 1.00000 | 0.89915 | 0.45920 | 0.98943 |
| 3 | Wang 2007 | 2 | 1.00000 | 0.93665 | 0.41690 | 0.99674 | 1.00000 | 0.89915 | 0.45920 | 0.98943 |
| 4 | Tavares 2017 | 3 | 1.00000 | 0.94297 | 0.47123 | 0.99675 | 1.00000 | 0.90854 | 0.50567 | 0.98974 |
| 5 | Weaver 2013 | 4 | 0.75000 | 0.82892 | 0.36427 | 0.97617 | 1.00000 | 0.91591 | 0.54359 | 0.99006 |
| 6 | Gnanadas 2017 | 6 | 0.83333 | 0.86658 | 0.46774 | 0.97959 | 0.83333 | 0.85026 | 0.49613 | 0.97037 |
| 7 | Morgan 2003 | 6 | 1.00000 | 0.95500 | 0.58313 | 0.99690 | 1.00000 | 0.92691 | 0.60219 | 0.99067 |
| 8 | Stufflebeam 2011 | 6 | 0.83333 | 0.86658 | 0.46774 | 0.97959 | 1.00000 | 0.92691 | 0.60219 | 0.99067 |
| 9 | Zhao 2019 | 6 | 1.00000 | 0.95500 | 0.58313 | 0.99690 | 1.00000 | 0.92691 | 0.60219 | 0.99067 |
| 10 | vanHoudt 2015 | 7 | 1.00000 | 0.95772 | 0.60976 | 0.99696 | 1.00000 | 0.93116 | 0.62543 | 0.99096 |
| 11 | Jann 2008 | 8 | 1.00000 | 0.96007 | 0.63289 | 0.99703 | 1.00000 | 0.93483 | 0.64573 | 0.99122 |
| 12 | Kang 2003 | 8 | 1.00000 | 0.96007 | 0.63289 | 0.99703 | 0.87500 | 0.87222 | 0.55921 | 0.97350 |
| 13 | Hunyadi 2014 | 10 | 0.70000 | 0.75048 | 0.42928 | 0.92323 | 0.70000 | 0.75224 | 0.44967 | 0.91858 |
| 14 | Yang 2015 | 11 | 1.00000 | 0.96549 | 0.68722 | 0.99720 | 0.81818 | 0.83462 | 0.55218 | 0.95382 |
| 15 | Hunyadi 2015b | 12 | 1.00000 | 0.96692 | 0.70163 | 0.99726 | 0.75000 | 0.78365 | 0.50512 | 0.92782 |
| 16 | Hunyadi 2015a | 18 | 0.61111 | 0.64979 | 0.40951 | 0.83233 | 0.61111 | 0.65729 | 0.42286 | 0.83390 |
| 17 | Su 2015 | 21 | 1.00000 | 0.97537 | 0.78675 | 0.99765 | 1.00000 | 0.95929 | 0.78442 | 0.99349 |
| 18 | Barron 2014 | 23 | 1.00000 | 0.97660 | 0.79905 | 0.99772 | 0.91304 | 0.90301 | 0.72093 | 0.97106 |
| 19 | Lee 2014 | 29 | 0.79310 | 0.80608 | 0.62055 | 0.91354 | 0.89655 | 0.89149 | 0.72839 | 0.96179 |
| 20 | Reyes 2016 | 34 | 0.91176 | 0.91216 | 0.76228 | 0.97112 | 0.91176 | 0.90461 | 0.75906 | 0.96616 |
| 21 | Boerwinkle 2017 | 36 | 0.94444 | 0.94024 | 0.80411 | 0.98369 | 0.80556 | 0.81332 | 0.65375 | 0.90953 |
| 22 | Chen 2017 | 42 | 0.76190 | 0.77276 | 0.61810 | 0.87723 | 0.85714 | 0.85850 | 0.71910 | 0.93498 |
| 23 | Bettus 2010 | 44 | 0.59091 | 0.60834 | 0.45295 | 0.74448 | 0.50000 | 0.52718 | 0.37684 | 0.67275 |
| 24 | Khoo 2019 | 49 | 0.48980 | 0.50873 | 0.36596 | 0.65008 | 0.46939 | 0.49553 | 0.35461 | 0.63716 |
| 25 | Boerwinkle 2019 | 64 | 0.39063 | 0.40765 | 0.28984 | 0.53713 | 0.35938 | 0.38416 | 0.26918 | 0.51373 |