

The GLIMMIX Procedure

| Model Information          |                    |
|----------------------------|--------------------|
| Data Set                   | WORK.RESULTS       |
| Response Variable          | q1                 |
| Response Distribution      | Binomial           |
| Link Function              | Logit              |
| Variance Function          | Default            |
| Variance Matrix Blocked By | block              |
| Estimation Technique       | Maximum Likelihood |
| Likelihood Approximation   | Laplace            |
| Degrees of Freedom Method  | Containment        |

The GLIMMIX Procedure

| Class Level Information |        |  |
|-------------------------|--------|--|
| Class                   | Levels | Values                                       |
| block                   | 18     | 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 |

## The GLIMMIX Procedure

| Class Level Information |        |   |
|-------------------------|--------|---|
| Class                   | Levels | Values  |
| user_id                 | 196    | 01a74b042fbb38c63121c61b3088d44e<br>0321162d0e39427d5e29d2bfbdbc291f<br>038e3262e4beea25129050e84cb5c6ba<br>03e6066b40eaa37f0757544d2b63c4c7<br>05b75ea899a1af6ab62a04567cbddd07<br>07828319b83df9a6305e58ded879cb9c<br>0cb92eb524bda4b8ad02f15f6bc73876<br>0ed4c738b86d5cd8202b19777836cc6c<br>0f2048110ffb7a9389ce62a82bb6a991<br>10f5a26c206e890b4c34bc1a32ff98f3<br>11381516724cd0e756e8df3c7b0e1576<br>11688597922b52da118fa62e46cb3b3c<br>122f70cc2f31b9d2469cefafec345f4c<br>131565a9ea605cf180d7de695129a299<br>136485b899e08b7c4231f0f22e683849<br>14aae7ac66d012b731cb6a1b509af320<br>161d880481d9a75ae15f4763d7d638a1<br>162d8160c0340900ce122198c496bbe7<br>16f8ff6718e42ff0fa4882bec9af76d4<br>187227a1cf07187e0cc3d33ed1184087<br>1b314cf17c219e35b5cd11b867b4863f<br>1bad085ba46106d508d171b89ccbda2<br>1d3d5a1d63ed762dda3726a01a9a7dcb<br>1eefdea0963b6bee526cb69c52ceb769<br>1ef9f3a09cc28905a2192ce89f4c36f4<br>1f4b21bd31b5f0eab310d240f7d4d55f<br>2037826a2d539c8b809d1cccc2c2c3f8<br>205bf71a59c22ca230bcbf31be0d4373<br>2225f1dc80a8164c419fc542469b24c3<br>230590ef1a090669112c8be8afdf9597<br>2535cf856f831cf3edc2eb0393793c69<br>2667c5e6ea63f95422abd46f8bdb65ff<br>28160540c8b41d617a8d7ef7e48e0a68<br>29b75a026732701e743fa6ba0dd02c24<br>2bacf8834b9d37d6c0e34a13b403f74b<br>2c3a9969b20a771996de27b52f4bf552<br>2c876e5105b4bc085b56f788a18c05d6<br>2c8f571a333c67fc590bda685f8d7fe8<br>2dc6aa328d07957266504b3ee1f39593<br>2e4f252cd443650e03266eb1d803321c<br>30afd795c4aa4b6da6f36753414c70d5<br>316d313b43865d16a149c94cf28afded<br>3598ef87c475c2536b4ee3fc0363338f<br>35a2123de983629f89f515d1e57886da<br>35f4e2131484e131d0c760cfa29bd0d8<br>380458ea92ef57ecc180804173ddaa8a<br>3889b24858bb7d413f6e106b217a25e1<br>38bb3c7991daa12cc41d68175b8b013e<br>395e77a1f0c555d3d9fb235390cbae05<br>3a151bbd55576da08d9615d9e432f4c<br>3c39697ad34ef4cac2bac5a6cfd8b90e<br>3d09edfc857b170c59f6422ca407e303<br>3e2f74e13713c8217c26f61ebb22d1aa<br>3e3a45e2b6960fde4d3e4eae18553a53<br>3fb38197da08cdf62479b464e8b5c464<br>4115dd096171825b9d4a82901b0733d8<br>41c9e6be5ba04e30ead052b7c5059a1b<br>42116c4585a0d83b33f131a8ce27f2e1<br>449ceaf6250a9780cd9e2946088be66c<br>45b7093618b340e503070dd1b8c3cde8<br>47b8f64022e823959a88848e8ea060da<br>4935461c435dea587a22f5904f4a997c<br>4965b1a73bc8db734fd5dbebe948c68e<br>49a4651227e32a14878e18d7af697c1c<br>4a012593fe2dcec9266ad54148962ec4<br>4f3a3d9979896b49ed4a000cbf1a9dae<br>5011d8b03c7ba6148cce7e9454cc6f31<br>5159066c6dcfd3eca97d9e7e00489e9<br>52228ece0404c6be2732dd4d22ba7979 |

## The GLIMMIX Procedure

| Class Level Information |        |  |
|-------------------------|--------|--|
| Class                   | Levels | Values   |
| user_id                 |        | 5263c3fbc4f0ad5f9a4433f011c09101<br>52d6c07e34b1005b7822c8951ab6d0f2<br>54bb1455cce098f73d4755b7196ba04a<br>554157ded9688d5558c771818608037e<br>55bc93c29d1743726620f90fb90e99cd<br>57e88e91731d9a1c66f2702958c0b3a9<br>585fb36d01fe4f180d740fc83f8210bb<br>58aae8847286cdd92c64512cc75df648<br>58c73694f8dbffe6b3fbe29b03c3c159<br>5dd6ba2fef5a7a2a0e908908dd857eed<br>69d651cbc8d01c01e0a859bdce933451<br>69e88d888071a73b1200d856374e4648<br>6a4fb9a9a94820bb5f6df71749b0e724<br>6b837d3f9effeaf0e296c34c12cf6390<br>6bb82ab5cc34a170671909db462a5e17<br>6d60df5581e4c901edec602f2b2bbbbb<br>6d85f4b2f6c51b0f7c4e566be2fdb8e8<br>6dd8fa822c4f26f5682562b4130fadc0<br>7115594e6dfc8d716b767b925fc4f394<br>73edb98af59a12809ae804a7c2574175<br>74313f0fdd71b205a2d32493a9a674e4<br>74425afa05adb40abc678cb0662fbd42<br>769bb19a4a8da9569be8665f3ab18c10<br>773966d68f5e13e119b6d13c8f16a68e<br>7753790e37138b699b994222c2cffb97<br>787b74f0ec20ebb5229977f343ead9a9<br>78eedb82dcd2fb4d8e8b06892c935644<br>79468f768c8edad0a915dff6ffc8b88<br>7ba1d1d0d7564ce20cc5861ef7f9ced1<br>7c78c0ba5e892359875adea7676003de<br>7d13844b0a0ecfd984cebc3e840363f2<br>7f32f8bd7c1b468893a24122c7cb1230<br>81cbd2e05b8bff07309927ed54f76a3a<br>81d3cbe3230faa39f99d6a545b06d134<br>830490699b621559e1910756be28cc84<br>859216e5e3f8ee5eeb1d36bf614d1bf8<br>859cb75228b03de37aed8f039910e8c6<br>85cc1181458c3c67c00aa06e5dad873<br>85cd07d9c58fa253256d1fdc55ff5577<br>871675c14d17b7ad6441053c8c7d2d53<br>8965f82a205ad65aa7ddc1bd16b2ecd0<br>8bdf186191b6329b9a73906d14e1cfac<br>8d42308697455ccaf7a6f327d2374bf8<br>90022ee1d925eff0780246c4dd5f699a<br>90116784a302cb283508dd607409aacd<br>94032fdc8eb4e0f75caea5b27ca09915<br>95ff37c12d97fde858cc7638bfd63514<br>96ea6ab73cf2ebd5cb44f8fa93640b17<br>97fbc0ccd937809856c28eb2e1812d5d<br>9815e23a49f2e5d1d14d35f57a874eae<br>9873de0d79c274cbfb1fceddae5c7271<br>9ac7adb2fbb60cb32273f6c7fc8a7e90<br>9c0e69876ef883e848dbac0bf5f833ad<br>9f401d9ccebe2867b0a08686329a921e<br>9f843f727e66ad5c9bd61b150351b4d3<br>9fd7c7ca2fa26afd0b2ab532442a27c0<br>a090ae42d260628bb8f50f5ccff51c2a<br>a15d5b00edff2da27ee271d9451e9aae<br>a3966c3b2eddc25e6fb33154aeedd372<br>a6e1a51c552a082122147366f7c2a4e5<br>a7dde31bf4ddf9202aca3c7b4d7608d6<br>a8453ae1e063fa9a3937cb8e93c04128<br>a93dfc54329ff883c71096f1664f28c9<br>a9e06000bf1c8973803af845fe6bd466<br>ad28668f94811fca38e0ef2c7c2405d0<br>ad77f0143c14addacacff5161e20bfd8<br>ae30d27d9132844a2be645a49a3643dc<br>ae6930edcb8e5719ba336260e79d0b32<br>b02476116adb2849a56be979d56e592a |

## The GLIMMIX Procedure

| Class Level Information |        |   |
|-------------------------|--------|---|
| Class                   | Levels | Values  |
| user_id                 |        | b1f7bc8648dc212088c89e502c42c85e<br>b1fc489a9f8234ab72cff48816da2981<br>b3007418a03b7cfc25ac305b5f1c792b<br>b3d0c390e5884a9772e3383254635def<br>b471d5fb91c0420be34dd717cf54671c<br>b66da46ae95d651545167bcd77a64fb3<br>b68e91bf33cdeca7f8f79a3828cbb307<br>b6a7d60ffc2c837655ee7b9e638265b5<br>b964e9258d843432fc9400d3385b25ea<br>b988a49b6fe7b42e38ffde53e086da91<br>b9dc23dacf2c9ec76dc453ab1773a177<br>ba3bca0c56303f8fa53035a4ac6813ff<br>bb3d7729bc5deeb2456eab58565e7ef2<br>bda4ff16a365c6c4c1d33b2202c0fc1a<br>be1982dfefb98c4882b95cdf50d9415d<br>bf74c2156cb7b58660e7afb2e26aa718<br>c3c21d608cd1db8b25a0eb154c1442ad<br>c3f16ceb85b808df9ae405f3ec1f3ab7<br>c4442adef4d65bb111f451e8a2bf20be<br>c526d0f862e2508e81822f063426ae00<br>c6b4ca8fd139386066acdbc51fc35dbf<br>c6eec96092269b5cde4d6ab2e5443fae<br>c70a488f40067c046c0ebe47dfe91ef7<br>c9b6ccb0be8570da85ab2f1aa13edbfe<br>cb8ceed21013a757b668d1562575e88f<br>cc2b97fc599d1214cc2b586a8452bf12<br>cc540d73fa2c162d2df017e8c0c6f731<br>ce819302c7572c11673c368e565ae0bf<br>d08683c78eda875ff9929ee62510580f<br>d0c2bc276b4d5ff4c7c137dce3a1271b<br>d1ca5bf1e1c1bf4c8b6ad91a53c08202<br>d27cb8e5711fb5930393469e0e8feac4<br>d2ac629c7238f9a16bf63e7f3672d6d2<br>d30bae8ae853db6bfdc4f04e46be43d8<br>d343e2f5bd88fa2b771309eb590e3870<br>d38962cdca12e30d0cf7ac728504c0aa<br>d3e59e94cb8ec84d1a6dd5b7d2604c33<br>d6c0385c8b86f89f47c7c35bc23c0772<br>db27a8f684448dafed1914bdb4782235<br>db4f8bcfb11165dcb37acba04cae6bb9<br>dc3106943b769236cb43a5c37bb25400<br>e0dbd0fca7e0fb9c05d3d7462eabba0e<br>e0e07d893326d0f2ea4503f66cbf0a9b<br>e0f49de494818ec9d7a021cd98579285<br>e1eff3c41cff7bb469c4e605f6e65817<br>e253a59f802accec881fca8eb3bb23a1c<br>e27b405f5770563c62f1860f5a4a1ad0<br>e6d5d8081c55fe066c7c3d2e57cbfd91<br>e9084bf2d3950a2c3d8be2298d988cba<br>ea72eb3f615e626e926f3001389123c1<br>efa12944608a4dc4ca9f4c5bbdf1b012<br>efeda1b48ed64a6ab9f0357201ce76e8<br>efee5a23339b17755f4d00c89975165c<br>f09ae45b1c5ff547deba46ab10f316b7<br>f12c6a747ba35c64022aa20f95187b69<br>f223f32a5c63b6acbed3e1e699506080<br>f5f8395c7a198158f5e62caef52ba035<br>fc59f442401904b5d62f978c5ee8cae9 |
| set                     | 2      | set1 set2   |
| media                   | 3      | 2dd 3dd 3dp   |
| pair_id                 | 9      | 1 2 3 4 5 6 7 8 9   |

## The GLIMMIX Procedure

|                             |      |
|-----------------------------|------|
| Number of Observations Read | 4072 |
| Number of Observations Used | 4072 |

| Dimensions               |     |
|--------------------------|-----|
| G-side Cov. Parameters   | 2   |
| Columns in X             | 120 |
| Columns in Z per Subject | 197 |
| Subjects (Blocks in V)   | 18  |
| Max Obs per Subject      | 296 |

| Optimization Information   |                   |
|----------------------------|-------------------|
| Optimization Technique     | Dual Quasi-Newton |
| Parameters in Optimization | 56                |
| Lower Boundaries           | 2                 |
| Upper Boundaries           | 0                 |
| Fixed Effects              | Not Profiled      |
| Starting From              | GLM estimates     |

| Iteration History |          |             |                    |             |              |
|-------------------|----------|-------------|--------------------|-------------|--------------|
| Iteration         | Restarts | Evaluations | Objective Function | Change      | Max Gradient |
| 0                 | 0        | 4           | 3207.9001671       | .           | 73.76489     |
| 1                 | 0        | 3           | 3181.8541899       | 26.04597711 | 36.39265     |
| 2                 | 0        | 4           | 3171.2636801       | 10.59050982 | 18.20702     |
| 3                 | 0        | 3           | 3167.3546853       | 3.90899482  | 12.73229     |
| 4                 | 0        | 2           | 3161.7233261       | 5.63135921  | 11.90276     |
| 5                 | 0        | 2           | 3159.8653599       | 1.85796615  | 13.91404     |
| 6                 | 0        | 3           | 3158.6118337       | 1.25352627  | 6.380447     |
| 7                 | 0        | 3           | 3157.8722955       | 0.73953815  | 7.39623      |
| 8                 | 0        | 2           | 3157.6672812       | 0.20501435  | 9.112317     |
| 9                 | 0        | 4           | 3157.0740174       | 0.59326379  | 1.660434     |
| 10                | 0        | 2           | 3156.7179179       | 0.35609944  | 2.062901     |
| 11                | 0        | 3           | 3156.495827        | 0.22209093  | 1.124395     |
| 12                | 0        | 2           | 3156.2913598       | 0.20446724  | 1.757872     |
| 13                | 0        | 3           | 3156.1817445       | 0.10961530  | 0.752801     |
| 14                | 0        | 2           | 3156.0654823       | 0.11626217  | 1.129135     |
| 15                | 0        | 2           | 3155.9344871       | 0.13099521  | 0.922018     |
| 16                | 0        | 2           | 3155.8037507       | 0.13073642  | 1.800605     |

## The GLIMMIX Procedure

| Iteration History |          |             |                    |            |              |
|-------------------|----------|-------------|--------------------|------------|--------------|
| Iteration         | Restarts | Evaluations | Objective Function | Change     | Max Gradient |
| 17                | 0        | 2           | 3155.5971401       | 0.20661056 | 0.80971      |
| 18                | 0        | 3           | 3155.4612555       | 0.13588458 | 0.907849     |
| 19                | 0        | 2           | 3155.4109065       | 0.05034907 | 1.143855     |
| 20                | 0        | 2           | 3155.3344832       | 0.07642323 | 0.527524     |
| 21                | 0        | 3           | 3155.3096353       | 0.02484797 | 0.45792      |
| 22                | 0        | 4           | 3155.2496792       | 0.05995608 | 0.481043     |
| 23                | 0        | 3           | 3155.2195295       | 0.03014968 | 0.31091      |
| 24                | 0        | 2           | 3155.1971334       | 0.02239611 | 0.66558      |
| 25                | 0        | 2           | 3155.1874038       | 0.00972961 | 0.309523     |
| 26                | 0        | 2           | 3155.1731434       | 0.01426039 | 0.251863     |
| 27                | 0        | 2           | 3155.1650645       | 0.00807892 | 0.310481     |
| 28                | 0        | 2           | 3155.1540724       | 0.01099204 | 0.195921     |
| 29                | 0        | 2           | 3155.1397111       | 0.01436132 | 0.283402     |
| 30                | 0        | 2           | 3155.1169602       | 0.02275088 | 0.347769     |
| 31                | 0        | 3           | 3155.1038372       | 0.01312307 | 0.405962     |
| 32                | 0        | 2           | 3155.0843836       | 0.01945353 | 0.33897      |
| 33                | 0        | 3           | 3155.0747577       | 0.00962597 | 0.440049     |
| 34                | 0        | 2           | 3155.0638292       | 0.01092851 | 0.424884     |
| 35                | 0        | 2           | 3155.0565853       | 0.00724390 | 0.679723     |
| 36                | 0        | 2           | 3155.0505371       | 0.00604820 | 0.229003     |
| 37                | 0        | 2           | 3155.046588        | 0.00394908 | 0.46985      |
| 38                | 0        | 2           | 3155.0438384       | 0.00274955 | 0.23884      |
| 39                | 0        | 3           | 3155.0421112       | 0.00172723 | 0.109667     |

Convergence criterion (GCONV=1E-6) satisfied.

**Estimated G matrix is not positive definite.**

| Fit Statistics           |         |
|--------------------------|---------|
| -2 Log Likelihood        | 3155.04 |
| AIC (smaller is better)  | 3265.04 |
| AICC (smaller is better) | 3266.58 |
| BIC (smaller is better)  | 3314.01 |
| CAIC (smaller is better) | 3369.01 |
| HQIC (smaller is better) | 3271.79 |

**The GLIMMIX Procedure**

| Fit Statistics for Conditional Distribution |         |
|---|---------|
| -2 log L(q1   r. effects)                   | 2654.35 |
| Pearson Chi-Square                          | 2901.63 |
| Pearson Chi-Square / DF                     | 0.71    |

| Covariance Parameter Estimates |         |          |                |
|--------------------------------|---------|----------|----------------|
| Cov Parm                       | Subject | Estimate | Standard Error |
| Intercept                      | block   | 0        | .              |
| user_id                        | block   | 2.6870   | .              |

## The GLIMMIX Procedure

| Solutions for Fixed Effects |      |       |         |          |                |      |         |         |
|-----------------------------|------|-------|---------|----------|----------------|------|---------|---------|
| Effect                      | set  | media | pair_id | Estimate | Standard Error | DF   | t Value | Pr >  t |
| Intercept                   |      |       |         | 2.1618   | 4.1133         | 17   | 0.53    | 0.6060  |
| set                         | set1 |       |         | -0.05639 | 11.7075        | 3823 | -0.00   | 0.9962  |
| set                         | set2 |       |         | 0        | .              | .    | .       | .       |
| media                       |      | 2dd   |         | 0.3844   | 4.2345         | 3823 | 0.09    | 0.9277  |
| media                       |      | 3dd   |         | 0.4396   | 4.9080         | 3823 | 0.09    | 0.9286  |
| media                       |      | 3dp   |         | 0        | .              | .    | .       | .       |
| set*media                   | set1 | 2dd   |         | 0.08460  | 7.9160         | 3823 | 0.01    | 0.9915  |
| set*media                   | set1 | 3dd   |         | 2.1682   | 7.5486         | 3823 | 0.29    | 0.7740  |
| set*media                   | set1 | 3dp   |         | 0        | .              | .    | .       | .       |
| set*media                   | set2 | 2dd   |         | 0        | .              | .    | .       | .       |
| set*media                   | set2 | 3dd   |         | 0        | .              | .    | .       | .       |
| set*media                   | set2 | 3dp   |         | 0        | .              | .    | .       | .       |
| pair_id                     |      |       | 1       | -0.7259  | 0.8047         | 3823 | -0.90   | 0.3671  |
| pair_id                     |      |       | 2       | 0.04015  | 11.6498        | 3823 | 0.00    | 0.9973  |
| pair_id                     |      |       | 3       | 0.9732   | 10.9591        | 3823 | 0.09    | 0.9292  |
| pair_id                     |      |       | 4       | -0.2162  | 1.7584         | 3823 | -0.12   | 0.9021  |
| pair_id                     |      |       | 5       | -0.8088  | 6.3543         | 3823 | -0.13   | 0.8987  |
| pair_id                     |      |       | 6       | 0.4736   | 0              | 3823 | Infy    | <.0001  |
| pair_id                     |      |       | 7       | 0.1766   | 2.6176         | 3823 | 0.07    | 0.9462  |
| pair_id                     |      |       | 8       | -0.5535  | 0              | 3823 | -Infy   | <.0001  |
| pair_id                     |      |       | 9       | 0        | .              | .    | .       | .       |
| set*pair_id                 | set1 |       | 1       | 0.7130   | 6.2256         | 3823 | 0.11    | 0.9088  |
| set*pair_id                 | set1 |       | 2       | 0.2237   | 34.3246        | 3823 | 0.01    | 0.9948  |
| set*pair_id                 | set1 |       | 3       | -0.3104  | 13.8520        | 3823 | -0.02   | 0.9821  |
| set*pair_id                 | set1 |       | 4       | -0.1306  | 3.8390         | 3823 | -0.03   | 0.9729  |
| set*pair_id                 | set1 |       | 5       | -0.4104  | 0              | 3823 | -Infy   | <.0001  |
| set*pair_id                 | set1 |       | 6       | -0.7324  | 3.0725         | 3823 | -0.24   | 0.8116  |
| set*pair_id                 | set1 |       | 7       | -0.1328  | 0              | 3823 | -Infy   | <.0001  |
| set*pair_id                 | set1 |       | 8       | 0.3901   | 0              | 3823 | Infy    | <.0001  |
| set*pair_id                 | set1 |       | 9       | 0        | .              | .    | .       | .       |
| set*pair_id                 | set2 |       | 1       | 0        | .              | .    | .       | .       |
| set*pair_id                 | set2 |       | 2       | 0        | .              | .    | .       | .       |
| set*pair_id                 | set2 |       | 3       | 0        | .              | .    | .       | .       |
| set*pair_id                 | set2 |       | 4       | 0        | .              | .    | .       | .       |
| set*pair_id                 | set2 |       | 5       | 0        | .              | .    | .       | .       |

## The GLIMMIX Procedure

| Solutions for Fixed Effects |      |       |         |          |                |      |         |         |
|-----------------------------|------|-------|---------|----------|----------------|------|---------|---------|
| Effect                      | set  | media | pair_id | Estimate | Standard Error | DF   | t Value | Pr >  t |
| set*pair_id                 | set2 |       | 6       | 0        | .              | .    | .       | .       |
| set*pair_id                 | set2 |       | 7       | 0        | .              | .    | .       | .       |
| set*pair_id                 | set2 |       | 8       | 0        | .              | .    | .       | .       |
| set*pair_id                 | set2 |       | 9       | 0        | .              | .    | .       | .       |
| media*pair_id               |      | 2dd   | 1       | -0.09705 | 0              | 3823 | -Infy   | <.0001  |
| media*pair_id               |      | 2dd   | 2       | -1.2221  | 3.6089         | 3823 | -0.34   | 0.7349  |
| media*pair_id               |      | 2dd   | 3       | -0.6400  | 0              | 3823 | -Infy   | <.0001  |
| media*pair_id               |      | 2dd   | 4       | -0.4860  | 0              | 3823 | -Infy   | <.0001  |
| media*pair_id               |      | 2dd   | 5       | -2.2026  | 0              | 3823 | -Infy   | <.0001  |
| media*pair_id               |      | 2dd   | 6       | -4.2472  | 0              | 3823 | -Infy   | <.0001  |
| media*pair_id               |      | 2dd   | 7       | -0.6177  | 0              | 3823 | -Infy   | <.0001  |
| media*pair_id               |      | 2dd   | 8       | 0.6132   | 0              | 3823 | Infy    | <.0001  |
| media*pair_id               |      | 2dd   | 9       | 0        | .              | .    | .       | .       |
| media*pair_id               |      | 3dd   | 1       | 0.5312   | 0              | 3823 | Infy    | <.0001  |
| media*pair_id               |      | 3dd   | 2       | -0.5072  | 0              | 3823 | -Infy   | <.0001  |
| media*pair_id               |      | 3dd   | 3       | -0.8439  | 2.8188         | 3823 | -0.30   | 0.7647  |
| media*pair_id               |      | 3dd   | 4       | 0.8362   | 0              | 3823 | Infy    | <.0001  |
| media*pair_id               |      | 3dd   | 5       | -1.1517  | 1.9308         | 3823 | -0.60   | 0.5509  |
| media*pair_id               |      | 3dd   | 6       | -1.5933  | 0.5218         | 3823 | -3.05   | 0.0023  |
| media*pair_id               |      | 3dd   | 7       | 0.4703   | 0              | 3823 | Infy    | <.0001  |
| media*pair_id               |      | 3dd   | 8       | 0.2061   | 0              | 3823 | Infy    | <.0001  |
| media*pair_id               |      | 3dd   | 9       | 0        | .              | .    | .       | .       |
| media*pair_id               |      | 3dp   | 1       | 0        | .              | .    | .       | .       |
| media*pair_id               |      | 3dp   | 2       | 0        | .              | .    | .       | .       |
| media*pair_id               |      | 3dp   | 3       | 0        | .              | .    | .       | .       |
| media*pair_id               |      | 3dp   | 4       | 0        | .              | .    | .       | .       |
| media*pair_id               |      | 3dp   | 5       | 0        | .              | .    | .       | .       |
| media*pair_id               |      | 3dp   | 6       | 0        | .              | .    | .       | .       |
| media*pair_id               |      | 3dp   | 7       | 0        | .              | .    | .       | .       |
| media*pair_id               |      | 3dp   | 8       | 0        | .              | .    | .       | .       |
| media*pair_id               |      | 3dp   | 9       | 0        | .              | .    | .       | .       |
| set*media*pair_id           | set1 | 2dd   | 1       | -0.5561  | 0              | 3823 | -Infy   | <.0001  |
| set*media*pair_id           | set1 | 2dd   | 2       | 0.6384   | 0              | 3823 | Infy    | <.0001  |
| set*media*pair_id           | set1 | 2dd   | 3       | -1.5362  | 0              | 3823 | -Infy   | <.0001  |
| set*media*pair_id           | set1 | 2dd   | 4       | 0.1001   | 0              | 3823 | Infy    | <.0001  |

## The GLIMMIX Procedure

| Solutions for Fixed Effects |      |       |         |          |                |      |         |         |
|-----------------------------|------|-------|---------|----------|----------------|------|---------|---------|
| Effect                      | set  | media | pair_id | Estimate | Standard Error | DF   | t Value | Pr >  t |
| set*media*pair_id           | set1 | 2dd   | 5       | 1.5547   | 0              | 3823 | Infy    | <.0001  |
| set*media*pair_id           | set1 | 2dd   | 6       | 2.5570   | 0              | 3823 | Infy    | <.0001  |
| set*media*pair_id           | set1 | 2dd   | 7       | -0.7604  | 0              | 3823 | -Infy   | <.0001  |
| set*media*pair_id           | set1 | 2dd   | 8       | -0.7690  | 0              | 3823 | -Infy   | <.0001  |
| set*media*pair_id           | set1 | 2dd   | 9       | 0        | .              | .    | .       | .       |
| set*media*pair_id           | set1 | 3dd   | 1       | -2.0429  | 0              | 3823 | -Infy   | <.0001  |
| set*media*pair_id           | set1 | 3dd   | 2       | -0.9265  | 0              | 3823 | -Infy   | <.0001  |
| set*media*pair_id           | set1 | 3dd   | 3       | -1.5070  | 0              | 3823 | -Infy   | <.0001  |
| set*media*pair_id           | set1 | 3dd   | 4       | -2.4428  | 0              | 3823 | -Infy   | <.0001  |
| set*media*pair_id           | set1 | 3dd   | 5       | -1.5670  | 0              | 3823 | -Infy   | <.0001  |
| set*media*pair_id           | set1 | 3dd   | 6       | -0.4741  | 0              | 3823 | -Infy   | <.0001  |
| set*media*pair_id           | set1 | 3dd   | 7       | -2.6927  | 0              | 3823 | -Infy   | <.0001  |
| set*media*pair_id           | set1 | 3dd   | 8       | -1.7565  | 0              | 3823 | -Infy   | <.0001  |
| set*media*pair_id           | set1 | 3dd   | 9       | 0        | .              | .    | .       | .       |
| set*media*pair_id           | set1 | 3dp   | 1       | 0        | .              | .    | .       | .       |
| set*media*pair_id           | set1 | 3dp   | 2       | 0        | .              | .    | .       | .       |
| set*media*pair_id           | set1 | 3dp   | 3       | 0        | .              | .    | .       | .       |
| set*media*pair_id           | set1 | 3dp   | 4       | 0        | .              | .    | .       | .       |
| set*media*pair_id           | set1 | 3dp   | 5       | 0        | .              | .    | .       | .       |
| set*media*pair_id           | set1 | 3dp   | 6       | 0        | .              | .    | .       | .       |
| set*media*pair_id           | set1 | 3dp   | 7       | 0        | .              | .    | .       | .       |
| set*media*pair_id           | set1 | 3dp   | 8       | 0        | .              | .    | .       | .       |
| set*media*pair_id           | set1 | 3dp   | 9       | 0        | .              | .    | .       | .       |
| set*media*pair_id           | set2 | 2dd   | 1       | 0        | .              | .    | .       | .       |
| set*media*pair_id           | set2 | 2dd   | 2       | 0        | .              | .    | .       | .       |
| set*media*pair_id           | set2 | 2dd   | 3       | 0        | .              | .    | .       | .       |
| set*media*pair_id           | set2 | 2dd   | 4       | 0        | .              | .    | .       | .       |
| set*media*pair_id           | set2 | 2dd   | 5       | 0        | .              | .    | .       | .       |
| set*media*pair_id           | set2 | 2dd   | 6       | 0        | .              | .    | .       | .       |
| set*media*pair_id           | set2 | 2dd   | 7       | 0        | .              | .    | .       | .       |
| set*media*pair_id           | set2 | 2dd   | 8       | 0        | .              | .    | .       | .       |
| set*media*pair_id           | set2 | 2dd   | 9       | 0        | .              | .    | .       | .       |
| set*media*pair_id           | set2 | 3dd   | 1       | 0        | .              | .    | .       | .       |
| set*media*pair_id           | set2 | 3dd   | 2       | 0        | .              | .    | .       | .       |
| set*media*pair_id           | set2 | 3dd   | 3       | 0        | .              | .    | .       | .       |

## The GLIMMIX Procedure

| Solutions for Fixed Effects |      |       |         |          |                |    |         |         |
|-----------------------------|------|-------|---------|----------|----------------|----|---------|---------|
| Effect                      | set  | media | pair_id | Estimate | Standard Error | DF | t Value | Pr >  t |
| set*media*pair_id           | set2 | 3dd   | 4       | 0        | .              | .  | .       | .       |
| set*media*pair_id           | set2 | 3dd   | 5       | 0        | .              | .  | .       | .       |
| set*media*pair_id           | set2 | 3dd   | 6       | 0        | .              | .  | .       | .       |
| set*media*pair_id           | set2 | 3dd   | 7       | 0        | .              | .  | .       | .       |
| set*media*pair_id           | set2 | 3dd   | 8       | 0        | .              | .  | .       | .       |
| set*media*pair_id           | set2 | 3dd   | 9       | 0        | .              | .  | .       | .       |
| set*media*pair_id           | set2 | 3dp   | 1       | 0        | .              | .  | .       | .       |
| set*media*pair_id           | set2 | 3dp   | 2       | 0        | .              | .  | .       | .       |
| set*media*pair_id           | set2 | 3dp   | 3       | 0        | .              | .  | .       | .       |
| set*media*pair_id           | set2 | 3dp   | 4       | 0        | .              | .  | .       | .       |
| set*media*pair_id           | set2 | 3dp   | 5       | 0        | .              | .  | .       | .       |
| set*media*pair_id           | set2 | 3dp   | 6       | 0        | .              | .  | .       | .       |
| set*media*pair_id           | set2 | 3dp   | 7       | 0        | .              | .  | .       | .       |
| set*media*pair_id           | set2 | 3dp   | 8       | 0        | .              | .  | .       | .       |
| set*media*pair_id           | set2 | 3dp   | 9       | 0        | .              | .  | .       | .       |

| Type III Tests of Fixed Effects |        |        |         |        |
|---------------------------------|--------|--------|---------|--------|
| Effect                          | Num DF | Den DF | F Value | Pr > F |
| set                             | 1      | 3823   | 0.52    | 0.4718 |
| media                           | 2      | 3823   | 31.03   | <.0001 |
| set*media                       | 2      | 3823   | 2.54    | 0.0787 |
| pair_id                         | 8      | 3823   | 3.85E30 | <.0001 |
| set*pair_id                     | 5      | 3823   | 3.18    | 0.0072 |
| media*pair_id                   | 4      | 3823   | 17.48   | <.0001 |
| set*media*pair_id               | 16     | 3823   | Infy    | <.0001 |

| set*media*pair_id Least Squares Means |       |         |          |                |      |         |         |       |          |         |        |                     |            |            |
|---------------------------------------|-------|---------|----------|----------------|------|---------|---------|-------|----------|---------|--------|---------------------|------------|------------|
| set                                   | media | pair_id | Estimate | Standard Error | DF   | t Value | Pr >  t | Alpha | Lower    | Upper   | Mean   | Standard Error Mean | Lower Mean | Upper Mean |
| set1                                  | 2dd   | 1       | 1.9083   | 1.5645         | 3823 | 1.22    | 0.2226  | 0.05  | -1.1591  | 4.9757  | 0.8708 | 0.1760              | 0.2388     | 0.9931     |
| set1                                  | 2dd   | 2       | 2.2545   | 15.1824        | 3823 | 0.15    | 0.8820  | 0.05  | -27.5119 | 32.0209 | 0.9050 | 1.3049              | 1.13E-12   | 1.0000     |
| set1                                  | 2dd   | 3       | 1.0609   | 1.0732         | 3823 | 0.99    | 0.3230  | 0.05  | -1.0432  | 3.1651  | 0.7429 | 0.2050              | 0.2605     | 0.9595     |
| set1                                  | 2dd   | 4       | 1.8415   | 1.8671         | 3823 | 0.99    | 0.3241  | 0.05  | -1.8191  | 5.5021  | 0.8631 | 0.2206              | 0.1395     | 0.9959     |
| set1                                  | 2dd   | 5       | 0.7072   | 2.4433         | 3823 | 0.29    | 0.7723  | 0.05  | -4.0831  | 5.4976  | 0.6698 | 0.5404              | 0.01658    | 0.9959     |

## The GLIMMIX Procedure

| set*media*pair_id Least Squares Means |       |         |          |                |      |         |         |       |          |         |        |                     |            |            |
|---------------------------------------|-------|---------|----------|----------------|------|---------|---------|-------|----------|---------|--------|---------------------|------------|------------|
| set                                   | media | pair_id | Estimate | Standard Error | DF   | t Value | Pr >  t | Alpha | Lower    | Upper   | Mean   | Standard Error Mean | Lower Mean | Upper Mean |
| set1                                  | 2dd   | 6       | 0.6253   | 0.9090         | 3823 | 0.69    | 0.4916  | 0.05  | -1.1569  | 2.4074  | 0.6514 | 0.2064              | 0.2392     | 0.9174     |
| set1                                  | 2dd   | 7       | 1.2401   | 6.5313         | 3823 | 0.19    | 0.8494  | 0.05  | -11.5652 | 14.0453 | 0.7756 | 1.1368              | 9.491E-6   | 1.0000     |
| set1                                  | 2dd   | 8       | 2.2552   | 3.9218         | 3823 | 0.58    | 0.5653  | 0.05  | -5.4338  | 9.9441  | 0.9051 | 0.3369              | 0.004347   | 1.0000     |
| set1                                  | 2dd   | 9       | 2.5743   | 3.9218         | 3823 | 0.66    | 0.5116  | 0.05  | -5.1146  | 10.2633 | 0.9292 | 0.2580              | 0.005972   | 1.0000     |
| set1                                  | 3dd   | 1       | 3.1886   | 0.5824         | 3823 | 5.47    | <.0001  | 0.05  | 2.0468   | 4.3305  | 0.9604 | 0.02215             | 0.8856     | 0.9870     |
| set1                                  | 3dd   | 2       | 3.5434   | 17.7339        | 3823 | 0.20    | 0.8416  | 0.05  | -31.2254 | 38.3121 | 0.9719 | 0.4844              | 2.75E-14   | 1.0000     |
| set1                                  | 3dd   | 3       | 3.0251   | 0.8274         | 3823 | 3.66    | 0.0003  | 0.05  | 1.4029   | 4.6472  | 0.9537 | 0.03654             | 0.8026     | 0.9905     |
| set1                                  | 3dd   | 4       | 2.7597   | 2.8901         | 3823 | 0.95    | 0.3397  | 0.05  | -2.9066  | 8.4260  | 0.9405 | 0.1618              | 0.05183    | 0.9998     |
| set1                                  | 3dd   | 5       | 0.7753   | 0.5674         | 3823 | 1.37    | 0.1719  | 0.05  | -0.3371  | 1.8876  | 0.6847 | 0.1225              | 0.4165     | 0.8685     |
| set1                                  | 3dd   | 6       | 2.3870   | 2.3419         | 3823 | 1.02    | 0.3082  | 0.05  | -2.2046  | 6.9786  | 0.9158 | 0.1805              | 0.09934    | 0.9991     |
| set1                                  | 3dd   | 7       | 2.5346   | 7.5714         | 3823 | 0.33    | 0.7378  | 0.05  | -12.3097 | 17.3790 | 0.9265 | 0.5154              | 4.508E-6   | 1.0000     |
| set1                                  | 3dd   | 8       | 2.9994   | 4.9636         | 3823 | 0.60    | 0.5457  | 0.05  | -6.7321  | 12.7310 | 0.9525 | 0.2244              | 0.001191   | 1.0000     |
| set1                                  | 3dd   | 9       | 4.7132   | 4.9636         | 3823 | 0.95    | 0.3424  | 0.05  | -5.0184  | 14.4448 | 0.9911 | 0.04376             | 0.006572   | 1.0000     |
| set1                                  | 3dp   | 1       | 2.0925   | 2.1735         | 3823 | 0.96    | 0.3357  | 0.05  | -2.1688  | 6.3538  | 0.8902 | 0.2125              | 0.1026     | 0.9983     |
| set1                                  | 3dp   | 2       | 2.3693   | 15.0913        | 3823 | 0.16    | 0.8753  | 0.05  | -27.2185 | 31.9570 | 0.9145 | 1.1806              | 1.51E-12   | 1.0000     |
| set1                                  | 3dp   | 3       | 2.7682   | 4.7209         | 3823 | 0.59    | 0.5577  | 0.05  | -6.4875  | 12.0238 | 0.9409 | 0.2624              | 0.001520   | 1.0000     |
| set1                                  | 3dp   | 4       | 1.7585   | 5.5262         | 3823 | 0.32    | 0.7503  | 0.05  | -9.0761  | 12.5931 | 0.8530 | 0.6928              | 0.000114   | 1.0000     |
| set1                                  | 3dp   | 5       | 0.8862   | 1.2817         | 3823 | 0.69    | 0.4893  | 0.05  | -1.6267  | 3.3991  | 0.7081 | 0.2649              | 0.1643     | 0.9677     |
| set1                                  | 3dp   | 6       | 1.8466   | 4.5539         | 3823 | 0.41    | 0.6851  | 0.05  | -7.0817  | 10.7748 | 0.8637 | 0.5360              | 0.000840   | 1.0000     |
| set1                                  | 3dp   | 7       | 2.1492   | 10.2135        | 3823 | 0.21    | 0.8333  | 0.05  | -17.8752 | 22.1736 | 0.8956 | 0.9550              | 1.725E-8   | 1.0000     |
| set1                                  | 3dp   | 8       | 1.9420   | 7.6037         | 3823 | 0.26    | 0.7984  | 0.05  | -12.9657 | 16.8497 | 0.8746 | 0.8341              | 2.339E-6   | 1.0000     |
| set1                                  | 3dp   | 9       | 2.1054   | 7.6037         | 3823 | 0.28    | 0.7819  | 0.05  | -12.8023 | 17.0130 | 0.8914 | 0.7359              | 2.754E-6   | 1.0000     |
| set2                                  | 2dd   | 1       | 1.7232   | 0.9238         | 3823 | 1.87    | 0.0622  | 0.05  | -0.08801 | 3.5344  | 0.8485 | 0.1187              | 0.4780     | 0.9717     |
| set2                                  | 2dd   | 2       | 1.3641   | 15.3548        | 3823 | 0.09    | 0.9292  | 0.05  | -28.7403 | 31.4685 | 0.7964 | 2.4895              | 3.3E-13    | 1.0000     |
| set2                                  | 2dd   | 3       | 2.8793   | 11.0815        | 3823 | 0.26    | 0.7950  | 0.05  | -18.8470 | 24.6056 | 0.9468 | 0.5580              | 6.529E-9   | 1.0000     |
| set2                                  | 2dd   | 4       | 1.8438   | 1.8804         | 3823 | 0.98    | 0.3269  | 0.05  | -1.8429  | 5.5306  | 0.8634 | 0.2218              | 0.1367     | 0.9961     |
| set2                                  | 2dd   | 5       | -0.4653  | 6.2339         | 3823 | -0.07   | 0.9405  | 0.05  | -12.6874 | 11.7569 | 0.3857 | 1.4771              | 3.09E-6    | 1.0000     |
| set2                                  | 2dd   | 6       | -1.2276  | 0.2315         | 3823 | -5.30   | <.0001  | 0.05  | -1.6814  | -0.7737 | 0.2266 | 0.04057             | 0.1569     | 0.3157     |
| set2                                  | 2dd   | 7       | 2.1051   | 2.7443         | 3823 | 0.77    | 0.4431  | 0.05  | -3.2753  | 7.4854  | 0.8914 | 0.2657              | 0.03643    | 0.9994     |
| set2                                  | 2dd   | 8       | 2.6058   | 0.2315         | 3823 | 11.26   | <.0001  | 0.05  | 2.1520   | 3.0597  | 0.9312 | 0.01482             | 0.8959     | 0.9552     |
| set2                                  | 2dd   | 9       | 2.5461   | 0.2315         | 3823 | 11.00   | <.0001  | 0.05  | 2.0923   | 3.0000  | 0.9273 | 0.01560             | 0.8901     | 0.9526     |
| set2                                  | 3dd   | 1       | 2.4068   | 1.5853         | 3823 | 1.52    | 0.1291  | 0.05  | -0.7014  | 5.5149  | 0.9173 | 0.1202              | 0.3315     | 0.9960     |
| set2                                  | 3dd   | 2       | 2.1344   | 12.4388        | 3823 | 0.17    | 0.8638  | 0.05  | -22.2529 | 26.5217 | 0.8942 | 1.1768              | 2.17E-10   | 1.0000     |
| set2                                  | 3dd   | 3       | 2.7307   | 8.9586         | 3823 | 0.30    | 0.7605  | 0.05  | -14.8333 | 20.2947 | 0.9388 | 0.5146              | 3.614E-7   | 1.0000     |
| set2                                  | 3dd   | 4       | 3.2214   | 2.5480         | 3823 | 1.26    | 0.2062  | 0.05  | -1.7741  | 8.2169  | 0.9616 | 0.09401             | 0.1450     | 0.9997     |

## The GLIMMIX Procedure

| set*media*pair_id Least Squares Means |       |         |          |                |      |         |         |       |          |         |        |                     |            |            |
|---------------------------------------|-------|---------|----------|----------------|------|---------|---------|-------|----------|---------|--------|---------------------|------------|------------|
| set                                   | media | pair_id | Estimate | Standard Error | DF   | t Value | Pr >  t | Alpha | Lower    | Upper   | Mean   | Standard Error Mean | Lower Mean | Upper Mean |
| set2                                  | 3dd   | 5       | 0.6409   | 3.6715         | 3823 | 0.17    | 0.8614  | 0.05  | -6.5575  | 7.8392  | 0.6550 | 0.8297              | 0.001417   | 0.9996     |
| set2                                  | 3dd   | 6       | 1.4817   | 1.2453         | 3823 | 1.19    | 0.2342  | 0.05  | -0.9598  | 3.9232  | 0.8148 | 0.1879              | 0.2769     | 0.9806     |
| set2                                  | 3dd   | 7       | 3.2484   | 3.4184         | 3823 | 0.95    | 0.3420  | 0.05  | -3.4538  | 9.9505  | 0.9626 | 0.1230              | 0.03066    | 1.0000     |
| set2                                  | 3dd   | 8       | 2.2540   | 0.8462         | 3823 | 2.66    | 0.0078  | 0.05  | 0.5950   | 3.9130  | 0.9050 | 0.07275             | 0.6445     | 0.9804     |
| set2                                  | 3dd   | 9       | 2.6014   | 0.8462         | 3823 | 3.07    | 0.0021  | 0.05  | 0.9424   | 4.2604  | 0.9310 | 0.05439             | 0.7196     | 0.9861     |
| set2                                  | 3dp   | 1       | 1.4359   | 3.3518         | 3823 | 0.43    | 0.6684  | 0.05  | -5.1355  | 8.0073  | 0.8078 | 0.5204              | 0.005850   | 0.9997     |
| set2                                  | 3dp   | 2       | 2.2019   | 7.5546         | 3823 | 0.29    | 0.7707  | 0.05  | -12.6095 | 17.0133 | 0.9004 | 0.6774              | 3.34E-6    | 1.0000     |
| set2                                  | 3dp   | 3       | 3.1350   | 6.8592         | 3823 | 0.46    | 0.6477  | 0.05  | -10.3131 | 16.5830 | 0.9583 | 0.2740              | 0.000033   | 1.0000     |
| set2                                  | 3dp   | 4       | 1.9455   | 2.3845         | 3823 | 0.82    | 0.4146  | 0.05  | -2.7295  | 6.6206  | 0.8750 | 0.2609              | 0.06125    | 0.9987     |
| set2                                  | 3dp   | 5       | 1.3529   | 10.4600        | 3823 | 0.13    | 0.8971  | 0.05  | -19.1547 | 21.8606 | 0.7946 | 1.7071              | 4.8E-9     | 1.0000     |
| set2                                  | 3dp   | 6       | 2.6353   | 4.1133         | 3823 | 0.64    | 0.5218  | 0.05  | -5.4292  | 10.6998 | 0.9331 | 0.2568              | 0.004368   | 1.0000     |
| set2                                  | 3dp   | 7       | 2.3384   | 1.5376         | 3823 | 1.52    | 0.1284  | 0.05  | -0.6762  | 5.3530  | 0.9120 | 0.1234              | 0.3371     | 0.9953     |
| set2                                  | 3dp   | 8       | 1.6083   | 4.1133         | 3823 | 0.39    | 0.6958  | 0.05  | -6.4562  | 9.6728  | 0.8332 | 0.5717              | 0.001568   | 0.9999     |
| set2                                  | 3dp   | 9       | 2.1618   | 4.1133         | 3823 | 0.53    | 0.5992  | 0.05  | -5.9027  | 10.2263 | 0.8968 | 0.3808              | 0.002725   | 1.0000     |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |          |                |      |         |         |        |       |          |         |
|---|-------|---------|------|--------|----------|----------|----------------|------|---------|---------|--------|-------|----------|---------|
| set   | media | pair_id | _set | _media | _pair_id | Estimate | Standard Error | DF   | t Value | Pr >  t | Adj P  | Alpha | Lower    | Upper   |
| set1  | 2dd   | 1       | set1 | 2dd    | 2        | -0.3462  | 13.6513        | 3823 | -0.03   | 0.9798  | 1.0000 | 0.05  | -27.1106 | 26.4183 |
| set1  | 2dd   | 1       | set1 | 2dd    | 3        | 0.8474   | 2.5791         | 3823 | 0.33    | 0.7425  | 1.0000 | 0.05  | -4.2093  | 5.9040  |
| set1  | 2dd   | 1       | set1 | 2dd    | 4        | 0.06678  | 3.3804         | 3823 | 0.02    | 0.9842  | 1.0000 | 0.05  | -6.5607  | 6.6943  |
| set1  | 2dd   | 1       | set1 | 2dd    | 5        | 1.2011   | 0.9731         | 3823 | 1.23    | 0.2172  | 1.0000 | 0.05  | -0.7068  | 3.1089  |
| set1  | 2dd   | 1       | set1 | 2dd    | 6        | 1.2830   | 2.4100         | 3823 | 0.53    | 0.5945  | 1.0000 | 0.05  | -3.4419  | 6.0080  |
| set1  | 2dd   | 1       | set1 | 2dd    | 7        | 0.6682   | 8.0643         | 3823 | 0.08    | 0.9340  | 1.0000 | 0.05  | -15.1425 | 16.4789 |
| set1  | 2dd   | 1       | set1 | 2dd    | 8        | -0.3469  | 5.4583         | 3823 | -0.06   | 0.9493  | 1.0000 | 0.05  | -11.0483 | 10.3546 |
| set1  | 2dd   | 1       | set1 | 2dd    | 9        | -0.6660  | 5.4583         | 3823 | -0.12   | 0.9029  | 1.0000 | 0.05  | -11.3675 | 10.0354 |
| set1  | 2dd   | 1       | set1 | 3dd    | 1        | -1.2803  | 1.0610         | 3823 | -1.21   | 0.2276  | 1.0000 | 0.05  | -3.3605  | 0.7998  |
| set1  | 2dd   | 1       | set1 | 3dd    | 2        | -1.6351  | 16.2035        | 3823 | -0.10   | 0.9196  | 1.0000 | 0.05  | -33.4035 | 30.1333 |
| set1  | 2dd   | 1       | set1 | 3dd    | 3        | -1.1168  | 0.9113         | 3823 | -1.23   | 0.2205  | 1.0000 | 0.05  | -2.9035  | 0.6699  |
| set1  | 2dd   | 1       | set1 | 3dd    | 4        | -0.8515  | 4.4190         | 3823 | -0.19   | 0.8472  | 1.0000 | 0.05  | -9.5153  | 7.8124  |
| set1  | 2dd   | 1       | set1 | 3dd    | 5        | 1.1330   | 2.0605         | 3823 | 0.55    | 0.5824  | 1.0000 | 0.05  | -2.9067  | 5.1728  |
| set1  | 2dd   | 1       | set1 | 3dd    | 6        | -0.4787  | 3.8686         | 3823 | -0.12   | 0.9015  | 1.0000 | 0.05  | -8.0635  | 7.1060  |
| set1  | 2dd   | 1       | set1 | 3dd    | 7        | -0.6264  | 9.1068         | 3823 | -0.07   | 0.9452  | 1.0000 | 0.05  | -18.4811 | 17.2283 |
| set1  | 2dd   | 1       | set1 | 3dd    | 8        | -1.0912  | 6.5026         | 3823 | -0.17   | 0.8667  | 1.0000 | 0.05  | -13.8401 | 11.6578 |
| set1  | 2dd   | 1       | set1 | 3dd    | 9        | -2.8049  | 6.5026         | 3823 | -0.43   | 0.6662  | 1.0000 | 0.05  | -15.5539 | 9.9441  |
| set1  | 2dd   | 1       | set1 | 3dp    | 1        | -0.1842  | 3.6905         | 3823 | -0.05   | 0.9602  | 1.0000 | 0.05  | -7.4197  | 7.0512  |
| set1  | 2dd   | 1       | set1 | 3dp    | 2        | -0.4610  | 13.5617        | 3823 | -0.03   | 0.9729  | 1.0000 | 0.05  | -27.0499 | 26.1279 |
| set1  | 2dd   | 1       | set1 | 3dp    | 3        | -0.8599  | 6.2554         | 3823 | -0.14   | 0.8907  | 1.0000 | 0.05  | -13.1241 | 11.4044 |
| set1  | 2dd   | 1       | set1 | 3dp    | 4        | 0.1498   | 7.0586         | 3823 | 0.02    | 0.9831  | 1.0000 | 0.05  | -13.6891 | 13.9887 |
| set1  | 2dd   | 1       | set1 | 3dp    | 5        | 1.0221   | 2.8219         | 3823 | 0.36    | 0.7172  | 1.0000 | 0.05  | -4.5105  | 6.5547  |
| set1  | 2dd   | 1       | set1 | 3dp    | 6        | 0.06173  | 6.0879         | 3823 | 0.01    | 0.9919  | 1.0000 | 0.05  | -11.8741 | 11.9976 |
| set1  | 2dd   | 1       | set1 | 3dp    | 7        | -0.2409  | 11.7487        | 3823 | -0.02   | 0.9836  | 1.0000 | 0.05  | -23.2753 | 22.7935 |
| set1  | 2dd   | 1       | set1 | 3dp    | 8        | -0.03371 | 9.1418         | 3823 | -0.00   | 0.9971  | 1.0000 | 0.05  | -17.9569 | 17.8895 |
| set1  | 2dd   | 1       | set1 | 3dp    | 9        | -0.1971  | 9.1418         | 3823 | -0.02   | 0.9828  | 1.0000 | 0.05  | -18.1203 | 17.7261 |
| set1  | 2dd   | 1       | set2 | 2dd    | 1        | 0.1851   | 2.4482         | 3823 | 0.08    | 0.9397  | 1.0000 | 0.05  | -4.6148  | 4.9849  |
| set1  | 2dd   | 1       | set2 | 2dd    | 2        | 0.5442   | 16.8864        | 3823 | 0.03    | 0.9743  | 1.0000 | 0.05  | -32.5630 | 33.6513 |
| set1  | 2dd   | 1       | set2 | 2dd    | 3        | -0.9710  | 12.6162        | 3823 | -0.08   | 0.9387  | 1.0000 | 0.05  | -25.7061 | 23.7641 |
| set1  | 2dd   | 1       | set2 | 2dd    | 4        | 0.06446  | 3.4145         | 3823 | 0.02    | 0.9849  | 1.0000 | 0.05  | -6.6300  | 6.7589  |
| set1  | 2dd   | 1       | set2 | 2dd    | 5        | 2.3736   | 4.7141         | 3823 | 0.50    | 0.6146  | 1.0000 | 0.05  | -6.8688  | 11.6160 |
| set1  | 2dd   | 1       | set2 | 2dd    | 6        | 3.1358   | 1.6882         | 3823 | 1.86    | 0.0633  | 0.9999 | 0.05  | -0.1740  | 6.4457  |
| set1  | 2dd   | 1       | set2 | 2dd    | 7        | -0.1968  | 4.2765         | 3823 | -0.05   | 0.9633  | 1.0000 | 0.05  | -8.5813  | 8.1877  |
| set1  | 2dd   | 1       | set2 | 2dd    | 8        | -0.6976  | 1.6882         | 3823 | -0.41   | 0.6795  | 1.0000 | 0.05  | -4.0074  | 2.6123  |
| set1  | 2dd   | 1       | set2 | 2dd    | 9        | -0.6378  | 1.6882         | 3823 | -0.38   | 0.7056  | 1.0000 | 0.05  | -3.9477  | 2.6720  |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |              |              |
|---|-------|---------|------|--------|----------|--------------|--------------|
| set   | media | pair_id | _set | _media | _pair_id | Adj<br>Lower | Adj<br>Upper |
| set1  | 2dd   | 1       | set1 | 2dd    | 2        | -55.3803     | 54.6879      |
| set1  | 2dd   | 1       | set1 | 2dd    | 3        | -9.5503      | 11.2450      |
| set1  | 2dd   | 1       | set1 | 2dd    | 4        | -13.5610     | 13.6945      |
| set1  | 2dd   | 1       | set1 | 2dd    | 5        | -2.7219      | 5.1241       |
| set1  | 2dd   | 1       | set1 | 2dd    | 6        | -8.4326      | 10.9986      |
| set1  | 2dd   | 1       | set1 | 2dd    | 7        | -31.8424     | 33.1788      |
| set1  | 2dd   | 1       | set1 | 2dd    | 8        | -22.3516     | 21.6579      |
| set1  | 2dd   | 1       | set1 | 2dd    | 9        | -22.6708     | 21.3387      |
| set1  | 2dd   | 1       | set1 | 3dd    | 1        | -5.5577      | 2.9970       |
| set1  | 2dd   | 1       | set1 | 3dd    | 2        | -66.9585     | 63.6884      |
| set1  | 2dd   | 1       | set1 | 3dd    | 3        | -4.7907      | 2.5571       |
| set1  | 2dd   | 1       | set1 | 3dd    | 4        | -18.6665     | 16.9636      |
| set1  | 2dd   | 1       | set1 | 3dd    | 5        | -7.1736      | 9.4397       |
| set1  | 2dd   | 1       | set1 | 3dd    | 6        | -16.0748     | 15.1173      |
| set1  | 2dd   | 1       | set1 | 3dd    | 7        | -37.3399     | 36.0872      |
| set1  | 2dd   | 1       | set1 | 3dd    | 8        | -27.3061     | 25.1238      |
| set1  | 2dd   | 1       | set1 | 3dd    | 9        | -29.0198     | 23.4100      |
| set1  | 2dd   | 1       | set1 | 3dp    | 1        | -15.0621     | 14.6936      |
| set1  | 2dd   | 1       | set1 | 3dp    | 2        | -55.1341     | 54.2121      |
| set1  | 2dd   | 1       | set1 | 3dp    | 3        | -26.0781     | 24.3584      |
| set1  | 2dd   | 1       | set1 | 3dp    | 4        | -28.3063     | 28.6059      |
| set1  | 2dd   | 1       | set1 | 3dp    | 5        | -10.3543     | 12.3984      |
| set1  | 2dd   | 1       | set1 | 3dp    | 6        | -24.4812     | 24.6047      |
| set1  | 2dd   | 1       | set1 | 3dp    | 7        | -47.6051     | 47.1233      |
| set1  | 2dd   | 1       | set1 | 3dp    | 8        | -36.8881     | 36.8207      |
| set1  | 2dd   | 1       | set1 | 3dp    | 9        | -37.0515     | 36.6573      |
| set1  | 2dd   | 1       | set2 | 2dd    | 1        | -9.6845      | 10.0547      |
| set1  | 2dd   | 1       | set2 | 2dd    | 2        | -67.5320     | 68.6203      |
| set1  | 2dd   | 1       | set2 | 2dd    | 3        | -51.8323     | 49.8902      |
| set1  | 2dd   | 1       | set2 | 2dd    | 4        | -13.7010     | 13.8299      |
| set1  | 2dd   | 1       | set2 | 2dd    | 5        | -16.6310     | 21.3782      |
| set1  | 2dd   | 1       | set2 | 2dd    | 6        | -3.6699      | 9.9416       |
| set1  | 2dd   | 1       | set2 | 2dd    | 7        | -17.4374     | 17.0438      |
| set1  | 2dd   | 1       | set2 | 2dd    | 8        | -7.5033      | 6.1082       |
| set1  | 2dd   | 1       | set2 | 2dd    | 9        | -7.4436      | 6.1679       |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |          |                |      |         |         |        |       |          |         |
|---|-------|---------|------|--------|----------|----------|----------------|------|---------|---------|--------|-------|----------|---------|
| set   | media | pair_id | _set | _media | _pair_id | Estimate | Standard Error | DF   | t Value | Pr >  t | Adj P  | Alpha | Lower    | Upper   |
| set1  | 2dd   | 1       | set2 | 3dd    | 1        | -0.4985  | 3.1204         | 3823 | -0.16   | 0.8731  | 1.0000 | 0.05  | -6.6162  | 5.6193  |
| set1  | 2dd   | 1       | set2 | 3dd    | 2        | -0.2261  | 13.9701        | 3823 | -0.02   | 0.9871  | 1.0000 | 0.05  | -27.6157 | 27.1635 |
| set1  | 2dd   | 1       | set2 | 3dd    | 3        | -0.8224  | 10.4937        | 3823 | -0.08   | 0.9375  | 1.0000 | 0.05  | -21.3963 | 19.7514 |
| set1  | 2dd   | 1       | set2 | 3dd    | 4        | -1.3131  | 4.0864         | 3823 | -0.32   | 0.7480  | 1.0000 | 0.05  | -9.3248  | 6.6986  |
| set1  | 2dd   | 1       | set2 | 3dd    | 5        | 1.2674   | 2.1533         | 3823 | 0.59    | 0.5562  | 1.0000 | 0.05  | -2.9544  | 5.4892  |
| set1  | 2dd   | 1       | set2 | 3dd    | 6        | 0.4266   | 2.7742         | 3823 | 0.15    | 0.8778  | 1.0000 | 0.05  | -5.0124  | 5.8656  |
| set1  | 2dd   | 1       | set2 | 3dd    | 7        | -1.3401  | 4.9525         | 3823 | -0.27   | 0.7867  | 1.0000 | 0.05  | -11.0498 | 8.3697  |
| set1  | 2dd   | 1       | set2 | 3dd    | 8        | -0.3457  | 2.3655         | 3823 | -0.15   | 0.8838  | 1.0000 | 0.05  | -4.9836  | 4.2921  |
| set1  | 2dd   | 1       | set2 | 3dd    | 9        | -0.6931  | 2.3655         | 3823 | -0.29   | 0.7695  | 1.0000 | 0.05  | -5.3310  | 3.9447  |
| set1  | 2dd   | 1       | set2 | 3dp    | 1        | 0.4724   | 1.8360         | 3823 | 0.26    | 0.7970  | 1.0000 | 0.05  | -3.1273  | 4.0721  |
| set1  | 2dd   | 1       | set2 | 3dp    | 2        | -0.2936  | 9.0789         | 3823 | -0.03   | 0.9742  | 1.0000 | 0.05  | -18.0935 | 17.5063 |
| set1  | 2dd   | 1       | set2 | 3dp    | 3        | -1.2267  | 8.3912         | 3823 | -0.15   | 0.8838  | 1.0000 | 0.05  | -17.6784 | 15.2250 |
| set1  | 2dd   | 1       | set2 | 3dp    | 4        | -0.03724 | 0.8975         | 3823 | -0.04   | 0.9669  | 1.0000 | 0.05  | -1.7969  | 1.7225  |
| set1  | 2dd   | 1       | set2 | 3dp    | 5        | 0.5553   | 8.9313         | 3823 | 0.06    | 0.9504  | 1.0000 | 0.05  | -16.9553 | 18.0660 |
| set1  | 2dd   | 1       | set2 | 3dp    | 6        | -0.7270  | 2.5908         | 3823 | -0.28   | 0.7790  | 1.0000 | 0.05  | -5.8065  | 4.3524  |
| set1  | 2dd   | 1       | set2 | 3dp    | 7        | -0.4301  | 0.3445         | 3823 | -1.25   | 0.2119  | 1.0000 | 0.05  | -1.1055  | 0.2453  |
| set1  | 2dd   | 1       | set2 | 3dp    | 8        | 0.3000   | 2.5908         | 3823 | 0.12    | 0.9078  | 1.0000 | 0.05  | -4.7795  | 5.3795  |
| set1  | 2dd   | 1       | set2 | 3dp    | 9        | -0.2535  | 2.5908         | 3823 | -0.10   | 0.9221  | 1.0000 | 0.05  | -5.3330  | 4.8260  |
| set1  | 2dd   | 2       | set1 | 2dd    | 3        | 1.1936   | 16.2086        | 3823 | 0.07    | 0.9413  | 1.0000 | 0.05  | -30.5847 | 32.9719 |
| set1  | 2dd   | 2       | set1 | 2dd    | 4        | 0.4130   | 17.0145        | 3823 | 0.02    | 0.9806  | 1.0000 | 0.05  | -32.9454 | 33.7714 |
| set1  | 2dd   | 2       | set1 | 2dd    | 5        | 1.5472   | 12.7481        | 3823 | 0.12    | 0.9034  | 1.0000 | 0.05  | -23.4465 | 26.5410 |
| set1  | 2dd   | 2       | set1 | 2dd    | 6        | 1.6292   | 16.0400        | 3823 | 0.10    | 0.9191  | 1.0000 | 0.05  | -29.8185 | 33.0770 |
| set1  | 2dd   | 2       | set1 | 2dd    | 7        | 1.0144   | 21.7079        | 3823 | 0.05    | 0.9627  | 1.0000 | 0.05  | -41.5457 | 43.5745 |
| set1  | 2dd   | 2       | set1 | 2dd    | 8        | -0.00068 | 19.0987        | 3823 | -0.00   | 1.0000  | 1.0000 | 0.05  | -37.4454 | 37.4440 |
| set1  | 2dd   | 2       | set1 | 2dd    | 9        | -0.3199  | 19.0987        | 3823 | -0.02   | 0.9866  | 1.0000 | 0.05  | -37.7646 | 37.1248 |
| set1  | 2dd   | 2       | set1 | 3dd    | 1        | -0.9341  | 14.6913        | 3823 | -0.06   | 0.9493  | 1.0000 | 0.05  | -29.7377 | 27.8695 |
| set1  | 2dd   | 2       | set1 | 3dd    | 2        | -1.2889  | 2.5763         | 3823 | -0.50   | 0.6169  | 1.0000 | 0.05  | -6.3400  | 3.7622  |
| set1  | 2dd   | 2       | set1 | 3dd    | 3        | -0.7706  | 14.4556        | 3823 | -0.05   | 0.9575  | 1.0000 | 0.05  | -29.1120 | 27.5708 |
| set1  | 2dd   | 2       | set1 | 3dd    | 4        | -0.5053  | 18.0540        | 3823 | -0.03   | 0.9777  | 1.0000 | 0.05  | -35.9017 | 34.8911 |
| set1  | 2dd   | 2       | set1 | 3dd    | 5        | 1.4792   | 15.6833        | 3823 | 0.09    | 0.9249  | 1.0000 | 0.05  | -29.2693 | 32.2277 |
| set1  | 2dd   | 2       | set1 | 3dd    | 6        | -0.1325  | 17.5002        | 3823 | -0.01   | 0.9940  | 1.0000 | 0.05  | -34.4430 | 34.1780 |
| set1  | 2dd   | 2       | set1 | 3dd    | 7        | -0.2802  | 22.7483        | 3823 | -0.01   | 0.9902  | 1.0000 | 0.05  | -44.8802 | 44.3198 |
| set1  | 2dd   | 2       | set1 | 3dd    | 8        | -0.7450  | 20.1397        | 3823 | -0.04   | 0.9705  | 1.0000 | 0.05  | -40.2305 | 38.7405 |
| set1  | 2dd   | 2       | set1 | 3dd    | 9        | -2.4587  | 20.1397        | 3823 | -0.12   | 0.9028  | 1.0000 | 0.05  | -41.9442 | 37.0268 |
| set1  | 2dd   | 2       | set1 | 3dp    | 1        | 0.1620   | 17.3340        | 3823 | 0.01    | 0.9925  | 1.0000 | 0.05  | -33.8228 | 34.1467 |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |              |              |
|---|-------|---------|------|--------|----------|--------------|--------------|
| set   | media | pair_id | _set | _media | _pair_id | Adj<br>Lower | Adj<br>Upper |
| set1  | 2dd   | 1       | set2 | 3dd    | 1        | -13.0781     | 12.0811      |
| set1  | 2dd   | 1       | set2 | 3dd    | 2        | -56.5457     | 56.0935      |
| set1  | 2dd   | 1       | set2 | 3dd    | 3        | -43.1271     | 41.4823      |
| set1  | 2dd   | 1       | set2 | 3dd    | 4        | -17.7871     | 15.1609      |
| set1  | 2dd   | 1       | set2 | 3dd    | 5        | -7.4135      | 9.9483       |
| set1  | 2dd   | 1       | set2 | 3dd    | 6        | -10.7573     | 11.6105      |
| set1  | 2dd   | 1       | set2 | 3dd    | 7        | -21.3057     | 18.6255      |
| set1  | 2dd   | 1       | set2 | 3dd    | 8        | -9.8823      | 9.1908       |
| set1  | 2dd   | 1       | set2 | 3dd    | 9        | -10.2297     | 8.8434       |
| set1  | 2dd   | 1       | set2 | 3dp    | 1        | -6.9294      | 7.8742       |
| set1  | 2dd   | 1       | set2 | 3dp    | 2        | -36.8945     | 36.3072      |
| set1  | 2dd   | 1       | set2 | 3dp    | 3        | -35.0554     | 32.6020      |
| set1  | 2dd   | 1       | set2 | 3dp    | 4        | -3.6556      | 3.5811       |
| set1  | 2dd   | 1       | set2 | 3dp    | 5        | -35.4507     | 36.5614      |
| set1  | 2dd   | 1       | set2 | 3dp    | 6        | -11.1717     | 9.7176       |
| set1  | 2dd   | 1       | set2 | 3dp    | 7        | -1.8189      | 0.9587       |
| set1  | 2dd   | 1       | set2 | 3dp    | 8        | -10.1446     | 10.7446      |
| set1  | 2dd   | 1       | set2 | 3dp    | 9        | -10.6981     | 10.1911      |
| set1  | 2dd   | 2       | set1 | 2dd    | 3        | -64.1502     | 66.5374      |
| set1  | 2dd   | 2       | set1 | 2dd    | 4        | -68.1799     | 69.0058      |
| set1  | 2dd   | 2       | set1 | 2dd    | 5        | -49.8459     | 52.9404      |
| set1  | 2dd   | 2       | set1 | 2dd    | 6        | -63.0349     | 66.2933      |
| set1  | 2dd   | 2       | set1 | 2dd    | 7        | -86.4994     | 88.5282      |
| set1  | 2dd   | 2       | set1 | 2dd    | 8        | -76.9960     | 76.9946      |
| set1  | 2dd   | 2       | set1 | 2dd    | 9        | -77.3151     | 76.6754      |
| set1  | 2dd   | 2       | set1 | 3dd    | 1        | -60.1613     | 58.2930      |
| set1  | 2dd   | 2       | set1 | 3dd    | 2        | -11.6753     | 9.0975       |
| set1  | 2dd   | 2       | set1 | 3dd    | 3        | -59.0474     | 57.5062      |
| set1  | 2dd   | 2       | set1 | 3dd    | 4        | -73.2888     | 72.2782      |
| set1  | 2dd   | 2       | set1 | 3dd    | 5        | -61.7470     | 64.7054      |
| set1  | 2dd   | 2       | set1 | 3dd    | 6        | -70.6832     | 70.4182      |
| set1  | 2dd   | 2       | set1 | 3dd    | 7        | -91.9884     | 91.4281      |
| set1  | 2dd   | 2       | set1 | 3dd    | 8        | -81.9366     | 80.4467      |
| set1  | 2dd   | 2       | set1 | 3dd    | 9        | -83.6504     | 78.7330      |
| set1  | 2dd   | 2       | set1 | 3dp    | 1        | -69.7189     | 70.0428      |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |          |                |      |         |         |        |       |          |         |
|---|-------|---------|------|--------|----------|----------|----------------|------|---------|---------|--------|-------|----------|---------|
| set   | media | pair_id | _set | _media | _pair_id | Estimate | Standard Error | DF   | t Value | Pr >  t | Adj P  | Alpha | Lower    | Upper   |
| set1  | 2dd   | 2       | set1 | 3dp    | 2        | -0.1148  | 0.3763         | 3823 | -0.31   | 0.7603  | 1.0000 | 0.05  | -0.8525  | 0.6230  |
| set1  | 2dd   | 2       | set1 | 3dp    | 3        | -0.5137  | 19.8919        | 3823 | -0.03   | 0.9794  | 1.0000 | 0.05  | -39.5134 | 38.4860 |
| set1  | 2dd   | 2       | set1 | 3dp    | 4        | 0.4960   | 20.6974        | 3823 | 0.02    | 0.9809  | 1.0000 | 0.05  | -40.0830 | 41.0749 |
| set1  | 2dd   | 2       | set1 | 3dp    | 5        | 1.3683   | 16.4323        | 3823 | 0.08    | 0.9336  | 1.0000 | 0.05  | -30.8487 | 33.5853 |
| set1  | 2dd   | 2       | set1 | 3dp    | 6        | 0.4079   | 19.7238        | 3823 | 0.02    | 0.9835  | 1.0000 | 0.05  | -38.2622 | 39.0780 |
| set1  | 2dd   | 2       | set1 | 3dp    | 7        | 0.1053   | 25.3914        | 3823 | 0.00    | 0.9967  | 1.0000 | 0.05  | -49.6767 | 49.8872 |
| set1  | 2dd   | 2       | set1 | 3dp    | 8        | 0.3125   | 22.7823        | 3823 | 0.01    | 0.9891  | 1.0000 | 0.05  | -44.3541 | 44.9791 |
| set1  | 2dd   | 2       | set1 | 3dp    | 9        | 0.1491   | 22.7823        | 3823 | 0.01    | 0.9948  | 1.0000 | 0.05  | -44.5175 | 44.8157 |
| set1  | 2dd   | 2       | set2 | 2dd    | 1        | 0.5313   | 16.0702        | 3823 | 0.03    | 0.9736  | 1.0000 | 0.05  | -30.9757 | 32.0383 |
| set1  | 2dd   | 2       | set2 | 2dd    | 2        | 0.8904   | 30.5298        | 3823 | 0.03    | 0.9767  | 1.0000 | 0.05  | -58.9659 | 60.7466 |
| set1  | 2dd   | 2       | set2 | 2dd    | 3        | -0.6249  | 26.2579        | 3823 | -0.02   | 0.9810  | 1.0000 | 0.05  | -52.1056 | 50.8559 |
| set1  | 2dd   | 2       | set2 | 2dd    | 4        | 0.4106   | 17.0445        | 3823 | 0.02    | 0.9808  | 1.0000 | 0.05  | -33.0066 | 33.8279 |
| set1  | 2dd   | 2       | set2 | 2dd    | 5        | 2.7198   | 8.9575         | 3823 | 0.30    | 0.7614  | 1.0000 | 0.05  | -14.8421 | 20.2816 |
| set1  | 2dd   | 2       | set2 | 2dd    | 6        | 3.4820   | 15.3057        | 3823 | 0.23    | 0.8200  | 1.0000 | 0.05  | -26.5261 | 33.4902 |
| set1  | 2dd   | 2       | set2 | 2dd    | 7        | 0.1494   | 17.9146        | 3823 | 0.01    | 0.9933  | 1.0000 | 0.05  | -34.9737 | 35.2725 |
| set1  | 2dd   | 2       | set2 | 2dd    | 8        | -0.3514  | 15.3057        | 3823 | -0.02   | 0.9817  | 1.0000 | 0.05  | -30.3595 | 29.6568 |
| set1  | 2dd   | 2       | set2 | 2dd    | 9        | -0.2916  | 15.3057        | 3823 | -0.02   | 0.9848  | 1.0000 | 0.05  | -30.2998 | 29.7165 |
| set1  | 2dd   | 2       | set2 | 3dd    | 1        | -0.1523  | 16.7436        | 3823 | -0.01   | 0.9927  | 1.0000 | 0.05  | -32.9795 | 32.6749 |
| set1  | 2dd   | 2       | set2 | 3dd    | 2        | 0.1201   | 27.6138        | 3823 | 0.00    | 0.9965  | 1.0000 | 0.05  | -54.0191 | 54.2593 |
| set1  | 2dd   | 2       | set2 | 3dd    | 3        | -0.4762  | 24.1349        | 3823 | -0.02   | 0.9843  | 1.0000 | 0.05  | -47.7947 | 46.8422 |
| set1  | 2dd   | 2       | set2 | 3dd    | 4        | -0.9669  | 17.7174        | 3823 | -0.05   | 0.9565  | 1.0000 | 0.05  | -35.7034 | 33.7696 |
| set1  | 2dd   | 2       | set2 | 3dd    | 5        | 1.6136   | 11.5240        | 3823 | 0.14    | 0.8887  | 1.0000 | 0.05  | -20.9802 | 24.2074 |
| set1  | 2dd   | 2       | set2 | 3dd    | 6        | 0.7728   | 16.3990        | 3823 | 0.05    | 0.9624  | 1.0000 | 0.05  | -31.3788 | 32.9244 |
| set1  | 2dd   | 2       | set2 | 3dd    | 7        | -0.9939  | 18.5883        | 3823 | -0.05   | 0.9574  | 1.0000 | 0.05  | -37.4377 | 35.4500 |
| set1  | 2dd   | 2       | set2 | 3dd    | 8        | 0.000459 | 15.9801        | 3823 | 0.00    | 1.0000  | 1.0000 | 0.05  | -31.3298 | 31.3307 |
| set1  | 2dd   | 2       | set2 | 3dd    | 9        | -0.3469  | 15.9801        | 3823 | -0.02   | 0.9827  | 1.0000 | 0.05  | -31.6772 | 30.9833 |
| set1  | 2dd   | 2       | set2 | 3dp    | 1        | 0.8186   | 11.8453        | 3823 | 0.07    | 0.9449  | 1.0000 | 0.05  | -22.4052 | 24.0424 |
| set1  | 2dd   | 2       | set2 | 3dp    | 2        | 0.05256  | 22.7182        | 3823 | 0.00    | 0.9982  | 1.0000 | 0.05  | -44.4883 | 44.5934 |
| set1  | 2dd   | 2       | set2 | 3dp    | 3        | -0.8805  | 22.0318        | 3823 | -0.04   | 0.9681  | 1.0000 | 0.05  | -44.0758 | 42.3148 |
| set1  | 2dd   | 2       | set2 | 3dp    | 4        | 0.3090   | 12.8197        | 3823 | 0.02    | 0.9808  | 1.0000 | 0.05  | -24.8252 | 25.4431 |
| set1  | 2dd   | 2       | set2 | 3dp    | 5        | 0.9015   | 4.7397         | 3823 | 0.19    | 0.8492  | 1.0000 | 0.05  | -8.3910  | 10.1941 |
| set1  | 2dd   | 2       | set2 | 3dp    | 6        | -0.3809  | 11.0819        | 3823 | -0.03   | 0.9726  | 1.0000 | 0.05  | -22.1079 | 21.3462 |
| set1  | 2dd   | 2       | set2 | 3dp    | 7        | -0.08390 | 13.6911        | 3823 | -0.01   | 0.9951  | 1.0000 | 0.05  | -26.9264 | 26.7586 |
| set1  | 2dd   | 2       | set2 | 3dp    | 8        | 0.6462   | 11.0819        | 3823 | 0.06    | 0.9535  | 1.0000 | 0.05  | -21.0809 | 22.3733 |
| set1  | 2dd   | 2       | set2 | 3dp    | 9        | 0.09271  | 11.0819        | 3823 | 0.01    | 0.9933  | 1.0000 | 0.05  | -21.6344 | 21.8198 |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |              |              |
|---|-------|---------|------|--------|----------|--------------|--------------|
| set   | media | pair_id | _set | _media | _pair_id | Adj<br>Lower | Adj<br>Upper |
| set1  | 2dd   | 2       | set1 | 3dp    | 2        | -1.6318      | 1.4022       |
| set1  | 2dd   | 2       | set1 | 3dp    | 3        | -80.7065     | 79.6791      |
| set1  | 2dd   | 2       | set1 | 3dp    | 4        | -82.9441     | 83.9360      |
| set1  | 2dd   | 2       | set1 | 3dp    | 5        | -64.8776     | 67.6142      |
| set1  | 2dd   | 2       | set1 | 3dp    | 6        | -79.1071     | 79.9229      |
| set1  | 2dd   | 2       | set1 | 3dp    | 7        | -102.26      | 102.47       |
| set1  | 2dd   | 2       | set1 | 3dp    | 8        | -91.5327     | 92.1577      |
| set1  | 2dd   | 2       | set1 | 3dp    | 9        | -91.6961     | 91.9943      |
| set1  | 2dd   | 2       | set2 | 2dd    | 1        | -64.2547     | 65.3173      |
| set1  | 2dd   | 2       | set2 | 2dd    | 2        | -122.19      | 123.97       |
| set1  | 2dd   | 2       | set2 | 2dd    | 3        | -106.48      | 105.23       |
| set1  | 2dd   | 2       | set2 | 2dd    | 4        | -68.3032     | 69.1245      |
| set1  | 2dd   | 2       | set2 | 2dd    | 5        | -33.3916     | 38.8312      |
| set1  | 2dd   | 2       | set2 | 2dd    | 6        | -58.2219     | 65.1860      |
| set1  | 2dd   | 2       | set2 | 2dd    | 7        | -72.0722     | 72.3710      |
| set1  | 2dd   | 2       | set2 | 2dd    | 8        | -62.0553     | 61.3526      |
| set1  | 2dd   | 2       | set2 | 2dd    | 9        | -61.9956     | 61.4123      |
| set1  | 2dd   | 2       | set2 | 3dd    | 1        | -67.6528     | 67.3482      |
| set1  | 2dd   | 2       | set2 | 3dd    | 2        | -111.20      | 111.44       |
| set1  | 2dd   | 2       | set2 | 3dd    | 3        | -97.7744     | 96.8219      |
| set1  | 2dd   | 2       | set2 | 3dd    | 4        | -72.3935     | 70.4597      |
| set1  | 2dd   | 2       | set2 | 3dd    | 5        | -44.8446     | 48.0718      |
| set1  | 2dd   | 2       | set2 | 3dd    | 6        | -65.3385     | 66.8841      |
| set1  | 2dd   | 2       | set2 | 3dd    | 7        | -75.9312     | 73.9434      |
| set1  | 2dd   | 2       | set2 | 3dd    | 8        | -64.4221     | 64.4230      |
| set1  | 2dd   | 2       | set2 | 3dd    | 9        | -64.7695     | 64.0756      |
| set1  | 2dd   | 2       | set2 | 3dp    | 1        | -46.9351     | 48.5722      |
| set1  | 2dd   | 2       | set2 | 3dp    | 2        | -91.5342     | 91.6393      |
| set1  | 2dd   | 2       | set2 | 3dp    | 3        | -89.7004     | 87.9394      |
| set1  | 2dd   | 2       | set2 | 3dp    | 4        | -51.3728     | 51.9907      |
| set1  | 2dd   | 2       | set2 | 3dp    | 5        | -18.2061     | 20.0092      |
| set1  | 2dd   | 2       | set2 | 3dp    | 6        | -45.0570     | 44.2953      |
| set1  | 2dd   | 2       | set2 | 3dp    | 7        | -55.2785     | 55.1107      |
| set1  | 2dd   | 2       | set2 | 3dp    | 8        | -44.0299     | 45.3223      |
| set1  | 2dd   | 2       | set2 | 3dp    | 9        | -44.5834     | 44.7688      |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |          |                |      |         |         |        |       |          |          |
|---|-------|---------|------|--------|----------|----------|----------------|------|---------|---------|--------|-------|----------|----------|
| set   | media | pair_id | _set | _media | _pair_id | Estimate | Standard Error | DF   | t Value | Pr >  t | Adj P  | Alpha | Lower    | Upper    |
| set1  | 2dd   | 3       | set1 | 2dd    | 4        | -0.7806  | 0.8818         | 3823 | -0.89   | 0.3761  | 1.0000 | 0.05  | -2.5094  | 0.9482   |
| set1  | 2dd   | 3       | set1 | 2dd    | 5        | 0.3537   | 3.4794         | 3823 | 0.10    | 0.9190  | 1.0000 | 0.05  | -6.4681  | 7.1754   |
| set1  | 2dd   | 3       | set1 | 2dd    | 6        | 0.4356   | 0.3707         | 3823 | 1.18    | 0.2400  | 1.0000 | 0.05  | -0.2912  | 1.1624   |
| set1  | 2dd   | 3       | set1 | 2dd    | 7        | -0.1791  | 5.5098         | 3823 | -0.03   | 0.9741  | 1.0000 | 0.05  | -10.9816 | 10.6234  |
| set1  | 2dd   | 3       | set1 | 2dd    | 8        | -1.1943  | 2.9081         | 3823 | -0.41   | 0.6813  | 1.0000 | 0.05  | -6.8959  | 4.5074   |
| set1  | 2dd   | 3       | set1 | 2dd    | 9        | -1.5134  | 2.9081         | 3823 | -0.52   | 0.6028  | 1.0000 | 0.05  | -7.2151  | 4.1882   |
| set1  | 2dd   | 3       | set1 | 3dd    | 1        | -2.1277  | 1.5642         | 3823 | -1.36   | 0.1738  | 1.0000 | 0.05  | -5.1945  | 0.9391   |
| set1  | 2dd   | 3       | set1 | 3dd    | 2        | -2.4825  | 18.7602        | 3823 | -0.13   | 0.8947  | 1.0000 | 0.05  | -39.2635 | 34.2985  |
| set1  | 2dd   | 3       | set1 | 3dd    | 3        | -1.9642  | 1.7925         | 3823 | -1.10   | 0.2732  | 1.0000 | 0.05  | -5.4785  | 1.5501   |
| set1  | 2dd   | 3       | set1 | 3dd    | 4        | -1.6988  | 1.8835         | 3823 | -0.90   | 0.3671  | 1.0000 | 0.05  | -5.3916  | 1.9939   |
| set1  | 2dd   | 3       | set1 | 3dd    | 5        | 0.2857   | 0.6251         | 3823 | 0.46    | 0.6477  | 1.0000 | 0.05  | -0.9399  | 1.5112   |
| set1  | 2dd   | 3       | set1 | 3dd    | 6        | -1.3261  | 1.3506         | 3823 | -0.98   | 0.3262  | 1.0000 | 0.05  | -3.9740  | 1.3219   |
| set1  | 2dd   | 3       | set1 | 3dd    | 7        | -1.4737  | 6.5520         | 3823 | -0.22   | 0.8220  | 1.0000 | 0.05  | -14.3195 | 11.3720  |
| set1  | 2dd   | 3       | set1 | 3dd    | 8        | -1.9385  | 3.9519         | 3823 | -0.49   | 0.6238  | 1.0000 | 0.05  | -9.6866  | 5.8095   |
| set1  | 2dd   | 3       | set1 | 3dd    | 9        | -3.6523  | 3.9519         | 3823 | -0.92   | 0.3555  | 1.0000 | 0.05  | -11.4004 | 4.0958   |
| set1  | 2dd   | 3       | set1 | 3dp    | 1        | -1.0316  | 1.1887         | 3823 | -0.87   | 0.3855  | 1.0000 | 0.05  | -3.3621  | 1.2989   |
| set1  | 2dd   | 3       | set1 | 3dp    | 2        | -1.3084  | 16.1178        | 3823 | -0.08   | 0.9353  | 1.0000 | 0.05  | -32.9087 | 30.2920  |
| set1  | 2dd   | 3       | set1 | 3dp    | 3        | -1.7073  | 3.6905         | 3823 | -0.46   | 0.6437  | 1.0000 | 0.05  | -8.9427  | 5.5282   |
| set1  | 2dd   | 3       | set1 | 3dp    | 4        | -0.6976  | 4.5072         | 3823 | -0.15   | 0.8770  | 1.0000 | 0.05  | -9.5344  | 8.1392   |
| set1  | 2dd   | 3       | set1 | 3dp    | 5        | 0.1747   | 0.5140         | 3823 | 0.34    | 0.7339  | 1.0000 | 0.05  | -0.8330  | 1.1825   |
| set1  | 2dd   | 3       | set1 | 3dp    | 6        | -0.7857  | 3.5403         | 3823 | -0.22   | 0.8244  | 1.0000 | 0.05  | -7.7266  | 6.1553   |
| set1  | 2dd   | 3       | set1 | 3dp    | 7        | -1.0883  | 9.1924         | 3823 | -0.12   | 0.9058  | 1.0000 | 0.05  | -19.1107 | 16.9341  |
| set1  | 2dd   | 3       | set1 | 3dp    | 8        | -0.8811  | 6.5862         | 3823 | -0.13   | 0.8936  | 1.0000 | 0.05  | -13.7938 | 12.0316  |
| set1  | 2dd   | 3       | set1 | 3dp    | 9        | -1.0445  | 6.5862         | 3823 | -0.16   | 0.8740  | 1.0000 | 0.05  | -13.9572 | 11.8683  |
| set1  | 2dd   | 3       | set2 | 2dd    | 1        | -0.6623  | 0.3968         | 3823 | -1.67   | 0.0952  | 1.0000 | 0.05  | -1.4402  | 0.1157   |
| set1  | 2dd   | 3       | set2 | 2dd    | 2        | -0.3032  | 14.3297        | 3823 | -0.02   | 0.9831  | 1.0000 | 0.05  | -28.3978 | 27.7914  |
| set1  | 2dd   | 3       | set2 | 2dd    | 3        | -1.8184  | 10.0590        | 3823 | -0.18   | 0.8566  | 1.0000 | 0.05  | -21.5399 | 17.9030  |
| set1  | 2dd   | 3       | set2 | 2dd    | 4        | -0.7829  | 0.9083         | 3823 | -0.86   | 0.3888  | 1.0000 | 0.05  | -2.5637  | 0.9979   |
| set1  | 2dd   | 3       | set2 | 2dd    | 5        | 1.5262   | 7.2658         | 3823 | 0.21    | 0.8336  | 1.0000 | 0.05  | -12.7190 | 15.7713  |
| set1  | 2dd   | 3       | set2 | 2dd    | 6        | 2.2885   | 0.9608         | 3823 | 2.38    | 0.0173  | 0.9812 | 0.05  | 0.4047   | 4.1723   |
| set1  | 2dd   | 3       | set2 | 2dd    | 7        | -1.0442  | 1.7388         | 3823 | -0.60   | 0.5482  | 1.0000 | 0.05  | -4.4532  | 2.3649   |
| set1  | 2dd   | 3       | set2 | 2dd    | 8        | -1.5449  | 0.9608         | 3823 | -1.61   | 0.1079  | 1.0000 | 0.05  | -3.4287  | 0.3389   |
| set1  | 2dd   | 3       | set2 | 2dd    | 9        | -1.4852  | 0.9608         | 3823 | -1.55   | 0.1222  | 1.0000 | 0.05  | -3.3690  | 0.3986   |
| set1  | 2dd   | 3       | set2 | 3dd    | 1        | -1.3459  | 0.6722         | 3823 | -2.00   | 0.0453  | 0.9995 | 0.05  | -2.6637  | -0.02802 |
| set1  | 2dd   | 3       | set2 | 3dd    | 2        | -1.0735  | 11.4135        | 3823 | -0.09   | 0.9251  | 1.0000 | 0.05  | -23.4507 | 21.3037  |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |              |              |
|---|-------|---------|------|--------|----------|--------------|--------------|
| set   | media | pair_id | _set | _media | _pair_id | Adj<br>Lower | Adj<br>Upper |
| set1  | 2dd   | 3       | set1 | 2dd    | 4        | -4.3355      | 2.7743       |
| set1  | 2dd   | 3       | set1 | 2dd    | 5        | -13.6735     | 14.3808      |
| set1  | 2dd   | 3       | set1 | 2dd    | 6        | -1.0588      | 1.9301       |
| set1  | 2dd   | 3       | set1 | 2dd    | 7        | -22.3917     | 22.0334      |
| set1  | 2dd   | 3       | set1 | 2dd    | 8        | -12.9182     | 10.5297      |
| set1  | 2dd   | 3       | set1 | 2dd    | 9        | -13.2374     | 10.2106      |
| set1  | 2dd   | 3       | set1 | 3dd    | 1        | -8.4337      | 4.1783       |
| set1  | 2dd   | 3       | set1 | 3dd    | 2        | -78.1131     | 73.1481      |
| set1  | 2dd   | 3       | set1 | 3dd    | 3        | -9.1904      | 5.2621       |
| set1  | 2dd   | 3       | set1 | 3dd    | 4        | -9.2920      | 5.8943       |
| set1  | 2dd   | 3       | set1 | 3dd    | 5        | -2.2343      | 2.8056       |
| set1  | 2dd   | 3       | set1 | 3dd    | 6        | -6.7709      | 4.1187       |
| set1  | 2dd   | 3       | set1 | 3dd    | 7        | -27.8878     | 24.9403      |
| set1  | 2dd   | 3       | set1 | 3dd    | 8        | -17.8704     | 13.9934      |
| set1  | 2dd   | 3       | set1 | 3dd    | 9        | -19.5842     | 12.2796      |
| set1  | 2dd   | 3       | set1 | 3dp    | 1        | -5.8237      | 3.7605       |
| set1  | 2dd   | 3       | set1 | 3dp    | 2        | -66.2862     | 63.6695      |
| set1  | 2dd   | 3       | set1 | 3dp    | 3        | -16.5851     | 13.1706      |
| set1  | 2dd   | 3       | set1 | 3dp    | 4        | -18.8683     | 17.4731      |
| set1  | 2dd   | 3       | set1 | 3dp    | 5        | -1.8974      | 2.2469       |
| set1  | 2dd   | 3       | set1 | 3dp    | 6        | -15.0580     | 13.4867      |
| set1  | 2dd   | 3       | set1 | 3dp    | 7        | -38.1466     | 35.9701      |
| set1  | 2dd   | 3       | set1 | 3dp    | 8        | -27.4328     | 25.6706      |
| set1  | 2dd   | 3       | set1 | 3dp    | 9        | -27.5962     | 25.5072      |
| set1  | 2dd   | 3       | set2 | 2dd    | 1        | -2.2619      | 0.9374       |
| set1  | 2dd   | 3       | set2 | 2dd    | 2        | -58.0725     | 57.4660      |
| set1  | 2dd   | 3       | set2 | 2dd    | 3        | -42.3705     | 38.7336      |
| set1  | 2dd   | 3       | set2 | 2dd    | 4        | -4.4447      | 2.8789       |
| set1  | 2dd   | 3       | set2 | 2dd    | 5        | -27.7652     | 30.8176      |
| set1  | 2dd   | 3       | set2 | 2dd    | 6        | -1.5851      | 6.1620       |
| set1  | 2dd   | 3       | set2 | 2dd    | 7        | -8.0540      | 5.9657       |
| set1  | 2dd   | 3       | set2 | 2dd    | 8        | -5.4185      | 2.3286       |
| set1  | 2dd   | 3       | set2 | 2dd    | 9        | -5.3588      | 2.3883       |
| set1  | 2dd   | 3       | set2 | 3dd    | 1        | -4.0557      | 1.3639       |
| set1  | 2dd   | 3       | set2 | 3dd    | 2        | -47.0863     | 44.9394      |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |          |                |      |         |         |        |       |          |         |
|---|-------|---------|------|--------|----------|----------|----------------|------|---------|---------|--------|-------|----------|---------|
| set   | media | pair_id | _set | _media | _pair_id | Estimate | Standard Error | DF   | t Value | Pr >  t | Adj P  | Alpha | Lower    | Upper   |
| set1  | 2dd   | 3       | set2 | 3dd    | 3        | -1.6698  | 7.9404         | 3823 | -0.21   | 0.8334  | 1.0000 | 0.05  | -17.2376 | 13.8979 |
| set1  | 2dd   | 3       | set2 | 3dd    | 4        | -2.1605  | 1.5542         | 3823 | -1.39   | 0.1646  | 1.0000 | 0.05  | -5.2077  | 0.8867  |
| set1  | 2dd   | 3       | set2 | 3dd    | 5        | 0.4200   | 4.6982         | 3823 | 0.09    | 0.9288  | 1.0000 | 0.05  | -8.7912  | 9.6312  |
| set1  | 2dd   | 3       | set2 | 3dd    | 6        | -0.4208  | 0.4241         | 3823 | -0.99   | 0.3212  | 1.0000 | 0.05  | -1.2523  | 0.4108  |
| set1  | 2dd   | 3       | set2 | 3dd    | 7        | -2.1875  | 2.4110         | 3823 | -0.91   | 0.3643  | 1.0000 | 0.05  | -6.9143  | 2.5394  |
| set1  | 2dd   | 3       | set2 | 3dd    | 8        | -1.1931  | 0.4693         | 3823 | -2.54   | 0.0110  | 0.9467 | 0.05  | -2.1132  | -0.2730 |
| set1  | 2dd   | 3       | set2 | 3dd    | 9        | -1.5405  | 0.4693         | 3823 | -3.28   | 0.0010  | 0.4195 | 0.05  | -2.4606  | -0.6204 |
| set1  | 2dd   | 3       | set2 | 3dp    | 1        | -0.3750  | 4.3791         | 3823 | -0.09   | 0.9318  | 1.0000 | 0.05  | -8.9607  | 8.2107  |
| set1  | 2dd   | 3       | set2 | 3dp    | 2        | -1.1410  | 6.5285         | 3823 | -0.17   | 0.8613  | 1.0000 | 0.05  | -13.9407 | 11.6587 |
| set1  | 2dd   | 3       | set2 | 3dp    | 3        | -2.0741  | 5.8369         | 3823 | -0.36   | 0.7224  | 1.0000 | 0.05  | -13.5178 | 9.3697  |
| set1  | 2dd   | 3       | set2 | 3dp    | 4        | -0.8846  | 3.4079         | 3823 | -0.26   | 0.7952  | 1.0000 | 0.05  | -7.5660  | 5.7968  |
| set1  | 2dd   | 3       | set2 | 3dp    | 5        | -0.2920  | 11.4882        | 3823 | -0.03   | 0.9797  | 1.0000 | 0.05  | -22.8157 | 22.2316 |
| set1  | 2dd   | 3       | set2 | 3dp    | 6        | -1.5744  | 5.1408         | 3823 | -0.31   | 0.7594  | 1.0000 | 0.05  | -11.6533 | 8.5045  |
| set1  | 2dd   | 3       | set2 | 3dp    | 7        | -1.2775  | 2.5486         | 3823 | -0.50   | 0.6162  | 1.0000 | 0.05  | -6.2742  | 3.7192  |
| set1  | 2dd   | 3       | set2 | 3dp    | 8        | -0.5474  | 5.1408         | 3823 | -0.11   | 0.9152  | 1.0000 | 0.05  | -10.6263 | 9.5315  |
| set1  | 2dd   | 3       | set2 | 3dp    | 9        | -1.1009  | 5.1408         | 3823 | -0.21   | 0.8304  | 1.0000 | 0.05  | -11.1798 | 8.9781  |
| set1  | 2dd   | 4       | set1 | 2dd    | 5        | 1.1343   | 4.2871         | 3823 | 0.26    | 0.7913  | 1.0000 | 0.05  | -7.2709  | 9.5395  |
| set1  | 2dd   | 4       | set1 | 2dd    | 6        | 1.2162   | 1.0337         | 3823 | 1.18    | 0.2394  | 1.0000 | 0.05  | -0.8105  | 3.2430  |
| set1  | 2dd   | 4       | set1 | 2dd    | 7        | 0.6014   | 4.7058         | 3823 | 0.13    | 0.8983  | 1.0000 | 0.05  | -8.6247  | 9.8276  |
| set1  | 2dd   | 4       | set1 | 2dd    | 8        | -0.4137  | 2.1152         | 3823 | -0.20   | 0.8450  | 1.0000 | 0.05  | -4.5607  | 3.7334  |
| set1  | 2dd   | 4       | set1 | 2dd    | 9        | -0.7328  | 2.1152         | 3823 | -0.35   | 0.7290  | 1.0000 | 0.05  | -4.8799  | 3.4142  |
| set1  | 2dd   | 4       | set1 | 3dd    | 1        | -1.3471  | 2.3617         | 3823 | -0.57   | 0.5684  | 1.0000 | 0.05  | -5.9774  | 3.2831  |
| set1  | 2dd   | 4       | set1 | 3dd    | 2        | -1.7019  | 19.5663        | 3823 | -0.09   | 0.9307  | 1.0000 | 0.05  | -40.0632 | 36.6595 |
| set1  | 2dd   | 4       | set1 | 3dd    | 3        | -1.1836  | 2.6064         | 3823 | -0.45   | 0.6498  | 1.0000 | 0.05  | -6.2937  | 3.9265  |
| set1  | 2dd   | 4       | set1 | 3dd    | 4        | -0.9182  | 1.0610         | 3823 | -0.87   | 0.3869  | 1.0000 | 0.05  | -2.9984  | 1.1619  |
| set1  | 2dd   | 4       | set1 | 3dd    | 5        | 1.0662   | 1.3712         | 3823 | 0.78    | 0.4368  | 1.0000 | 0.05  | -1.6220  | 3.7545  |
| set1  | 2dd   | 4       | set1 | 3dd    | 6        | -0.5455  | 0.6168         | 3823 | -0.88   | 0.3765  | 1.0000 | 0.05  | -1.7547  | 0.6637  |
| set1  | 2dd   | 4       | set1 | 3dd    | 7        | -0.6931  | 5.7508         | 3823 | -0.12   | 0.9041  | 1.0000 | 0.05  | -11.9680 | 10.5817 |
| set1  | 2dd   | 4       | set1 | 3dd    | 8        | -1.1579  | 3.1607         | 3823 | -0.37   | 0.7141  | 1.0000 | 0.05  | -7.3548  | 5.0390  |
| set1  | 2dd   | 4       | set1 | 3dd    | 9        | -2.8717  | 3.1607         | 3823 | -0.91   | 0.3636  | 1.0000 | 0.05  | -9.0686  | 3.3252  |
| set1  | 2dd   | 4       | set1 | 3dp    | 1        | -0.2510  | 0.5194         | 3823 | -0.48   | 0.6289  | 1.0000 | 0.05  | -1.2693  | 0.7673  |
| set1  | 2dd   | 4       | set1 | 3dp    | 2        | -0.5278  | 16.9235        | 3823 | -0.03   | 0.9751  | 1.0000 | 0.05  | -33.7076 | 32.6521 |
| set1  | 2dd   | 4       | set1 | 3dp    | 3        | -0.9267  | 2.9119         | 3823 | -0.32   | 0.7503  | 1.0000 | 0.05  | -6.6356  | 4.7823  |
| set1  | 2dd   | 4       | set1 | 3dp    | 4        | 0.08300  | 3.6905         | 3823 | 0.02    | 0.9821  | 1.0000 | 0.05  | -7.1525  | 7.3185  |
| set1  | 2dd   | 4       | set1 | 3dp    | 5        | 0.9553   | 0.7865         | 3823 | 1.21    | 0.2246  | 1.0000 | 0.05  | -0.5867  | 2.4974  |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |              |              |
|---|-------|---------|------|--------|----------|--------------|--------------|
| set   | media | pair_id | _set | _media | _pair_id | Adj<br>Lower | Adj<br>Upper |
| set1  | 2dd   | 3       | set2 | 3dd    | 3        | -33.6808     | 30.3412      |
| set1  | 2dd   | 3       | set2 | 3dd    | 4        | -8.4263      | 4.1053       |
| set1  | 2dd   | 3       | set2 | 3dd    | 5        | -18.5204     | 19.3604      |
| set1  | 2dd   | 3       | set2 | 3dd    | 6        | -2.1306      | 1.2891       |
| set1  | 2dd   | 3       | set2 | 3dd    | 7        | -11.9071     | 7.5322       |
| set1  | 2dd   | 3       | set2 | 3dd    | 8        | -3.0850      | 0.6988       |
| set1  | 2dd   | 3       | set2 | 3dd    | 9        | -3.4324      | 0.3514       |
| set1  | 2dd   | 3       | set2 | 3dp    | 1        | -18.0292     | 17.2792      |
| set1  | 2dd   | 3       | set2 | 3dp    | 2        | -27.4602     | 25.1782      |
| set1  | 2dd   | 3       | set2 | 3dp    | 3        | -25.6052     | 21.4570      |
| set1  | 2dd   | 3       | set2 | 3dp    | 4        | -14.6232     | 12.8540      |
| set1  | 2dd   | 3       | set2 | 3dp    | 5        | -46.6060     | 46.0220      |
| set1  | 2dd   | 3       | set2 | 3dp    | 6        | -22.2991     | 19.1503      |
| set1  | 2dd   | 3       | set2 | 3dp    | 7        | -11.5519     | 8.9970       |
| set1  | 2dd   | 3       | set2 | 3dp    | 8        | -21.2721     | 20.1773      |
| set1  | 2dd   | 3       | set2 | 3dp    | 9        | -21.8255     | 19.6238      |
| set1  | 2dd   | 4       | set1 | 2dd    | 5        | -16.1488     | 18.4174      |
| set1  | 2dd   | 4       | set1 | 2dd    | 6        | -2.9512      | 5.3837       |
| set1  | 2dd   | 4       | set1 | 2dd    | 7        | -18.3698     | 19.5727      |
| set1  | 2dd   | 4       | set1 | 2dd    | 8        | -8.9410      | 8.1137       |
| set1  | 2dd   | 4       | set1 | 2dd    | 9        | -9.2602      | 7.7945       |
| set1  | 2dd   | 4       | set1 | 3dd    | 1        | -10.8680     | 8.1738       |
| set1  | 2dd   | 4       | set1 | 3dd    | 2        | -80.5820     | 77.1783      |
| set1  | 2dd   | 4       | set1 | 3dd    | 3        | -11.6911     | 9.3240       |
| set1  | 2dd   | 4       | set1 | 3dd    | 4        | -5.1956      | 3.3591       |
| set1  | 2dd   | 4       | set1 | 3dd    | 5        | -4.4615      | 6.5940       |
| set1  | 2dd   | 4       | set1 | 3dd    | 6        | -3.0320      | 1.9410       |
| set1  | 2dd   | 4       | set1 | 3dd    | 7        | -23.8769     | 22.4906      |
| set1  | 2dd   | 4       | set1 | 3dd    | 8        | -13.9002     | 11.5844      |
| set1  | 2dd   | 4       | set1 | 3dd    | 9        | -15.6140     | 9.8706       |
| set1  | 2dd   | 4       | set1 | 3dp    | 1        | -2.3449      | 1.8429       |
| set1  | 2dd   | 4       | set1 | 3dp    | 2        | -68.7535     | 67.6980      |
| set1  | 2dd   | 4       | set1 | 3dp    | 3        | -12.6657     | 10.8123      |
| set1  | 2dd   | 4       | set1 | 3dp    | 4        | -14.7949     | 14.9609      |
| set1  | 2dd   | 4       | set1 | 3dp    | 5        | -2.2155      | 4.1261       |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |          |                |      |         |         |        |       |          |         |
|---|-------|---------|------|--------|----------|----------|----------------|------|---------|---------|--------|-------|----------|---------|
| set   | media | pair_id | _set | _media | _pair_id | Estimate | Standard Error | DF   | t Value | Pr >  t | Adj P  | Alpha | Lower    | Upper   |
| set1  | 2dd   | 4       | set1 | 3dp    | 6        | -0.00505 | 2.7471         | 3823 | -0.00   | 0.9985  | 1.0000 | 0.05  | -5.3910  | 5.3809  |
| set1  | 2dd   | 4       | set1 | 3dp    | 7        | -0.3077  | 8.3886         | 3823 | -0.04   | 0.9707  | 1.0000 | 0.05  | -16.7541 | 16.1388 |
| set1  | 2dd   | 4       | set1 | 3dp    | 8        | -0.1005  | 5.7859         | 3823 | -0.02   | 0.9861  | 1.0000 | 0.05  | -11.4442 | 11.2432 |
| set1  | 2dd   | 4       | set1 | 3dp    | 9        | -0.2639  | 5.7859         | 3823 | -0.05   | 0.9636  | 1.0000 | 0.05  | -11.6076 | 11.0798 |
| set1  | 2dd   | 4       | set2 | 2dd    | 1        | 0.1183   | 1.0274         | 3823 | 0.12    | 0.9083  | 1.0000 | 0.05  | -1.8959  | 2.1326  |
| set1  | 2dd   | 4       | set2 | 2dd    | 2        | 0.4774   | 13.5225        | 3823 | 0.04    | 0.9718  | 1.0000 | 0.05  | -26.0346 | 26.9894 |
| set1  | 2dd   | 4       | set2 | 2dd    | 3        | -1.0378  | 9.2561         | 3823 | -0.11   | 0.9107  | 1.0000 | 0.05  | -19.1852 | 17.1095 |
| set1  | 2dd   | 4       | set2 | 2dd    | 4        | -0.00232 | 0.3536         | 3823 | -0.01   | 0.9948  | 1.0000 | 0.05  | -0.6956  | 0.6910  |
| set1  | 2dd   | 4       | set2 | 2dd    | 5        | 2.3068   | 8.0751         | 3823 | 0.29    | 0.7752  | 1.0000 | 0.05  | -13.5252 | 18.1388 |
| set1  | 2dd   | 4       | set2 | 2dd    | 6        | 3.0691   | 1.7561         | 3823 | 1.75    | 0.0806  | 1.0000 | 0.05  | -0.3740  | 6.5121  |
| set1  | 2dd   | 4       | set2 | 2dd    | 7        | -0.2636  | 0.9766         | 3823 | -0.27   | 0.7873  | 1.0000 | 0.05  | -2.1784  | 1.6512  |
| set1  | 2dd   | 4       | set2 | 2dd    | 8        | -0.7643  | 1.7561         | 3823 | -0.44   | 0.6634  | 1.0000 | 0.05  | -4.2074  | 2.6787  |
| set1  | 2dd   | 4       | set2 | 2dd    | 9        | -0.7046  | 1.7561         | 3823 | -0.40   | 0.6883  | 1.0000 | 0.05  | -4.1476  | 2.7384  |
| set1  | 2dd   | 4       | set2 | 3dd    | 1        | -0.5653  | 0.5575         | 3823 | -1.01   | 0.3106  | 1.0000 | 0.05  | -1.6582  | 0.5277  |
| set1  | 2dd   | 4       | set2 | 3dd    | 2        | -0.2929  | 10.6070        | 3823 | -0.03   | 0.9780  | 1.0000 | 0.05  | -21.0888 | 20.5031 |
| set1  | 2dd   | 4       | set2 | 3dd    | 3        | -0.8892  | 7.1379         | 3823 | -0.12   | 0.9009  | 1.0000 | 0.05  | -14.8837 | 13.1052 |
| set1  | 2dd   | 4       | set2 | 3dd    | 4        | -1.3799  | 0.8225         | 3823 | -1.68   | 0.0935  | 1.0000 | 0.05  | -2.9926  | 0.2328  |
| set1  | 2dd   | 4       | set2 | 3dd    | 5        | 1.2006   | 5.5056         | 3823 | 0.22    | 0.8274  | 1.0000 | 0.05  | -9.5935  | 11.9948 |
| set1  | 2dd   | 4       | set2 | 3dd    | 6        | 0.3598   | 0.7556         | 3823 | 0.48    | 0.6339  | 1.0000 | 0.05  | -1.1216  | 1.8412  |
| set1  | 2dd   | 4       | set2 | 3dd    | 7        | -1.4069  | 1.6444         | 3823 | -0.86   | 0.3923  | 1.0000 | 0.05  | -4.6308  | 1.8171  |
| set1  | 2dd   | 4       | set2 | 3dd    | 8        | -0.4125  | 1.1584         | 3823 | -0.36   | 0.7218  | 1.0000 | 0.05  | -2.6837  | 1.8586  |
| set1  | 2dd   | 4       | set2 | 3dd    | 9        | -0.7599  | 1.1584         | 3823 | -0.66   | 0.5119  | 1.0000 | 0.05  | -3.0311  | 1.5112  |
| set1  | 2dd   | 4       | set2 | 3dp    | 1        | 0.4056   | 5.1825         | 3823 | 0.08    | 0.9376  | 1.0000 | 0.05  | -9.7551  | 10.5663 |
| set1  | 2dd   | 4       | set2 | 3dp    | 2        | -0.3604  | 5.7170         | 3823 | -0.06   | 0.9497  | 1.0000 | 0.05  | -11.5690 | 10.8482 |
| set1  | 2dd   | 4       | set2 | 3dp    | 3        | -1.2935  | 5.0344         | 3823 | -0.26   | 0.7972  | 1.0000 | 0.05  | -11.1638 | 8.5768  |
| set1  | 2dd   | 4       | set2 | 3dp    | 4        | -0.1040  | 4.2067         | 3823 | -0.02   | 0.9803  | 1.0000 | 0.05  | -8.3517  | 8.1436  |
| set1  | 2dd   | 4       | set2 | 3dp    | 5        | 0.4886   | 12.2955        | 3823 | 0.04    | 0.9683  | 1.0000 | 0.05  | -23.6178 | 24.5949 |
| set1  | 2dd   | 4       | set2 | 3dp    | 6        | -0.7938  | 5.9474         | 3823 | -0.13   | 0.8938  | 1.0000 | 0.05  | -12.4542 | 10.8665 |
| set1  | 2dd   | 4       | set2 | 3dp    | 7        | -0.4969  | 3.3479         | 3823 | -0.15   | 0.8820  | 1.0000 | 0.05  | -7.0608  | 6.0671  |
| set1  | 2dd   | 4       | set2 | 3dp    | 8        | 0.2332   | 5.9474         | 3823 | 0.04    | 0.9687  | 1.0000 | 0.05  | -11.4271 | 11.8936 |
| set1  | 2dd   | 4       | set2 | 3dp    | 9        | -0.3203  | 5.9474         | 3823 | -0.05   | 0.9571  | 1.0000 | 0.05  | -11.9806 | 11.3401 |
| set1  | 2dd   | 5       | set1 | 2dd    | 6        | 0.08196  | 3.3087         | 3823 | 0.02    | 0.9802  | 1.0000 | 0.05  | -6.4050  | 6.5689  |
| set1  | 2dd   | 5       | set1 | 2dd    | 7        | -0.5328  | 8.9663         | 3823 | -0.06   | 0.9526  | 1.0000 | 0.05  | -18.1120 | 17.0464 |
| set1  | 2dd   | 5       | set1 | 2dd    | 8        | -1.5479  | 6.3543         | 3823 | -0.24   | 0.8076  | 1.0000 | 0.05  | -14.0061 | 10.9102 |
| set1  | 2dd   | 5       | set1 | 2dd    | 9        | -1.8671  | 6.3543         | 3823 | -0.29   | 0.7689  | 1.0000 | 0.05  | -14.3253 | 10.5910 |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |              |              |
|---|-------|---------|------|--------|----------|--------------|--------------|
| set   | media | pair_id | _set | _media | _pair_id | Adj<br>Lower | Adj<br>Upper |
| set1  | 2dd   | 4       | set1 | 3dp    | 6        | -11.0798     | 11.0697      |
| set1  | 2dd   | 4       | set1 | 3dp    | 7        | -34.1256     | 33.5102      |
| set1  | 2dd   | 4       | set1 | 3dp    | 8        | -23.4258     | 23.2248      |
| set1  | 2dd   | 4       | set1 | 3dp    | 9        | -23.5892     | 23.0615      |
| set1  | 2dd   | 4       | set2 | 2dd    | 1        | -4.0235      | 4.2601       |
| set1  | 2dd   | 4       | set2 | 2dd    | 2        | -54.0376     | 54.9924      |
| set1  | 2dd   | 4       | set2 | 2dd    | 3        | -38.3531     | 36.2774      |
| set1  | 2dd   | 4       | set2 | 2dd    | 4        | -1.4279      | 1.4232       |
| set1  | 2dd   | 4       | set2 | 2dd    | 5        | -30.2476     | 34.8611      |
| set1  | 2dd   | 4       | set2 | 2dd    | 6        | -4.0106      | 10.1488      |
| set1  | 2dd   | 4       | set2 | 2dd    | 7        | -4.2008      | 3.6737       |
| set1  | 2dd   | 4       | set2 | 2dd    | 8        | -7.8441      | 6.3154       |
| set1  | 2dd   | 4       | set2 | 2dd    | 9        | -7.7843      | 6.3751       |
| set1  | 2dd   | 4       | set2 | 3dd    | 1        | -2.8126      | 1.6821       |
| set1  | 2dd   | 4       | set2 | 3dd    | 2        | -43.0543     | 42.4686      |
| set1  | 2dd   | 4       | set2 | 3dd    | 3        | -29.6651     | 27.8867      |
| set1  | 2dd   | 4       | set2 | 3dd    | 4        | -4.6959      | 1.9361       |
| set1  | 2dd   | 4       | set2 | 3dd    | 5        | -20.9947     | 23.3960      |
| set1  | 2dd   | 4       | set2 | 3dd    | 6        | -2.6863      | 3.4059       |
| set1  | 2dd   | 4       | set2 | 3dd    | 7        | -8.0361      | 5.2224       |
| set1  | 2dd   | 4       | set2 | 3dd    | 8        | -5.0825      | 4.2575       |
| set1  | 2dd   | 4       | set2 | 3dd    | 9        | -5.4299      | 3.9101       |
| set1  | 2dd   | 4       | set2 | 3dp    | 1        | -20.4872     | 21.2984      |
| set1  | 2dd   | 4       | set2 | 3dp    | 2        | -23.4079     | 22.6871      |
| set1  | 2dd   | 4       | set2 | 3dp    | 3        | -21.5891     | 19.0022      |
| set1  | 2dd   | 4       | set2 | 3dp    | 4        | -17.0632     | 16.8552      |
| set1  | 2dd   | 4       | set2 | 3dp    | 5        | -49.0798     | 50.0570      |
| set1  | 2dd   | 4       | set2 | 3dp    | 6        | -24.7703     | 23.1826      |
| set1  | 2dd   | 4       | set2 | 3dp    | 7        | -13.9939     | 13.0001      |
| set1  | 2dd   | 4       | set2 | 3dp    | 8        | -23.7432     | 24.2097      |
| set1  | 2dd   | 4       | set2 | 3dp    | 9        | -24.2967     | 23.6562      |
| set1  | 2dd   | 5       | set1 | 2dd    | 6        | -13.2568     | 13.4207      |
| set1  | 2dd   | 5       | set1 | 2dd    | 7        | -36.6798     | 35.6142      |
| set1  | 2dd   | 5       | set1 | 2dd    | 8        | -27.1649     | 24.0690      |
| set1  | 2dd   | 5       | set1 | 2dd    | 9        | -27.4841     | 23.7498      |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |          |                |      |         |         |        |       |          |         |
|---|-------|---------|------|--------|----------|----------|----------------|------|---------|---------|--------|-------|----------|---------|
| set   | media | pair_id | _set | _media | _pair_id | Estimate | Standard Error | DF   | t Value | Pr >  t | Adj P  | Alpha | Lower    | Upper   |
| set1  | 2dd   | 5       | set1 | 3dd    | 1        | -2.4814  | 1.9768         | 3823 | -1.26   | 0.2095  | 1.0000 | 0.05  | -6.3571  | 1.3944  |
| set1  | 2dd   | 5       | set1 | 3dd    | 2        | -2.8362  | 15.2999        | 3823 | -0.19   | 0.8529  | 1.0000 | 0.05  | -32.8329 | 27.1606 |
| set1  | 2dd   | 5       | set1 | 3dd    | 3        | -2.3178  | 1.7590         | 3823 | -1.32   | 0.1877  | 1.0000 | 0.05  | -5.7666  | 1.1309  |
| set1  | 2dd   | 5       | set1 | 3dd    | 4        | -2.0525  | 5.3212         | 3823 | -0.39   | 0.6997  | 1.0000 | 0.05  | -12.4852 | 8.3802  |
| set1  | 2dd   | 5       | set1 | 3dd    | 5        | -0.06803 | 2.9518         | 3823 | -0.02   | 0.9816  | 1.0000 | 0.05  | -5.8552  | 5.7191  |
| set1  | 2dd   | 5       | set1 | 3dd    | 6        | -1.6798  | 4.7680         | 3823 | -0.35   | 0.7246  | 1.0000 | 0.05  | -11.0278 | 7.6682  |
| set1  | 2dd   | 5       | set1 | 3dd    | 7        | -1.8274  | 10.0066        | 3823 | -0.18   | 0.8551  | 1.0000 | 0.05  | -21.4461 | 17.7913 |
| set1  | 2dd   | 5       | set1 | 3dd    | 8        | -2.2922  | 7.3962         | 3823 | -0.31   | 0.7566  | 1.0000 | 0.05  | -16.7931 | 12.2087 |
| set1  | 2dd   | 5       | set1 | 3dd    | 9        | -4.0060  | 7.3962         | 3823 | -0.54   | 0.5881  | 1.0000 | 0.05  | -18.5068 | 10.4949 |
| set1  | 2dd   | 5       | set1 | 3dp    | 1        | -1.3853  | 4.6011         | 3823 | -0.30   | 0.7634  | 1.0000 | 0.05  | -10.4061 | 7.6355  |
| set1  | 2dd   | 5       | set1 | 3dp    | 2        | -1.6620  | 12.6578        | 3823 | -0.13   | 0.8955  | 1.0000 | 0.05  | -26.4788 | 23.1547 |
| set1  | 2dd   | 5       | set1 | 3dp    | 3        | -2.0609  | 7.1546         | 3823 | -0.29   | 0.7733  | 1.0000 | 0.05  | -16.0881 | 11.9662 |
| set1  | 2dd   | 5       | set1 | 3dp    | 4        | -1.0513  | 7.9611         | 3823 | -0.13   | 0.8949  | 1.0000 | 0.05  | -16.6596 | 14.5571 |
| set1  | 2dd   | 5       | set1 | 3dp    | 5        | -0.1790  | 3.6905         | 3823 | -0.05   | 0.9613  | 1.0000 | 0.05  | -7.4144  | 7.0565  |
| set1  | 2dd   | 5       | set1 | 3dp    | 6        | -1.1393  | 6.9861         | 3823 | -0.16   | 0.8705  | 1.0000 | 0.05  | -14.8361 | 12.5575 |
| set1  | 2dd   | 5       | set1 | 3dp    | 7        | -1.4420  | 12.6490        | 3823 | -0.11   | 0.9092  | 1.0000 | 0.05  | -26.2414 | 23.3575 |
| set1  | 2dd   | 5       | set1 | 3dp    | 8        | -1.2348  | 10.0379        | 3823 | -0.12   | 0.9021  | 1.0000 | 0.05  | -20.9149 | 18.4454 |
| set1  | 2dd   | 5       | set1 | 3dp    | 9        | -1.3982  | 10.0379        | 3823 | -0.14   | 0.8892  | 1.0000 | 0.05  | -21.0783 | 18.2820 |
| set1  | 2dd   | 5       | set2 | 2dd    | 1        | -1.0160  | 3.3346         | 3823 | -0.30   | 0.7606  | 1.0000 | 0.05  | -7.5538  | 5.5219  |
| set1  | 2dd   | 5       | set2 | 2dd    | 2        | -0.6569  | 17.7912        | 3823 | -0.04   | 0.9705  | 1.0000 | 0.05  | -35.5381 | 34.2243 |
| set1  | 2dd   | 5       | set2 | 2dd    | 3        | -2.1721  | 13.5166        | 3823 | -0.16   | 0.8723  | 1.0000 | 0.05  | -28.6726 | 24.3284 |
| set1  | 2dd   | 5       | set2 | 2dd    | 4        | -1.1366  | 4.3089         | 3823 | -0.26   | 0.7920  | 1.0000 | 0.05  | -9.5846  | 7.3114  |
| set1  | 2dd   | 5       | set2 | 2dd    | 5        | 1.1725   | 3.7991         | 3823 | 0.31    | 0.7576  | 1.0000 | 0.05  | -6.2759  | 8.6209  |
| set1  | 2dd   | 5       | set2 | 2dd    | 6        | 1.9348   | 2.5674         | 3823 | 0.75    | 0.4511  | 1.0000 | 0.05  | -3.0988  | 6.9683  |
| set1  | 2dd   | 5       | set2 | 2dd    | 7        | -1.3978  | 5.1776         | 3823 | -0.27   | 0.7872  | 1.0000 | 0.05  | -11.5490 | 8.7533  |
| set1  | 2dd   | 5       | set2 | 2dd    | 8        | -1.8986  | 2.5674         | 3823 | -0.74   | 0.4596  | 1.0000 | 0.05  | -6.9322  | 3.1349  |
| set1  | 2dd   | 5       | set2 | 2dd    | 9        | -1.8389  | 2.5674         | 3823 | -0.72   | 0.4739  | 1.0000 | 0.05  | -6.8724  | 3.1946  |
| set1  | 2dd   | 5       | set2 | 3dd    | 1        | -1.6995  | 4.0056         | 3823 | -0.42   | 0.6714  | 1.0000 | 0.05  | -9.5529  | 6.1538  |
| set1  | 2dd   | 5       | set2 | 3dd    | 2        | -1.4272  | 14.8750        | 3823 | -0.10   | 0.9236  | 1.0000 | 0.05  | -30.5908 | 27.7364 |
| set1  | 2dd   | 5       | set2 | 3dd    | 3        | -2.0235  | 11.3932        | 3823 | -0.18   | 0.8590  | 1.0000 | 0.05  | -24.3608 | 20.3138 |
| set1  | 2dd   | 5       | set2 | 3dd    | 4        | -2.5142  | 4.9788         | 3823 | -0.50   | 0.6136  | 1.0000 | 0.05  | -12.2755 | 7.2471  |
| set1  | 2dd   | 5       | set2 | 3dd    | 5        | 0.06634  | 1.2681         | 3823 | 0.05    | 0.9583  | 1.0000 | 0.05  | -2.4198  | 2.5525  |
| set1  | 2dd   | 5       | set2 | 3dd    | 6        | -0.7744  | 3.6622         | 3823 | -0.21   | 0.8325  | 1.0000 | 0.05  | -7.9546  | 6.4057  |
| set1  | 2dd   | 5       | set2 | 3dd    | 7        | -2.5411  | 5.8505         | 3823 | -0.43   | 0.6641  | 1.0000 | 0.05  | -14.0115 | 8.9292  |
| set1  | 2dd   | 5       | set2 | 3dd    | 8        | -1.5468  | 3.2433         | 3823 | -0.48   | 0.6335  | 1.0000 | 0.05  | -7.9056  | 4.8120  |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |              |              |
|---|-------|---------|------|--------|----------|--------------|--------------|
| set   | media | pair_id | _set | _media | _pair_id | Adj<br>Lower | Adj<br>Upper |
| set1  | 2dd   | 5       | set1 | 3dd    | 1        | -10.4509     | 5.4881       |
| set1  | 2dd   | 5       | set1 | 3dd    | 2        | -64.5167     | 58.8444      |
| set1  | 2dd   | 5       | set1 | 3dd    | 3        | -9.4092      | 4.7735       |
| set1  | 2dd   | 5       | set1 | 3dd    | 4        | -23.5046     | 19.3996      |
| set1  | 2dd   | 5       | set1 | 3dd    | 5        | -11.9679     | 11.8318      |
| set1  | 2dd   | 5       | set1 | 3dd    | 6        | -20.9015     | 17.5419      |
| set1  | 2dd   | 5       | set1 | 3dd    | 7        | -42.1682     | 38.5134      |
| set1  | 2dd   | 5       | set1 | 3dd    | 8        | -32.1095     | 27.5251      |
| set1  | 2dd   | 5       | set1 | 3dd    | 9        | -33.8232     | 25.8113      |
| set1  | 2dd   | 5       | set1 | 3dp    | 1        | -19.9342     | 17.1636      |
| set1  | 2dd   | 5       | set1 | 3dp    | 2        | -52.6913     | 49.3672      |
| set1  | 2dd   | 5       | set1 | 3dp    | 3        | -30.9041     | 26.7822      |
| set1  | 2dd   | 5       | set1 | 3dp    | 4        | -33.1458     | 31.0433      |
| set1  | 2dd   | 5       | set1 | 3dp    | 5        | -15.0568     | 14.6989      |
| set1  | 2dd   | 5       | set1 | 3dp    | 6        | -29.3033     | 27.0246      |
| set1  | 2dd   | 5       | set1 | 3dp    | 7        | -52.4356     | 49.5517      |
| set1  | 2dd   | 5       | set1 | 3dp    | 8        | -41.7019     | 39.2323      |
| set1  | 2dd   | 5       | set1 | 3dp    | 9        | -41.8653     | 39.0689      |
| set1  | 2dd   | 5       | set2 | 2dd    | 1        | -14.4594     | 12.4274      |
| set1  | 2dd   | 5       | set2 | 2dd    | 2        | -72.3809     | 71.0671      |
| set1  | 2dd   | 5       | set2 | 2dd    | 3        | -56.6635     | 52.3192      |
| set1  | 2dd   | 5       | set2 | 2dd    | 4        | -18.5077     | 16.2345      |
| set1  | 2dd   | 5       | set2 | 2dd    | 5        | -14.1432     | 16.4882      |
| set1  | 2dd   | 5       | set2 | 2dd    | 6        | -8.4154      | 12.2849      |
| set1  | 2dd   | 5       | set2 | 2dd    | 7        | -22.2711     | 19.4754      |
| set1  | 2dd   | 5       | set2 | 2dd    | 8        | -12.2488     | 8.4515       |
| set1  | 2dd   | 5       | set2 | 2dd    | 9        | -12.1891     | 8.5113       |
| set1  | 2dd   | 5       | set2 | 3dd    | 1        | -17.8479     | 14.4489      |
| set1  | 2dd   | 5       | set2 | 3dd    | 2        | -61.3946     | 58.5402      |
| set1  | 2dd   | 5       | set2 | 3dd    | 3        | -47.9544     | 43.9074      |
| set1  | 2dd   | 5       | set2 | 3dd    | 4        | -22.5857     | 17.5574      |
| set1  | 2dd   | 5       | set2 | 3dd    | 5        | -5.0458      | 5.1785       |
| set1  | 2dd   | 5       | set2 | 3dd    | 6        | -15.5385     | 13.9896      |
| set1  | 2dd   | 5       | set2 | 3dd    | 7        | -26.1269     | 21.0446      |
| set1  | 2dd   | 5       | set2 | 3dd    | 8        | -14.6220     | 11.5285      |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |          |                |      |         |         |        |       |          |         |
|---|-------|---------|------|--------|----------|----------|----------------|------|---------|---------|--------|-------|----------|---------|
| set   | media | pair_id | _set | _media | _pair_id | Estimate | Standard Error | DF   | t Value | Pr >  t | Adj P  | Alpha | Lower    | Upper   |
| set1  | 2dd   | 5       | set2 | 3dd    | 9        | -1.8942  | 3.2433         | 3823 | -0.58   | 0.5592  | 1.0000 | 0.05  | -8.2530  | 4.4646  |
| set1  | 2dd   | 5       | set2 | 3dp    | 1        | -0.7287  | 0.9648         | 3823 | -0.76   | 0.4501  | 1.0000 | 0.05  | -2.6202  | 1.1628  |
| set1  | 2dd   | 5       | set2 | 3dp    | 2        | -1.4947  | 9.9889         | 3823 | -0.15   | 0.8811  | 1.0000 | 0.05  | -21.0787 | 18.0894 |
| set1  | 2dd   | 5       | set2 | 3dp    | 3        | -2.4277  | 9.2939         | 3823 | -0.26   | 0.7939  | 1.0000 | 0.05  | -20.6493 | 15.7938 |
| set1  | 2dd   | 5       | set2 | 3dp    | 4        | -1.2383  | 0.3830         | 3823 | -3.23   | 0.0012  | 0.4616 | 0.05  | -1.9891  | -0.4875 |
| set1  | 2dd   | 5       | set2 | 3dp    | 5        | -0.6457  | 8.0257         | 3823 | -0.08   | 0.9359  | 1.0000 | 0.05  | -16.3809 | 15.0894 |
| set1  | 2dd   | 5       | set2 | 3dp    | 6        | -1.9281  | 1.6992         | 3823 | -1.13   | 0.2566  | 1.0000 | 0.05  | -5.2594  | 1.4032  |
| set1  | 2dd   | 5       | set2 | 3dp    | 7        | -1.6311  | 1.0350         | 3823 | -1.58   | 0.1151  | 1.0000 | 0.05  | -3.6603  | 0.3980  |
| set1  | 2dd   | 5       | set2 | 3dp    | 8        | -0.9011  | 1.6992         | 3823 | -0.53   | 0.5959  | 1.0000 | 0.05  | -4.2324  | 2.4303  |
| set1  | 2dd   | 5       | set2 | 3dp    | 9        | -1.4545  | 1.6992         | 3823 | -0.86   | 0.3920  | 1.0000 | 0.05  | -4.7859  | 1.8768  |
| set1  | 2dd   | 6       | set1 | 2dd    | 7        | -0.6148  | 5.6772         | 3823 | -0.11   | 0.9138  | 1.0000 | 0.05  | -11.7454 | 10.5158 |
| set1  | 2dd   | 6       | set1 | 2dd    | 8        | -1.6299  | 3.0725         | 3823 | -0.53   | 0.5958  | 1.0000 | 0.05  | -7.6537  | 4.3939  |
| set1  | 2dd   | 6       | set1 | 2dd    | 9        | -1.9491  | 3.0725         | 3823 | -0.63   | 0.5259  | 1.0000 | 0.05  | -7.9729  | 4.0747  |
| set1  | 2dd   | 6       | set1 | 3dd    | 1        | -2.5634  | 1.3958         | 3823 | -1.84   | 0.0664  | 1.0000 | 0.05  | -5.3000  | 0.1733  |
| set1  | 2dd   | 6       | set1 | 3dd    | 2        | -2.9181  | 18.5924        | 3823 | -0.16   | 0.8753  | 1.0000 | 0.05  | -39.3700 | 33.5338 |
| set1  | 2dd   | 6       | set1 | 3dd    | 3        | -2.3998  | 1.6450         | 3823 | -1.46   | 0.1447  | 1.0000 | 0.05  | -5.6250  | 0.8254  |
| set1  | 2dd   | 6       | set1 | 3dd    | 4        | -2.1345  | 2.0455         | 3823 | -1.04   | 0.2968  | 1.0000 | 0.05  | -6.1449  | 1.8760  |
| set1  | 2dd   | 6       | set1 | 3dd    | 5        | -0.1500  | 0.4738         | 3823 | -0.32   | 0.7516  | 1.0000 | 0.05  | -1.0789  | 0.7789  |
| set1  | 2dd   | 6       | set1 | 3dd    | 6        | -1.7617  | 1.4877         | 3823 | -1.18   | 0.2364  | 1.0000 | 0.05  | -4.6786  | 1.1551  |
| set1  | 2dd   | 6       | set1 | 3dd    | 7        | -1.9094  | 6.7191         | 3823 | -0.28   | 0.7763  | 1.0000 | 0.05  | -15.0828 | 11.2640 |
| set1  | 2dd   | 6       | set1 | 3dd    | 8        | -2.3742  | 4.1165         | 3823 | -0.58   | 0.5641  | 1.0000 | 0.05  | -10.4450 | 5.6967  |
| set1  | 2dd   | 6       | set1 | 3dd    | 9        | -4.0879  | 4.1165         | 3823 | -0.99   | 0.3207  | 1.0000 | 0.05  | -12.1588 | 3.9829  |
| set1  | 2dd   | 6       | set1 | 3dp    | 1        | -1.4673  | 1.3388         | 3823 | -1.10   | 0.2732  | 1.0000 | 0.05  | -4.0921  | 1.1576  |
| set1  | 2dd   | 6       | set1 | 3dp    | 2        | -1.7440  | 15.9497        | 3823 | -0.11   | 0.9129  | 1.0000 | 0.05  | -33.0147 | 29.5266 |
| set1  | 2dd   | 6       | set1 | 3dp    | 3        | -2.1429  | 3.8705         | 3823 | -0.55   | 0.5798  | 1.0000 | 0.05  | -9.7313  | 5.4455  |
| set1  | 2dd   | 6       | set1 | 3dp    | 4        | -1.1332  | 4.6722         | 3823 | -0.24   | 0.8084  | 1.0000 | 0.05  | -10.2936 | 8.0271  |
| set1  | 2dd   | 6       | set1 | 3dp    | 5        | -0.2609  | 0.5732         | 3823 | -0.46   | 0.6490  | 1.0000 | 0.05  | -1.3848  | 0.8629  |
| set1  | 2dd   | 6       | set1 | 3dp    | 6        | -1.2213  | 3.6905         | 3823 | -0.33   | 0.7407  | 1.0000 | 0.05  | -8.4568  | 6.0142  |
| set1  | 2dd   | 6       | set1 | 3dp    | 7        | -1.5239  | 9.3592         | 3823 | -0.16   | 0.8707  | 1.0000 | 0.05  | -19.8735 | 16.8256 |
| set1  | 2dd   | 6       | set1 | 3dp    | 8        | -1.3167  | 6.7516         | 3823 | -0.20   | 0.8454  | 1.0000 | 0.05  | -14.5538 | 11.9203 |
| set1  | 2dd   | 6       | set1 | 3dp    | 9        | -1.4801  | 6.7516         | 3823 | -0.22   | 0.8265  | 1.0000 | 0.05  | -14.7171 | 11.7569 |
| set1  | 2dd   | 6       | set2 | 2dd    | 1        | -1.0979  | 0.3660         | 3823 | -3.00   | 0.0027  | 0.6685 | 0.05  | -1.8156  | -0.3803 |
| set1  | 2dd   | 6       | set2 | 2dd    | 2        | -0.7389  | 14.4974        | 3823 | -0.05   | 0.9594  | 1.0000 | 0.05  | -29.1621 | 27.6844 |
| set1  | 2dd   | 6       | set2 | 2dd    | 3        | -2.2541  | 10.2283        | 3823 | -0.22   | 0.8256  | 1.0000 | 0.05  | -22.3075 | 17.7993 |
| set1  | 2dd   | 6       | set2 | 2dd    | 4        | -1.2186  | 1.0655         | 3823 | -1.14   | 0.2529  | 1.0000 | 0.05  | -3.3077  | 0.8705  |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |              |              |
|---|-------|---------|------|--------|----------|--------------|--------------|
| set   | media | pair_id | _set | _media | _pair_id | Adj<br>Lower | Adj<br>Upper |
| set1  | 2dd   | 5       | set2 | 3dd    | 9        | -14.9694     | 11.1811      |
| set1  | 2dd   | 5       | set2 | 3dp    | 1        | -4.6180      | 3.1607       |
| set1  | 2dd   | 5       | set2 | 3dp    | 2        | -41.7642     | 38.7748      |
| set1  | 2dd   | 5       | set2 | 3dp    | 3        | -39.8956     | 35.0401      |
| set1  | 2dd   | 5       | set2 | 3dp    | 4        | -2.7822      | 0.3056       |
| set1  | 2dd   | 5       | set2 | 3dp    | 5        | -33.0009     | 31.7095      |
| set1  | 2dd   | 5       | set2 | 3dp    | 6        | -8.7781      | 4.9219       |
| set1  | 2dd   | 5       | set2 | 3dp    | 7        | -5.8035      | 2.5412       |
| set1  | 2dd   | 5       | set2 | 3dp    | 8        | -7.7511      | 5.9490       |
| set1  | 2dd   | 5       | set2 | 3dp    | 9        | -8.3046      | 5.3955       |
| set1  | 2dd   | 6       | set1 | 2dd    | 7        | -23.5019     | 22.2723      |
| set1  | 2dd   | 6       | set1 | 2dd    | 8        | -14.0163     | 10.7565      |
| set1  | 2dd   | 6       | set1 | 2dd    | 9        | -14.3354     | 10.4373      |
| set1  | 2dd   | 6       | set1 | 3dd    | 1        | -8.1905      | 3.0638       |
| set1  | 2dd   | 6       | set1 | 3dd    | 2        | -77.8720     | 72.0357      |
| set1  | 2dd   | 6       | set1 | 3dd    | 3        | -9.0316      | 4.2319       |
| set1  | 2dd   | 6       | set1 | 3dd    | 4        | -10.3809     | 6.1119       |
| set1  | 2dd   | 6       | set1 | 3dd    | 5        | -2.0601      | 1.7601       |
| set1  | 2dd   | 6       | set1 | 3dd    | 6        | -7.7595      | 4.2360       |
| set1  | 2dd   | 6       | set1 | 3dd    | 7        | -28.9971     | 25.1783      |
| set1  | 2dd   | 6       | set1 | 3dd    | 8        | -18.9698     | 14.2214      |
| set1  | 2dd   | 6       | set1 | 3dd    | 9        | -20.6835     | 12.5076      |
| set1  | 2dd   | 6       | set1 | 3dp    | 1        | -6.8645      | 3.9300       |
| set1  | 2dd   | 6       | set1 | 3dp    | 2        | -66.0440     | 62.5559      |
| set1  | 2dd   | 6       | set1 | 3dp    | 3        | -17.7464     | 13.4606      |
| set1  | 2dd   | 6       | set1 | 3dp    | 4        | -19.9691     | 17.7026      |
| set1  | 2dd   | 6       | set1 | 3dp    | 5        | -2.5719      | 2.0500       |
| set1  | 2dd   | 6       | set1 | 3dp    | 6        | -16.0992     | 13.6566      |
| set1  | 2dd   | 6       | set1 | 3dp    | 7        | -39.2550     | 36.2071      |
| set1  | 2dd   | 6       | set1 | 3dp    | 8        | -28.5352     | 25.9018      |
| set1  | 2dd   | 6       | set1 | 3dp    | 9        | -28.6986     | 25.7384      |
| set1  | 2dd   | 6       | set2 | 2dd    | 1        | -2.5736      | 0.3778       |
| set1  | 2dd   | 6       | set2 | 2dd    | 2        | -59.1839     | 57.7062      |
| set1  | 2dd   | 6       | set2 | 2dd    | 3        | -43.4887     | 38.9805      |
| set1  | 2dd   | 6       | set2 | 2dd    | 4        | -5.5142      | 3.0771       |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |          |                |      |         |         |        |       |          |         |
|---|-------|---------|------|--------|----------|----------|----------------|------|---------|---------|--------|-------|----------|---------|
| set   | media | pair_id | _set | _media | _pair_id | Estimate | Standard Error | DF   | t Value | Pr >  t | Adj P  | Alpha | Lower    | Upper   |
| set1  | 2dd   | 6       | set2 | 2dd    | 5        | 1.0905   | 7.0960         | 3823 | 0.15    | 0.8779  | 1.0000 | 0.05  | -12.8218 | 15.0029 |
| set1  | 2dd   | 6       | set2 | 2dd    | 6        | 1.8528   | 0.7921         | 3823 | 2.34    | 0.0194  | 0.9863 | 0.05  | 0.2998   | 3.4058  |
| set1  | 2dd   | 6       | set2 | 2dd    | 7        | -1.4798  | 1.9018         | 3823 | -0.78   | 0.4366  | 1.0000 | 0.05  | -5.2085  | 2.2489  |
| set1  | 2dd   | 6       | set2 | 2dd    | 8        | -1.9806  | 0.7921         | 3823 | -2.50   | 0.0124  | 0.9584 | 0.05  | -3.5336  | -0.4276 |
| set1  | 2dd   | 6       | set2 | 2dd    | 9        | -1.9209  | 0.7921         | 3823 | -2.43   | 0.0154  | 0.9744 | 0.05  | -3.4738  | -0.3679 |
| set1  | 2dd   | 6       | set2 | 3dd    | 1        | -1.7815  | 0.8070         | 3823 | -2.21   | 0.0273  | 0.9956 | 0.05  | -3.3637  | -0.1993 |
| set1  | 2dd   | 6       | set2 | 3dd    | 2        | -1.5091  | 11.5821        | 3823 | -0.13   | 0.8963  | 1.0000 | 0.05  | -24.2168 | 21.1986 |
| set1  | 2dd   | 6       | set2 | 3dd    | 3        | -2.1055  | 8.1066         | 3823 | -0.26   | 0.7951  | 1.0000 | 0.05  | -17.9992 | 13.7882 |
| set1  | 2dd   | 6       | set2 | 3dd    | 4        | -2.5961  | 1.7173         | 3823 | -1.51   | 0.1307  | 1.0000 | 0.05  | -5.9629  | 0.7707  |
| set1  | 2dd   | 6       | set2 | 3dd    | 5        | -0.01562 | 4.5283         | 3823 | -0.00   | 0.9972  | 1.0000 | 0.05  | -8.8938  | 8.8625  |
| set1  | 2dd   | 6       | set2 | 3dd    | 6        | -0.8564  | 0.5368         | 3823 | -1.60   | 0.1107  | 1.0000 | 0.05  | -1.9088  | 0.1959  |
| set1  | 2dd   | 6       | set2 | 3dd    | 7        | -2.6231  | 2.5747         | 3823 | -1.02   | 0.3084  | 1.0000 | 0.05  | -7.6710  | 2.4249  |
| set1  | 2dd   | 6       | set2 | 3dd    | 8        | -1.6288  | 0.3839         | 3823 | -4.24   | <.0001  | 0.0226 | 0.05  | -2.3814  | -0.8761 |
| set1  | 2dd   | 6       | set2 | 3dd    | 9        | -1.9762  | 0.3839         | 3823 | -5.15   | <.0001  | 0.0004 | 0.05  | -2.7288  | -1.2235 |
| set1  | 2dd   | 6       | set2 | 3dp    | 1        | -0.8106  | 4.2073         | 3823 | -0.19   | 0.8472  | 1.0000 | 0.05  | -9.0594  | 7.4382  |
| set1  | 2dd   | 6       | set2 | 3dp    | 2        | -1.5767  | 6.6950         | 3823 | -0.24   | 0.8138  | 1.0000 | 0.05  | -14.7028 | 11.5495 |
| set1  | 2dd   | 6       | set2 | 3dp    | 3        | -2.5097  | 6.0044         | 3823 | -0.42   | 0.6760  | 1.0000 | 0.05  | -14.2818 | 9.2624  |
| set1  | 2dd   | 6       | set2 | 3dp    | 4        | -1.3203  | 3.2361         | 3823 | -0.41   | 0.6833  | 1.0000 | 0.05  | -7.6648  | 5.0243  |
| set1  | 2dd   | 6       | set2 | 3dp    | 5        | -0.7277  | 11.3177        | 3823 | -0.06   | 0.9487  | 1.0000 | 0.05  | -22.9170 | 21.4616 |
| set1  | 2dd   | 6       | set2 | 3dp    | 6        | -2.0101  | 4.9679         | 3823 | -0.40   | 0.6858  | 1.0000 | 0.05  | -11.7500 | 7.7299  |
| set1  | 2dd   | 6       | set2 | 3dp    | 7        | -1.7131  | 2.3742         | 3823 | -0.72   | 0.4706  | 1.0000 | 0.05  | -6.3680  | 2.9418  |
| set1  | 2dd   | 6       | set2 | 3dp    | 8        | -0.9830  | 4.9679         | 3823 | -0.20   | 0.8432  | 1.0000 | 0.05  | -10.7230 | 8.7569  |
| set1  | 2dd   | 6       | set2 | 3dp    | 9        | -1.5365  | 4.9679         | 3823 | -0.31   | 0.7571  | 1.0000 | 0.05  | -11.2765 | 8.2035  |
| set1  | 2dd   | 7       | set1 | 2dd    | 8        | -1.0151  | 2.6176         | 3823 | -0.39   | 0.6982  | 1.0000 | 0.05  | -6.1472  | 4.1170  |
| set1  | 2dd   | 7       | set1 | 2dd    | 9        | -1.3343  | 2.6176         | 3823 | -0.51   | 0.6103  | 1.0000 | 0.05  | -6.4664  | 3.7978  |
| set1  | 2dd   | 7       | set1 | 3dd    | 1        | -1.9486  | 7.0273         | 3823 | -0.28   | 0.7816  | 1.0000 | 0.05  | -15.7261 | 11.8290 |
| set1  | 2dd   | 7       | set1 | 3dd    | 2        | -2.3033  | 24.2596        | 3823 | -0.09   | 0.9244  | 1.0000 | 0.05  | -49.8662 | 45.2596 |
| set1  | 2dd   | 7       | set1 | 3dd    | 3        | -1.7850  | 7.2694         | 3823 | -0.25   | 0.8060  | 1.0000 | 0.05  | -16.0373 | 12.4673 |
| set1  | 2dd   | 7       | set1 | 3dd    | 4        | -1.5197  | 3.6701         | 3823 | -0.41   | 0.6788  | 1.0000 | 0.05  | -8.7153  | 5.6759  |
| set1  | 2dd   | 7       | set1 | 3dd    | 5        | 0.4648   | 6.0321         | 3823 | 0.08    | 0.9386  | 1.0000 | 0.05  | -11.3616 | 12.2912 |
| set1  | 2dd   | 7       | set1 | 3dd    | 6        | -1.1469  | 4.2239         | 3823 | -0.27   | 0.7860  | 1.0000 | 0.05  | -9.4282  | 7.1343  |
| set1  | 2dd   | 7       | set1 | 3dd    | 7        | -1.2946  | 1.0610         | 3823 | -1.22   | 0.2225  | 1.0000 | 0.05  | -3.3748  | 0.7856  |
| set1  | 2dd   | 7       | set1 | 3dd    | 8        | -1.7594  | 1.6023         | 3823 | -1.10   | 0.2723  | 1.0000 | 0.05  | -4.9009  | 1.3821  |
| set1  | 2dd   | 7       | set1 | 3dd    | 9        | -3.4731  | 1.6023         | 3823 | -2.17   | 0.0303  | 0.9970 | 0.05  | -6.6146  | -0.3317 |
| set1  | 2dd   | 7       | set1 | 3dp    | 1        | -0.8525  | 4.3900         | 3823 | -0.19   | 0.8460  | 1.0000 | 0.05  | -9.4594  | 7.7545  |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |              |              |
|---|-------|---------|------|--------|----------|--------------|--------------|
| set   | media | pair_id | _set | _media | _pair_id | Adj<br>Lower | Adj<br>Upper |
| set1  | 2dd   | 6       | set2 | 2dd    | 5        | -27.5167     | 29.6977      |
| set1  | 2dd   | 6       | set2 | 2dd    | 6        | -1.3405      | 5.0461       |
| set1  | 2dd   | 6       | set2 | 2dd    | 7        | -9.1469      | 6.1873       |
| set1  | 2dd   | 6       | set2 | 2dd    | 8        | -5.1739      | 1.2127       |
| set1  | 2dd   | 6       | set2 | 2dd    | 9        | -5.1142      | 1.2725       |
| set1  | 2dd   | 6       | set2 | 3dd    | 1        | -5.0349      | 1.4719       |
| set1  | 2dd   | 6       | set2 | 3dd    | 2        | -48.2016     | 45.1833      |
| set1  | 2dd   | 6       | set2 | 3dd    | 3        | -34.7867     | 30.5758      |
| set1  | 2dd   | 6       | set2 | 3dd    | 4        | -9.5191      | 4.3269       |
| set1  | 2dd   | 6       | set2 | 3dd    | 5        | -18.2712     | 18.2399      |
| set1  | 2dd   | 6       | set2 | 3dd    | 6        | -3.0203      | 1.3075       |
| set1  | 2dd   | 6       | set2 | 3dd    | 7        | -13.0029     | 7.7567       |
| set1  | 2dd   | 6       | set2 | 3dd    | 8        | -3.1764      | -0.08113     |
| set1  | 2dd   | 6       | set2 | 3dd    | 9        | -3.5238      | -0.4285      |
| set1  | 2dd   | 6       | set2 | 3dp    | 1        | -17.7722     | 16.1509      |
| set1  | 2dd   | 6       | set2 | 3dp    | 2        | -28.5671     | 25.4138      |
| set1  | 2dd   | 6       | set2 | 3dp    | 3        | -26.7159     | 21.6965      |
| set1  | 2dd   | 6       | set2 | 3dp    | 4        | -14.3662     | 11.7257      |
| set1  | 2dd   | 6       | set2 | 3dp    | 5        | -46.3542     | 44.8988      |
| set1  | 2dd   | 6       | set2 | 3dp    | 6        | -22.0378     | 18.0176      |
| set1  | 2dd   | 6       | set2 | 3dp    | 7        | -11.2846     | 7.8584       |
| set1  | 2dd   | 6       | set2 | 3dp    | 8        | -21.0107     | 19.0447      |
| set1  | 2dd   | 6       | set2 | 3dp    | 9        | -21.5642     | 18.4912      |
| set1  | 2dd   | 7       | set1 | 2dd    | 8        | -11.5679     | 9.5377       |
| set1  | 2dd   | 7       | set1 | 2dd    | 9        | -11.8871     | 9.2185       |
| set1  | 2dd   | 7       | set1 | 3dd    | 1        | -30.2785     | 26.3814      |
| set1  | 2dd   | 7       | set1 | 3dd    | 2        | -100.10      | 95.4975      |
| set1  | 2dd   | 7       | set1 | 3dd    | 3        | -31.0911     | 27.5211      |
| set1  | 2dd   | 7       | set1 | 3dd    | 4        | -16.3155     | 13.2762      |
| set1  | 2dd   | 7       | set1 | 3dd    | 5        | -23.8531     | 24.7827      |
| set1  | 2dd   | 7       | set1 | 3dd    | 6        | -18.1752     | 15.8813      |
| set1  | 2dd   | 7       | set1 | 3dd    | 7        | -5.5719      | 2.9828       |
| set1  | 2dd   | 7       | set1 | 3dd    | 8        | -8.2190      | 4.7002       |
| set1  | 2dd   | 7       | set1 | 3dd    | 9        | -9.9328      | 2.9865       |
| set1  | 2dd   | 7       | set1 | 3dp    | 1        | -18.5504     | 16.8455      |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |          |                |      |         |         |        |       |          |         |
|---|-------|---------|------|--------|----------|----------|----------------|------|---------|---------|--------|-------|----------|---------|
| set   | media | pair_id | _set | _media | _pair_id | Estimate | Standard Error | DF   | t Value | Pr >  t | Adj P  | Alpha | Lower    | Upper   |
| set1  | 2dd   | 7       | set1 | 3dp    | 2        | -1.1292  | 21.6168        | 3823 | -0.05   | 0.9583  | 1.0000 | 0.05  | -43.5108 | 41.2524 |
| set1  | 2dd   | 7       | set1 | 3dp    | 3        | -1.5281  | 1.8591         | 3823 | -0.82   | 0.4111  | 1.0000 | 0.05  | -5.1730  | 2.1168  |
| set1  | 2dd   | 7       | set1 | 3dp    | 4        | -0.5185  | 1.0774         | 3823 | -0.48   | 0.6304  | 1.0000 | 0.05  | -2.6309  | 1.5940  |
| set1  | 2dd   | 7       | set1 | 3dp    | 5        | 0.3539   | 5.2944         | 3823 | 0.07    | 0.9467  | 1.0000 | 0.05  | -10.0262 | 10.7340 |
| set1  | 2dd   | 7       | set1 | 3dp    | 6        | -0.6065  | 2.0260         | 3823 | -0.30   | 0.7647  | 1.0000 | 0.05  | -4.5787  | 3.3657  |
| set1  | 2dd   | 7       | set1 | 3dp    | 7        | -0.9091  | 3.6905         | 3823 | -0.25   | 0.8054  | 1.0000 | 0.05  | -8.1446  | 6.3264  |
| set1  | 2dd   | 7       | set1 | 3dp    | 8        | -0.7019  | 1.1183         | 3823 | -0.63   | 0.5303  | 1.0000 | 0.05  | -2.8945  | 1.4906  |
| set1  | 2dd   | 7       | set1 | 3dp    | 9        | -0.8653  | 1.1183         | 3823 | -0.77   | 0.4391  | 1.0000 | 0.05  | -3.0579  | 1.3272  |
| set1  | 2dd   | 7       | set2 | 2dd    | 1        | -0.4831  | 5.6490         | 3823 | -0.09   | 0.9318  | 1.0000 | 0.05  | -11.5586 | 10.5923 |
| set1  | 2dd   | 7       | set2 | 2dd    | 2        | -0.1241  | 8.8316         | 3823 | -0.01   | 0.9888  | 1.0000 | 0.05  | -17.4391 | 17.1910 |
| set1  | 2dd   | 7       | set2 | 2dd    | 3        | -1.6393  | 4.5654         | 3823 | -0.36   | 0.7196  | 1.0000 | 0.05  | -10.5902 | 7.3116  |
| set1  | 2dd   | 7       | set2 | 2dd    | 4        | -0.6038  | 4.6745         | 3823 | -0.13   | 0.8972  | 1.0000 | 0.05  | -9.7685  | 8.5610  |
| set1  | 2dd   | 7       | set2 | 2dd    | 5        | 1.7053   | 12.7612        | 3823 | 0.13    | 0.8937  | 1.0000 | 0.05  | -23.3140 | 26.7247 |
| set1  | 2dd   | 7       | set2 | 2dd    | 6        | 2.4676   | 6.4098         | 3823 | 0.38    | 0.7003  | 1.0000 | 0.05  | -10.0994 | 15.0346 |
| set1  | 2dd   | 7       | set2 | 2dd    | 7        | -0.8650  | 3.7991         | 3823 | -0.23   | 0.8199  | 1.0000 | 0.05  | -8.3134  | 6.5834  |
| set1  | 2dd   | 7       | set2 | 2dd    | 8        | -1.3658  | 6.4098         | 3823 | -0.21   | 0.8313  | 1.0000 | 0.05  | -13.9328 | 11.2012 |
| set1  | 2dd   | 7       | set2 | 2dd    | 9        | -1.3061  | 6.4098         | 3823 | -0.20   | 0.8386  | 1.0000 | 0.05  | -13.8731 | 11.2609 |
| set1  | 2dd   | 7       | set2 | 3dd    | 1        | -1.1667  | 4.9808         | 3823 | -0.23   | 0.8148  | 1.0000 | 0.05  | -10.9320 | 8.5985  |
| set1  | 2dd   | 7       | set2 | 3dd    | 2        | -0.8943  | 5.9194         | 3823 | -0.15   | 0.8799  | 1.0000 | 0.05  | -12.4997 | 10.7110 |
| set1  | 2dd   | 7       | set2 | 3dd    | 3        | -1.4907  | 2.4556         | 3823 | -0.61   | 0.5439  | 1.0000 | 0.05  | -6.3050  | 3.3237  |
| set1  | 2dd   | 7       | set2 | 3dd    | 4        | -1.9813  | 4.0054         | 3823 | -0.49   | 0.6209  | 1.0000 | 0.05  | -9.8343  | 5.8717  |
| set1  | 2dd   | 7       | set2 | 3dd    | 5        | 0.5992   | 10.1923        | 3823 | 0.06    | 0.9531  | 1.0000 | 0.05  | -19.3837 | 20.5820 |
| set1  | 2dd   | 7       | set2 | 3dd    | 6        | -0.2416  | 5.3211         | 3823 | -0.05   | 0.9638  | 1.0000 | 0.05  | -10.6740 | 10.1908 |
| set1  | 2dd   | 7       | set2 | 3dd    | 7        | -2.0083  | 3.1344         | 3823 | -0.64   | 0.5217  | 1.0000 | 0.05  | -8.1536  | 4.1370  |
| set1  | 2dd   | 7       | set2 | 3dd    | 8        | -1.0140  | 5.7432         | 3823 | -0.18   | 0.8599  | 1.0000 | 0.05  | -12.2741 | 10.2462 |
| set1  | 2dd   | 7       | set2 | 3dd    | 9        | -1.3614  | 5.7432         | 3823 | -0.24   | 0.8126  | 1.0000 | 0.05  | -12.6215 | 9.8988  |
| set1  | 2dd   | 7       | set2 | 3dp    | 1        | -0.1958  | 9.8711         | 3823 | -0.02   | 0.9842  | 1.0000 | 0.05  | -19.5490 | 19.1573 |
| set1  | 2dd   | 7       | set2 | 3dp    | 2        | -0.9619  | 1.1388         | 3823 | -0.84   | 0.3984  | 1.0000 | 0.05  | -3.1946  | 1.2709  |
| set1  | 2dd   | 7       | set2 | 3dp    | 3        | -1.8949  | 0.4873         | 3823 | -3.89   | 0.0001  | 0.0820 | 0.05  | -2.8504  | -0.9395 |
| set1  | 2dd   | 7       | set2 | 3dp    | 4        | -0.7055  | 8.8965         | 3823 | -0.08   | 0.9368  | 1.0000 | 0.05  | -18.1477 | 16.7368 |
| set1  | 2dd   | 7       | set2 | 3dp    | 5        | -0.1129  | 16.9865        | 3823 | -0.01   | 0.9947  | 1.0000 | 0.05  | -33.4165 | 33.1907 |
| set1  | 2dd   | 7       | set2 | 3dp    | 6        | -1.3953  | 10.6347        | 3823 | -0.13   | 0.8956  | 1.0000 | 0.05  | -22.2456 | 19.4550 |
| set1  | 2dd   | 7       | set2 | 3dp    | 7        | -1.0983  | 8.0257         | 3823 | -0.14   | 0.8912  | 1.0000 | 0.05  | -16.8335 | 14.6368 |
| set1  | 2dd   | 7       | set2 | 3dp    | 8        | -0.3682  | 10.6347        | 3823 | -0.03   | 0.9724  | 1.0000 | 0.05  | -21.2185 | 20.4821 |
| set1  | 2dd   | 7       | set2 | 3dp    | 9        | -0.9217  | 10.6347        | 3823 | -0.09   | 0.9309  | 1.0000 | 0.05  | -21.7720 | 19.9286 |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |              |              |
|---|-------|---------|------|--------|----------|--------------|--------------|
| set   | media | pair_id | _set | _media | _pair_id | Adj<br>Lower | Adj<br>Upper |
| set1  | 2dd   | 7       | set1 | 3dp    | 2        | -88.2760     | 86.0176      |
| set1  | 2dd   | 7       | set1 | 3dp    | 3        | -9.0229      | 5.9667       |
| set1  | 2dd   | 7       | set1 | 3dp    | 4        | -4.8621      | 3.8252       |
| set1  | 2dd   | 7       | set1 | 3dp    | 5        | -20.9901     | 21.6978      |
| set1  | 2dd   | 7       | set1 | 3dp    | 6        | -8.7742      | 7.5612       |
| set1  | 2dd   | 7       | set1 | 3dp    | 7        | -15.7870     | 13.9688      |
| set1  | 2dd   | 7       | set1 | 3dp    | 8        | -5.2104      | 3.8065       |
| set1  | 2dd   | 7       | set1 | 3dp    | 9        | -5.3738      | 3.6431       |
| set1  | 2dd   | 7       | set2 | 2dd    | 1        | -23.2569     | 22.2906      |
| set1  | 2dd   | 7       | set2 | 2dd    | 2        | -35.7280     | 35.4798      |
| set1  | 2dd   | 7       | set2 | 2dd    | 3        | -20.0445     | 16.7660      |
| set1  | 2dd   | 7       | set2 | 2dd    | 4        | -19.4486     | 18.2411      |
| set1  | 2dd   | 7       | set2 | 2dd    | 5        | -49.7404     | 53.1511      |
| set1  | 2dd   | 7       | set2 | 2dd    | 6        | -23.3731     | 28.3084      |
| set1  | 2dd   | 7       | set2 | 2dd    | 7        | -16.1808     | 14.4507      |
| set1  | 2dd   | 7       | set2 | 2dd    | 8        | -27.2065     | 24.4750      |
| set1  | 2dd   | 7       | set2 | 2dd    | 9        | -27.1468     | 24.5347      |
| set1  | 2dd   | 7       | set2 | 3dd    | 1        | -21.2464     | 18.9130      |
| set1  | 2dd   | 7       | set2 | 3dd    | 2        | -24.7578     | 22.9691      |
| set1  | 2dd   | 7       | set2 | 3dd    | 3        | -11.3901     | 8.4088       |
| set1  | 2dd   | 7       | set2 | 3dd    | 4        | -18.1290     | 14.1663      |
| set1  | 2dd   | 7       | set2 | 3dd    | 5        | -40.4904     | 41.6887      |
| set1  | 2dd   | 7       | set2 | 3dd    | 6        | -21.6931     | 21.2099      |
| set1  | 2dd   | 7       | set2 | 3dd    | 7        | -14.6444     | 10.6278      |
| set1  | 2dd   | 7       | set2 | 3dd    | 8        | -24.1675     | 22.1396      |
| set1  | 2dd   | 7       | set2 | 3dd    | 9        | -24.5149     | 21.7922      |
| set1  | 2dd   | 7       | set2 | 3dp    | 1        | -39.9905     | 39.5989      |
| set1  | 2dd   | 7       | set2 | 3dp    | 2        | -5.5529      | 3.6291       |
| set1  | 2dd   | 7       | set2 | 3dp    | 3        | -3.8596      | 0.06973      |
| set1  | 2dd   | 7       | set2 | 3dp    | 4        | -36.5709     | 35.1600      |
| set1  | 2dd   | 7       | set2 | 3dp    | 5        | -68.5930     | 68.3672      |
| set1  | 2dd   | 7       | set2 | 3dp    | 6        | -44.2685     | 41.4780      |
| set1  | 2dd   | 7       | set2 | 3dp    | 7        | -33.4535     | 31.2569      |
| set1  | 2dd   | 7       | set2 | 3dp    | 8        | -43.2415     | 42.5050      |
| set1  | 2dd   | 7       | set2 | 3dp    | 9        | -43.7949     | 41.9515      |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |          |                |      |         |         |        |       |          |         |
|---|-------|---------|------|--------|----------|----------|----------------|------|---------|---------|--------|-------|----------|---------|
| set   | media | pair_id | _set | _media | _pair_id | Estimate | Standard Error | DF   | t Value | Pr >  t | Adj P  | Alpha | Lower    | Upper   |
| set1  | 2dd   | 8       | set1 | 2dd    | 9        | -0.3192  | 0              | 3823 | -Infly  | <.0001  | .      | .     | .        | .       |
| set1  | 2dd   | 8       | set1 | 3dd    | 1        | -0.9335  | 4.4219         | 3823 | -0.21   | 0.8328  | 1.0000 | 0.05  | -9.6029  | 7.7360  |
| set1  | 2dd   | 8       | set1 | 3dd    | 2        | -1.2882  | 21.6505        | 3823 | -0.06   | 0.9526  | 1.0000 | 0.05  | -43.7358 | 41.1594 |
| set1  | 2dd   | 8       | set1 | 3dd    | 3        | -0.7699  | 4.6649         | 3823 | -0.17   | 0.8689  | 1.0000 | 0.05  | -9.9159  | 8.3760  |
| set1  | 2dd   | 8       | set1 | 3dd    | 4        | -0.5046  | 1.0997         | 3823 | -0.46   | 0.6464  | 1.0000 | 0.05  | -2.6607  | 1.6516  |
| set1  | 2dd   | 8       | set1 | 3dd    | 5        | 1.4799   | 3.4260         | 3823 | 0.43    | 0.6658  | 1.0000 | 0.05  | -5.2370  | 8.1968  |
| set1  | 2dd   | 8       | set1 | 3dd    | 6        | -0.1318  | 1.6383         | 3823 | -0.08   | 0.9359  | 1.0000 | 0.05  | -3.3438  | 3.0801  |
| set1  | 2dd   | 8       | set1 | 3dd    | 7        | -0.2795  | 3.6590         | 3823 | -0.08   | 0.9391  | 1.0000 | 0.05  | -7.4532  | 6.8942  |
| set1  | 2dd   | 8       | set1 | 3dd    | 8        | -0.7443  | 1.0610         | 3823 | -0.70   | 0.4830  | 1.0000 | 0.05  | -2.8245  | 1.3359  |
| set1  | 2dd   | 8       | set1 | 3dd    | 9        | -2.4580  | 1.0610         | 3823 | -2.32   | 0.0206  | 0.9885 | 0.05  | -4.5382  | -0.3779 |
| set1  | 2dd   | 8       | set1 | 3dp    | 1        | 0.1626   | 1.8037         | 3823 | 0.09    | 0.9282  | 1.0000 | 0.05  | -3.3736  | 3.6989  |
| set1  | 2dd   | 8       | set1 | 3dp    | 2        | -0.1141  | 19.0083        | 3823 | -0.01   | 0.9952  | 1.0000 | 0.05  | -37.3814 | 37.1532 |
| set1  | 2dd   | 8       | set1 | 3dp    | 3        | -0.5130  | 0.8810         | 3823 | -0.58   | 0.5604  | 1.0000 | 0.05  | -2.2402  | 1.2142  |
| set1  | 2dd   | 8       | set1 | 3dp    | 4        | 0.4966   | 1.6465         | 3823 | 0.30    | 0.7630  | 1.0000 | 0.05  | -2.7315  | 3.7248  |
| set1  | 2dd   | 8       | set1 | 3dp    | 5        | 1.3690   | 2.6896         | 3823 | 0.51    | 0.6108  | 1.0000 | 0.05  | -3.9043  | 6.6422  |
| set1  | 2dd   | 8       | set1 | 3dp    | 6        | 0.4086   | 0.7316         | 3823 | 0.56    | 0.5766  | 1.0000 | 0.05  | -1.0258  | 1.8430  |
| set1  | 2dd   | 8       | set1 | 3dp    | 7        | 0.1060   | 6.3002         | 3823 | 0.02    | 0.9866  | 1.0000 | 0.05  | -12.2461 | 12.4580 |
| set1  | 2dd   | 8       | set1 | 3dp    | 8        | 0.3132   | 3.6905         | 3823 | 0.08    | 0.9324  | 1.0000 | 0.05  | -6.9223  | 7.5486  |
| set1  | 2dd   | 8       | set1 | 3dp    | 9        | 0.1498   | 3.6905         | 3823 | 0.04    | 0.9676  | 1.0000 | 0.05  | -7.0857  | 7.3853  |
| set1  | 2dd   | 8       | set2 | 2dd    | 1        | 0.5320   | 3.0428         | 3823 | 0.17    | 0.8612  | 1.0000 | 0.05  | -5.4338  | 6.4977  |
| set1  | 2dd   | 8       | set2 | 2dd    | 2        | 0.8910   | 11.4398        | 3823 | 0.08    | 0.9379  | 1.0000 | 0.05  | -21.5377 | 23.3198 |
| set1  | 2dd   | 8       | set2 | 2dd    | 3        | -0.6242  | 7.1676         | 3823 | -0.09   | 0.9306  | 1.0000 | 0.05  | -14.6768 | 13.4285 |
| set1  | 2dd   | 8       | set2 | 2dd    | 4        | 0.4113   | 2.0743         | 3823 | 0.20    | 0.8428  | 1.0000 | 0.05  | -3.6555  | 4.4781  |
| set1  | 2dd   | 8       | set2 | 2dd    | 5        | 2.7204   | 10.1503        | 3823 | 0.27    | 0.7887  | 1.0000 | 0.05  | -17.1801 | 22.6210 |
| set1  | 2dd   | 8       | set2 | 2dd    | 6        | 3.4827   | 3.7991         | 3823 | 0.92    | 0.3593  | 1.0000 | 0.05  | -3.9657  | 10.9311 |
| set1  | 2dd   | 8       | set2 | 2dd    | 7        | 0.1501   | 1.2183         | 3823 | 0.12    | 0.9020  | 1.0000 | 0.05  | -2.2384  | 2.5386  |
| set1  | 2dd   | 8       | set2 | 2dd    | 8        | -0.3507  | 3.7991         | 3823 | -0.09   | 0.9265  | 1.0000 | 0.05  | -7.7991  | 7.0977  |
| set1  | 2dd   | 8       | set2 | 2dd    | 9        | -0.2910  | 3.7991         | 3823 | -0.08   | 0.9390  | 1.0000 | 0.05  | -7.7394  | 7.1575  |
| set1  | 2dd   | 8       | set2 | 3dd    | 1        | -0.1516  | 2.3765         | 3823 | -0.06   | 0.9491  | 1.0000 | 0.05  | -4.8109  | 4.5077  |
| set1  | 2dd   | 8       | set2 | 3dd    | 2        | 0.1208   | 8.5252         | 3823 | 0.01    | 0.9887  | 1.0000 | 0.05  | -16.5937 | 16.8352 |
| set1  | 2dd   | 8       | set2 | 3dd    | 3        | -0.4756  | 5.0459         | 3823 | -0.09   | 0.9249  | 1.0000 | 0.05  | -10.3684 | 9.4173  |
| set1  | 2dd   | 8       | set2 | 3dd    | 4        | -0.9662  | 1.4099         | 3823 | -0.69   | 0.4932  | 1.0000 | 0.05  | -3.7304  | 1.7979  |
| set1  | 2dd   | 8       | set2 | 3dd    | 5        | 1.6143   | 7.5839         | 3823 | 0.21    | 0.8315  | 1.0000 | 0.05  | -13.2546 | 16.4832 |
| set1  | 2dd   | 8       | set2 | 3dd    | 6        | 0.7735   | 2.7159         | 3823 | 0.28    | 0.7758  | 1.0000 | 0.05  | -4.5513  | 6.0982  |
| set1  | 2dd   | 8       | set2 | 3dd    | 7        | -0.9932  | 0.6066         | 3823 | -1.64   | 0.1016  | 1.0000 | 0.05  | -2.1824  | 0.1960  |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |              |              |
|---|-------|---------|------|--------|----------|--------------|--------------|
| set   | media | pair_id | _set | _media | _pair_id | Adj<br>Lower | Adj<br>Upper |
| set1  | 2dd   | 8       | set1 | 2dd    | 9        | .            | .            |
| set1  | 2dd   | 8       | set1 | 3dd    | 1        | -18.7600     | 16.8931      |
| set1  | 2dd   | 8       | set1 | 3dd    | 2        | -88.5706     | 85.9942      |
| set1  | 2dd   | 8       | set1 | 3dd    | 3        | -19.5762     | 18.0364      |
| set1  | 2dd   | 8       | set1 | 3dd    | 4        | -4.9381      | 3.9290       |
| set1  | 2dd   | 8       | set1 | 3dd    | 5        | -12.3317     | 15.2915      |
| set1  | 2dd   | 8       | set1 | 3dd    | 6        | -6.7364      | 6.4728       |
| set1  | 2dd   | 8       | set1 | 3dd    | 7        | -15.0303     | 14.4713      |
| set1  | 2dd   | 8       | set1 | 3dd    | 8        | -5.0216      | 3.5331       |
| set1  | 2dd   | 8       | set1 | 3dd    | 9        | -6.7354      | 1.8193       |
| set1  | 2dd   | 8       | set1 | 3dp    | 1        | -7.1087      | 7.4340       |
| set1  | 2dd   | 8       | set1 | 3dp    | 2        | -76.7447     | 76.5164      |
| set1  | 2dd   | 8       | set1 | 3dp    | 3        | -4.0646      | 3.0386       |
| set1  | 2dd   | 8       | set1 | 3dp    | 4        | -6.1413      | 7.1346       |
| set1  | 2dd   | 8       | set1 | 3dp    | 5        | -9.4741      | 12.2120      |
| set1  | 2dd   | 8       | set1 | 3dp    | 6        | -2.5410      | 3.3582       |
| set1  | 2dd   | 8       | set1 | 3dp    | 7        | -25.2928     | 25.5048      |
| set1  | 2dd   | 8       | set1 | 3dp    | 8        | -14.5647     | 15.1910      |
| set1  | 2dd   | 8       | set1 | 3dp    | 9        | -14.7281     | 15.0277      |
| set1  | 2dd   | 8       | set2 | 2dd    | 1        | -11.7350     | 12.7989      |
| set1  | 2dd   | 8       | set2 | 2dd    | 2        | -45.2279     | 47.0100      |
| set1  | 2dd   | 8       | set2 | 2dd    | 3        | -29.5198     | 28.2714      |
| set1  | 2dd   | 8       | set2 | 2dd    | 4        | -7.9510      | 8.7737       |
| set1  | 2dd   | 8       | set2 | 2dd    | 5        | -38.1999     | 43.6408      |
| set1  | 2dd   | 8       | set2 | 2dd    | 6        | -11.8330     | 18.7985      |
| set1  | 2dd   | 8       | set2 | 2dd    | 7        | -4.7613      | 5.0615       |
| set1  | 2dd   | 8       | set2 | 2dd    | 8        | -15.6664     | 14.9650      |
| set1  | 2dd   | 8       | set2 | 2dd    | 9        | -15.6067     | 15.0248      |
| set1  | 2dd   | 8       | set2 | 3dd    | 1        | -9.7322      | 9.4290       |
| set1  | 2dd   | 8       | set2 | 3dd    | 2        | -34.2481     | 34.4897      |
| set1  | 2dd   | 8       | set2 | 3dd    | 3        | -20.8177     | 19.8666      |
| set1  | 2dd   | 8       | set2 | 3dd    | 4        | -6.6500      | 4.7176       |
| set1  | 2dd   | 8       | set2 | 3dd    | 5        | -28.9598     | 32.1883      |
| set1  | 2dd   | 8       | set2 | 3dd    | 6        | -10.1755     | 11.7224      |
| set1  | 2dd   | 8       | set2 | 3dd    | 7        | -3.4385      | 1.4521       |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |          |                |      |         |         |        |       |          |          |
|---|-------|---------|------|--------|----------|----------|----------------|------|---------|---------|--------|-------|----------|----------|
| set   | media | pair_id | _set | _media | _pair_id | Estimate | Standard Error | DF   | t Value | Pr >  t | Adj P  | Alpha | Lower    | Upper    |
| set1  | 2dd   | 8       | set2 | 3dd    | 8        | 0.001142 | 3.1344         | 3823 | 0.00    | 0.9997  | 1.0000 | 0.05  | -6.1441  | 6.1464   |
| set1  | 2dd   | 8       | set2 | 3dd    | 9        | -0.3463  | 3.1344         | 3823 | -0.11   | 0.9120  | 1.0000 | 0.05  | -6.4915  | 5.7990   |
| set1  | 2dd   | 8       | set2 | 3dp    | 1        | 0.8193   | 7.2632         | 3823 | 0.11    | 0.9102  | 1.0000 | 0.05  | -13.4208 | 15.0593  |
| set1  | 2dd   | 8       | set2 | 3dp    | 2        | 0.05324  | 3.6624         | 3823 | 0.01    | 0.9884  | 1.0000 | 0.05  | -7.1272  | 7.2336   |
| set1  | 2dd   | 8       | set2 | 3dp    | 3        | -0.8798  | 2.9557         | 3823 | -0.30   | 0.7660  | 1.0000 | 0.05  | -6.6747  | 4.9150   |
| set1  | 2dd   | 8       | set2 | 3dp    | 4        | 0.3096   | 6.2902         | 3823 | 0.05    | 0.9607  | 1.0000 | 0.05  | -12.0228 | 12.6421  |
| set1  | 2dd   | 8       | set2 | 3dp    | 5        | 0.9022   | 14.3768        | 3823 | 0.06    | 0.9500  | 1.0000 | 0.05  | -27.2847 | 29.0891  |
| set1  | 2dd   | 8       | set2 | 3dp    | 6        | -0.3802  | 8.0257         | 3823 | -0.05   | 0.9622  | 1.0000 | 0.05  | -16.1153 | 15.3550  |
| set1  | 2dd   | 8       | set2 | 3dp    | 7        | -0.08321 | 5.4251         | 3823 | -0.02   | 0.9878  | 1.0000 | 0.05  | -10.7195 | 10.5531  |
| set1  | 2dd   | 8       | set2 | 3dp    | 8        | 0.6469   | 8.0257         | 3823 | 0.08    | 0.9358  | 1.0000 | 0.05  | -15.0883 | 16.3820  |
| set1  | 2dd   | 8       | set2 | 3dp    | 9        | 0.09339  | 8.0257         | 3823 | 0.01    | 0.9907  | 1.0000 | 0.05  | -15.6417 | 15.8285  |
| set1  | 2dd   | 9       | set1 | 3dd    | 1        | -0.6143  | 4.4219         | 3823 | -0.14   | 0.8895  | 1.0000 | 0.05  | -9.2838  | 8.0552   |
| set1  | 2dd   | 9       | set1 | 3dd    | 2        | -0.9690  | 21.6505        | 3823 | -0.04   | 0.9643  | 1.0000 | 0.05  | -43.4166 | 41.4785  |
| set1  | 2dd   | 9       | set1 | 3dd    | 3        | -0.4507  | 4.6649         | 3823 | -0.10   | 0.9230  | 1.0000 | 0.05  | -9.5967  | 8.6952   |
| set1  | 2dd   | 9       | set1 | 3dd    | 4        | -0.1854  | 1.0997         | 3823 | -0.17   | 0.8661  | 1.0000 | 0.05  | -2.3415  | 1.9707   |
| set1  | 2dd   | 9       | set1 | 3dd    | 5        | 1.7991   | 3.4260         | 3823 | 0.53    | 0.5995  | 1.0000 | 0.05  | -4.9179  | 8.5160   |
| set1  | 2dd   | 9       | set1 | 3dd    | 6        | 0.1873   | 1.6383         | 3823 | 0.11    | 0.9090  | 1.0000 | 0.05  | -3.0246  | 3.3993   |
| set1  | 2dd   | 9       | set1 | 3dd    | 7        | 0.03968  | 3.6590         | 3823 | 0.01    | 0.9913  | 1.0000 | 0.05  | -7.1340  | 7.2134   |
| set1  | 2dd   | 9       | set1 | 3dd    | 8        | -0.4251  | 1.0610         | 3823 | -0.40   | 0.6887  | 1.0000 | 0.05  | -2.5053  | 1.6551   |
| set1  | 2dd   | 9       | set1 | 3dd    | 9        | -2.1389  | 1.0610         | 3823 | -2.02   | 0.0439  | 0.9994 | 0.05  | -4.2190  | -0.05869 |
| set1  | 2dd   | 9       | set1 | 3dp    | 1        | 0.4818   | 1.8037         | 3823 | 0.27    | 0.7894  | 1.0000 | 0.05  | -3.0544  | 4.0180   |
| set1  | 2dd   | 9       | set1 | 3dp    | 2        | 0.2051   | 19.0083        | 3823 | 0.01    | 0.9914  | 1.0000 | 0.05  | -37.0623 | 37.4724  |
| set1  | 2dd   | 9       | set1 | 3dp    | 3        | -0.1938  | 0.8810         | 3823 | -0.22   | 0.8259  | 1.0000 | 0.05  | -1.9211  | 1.5334   |
| set1  | 2dd   | 9       | set1 | 3dp    | 4        | 0.8158   | 1.6465         | 3823 | 0.50    | 0.6203  | 1.0000 | 0.05  | -2.4124  | 4.0440   |
| set1  | 2dd   | 9       | set1 | 3dp    | 5        | 1.6881   | 2.6896         | 3823 | 0.63    | 0.5303  | 1.0000 | 0.05  | -3.5851  | 6.9614   |
| set1  | 2dd   | 9       | set1 | 3dp    | 6        | 0.7278   | 0.7316         | 3823 | 0.99    | 0.3199  | 1.0000 | 0.05  | -0.7067  | 2.1622   |
| set1  | 2dd   | 9       | set1 | 3dp    | 7        | 0.4251   | 6.3002         | 3823 | 0.07    | 0.9462  | 1.0000 | 0.05  | -11.9269 | 12.7772  |
| set1  | 2dd   | 9       | set1 | 3dp    | 8        | 0.6323   | 3.6905         | 3823 | 0.17    | 0.8640  | 1.0000 | 0.05  | -6.6031  | 7.8678   |
| set1  | 2dd   | 9       | set1 | 3dp    | 9        | 0.4689   | 3.6905         | 3823 | 0.13    | 0.8989  | 1.0000 | 0.05  | -6.7665  | 7.7044   |
| set1  | 2dd   | 9       | set2 | 2dd    | 1        | 0.8511   | 3.0428         | 3823 | 0.28    | 0.7797  | 1.0000 | 0.05  | -5.1146  | 6.8169   |
| set1  | 2dd   | 9       | set2 | 2dd    | 2        | 1.2102   | 11.4398        | 3823 | 0.11    | 0.9158  | 1.0000 | 0.05  | -21.2186 | 23.6390  |
| set1  | 2dd   | 9       | set2 | 2dd    | 3        | -0.3050  | 7.1676         | 3823 | -0.04   | 0.9661  | 1.0000 | 0.05  | -14.3576 | 13.7476  |
| set1  | 2dd   | 9       | set2 | 2dd    | 4        | 0.7305   | 2.0743         | 3823 | 0.35    | 0.7247  | 1.0000 | 0.05  | -3.3363  | 4.7973   |
| set1  | 2dd   | 9       | set2 | 2dd    | 5        | 3.0396   | 10.1503        | 3823 | 0.30    | 0.7646  | 1.0000 | 0.05  | -16.8610 | 22.9402  |
| set1  | 2dd   | 9       | set2 | 2dd    | 6        | 3.8019   | 3.7991         | 3823 | 1.00    | 0.3170  | 1.0000 | 0.05  | -3.6465  | 11.2503  |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |              |              |
|---|-------|---------|------|--------|----------|--------------|--------------|
| set   | media | pair_id | _set | _media | _pair_id | Adj<br>Lower | Adj<br>Upper |
| set1  | 2dd   | 8       | set2 | 3dd    | 8        | -12.6350     | 12.6373      |
| set1  | 2dd   | 8       | set2 | 3dd    | 9        | -12.9824     | 12.2899      |
| set1  | 2dd   | 8       | set2 | 3dp    | 1        | -28.4616     | 30.1002      |
| set1  | 2dd   | 8       | set2 | 3dp    | 2        | -14.7114     | 14.8179      |
| set1  | 2dd   | 8       | set2 | 3dp    | 3        | -12.7954     | 11.0358      |
| set1  | 2dd   | 8       | set2 | 3dp    | 4        | -25.0488     | 25.6681      |
| set1  | 2dd   | 8       | set2 | 3dp    | 5        | -57.0569     | 58.8613      |
| set1  | 2dd   | 8       | set2 | 3dp    | 6        | -32.7354     | 31.9751      |
| set1  | 2dd   | 8       | set2 | 3dp    | 7        | -21.9539     | 21.7875      |
| set1  | 2dd   | 8       | set2 | 3dp    | 8        | -31.7084     | 33.0021      |
| set1  | 2dd   | 8       | set2 | 3dp    | 9        | -32.2618     | 32.4486      |
| set1  | 2dd   | 9       | set1 | 3dd    | 1        | -18.4408     | 17.2122      |
| set1  | 2dd   | 9       | set1 | 3dd    | 2        | -88.2514     | 86.3133      |
| set1  | 2dd   | 9       | set1 | 3dd    | 3        | -19.2570     | 18.3555      |
| set1  | 2dd   | 9       | set1 | 3dd    | 4        | -4.6190      | 4.2481       |
| set1  | 2dd   | 9       | set1 | 3dd    | 5        | -12.0126     | 15.6107      |
| set1  | 2dd   | 9       | set1 | 3dd    | 6        | -6.4173      | 6.7919       |
| set1  | 2dd   | 9       | set1 | 3dd    | 7        | -14.7112     | 14.7905      |
| set1  | 2dd   | 9       | set1 | 3dd    | 8        | -4.7025      | 3.8522       |
| set1  | 2dd   | 9       | set1 | 3dd    | 9        | -6.4162      | 2.1385       |
| set1  | 2dd   | 9       | set1 | 3dp    | 1        | -6.7895      | 7.7531       |
| set1  | 2dd   | 9       | set1 | 3dp    | 2        | -76.4255     | 76.8356      |
| set1  | 2dd   | 9       | set1 | 3dp    | 3        | -3.7454      | 3.3578       |
| set1  | 2dd   | 9       | set1 | 3dp    | 4        | -5.8221      | 7.4538       |
| set1  | 2dd   | 9       | set1 | 3dp    | 5        | -9.1549      | 12.5312      |
| set1  | 2dd   | 9       | set1 | 3dp    | 6        | -2.2218      | 3.6773       |
| set1  | 2dd   | 9       | set1 | 3dp    | 7        | -24.9736     | 25.8239      |
| set1  | 2dd   | 9       | set1 | 3dp    | 8        | -14.2455     | 15.5102      |
| set1  | 2dd   | 9       | set1 | 3dp    | 9        | -14.4089     | 15.3468      |
| set1  | 2dd   | 9       | set2 | 2dd    | 1        | -11.4158     | 13.1181      |
| set1  | 2dd   | 9       | set2 | 2dd    | 2        | -44.9087     | 47.3291      |
| set1  | 2dd   | 9       | set2 | 2dd    | 3        | -29.2006     | 28.5906      |
| set1  | 2dd   | 9       | set2 | 2dd    | 4        | -7.6318      | 9.0929       |
| set1  | 2dd   | 9       | set2 | 2dd    | 5        | -37.8807     | 43.9599      |
| set1  | 2dd   | 9       | set2 | 2dd    | 6        | -11.5139     | 19.1176      |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |          |                |      |         |         |        |       |          |         |
|---|-------|---------|------|--------|----------|----------|----------------|------|---------|---------|--------|-------|----------|---------|
| set   | media | pair_id | _set | _media | _pair_id | Estimate | Standard Error | DF   | t Value | Pr >  t | Adj P  | Alpha | Lower    | Upper   |
| set1  | 2dd   | 9       | set2 | 2dd    | 7        | 0.4693   | 1.2183         | 3823 | 0.39    | 0.7001  | 1.0000 | 0.05  | -1.9193  | 2.8578  |
| set1  | 2dd   | 9       | set2 | 2dd    | 8        | -0.03152 | 3.7991         | 3823 | -0.01   | 0.9934  | 1.0000 | 0.05  | -7.4799  | 7.4169  |
| set1  | 2dd   | 9       | set2 | 2dd    | 9        | 0.02821  | 3.7991         | 3823 | 0.01    | 0.9941  | 1.0000 | 0.05  | -7.4202  | 7.4766  |
| set1  | 2dd   | 9       | set2 | 3dd    | 1        | 0.1676   | 2.3765         | 3823 | 0.07    | 0.9438  | 1.0000 | 0.05  | -4.4917  | 4.8268  |
| set1  | 2dd   | 9       | set2 | 3dd    | 2        | 0.4399   | 8.5252         | 3823 | 0.05    | 0.9588  | 1.0000 | 0.05  | -16.2745 | 17.1544 |
| set1  | 2dd   | 9       | set2 | 3dd    | 3        | -0.1564  | 5.0459         | 3823 | -0.03   | 0.9753  | 1.0000 | 0.05  | -10.0493 | 9.7365  |
| set1  | 2dd   | 9       | set2 | 3dd    | 4        | -0.6471  | 1.4099         | 3823 | -0.46   | 0.6463  | 1.0000 | 0.05  | -3.4112  | 2.1171  |
| set1  | 2dd   | 9       | set2 | 3dd    | 5        | 1.9334   | 7.5839         | 3823 | 0.25    | 0.7988  | 1.0000 | 0.05  | -12.9355 | 16.8024 |
| set1  | 2dd   | 9       | set2 | 3dd    | 6        | 1.0927   | 2.7159         | 3823 | 0.40    | 0.6875  | 1.0000 | 0.05  | -4.2321  | 6.4174  |
| set1  | 2dd   | 9       | set2 | 3dd    | 7        | -0.6740  | 0.6066         | 3823 | -1.11   | 0.2665  | 1.0000 | 0.05  | -1.8633  | 0.5152  |
| set1  | 2dd   | 9       | set2 | 3dd    | 8        | 0.3203   | 3.1344         | 3823 | 0.10    | 0.9186  | 1.0000 | 0.05  | -5.8249  | 6.4656  |
| set1  | 2dd   | 9       | set2 | 3dd    | 9        | -0.02709 | 3.1344         | 3823 | -0.01   | 0.9931  | 1.0000 | 0.05  | -6.1723  | 6.1182  |
| set1  | 2dd   | 9       | set2 | 3dp    | 1        | 1.1384   | 7.2632         | 3823 | 0.16    | 0.8755  | 1.0000 | 0.05  | -13.1016 | 15.3785 |
| set1  | 2dd   | 9       | set2 | 3dp    | 2        | 0.3724   | 3.6624         | 3823 | 0.10    | 0.9190  | 1.0000 | 0.05  | -6.8080  | 7.5528  |
| set1  | 2dd   | 9       | set2 | 3dp    | 3        | -0.5606  | 2.9557         | 3823 | -0.19   | 0.8496  | 1.0000 | 0.05  | -6.3555  | 5.2342  |
| set1  | 2dd   | 9       | set2 | 3dp    | 4        | 0.6288   | 6.2902         | 3823 | 0.10    | 0.9204  | 1.0000 | 0.05  | -11.7036 | 12.9612 |
| set1  | 2dd   | 9       | set2 | 3dp    | 5        | 1.2214   | 14.3768        | 3823 | 0.08    | 0.9323  | 1.0000 | 0.05  | -26.9655 | 29.4083 |
| set1  | 2dd   | 9       | set2 | 3dp    | 6        | -0.06100 | 8.0257         | 3823 | -0.01   | 0.9939  | 1.0000 | 0.05  | -15.7961 | 15.6741 |
| set1  | 2dd   | 9       | set2 | 3dp    | 7        | 0.2360   | 5.4251         | 3823 | 0.04    | 0.9653  | 1.0000 | 0.05  | -10.4003 | 10.8722 |
| set1  | 2dd   | 9       | set2 | 3dp    | 8        | 0.9660   | 8.0257         | 3823 | 0.12    | 0.9042  | 1.0000 | 0.05  | -14.7691 | 16.7012 |
| set1  | 2dd   | 9       | set2 | 3dp    | 9        | 0.4126   | 8.0257         | 3823 | 0.05    | 0.9590  | 1.0000 | 0.05  | -15.3226 | 16.1477 |
| set1  | 3dd   | 1       | set1 | 3dd    | 2        | -0.3548  | 17.2422        | 3823 | -0.02   | 0.9836  | 1.0000 | 0.05  | -34.1596 | 33.4500 |
| set1  | 3dd   | 1       | set1 | 3dd    | 3        | 0.1635   | 0.4819         | 3823 | 0.34    | 0.7344  | 1.0000 | 0.05  | -0.7814  | 1.1084  |
| set1  | 3dd   | 1       | set1 | 3dd    | 4        | 0.4289   | 3.3804         | 3823 | 0.13    | 0.8990  | 1.0000 | 0.05  | -6.1986  | 7.0564  |
| set1  | 3dd   | 1       | set1 | 3dd    | 5        | 2.4134   | 1.0468         | 3823 | 2.31    | 0.0212  | 0.9895 | 0.05  | 0.3610   | 4.4658  |
| set1  | 3dd   | 1       | set1 | 3dd    | 6        | 0.8016   | 2.8354         | 3823 | 0.28    | 0.7774  | 1.0000 | 0.05  | -4.7575  | 6.3607  |
| set1  | 3dd   | 1       | set1 | 3dd    | 7        | 0.6540   | 8.0643         | 3823 | 0.08    | 0.9354  | 1.0000 | 0.05  | -15.1567 | 16.4647 |
| set1  | 3dd   | 1       | set1 | 3dd    | 8        | 0.1892   | 5.4583         | 3823 | 0.03    | 0.9724  | 1.0000 | 0.05  | -10.5123 | 10.8906 |
| set1  | 3dd   | 1       | set1 | 3dd    | 9        | -1.5246  | 5.4583         | 3823 | -0.28   | 0.7800  | 1.0000 | 0.05  | -12.2260 | 9.1769  |
| set1  | 3dd   | 1       | set1 | 3dp    | 1        | 1.0961   | 2.6552         | 3823 | 0.41    | 0.6798  | 1.0000 | 0.05  | -4.1097  | 6.3019  |
| set1  | 3dd   | 1       | set1 | 3dp    | 2        | 0.8193   | 14.6019        | 3823 | 0.06    | 0.9553  | 1.0000 | 0.05  | -27.8089 | 29.4476 |
| set1  | 3dd   | 1       | set1 | 3dp    | 3        | 0.4204   | 5.2182         | 3823 | 0.08    | 0.9358  | 1.0000 | 0.05  | -9.8103  | 10.6512 |
| set1  | 3dd   | 1       | set1 | 3dp    | 4        | 1.4301   | 6.0232         | 3823 | 0.24    | 0.8123  | 1.0000 | 0.05  | -10.3789 | 13.2391 |
| set1  | 3dd   | 1       | set1 | 3dp    | 5        | 2.3024   | 1.7970         | 3823 | 1.28    | 0.2002  | 1.0000 | 0.05  | -1.2207  | 5.8256  |
| set1  | 3dd   | 1       | set1 | 3dp    | 6        | 1.3421   | 5.0505         | 3823 | 0.27    | 0.7905  | 1.0000 | 0.05  | -8.5600  | 11.2441 |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |              |              |
|---|-------|---------|------|--------|----------|--------------|--------------|
| set   | media | pair_id | _set | _media | _pair_id | Adj<br>Lower | Adj<br>Upper |
| set1  | 2dd   | 9       | set2 | 2dd    | 7        | -4.4421      | 5.3807       |
| set1  | 2dd   | 9       | set2 | 2dd    | 8        | -15.3473     | 15.2842      |
| set1  | 2dd   | 9       | set2 | 2dd    | 9        | -15.2875     | 15.3439      |
| set1  | 2dd   | 9       | set2 | 3dd    | 1        | -9.4130      | 9.7481       |
| set1  | 2dd   | 9       | set2 | 3dd    | 2        | -33.9290     | 34.8088      |
| set1  | 2dd   | 9       | set2 | 3dd    | 3        | -20.4985     | 20.1858      |
| set1  | 2dd   | 9       | set2 | 3dd    | 4        | -6.3309      | 5.0367       |
| set1  | 2dd   | 9       | set2 | 3dd    | 5        | -28.6406     | 32.5075      |
| set1  | 2dd   | 9       | set2 | 3dd    | 6        | -9.8563      | 12.0416      |
| set1  | 2dd   | 9       | set2 | 3dd    | 7        | -3.1194      | 1.7713       |
| set1  | 2dd   | 9       | set2 | 3dd    | 8        | -12.3158     | 12.9564      |
| set1  | 2dd   | 9       | set2 | 3dd    | 9        | -12.6632     | 12.6090      |
| set1  | 2dd   | 9       | set2 | 3dp    | 1        | -28.1425     | 30.4194      |
| set1  | 2dd   | 9       | set2 | 3dp    | 2        | -14.3922     | 15.1370      |
| set1  | 2dd   | 9       | set2 | 3dp    | 3        | -12.4763     | 11.3550      |
| set1  | 2dd   | 9       | set2 | 3dp    | 4        | -24.7296     | 25.9872      |
| set1  | 2dd   | 9       | set2 | 3dp    | 5        | -56.7377     | 59.1805      |
| set1  | 2dd   | 9       | set2 | 3dp    | 6        | -32.4162     | 32.2942      |
| set1  | 2dd   | 9       | set2 | 3dp    | 7        | -21.6348     | 22.1067      |
| set1  | 2dd   | 9       | set2 | 3dp    | 8        | -31.3892     | 33.3213      |
| set1  | 2dd   | 9       | set2 | 3dp    | 9        | -31.9427     | 32.7678      |
| set1  | 3dd   | 1       | set1 | 3dd    | 2        | -69.8655     | 69.1560      |
| set1  | 3dd   | 1       | set1 | 3dd    | 3        | -1.7794      | 2.1065       |
| set1  | 3dd   | 1       | set1 | 3dd    | 4        | -13.1989     | 14.0566      |
| set1  | 3dd   | 1       | set1 | 3dd    | 5        | -1.8069      | 6.6336       |
| set1  | 3dd   | 1       | set1 | 3dd    | 6        | -10.6293     | 12.2325      |
| set1  | 3dd   | 1       | set1 | 3dd    | 7        | -31.8566     | 33.1646      |
| set1  | 3dd   | 1       | set1 | 3dd    | 8        | -21.8156     | 22.1939      |
| set1  | 3dd   | 1       | set1 | 3dd    | 9        | -23.5293     | 20.4801      |
| set1  | 3dd   | 1       | set1 | 3dp    | 1        | -9.6083      | 11.8005      |
| set1  | 3dd   | 1       | set1 | 3dp    | 2        | -58.0472     | 59.6859      |
| set1  | 3dd   | 1       | set1 | 3dp    | 3        | -20.6165     | 21.4574      |
| set1  | 3dd   | 1       | set1 | 3dp    | 4        | -22.8520     | 25.7122      |
| set1  | 3dd   | 1       | set1 | 3dp    | 5        | -4.9420      | 9.5469       |
| set1  | 3dd   | 1       | set1 | 3dp    | 6        | -19.0189     | 21.7030      |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |          |                |      |         |         |        |       |          |         |
|---|-------|---------|------|--------|----------|----------|----------------|------|---------|---------|--------|-------|----------|---------|
| set   | media | pair_id | _set | _media | _pair_id | Estimate | Standard Error | DF   | t Value | Pr >  t | Adj P  | Alpha | Lower    | Upper   |
| set1  | 3dd   | 1       | set1 | 3dp    | 7        | 1.0394   | 10.7092        | 3823 | 0.10    | 0.9227  | 1.0000 | 0.05  | -19.9569 | 22.0358 |
| set1  | 3dd   | 1       | set1 | 3dp    | 8        | 1.2466   | 8.1017         | 3823 | 0.15    | 0.8777  | 1.0000 | 0.05  | -14.6374 | 17.1306 |
| set1  | 3dd   | 1       | set1 | 3dp    | 9        | 1.0832   | 8.1017         | 3823 | 0.13    | 0.8936  | 1.0000 | 0.05  | -14.8008 | 16.9672 |
| set1  | 3dd   | 1       | set2 | 2dd    | 1        | 1.4654   | 1.4282         | 3823 | 1.03    | 0.3049  | 1.0000 | 0.05  | -1.3347  | 4.2656  |
| set1  | 3dd   | 1       | set2 | 2dd    | 2        | 1.8245   | 15.8479        | 3823 | 0.12    | 0.9084  | 1.0000 | 0.05  | -29.2467 | 32.8957 |
| set1  | 3dd   | 1       | set2 | 2dd    | 3        | 0.3093   | 11.5764        | 3823 | 0.03    | 0.9787  | 1.0000 | 0.05  | -22.3873 | 23.0059 |
| set1  | 3dd   | 1       | set2 | 2dd    | 4        | 1.3448   | 2.3838         | 3823 | 0.56    | 0.5727  | 1.0000 | 0.05  | -3.3289  | 6.0185  |
| set1  | 3dd   | 1       | set2 | 2dd    | 5        | 3.6539   | 5.7489         | 3823 | 0.64    | 0.5251  | 1.0000 | 0.05  | -7.6173  | 14.9251 |
| set1  | 3dd   | 1       | set2 | 2dd    | 6        | 4.4162   | 0.6899         | 3823 | 6.40    | <.0001  | <.0001 | 0.05  | 3.0635   | 5.7688  |
| set1  | 3dd   | 1       | set2 | 2dd    | 7        | 1.0835   | 3.2411         | 3823 | 0.33    | 0.7382  | 1.0000 | 0.05  | -5.2709  | 7.4380  |
| set1  | 3dd   | 1       | set2 | 2dd    | 8        | 0.5828   | 0.6899         | 3823 | 0.84    | 0.3983  | 1.0000 | 0.05  | -0.7699  | 1.9354  |
| set1  | 3dd   | 1       | set2 | 2dd    | 9        | 0.6425   | 0.6899         | 3823 | 0.93    | 0.3518  | 1.0000 | 0.05  | -0.7101  | 1.9951  |
| set1  | 3dd   | 1       | set2 | 3dd    | 1        | 0.7818   | 2.0843         | 3823 | 0.38    | 0.7076  | 1.0000 | 0.05  | -3.3046  | 4.8683  |
| set1  | 3dd   | 1       | set2 | 3dd    | 2        | 1.0542   | 12.9323        | 3823 | 0.08    | 0.9350  | 1.0000 | 0.05  | -24.3007 | 26.4092 |
| set1  | 3dd   | 1       | set2 | 3dd    | 3        | 0.4579   | 9.4543         | 3823 | 0.05    | 0.9614  | 1.0000 | 0.05  | -18.0780 | 18.9938 |
| set1  | 3dd   | 1       | set2 | 3dd    | 4        | -0.03278 | 3.0469         | 3823 | -0.01   | 0.9914  | 1.0000 | 0.05  | -6.0064  | 5.9409  |
| set1  | 3dd   | 1       | set2 | 3dd    | 5        | 2.5477   | 3.1884         | 3823 | 0.80    | 0.4243  | 1.0000 | 0.05  | -3.7033  | 8.7988  |
| set1  | 3dd   | 1       | set2 | 3dd    | 6        | 1.7069   | 1.7516         | 3823 | 0.97    | 0.3299  | 1.0000 | 0.05  | -1.7272  | 5.1411  |
| set1  | 3dd   | 1       | set2 | 3dd    | 7        | -0.05974 | 3.9120         | 3823 | -0.02   | 0.9878  | 1.0000 | 0.05  | -7.7296  | 7.6101  |
| set1  | 3dd   | 1       | set2 | 3dd    | 8        | 0.9346   | 1.3353         | 3823 | 0.70    | 0.4840  | 1.0000 | 0.05  | -1.6834  | 3.5526  |
| set1  | 3dd   | 1       | set2 | 3dd    | 9        | 0.5872   | 1.3353         | 3823 | 0.44    | 0.6601  | 1.0000 | 0.05  | -2.0308  | 3.2052  |
| set1  | 3dd   | 1       | set2 | 3dp    | 1        | 1.7527   | 2.8673         | 3823 | 0.61    | 0.5411  | 1.0000 | 0.05  | -3.8689  | 7.3744  |
| set1  | 3dd   | 1       | set2 | 3dp    | 2        | 0.9867   | 8.0468         | 3823 | 0.12    | 0.9024  | 1.0000 | 0.05  | -14.7897 | 16.7630 |
| set1  | 3dd   | 1       | set2 | 3dp    | 3        | 0.05364  | 7.3528         | 3823 | 0.01    | 0.9942  | 1.0000 | 0.05  | -14.3621 | 14.4693 |
| set1  | 3dd   | 1       | set2 | 3dp    | 4        | 1.2431   | 1.9062         | 3823 | 0.65    | 0.5144  | 1.0000 | 0.05  | -2.4941  | 4.9803  |
| set1  | 3dd   | 1       | set2 | 3dp    | 5        | 1.8357   | 9.9700         | 3823 | 0.18    | 0.8539  | 1.0000 | 0.05  | -17.7113 | 21.3826 |
| set1  | 3dd   | 1       | set2 | 3dp    | 6        | 0.5533   | 3.6253         | 3823 | 0.15    | 0.8787  | 1.0000 | 0.05  | -6.5544  | 7.6610  |
| set1  | 3dd   | 1       | set2 | 3dp    | 7        | 0.8502   | 1.0672         | 3823 | 0.80    | 0.4257  | 1.0000 | 0.05  | -1.2420  | 2.9425  |
| set1  | 3dd   | 1       | set2 | 3dp    | 8        | 1.5803   | 3.6253         | 3823 | 0.44    | 0.6629  | 1.0000 | 0.05  | -5.5273  | 8.6880  |
| set1  | 3dd   | 1       | set2 | 3dp    | 9        | 1.0268   | 3.6253         | 3823 | 0.28    | 0.7770  | 1.0000 | 0.05  | -6.0808  | 8.1345  |
| set1  | 3dd   | 2       | set1 | 3dd    | 3        | 0.5183   | 17.0065        | 3823 | 0.03    | 0.9757  | 1.0000 | 0.05  | -32.8244 | 33.8610 |
| set1  | 3dd   | 2       | set1 | 3dd    | 4        | 0.7836   | 20.6047        | 3823 | 0.04    | 0.9697  | 1.0000 | 0.05  | -39.6136 | 41.1809 |
| set1  | 3dd   | 2       | set1 | 3dd    | 5        | 2.7681   | 18.2343        | 3823 | 0.15    | 0.8793  | 1.0000 | 0.05  | -32.9817 | 38.5180 |
| set1  | 3dd   | 2       | set1 | 3dd    | 6        | 1.1564   | 20.0511        | 3823 | 0.06    | 0.9540  | 1.0000 | 0.05  | -38.1556 | 40.4683 |
| set1  | 3dd   | 2       | set1 | 3dd    | 7        | 1.0087   | 25.2990        | 3823 | 0.04    | 0.9682  | 1.0000 | 0.05  | -48.5922 | 50.6096 |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |              |              |
|---|-------|---------|------|--------|----------|--------------|--------------|
| set   | media | pair_id | _set | _media | _pair_id | Adj<br>Lower | Adj<br>Upper |
| set1  | 3dd   | 1       | set1 | 3dp    | 7        | -42.1340     | 44.2129      |
| set1  | 3dd   | 1       | set1 | 3dp    | 8        | -31.4147     | 33.9079      |
| set1  | 3dd   | 1       | set1 | 3dp    | 9        | -31.5781     | 33.7445      |
| set1  | 3dd   | 1       | set2 | 2dd    | 1        | -4.2923      | 7.2232       |
| set1  | 3dd   | 1       | set2 | 2dd    | 2        | -62.0653     | 65.7143      |
| set1  | 3dd   | 1       | set2 | 2dd    | 3        | -46.3603     | 46.9789      |
| set1  | 3dd   | 1       | set2 | 2dd    | 4        | -8.2655      | 10.9550      |
| set1  | 3dd   | 1       | set2 | 2dd    | 5        | -19.5223     | 26.8301      |
| set1  | 3dd   | 1       | set2 | 2dd    | 6        | 1.6349       | 7.1975       |
| set1  | 3dd   | 1       | set2 | 2dd    | 7        | -11.9827     | 14.1498      |
| set1  | 3dd   | 1       | set2 | 2dd    | 8        | -2.1985      | 3.3641       |
| set1  | 3dd   | 1       | set2 | 2dd    | 9        | -2.1388      | 3.4238       |
| set1  | 3dd   | 1       | set2 | 3dd    | 1        | -7.6208      | 9.1845       |
| set1  | 3dd   | 1       | set2 | 3dd    | 2        | -51.0816     | 53.1901      |
| set1  | 3dd   | 1       | set2 | 3dd    | 3        | -37.6564     | 38.5722      |
| set1  | 3dd   | 1       | set2 | 3dd    | 4        | -12.3160     | 12.2505      |
| set1  | 3dd   | 1       | set2 | 3dd    | 5        | -10.3060     | 15.4014      |
| set1  | 3dd   | 1       | set2 | 3dd    | 6        | -5.3544      | 8.7683       |
| set1  | 3dd   | 1       | set2 | 3dd    | 7        | -15.8309     | 15.7114      |
| set1  | 3dd   | 1       | set2 | 3dd    | 8        | -4.4487      | 6.3179       |
| set1  | 3dd   | 1       | set2 | 3dd    | 9        | -4.7961      | 5.9705       |
| set1  | 3dd   | 1       | set2 | 3dp    | 1        | -9.8067      | 13.3122      |
| set1  | 3dd   | 1       | set2 | 3dp    | 2        | -31.4533     | 33.4267      |
| set1  | 3dd   | 1       | set2 | 3dp    | 3        | -29.5885     | 29.6958      |
| set1  | 3dd   | 1       | set2 | 3dp    | 4        | -6.4416      | 8.9278       |
| set1  | 3dd   | 1       | set2 | 3dp    | 5        | -38.3575     | 42.0289      |
| set1  | 3dd   | 1       | set2 | 3dp    | 6        | -14.0618     | 15.1684      |
| set1  | 3dd   | 1       | set2 | 3dp    | 7        | -3.4520      | 5.1524       |
| set1  | 3dd   | 1       | set2 | 3dp    | 8        | -13.0347     | 16.1954      |
| set1  | 3dd   | 1       | set2 | 3dp    | 9        | -13.5882     | 15.6419      |
| set1  | 3dd   | 2       | set1 | 3dd    | 3        | -68.0423     | 69.0789      |
| set1  | 3dd   | 2       | set1 | 3dd    | 4        | -82.2828     | 83.8501      |
| set1  | 3dd   | 2       | set1 | 3dd    | 5        | -70.7422     | 76.2784      |
| set1  | 3dd   | 2       | set1 | 3dd    | 6        | -79.6784     | 81.9912      |
| set1  | 3dd   | 2       | set1 | 3dd    | 7        | -100.98      | 103.00       |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |          |                |      |         |         |        |       |          |         |
|---|-------|---------|------|--------|----------|----------|----------------|------|---------|---------|--------|-------|----------|---------|
| set   | media | pair_id | _set | _media | _pair_id | Estimate | Standard Error | DF   | t Value | Pr >  t | Adj P  | Alpha | Lower    | Upper   |
| set1  | 3dd   | 2       | set1 | 3dd    | 8        | 0.5439   | 22.6902        | 3823 | 0.02    | 0.9809  | 1.0000 | 0.05  | -43.9422 | 45.0301 |
| set1  | 3dd   | 2       | set1 | 3dd    | 9        | -1.1698  | 22.6902        | 3823 | -0.05   | 0.9589  | 1.0000 | 0.05  | -45.6560 | 43.3163 |
| set1  | 3dd   | 2       | set1 | 3dp    | 1        | 1.4509   | 19.8865        | 3823 | 0.07    | 0.9418  | 1.0000 | 0.05  | -37.5383 | 40.4400 |
| set1  | 3dd   | 2       | set1 | 3dp    | 2        | 1.1741   | 2.6552         | 3823 | 0.44    | 0.6584  | 1.0000 | 0.05  | -4.0317  | 6.3799  |
| set1  | 3dd   | 2       | set1 | 3dp    | 3        | 0.7752   | 22.4438        | 3823 | 0.03    | 0.9724  | 1.0000 | 0.05  | -43.2277 | 44.7781 |
| set1  | 3dd   | 2       | set1 | 3dp    | 4        | 1.7849   | 23.2494        | 3823 | 0.08    | 0.9388  | 1.0000 | 0.05  | -43.7975 | 47.3673 |
| set1  | 3dd   | 2       | set1 | 3dp    | 5        | 2.6572   | 18.9843        | 3823 | 0.14    | 0.8887  | 1.0000 | 0.05  | -34.5631 | 39.8774 |
| set1  | 3dd   | 2       | set1 | 3dp    | 6        | 1.6968   | 22.2762        | 3823 | 0.08    | 0.9393  | 1.0000 | 0.05  | -41.9775 | 45.3712 |
| set1  | 3dd   | 2       | set1 | 3dp    | 7        | 1.3942   | 27.9432        | 3823 | 0.05    | 0.9602  | 1.0000 | 0.05  | -53.3909 | 56.1793 |
| set1  | 3dd   | 2       | set1 | 3dp    | 8        | 1.6014   | 25.3342        | 3823 | 0.06    | 0.9496  | 1.0000 | 0.05  | -48.0684 | 51.2711 |
| set1  | 3dd   | 2       | set1 | 3dp    | 9        | 1.4380   | 25.3342        | 3823 | 0.06    | 0.9547  | 1.0000 | 0.05  | -48.2318 | 51.1078 |
| set1  | 3dd   | 2       | set2 | 2dd    | 1        | 1.8202   | 18.6204        | 3823 | 0.10    | 0.9221  | 1.0000 | 0.05  | -34.6867 | 38.3270 |
| set1  | 3dd   | 2       | set2 | 2dd    | 2        | 2.1793   | 33.0820        | 3823 | 0.07    | 0.9475  | 1.0000 | 0.05  | -62.6808 | 67.0393 |
| set1  | 3dd   | 2       | set2 | 2dd    | 3        | 0.6640   | 28.8077        | 3823 | 0.02    | 0.9816  | 1.0000 | 0.05  | -55.8159 | 57.1440 |
| set1  | 3dd   | 2       | set2 | 2dd    | 4        | 1.6995   | 19.5946        | 3823 | 0.09    | 0.9309  | 1.0000 | 0.05  | -36.7173 | 40.1164 |
| set1  | 3dd   | 2       | set2 | 2dd    | 5        | 4.0087   | 11.5082        | 3823 | 0.35    | 0.7276  | 1.0000 | 0.05  | -18.5542 | 26.5715 |
| set1  | 3dd   | 2       | set2 | 2dd    | 6        | 4.7709   | 17.8571        | 3823 | 0.27    | 0.7894  | 1.0000 | 0.05  | -30.2394 | 39.7813 |
| set1  | 3dd   | 2       | set2 | 2dd    | 7        | 1.4383   | 20.4660        | 3823 | 0.07    | 0.9440  | 1.0000 | 0.05  | -38.6871 | 41.5637 |
| set1  | 3dd   | 2       | set2 | 2dd    | 8        | 0.9375   | 17.8571        | 3823 | 0.05    | 0.9581  | 1.0000 | 0.05  | -34.0728 | 35.9479 |
| set1  | 3dd   | 2       | set2 | 2dd    | 9        | 0.9973   | 17.8571        | 3823 | 0.06    | 0.9555  | 1.0000 | 0.05  | -34.0131 | 36.0076 |
| set1  | 3dd   | 2       | set2 | 3dd    | 1        | 1.1366   | 19.2944        | 3823 | 0.06    | 0.9530  | 1.0000 | 0.05  | -36.6917 | 38.9650 |
| set1  | 3dd   | 2       | set2 | 3dd    | 2        | 1.4090   | 30.1629        | 3823 | 0.05    | 0.9627  | 1.0000 | 0.05  | -57.7279 | 60.5458 |
| set1  | 3dd   | 2       | set2 | 3dd    | 3        | 0.8127   | 26.6858        | 3823 | 0.03    | 0.9757  | 1.0000 | 0.05  | -51.5071 | 53.1324 |
| set1  | 3dd   | 2       | set2 | 3dd    | 4        | 0.3220   | 20.2682        | 3823 | 0.02    | 0.9873  | 1.0000 | 0.05  | -39.4156 | 40.0596 |
| set1  | 3dd   | 2       | set2 | 3dd    | 5        | 2.9025   | 14.0768        | 3823 | 0.21    | 0.8367  | 1.0000 | 0.05  | -24.6963 | 30.5013 |
| set1  | 3dd   | 2       | set2 | 3dd    | 6        | 2.0617   | 18.9509        | 3823 | 0.11    | 0.9134  | 1.0000 | 0.05  | -35.0931 | 39.2165 |
| set1  | 3dd   | 2       | set2 | 3dd    | 7        | 0.2950   | 21.1402        | 3823 | 0.01    | 0.9889  | 1.0000 | 0.05  | -41.1522 | 41.7423 |
| set1  | 3dd   | 2       | set2 | 3dd    | 8        | 1.2894   | 18.5320        | 3823 | 0.07    | 0.9445  | 1.0000 | 0.05  | -35.0442 | 37.6229 |
| set1  | 3dd   | 2       | set2 | 3dd    | 9        | 0.9420   | 18.5320        | 3823 | 0.05    | 0.9595  | 1.0000 | 0.05  | -35.3916 | 37.2755 |
| set1  | 3dd   | 2       | set2 | 3dp    | 1        | 2.1075   | 14.3983        | 3823 | 0.15    | 0.8836  | 1.0000 | 0.05  | -26.1215 | 30.3365 |
| set1  | 3dd   | 2       | set2 | 3dp    | 2        | 1.3415   | 25.2678        | 3823 | 0.05    | 0.9577  | 1.0000 | 0.05  | -48.1982 | 50.8811 |
| set1  | 3dd   | 2       | set2 | 3dp    | 3        | 0.4084   | 24.5834        | 3823 | 0.02    | 0.9867  | 1.0000 | 0.05  | -47.7894 | 48.6062 |
| set1  | 3dd   | 2       | set2 | 3dp    | 4        | 1.5979   | 15.3723        | 3823 | 0.10    | 0.9172  | 1.0000 | 0.05  | -28.5409 | 31.7366 |
| set1  | 3dd   | 2       | set2 | 3dp    | 5        | 2.1904   | 7.2938         | 3823 | 0.30    | 0.7640  | 1.0000 | 0.05  | -12.1096 | 16.4905 |
| set1  | 3dd   | 2       | set2 | 3dp    | 6        | 0.9081   | 13.6364        | 3823 | 0.07    | 0.9469  | 1.0000 | 0.05  | -25.8273 | 27.6434 |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |              |              |
|---|-------|---------|------|--------|----------|--------------|--------------|
| set   | media | pair_id | _set | _media | _pair_id | Adj<br>Lower | Adj<br>Upper |
| set1  | 3dd   | 2       | set1 | 3dd    | 8        | -90.9303     | 92.0181      |
| set1  | 3dd   | 2       | set1 | 3dd    | 9        | -92.6440     | 90.3044      |
| set1  | 3dd   | 2       | set1 | 3dp    | 1        | -78.7202     | 81.6219      |
| set1  | 3dd   | 2       | set1 | 3dp    | 2        | -9.5303      | 11.8785      |
| set1  | 3dd   | 2       | set1 | 3dp    | 3        | -89.7053     | 91.2557      |
| set1  | 3dd   | 2       | set1 | 3dp    | 4        | -91.9435     | 95.5132      |
| set1  | 3dd   | 2       | set1 | 3dp    | 5        | -73.8765     | 79.1909      |
| set1  | 3dd   | 2       | set1 | 3dp    | 6        | -88.1081     | 91.5018      |
| set1  | 3dd   | 2       | set1 | 3dp    | 7        | -111.26      | 114.05       |
| set1  | 3dd   | 2       | set1 | 3dp    | 8        | -100.53      | 103.73       |
| set1  | 3dd   | 2       | set1 | 3dp    | 9        | -100.69      | 103.57       |
| set1  | 3dd   | 2       | set2 | 2dd    | 1        | -73.2466     | 76.8870      |
| set1  | 3dd   | 2       | set2 | 2dd    | 2        | -131.19      | 135.55       |
| set1  | 3dd   | 2       | set2 | 2dd    | 3        | -115.47      | 116.80       |
| set1  | 3dd   | 2       | set2 | 2dd    | 4        | -77.2948     | 80.6939      |
| set1  | 3dd   | 2       | set2 | 2dd    | 5        | -42.3860     | 50.4033      |
| set1  | 3dd   | 2       | set2 | 2dd    | 6        | -67.2187     | 76.7606      |
| set1  | 3dd   | 2       | set2 | 2dd    | 7        | -81.0692     | 83.9458      |
| set1  | 3dd   | 2       | set2 | 2dd    | 8        | -71.0522     | 72.9272      |
| set1  | 3dd   | 2       | set2 | 2dd    | 9        | -70.9924     | 72.9869      |
| set1  | 3dd   | 2       | set2 | 3dd    | 1        | -76.6476     | 78.9208      |
| set1  | 3dd   | 2       | set2 | 3dd    | 2        | -120.19      | 123.01       |
| set1  | 3dd   | 2       | set2 | 3dd    | 3        | -106.77      | 108.39       |
| set1  | 3dd   | 2       | set2 | 3dd    | 4        | -81.3880     | 82.0320      |
| set1  | 3dd   | 2       | set2 | 3dd    | 5        | -53.8472     | 59.6522      |
| set1  | 3dd   | 2       | set2 | 3dd    | 6        | -74.3375     | 78.4609      |
| set1  | 3dd   | 2       | set2 | 3dd    | 7        | -84.9304     | 85.5205      |
| set1  | 3dd   | 2       | set2 | 3dd    | 8        | -73.4211     | 75.9998      |
| set1  | 3dd   | 2       | set2 | 3dd    | 9        | -73.7685     | 75.6524      |
| set1  | 3dd   | 2       | set2 | 3dp    | 1        | -55.9381     | 60.1531      |
| set1  | 3dd   | 2       | set2 | 3dp    | 2        | -100.52      | 103.21       |
| set1  | 3dd   | 2       | set2 | 3dp    | 3        | -98.6978     | 99.5146      |
| set1  | 3dd   | 2       | set2 | 3dp    | 4        | -60.3747     | 63.5704      |
| set1  | 3dd   | 2       | set2 | 3dp    | 5        | -27.2139     | 31.5948      |
| set1  | 3dd   | 2       | set2 | 3dp    | 6        | -54.0662     | 55.8823      |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |          |                |      |         |         |        |       |          |         |
|---|-------|---------|------|--------|----------|----------|----------------|------|---------|---------|--------|-------|----------|---------|
| set   | media | pair_id | _set | _media | _pair_id | Estimate | Standard Error | DF   | t Value | Pr >  t | Adj P  | Alpha | Lower    | Upper   |
| set1  | 3dd   | 2       | set2 | 3dp    | 7        | 1.2050   | 16.2451        | 3823 | 0.07    | 0.9409  | 1.0000 | 0.05  | -30.6448 | 33.0548 |
| set1  | 3dd   | 2       | set2 | 3dp    | 8        | 1.9351   | 13.6364        | 3823 | 0.14    | 0.8872  | 1.0000 | 0.05  | -24.8003 | 28.6704 |
| set1  | 3dd   | 2       | set2 | 3dp    | 9        | 1.3816   | 13.6364        | 3823 | 0.10    | 0.9193  | 1.0000 | 0.05  | -25.3537 | 28.1170 |
| set1  | 3dd   | 3       | set1 | 3dd    | 4        | 0.2653   | 3.6291         | 3823 | 0.07    | 0.9417  | 1.0000 | 0.05  | -6.8498  | 7.3805  |
| set1  | 3dd   | 3       | set1 | 3dd    | 5        | 2.2498   | 1.3015         | 3823 | 1.73    | 0.0840  | 1.0000 | 0.05  | -0.3020  | 4.8016  |
| set1  | 3dd   | 3       | set1 | 3dd    | 6        | 0.6381   | 3.0831         | 3823 | 0.21    | 0.8361  | 1.0000 | 0.05  | -5.4067  | 6.6828  |
| set1  | 3dd   | 3       | set1 | 3dd    | 7        | 0.4904   | 8.3079         | 3823 | 0.06    | 0.9529  | 1.0000 | 0.05  | -15.7980 | 16.7789 |
| set1  | 3dd   | 3       | set1 | 3dd    | 8        | 0.02563  | 5.7034         | 3823 | 0.00    | 0.9964  | 1.0000 | 0.05  | -11.1564 | 11.2076 |
| set1  | 3dd   | 3       | set1 | 3dd    | 9        | -1.6881  | 5.7034         | 3823 | -0.30   | 0.7673  | 1.0000 | 0.05  | -12.8701 | 9.4939  |
| set1  | 3dd   | 3       | set1 | 3dp    | 1        | 0.9326   | 2.9172         | 3823 | 0.32    | 0.7492  | 1.0000 | 0.05  | -4.7868  | 6.6519  |
| set1  | 3dd   | 3       | set1 | 3dp    | 2        | 0.6558   | 14.3656        | 3823 | 0.05    | 0.9636  | 1.0000 | 0.05  | -27.5092 | 28.8208 |
| set1  | 3dd   | 3       | set1 | 3dp    | 3        | 0.2569   | 5.4545         | 3823 | 0.05    | 0.9624  | 1.0000 | 0.05  | -10.4370 | 10.9508 |
| set1  | 3dd   | 3       | set1 | 3dp    | 4        | 1.2666   | 6.2649         | 3823 | 0.20    | 0.8398  | 1.0000 | 0.05  | -11.0164 | 13.5495 |
| set1  | 3dd   | 3       | set1 | 3dp    | 5        | 2.1389   | 2.0421         | 3823 | 1.05    | 0.2950  | 1.0000 | 0.05  | -1.8649  | 6.1427  |
| set1  | 3dd   | 3       | set1 | 3dp    | 6        | 1.1785   | 5.2935         | 3823 | 0.22    | 0.8238  | 1.0000 | 0.05  | -9.1998  | 11.5568 |
| set1  | 3dd   | 3       | set1 | 3dp    | 7        | 0.8759   | 10.9501        | 3823 | 0.08    | 0.9362  | 1.0000 | 0.05  | -20.5926 | 22.3444 |
| set1  | 3dd   | 3       | set1 | 3dp    | 8        | 1.0831   | 8.3427         | 3823 | 0.13    | 0.8967  | 1.0000 | 0.05  | -15.2734 | 17.4396 |
| set1  | 3dd   | 3       | set1 | 3dp    | 9        | 0.9197   | 8.3427         | 3823 | 0.11    | 0.9122  | 1.0000 | 0.05  | -15.4368 | 17.2762 |
| set1  | 3dd   | 3       | set2 | 2dd    | 1        | 1.3019   | 1.6750         | 3823 | 0.78    | 0.4371  | 1.0000 | 0.05  | -1.9821  | 4.5859  |
| set1  | 3dd   | 3       | set2 | 2dd    | 2        | 1.6609   | 16.0878        | 3823 | 0.10    | 0.9178  | 1.0000 | 0.05  | -29.8806 | 33.2025 |
| set1  | 3dd   | 3       | set2 | 2dd    | 3        | 0.1457   | 11.8210        | 3823 | 0.01    | 0.9902  | 1.0000 | 0.05  | -23.0303 | 23.3218 |
| set1  | 3dd   | 3       | set2 | 2dd    | 4        | 1.1812   | 2.6278         | 3823 | 0.45    | 0.6531  | 1.0000 | 0.05  | -3.9707  | 6.3332  |
| set1  | 3dd   | 3       | set2 | 2dd    | 5        | 3.4903   | 5.5161         | 3823 | 0.63    | 0.5269  | 1.0000 | 0.05  | -7.3245  | 14.3052 |
| set1  | 3dd   | 3       | set2 | 2dd    | 6        | 4.2526   | 0.9360         | 3823 | 4.54    | <.0001  | 0.0065 | 0.05  | 2.4175   | 6.0877  |
| set1  | 3dd   | 3       | set2 | 2dd    | 7        | 0.9200   | 3.4869         | 3823 | 0.26    | 0.7919  | 1.0000 | 0.05  | -5.9163  | 7.7563  |
| set1  | 3dd   | 3       | set2 | 2dd    | 8        | 0.4192   | 0.9360         | 3823 | 0.45    | 0.6543  | 1.0000 | 0.05  | -1.4159  | 2.2543  |
| set1  | 3dd   | 3       | set2 | 2dd    | 9        | 0.4790   | 0.9360         | 3823 | 0.51    | 0.6089  | 1.0000 | 0.05  | -1.3561  | 2.3140  |
| set1  | 3dd   | 3       | set2 | 3dd    | 1        | 0.6183   | 2.3342         | 3823 | 0.26    | 0.7911  | 1.0000 | 0.05  | -3.9581  | 5.1947  |
| set1  | 3dd   | 3       | set2 | 3dd    | 2        | 0.8907   | 13.1726        | 3823 | 0.07    | 0.9461  | 1.0000 | 0.05  | -24.9353 | 26.7166 |
| set1  | 3dd   | 3       | set2 | 3dd    | 3        | 0.2944   | 9.6911         | 3823 | 0.03    | 0.9758  | 1.0000 | 0.05  | -18.7059 | 19.2947 |
| set1  | 3dd   | 3       | set2 | 3dd    | 4        | -0.1963  | 3.2931         | 3823 | -0.06   | 0.9525  | 1.0000 | 0.05  | -6.6527  | 6.2600  |
| set1  | 3dd   | 3       | set2 | 3dd    | 5        | 2.3842   | 2.9608         | 3823 | 0.81    | 0.4207  | 1.0000 | 0.05  | -3.4208  | 8.1891  |
| set1  | 3dd   | 3       | set2 | 3dd    | 6        | 1.5434   | 1.9968         | 3823 | 0.77    | 0.4396  | 1.0000 | 0.05  | -2.3715  | 5.4583  |
| set1  | 3dd   | 3       | set2 | 3dd    | 7        | -0.2233  | 4.1588         | 3823 | -0.05   | 0.9572  | 1.0000 | 0.05  | -8.3771  | 7.9305  |
| set1  | 3dd   | 3       | set2 | 3dd    | 8        | 0.7711   | 1.5880         | 3823 | 0.49    | 0.6273  | 1.0000 | 0.05  | -2.3423  | 3.8844  |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |              |              |
|---|-------|---------|------|--------|----------|--------------|--------------|
| set   | media | pair_id | _set | _media | _pair_id | Adj<br>Lower | Adj<br>Upper |
| set1  | 3dd   | 2       | set2 | 3dp    | 7        | -64.2859     | 66.6959      |
| set1  | 3dd   | 2       | set2 | 3dp    | 8        | -53.0392     | 56.9094      |
| set1  | 3dd   | 2       | set2 | 3dp    | 9        | -53.5927     | 56.3559      |
| set1  | 3dd   | 3       | set1 | 3dd    | 4        | -14.3651     | 14.8958      |
| set1  | 3dd   | 3       | set1 | 3dd    | 5        | -2.9972      | 7.4969       |
| set1  | 3dd   | 3       | set1 | 3dd    | 6        | -11.7913     | 13.0675      |
| set1  | 3dd   | 3       | set1 | 3dd    | 7        | -33.0025     | 33.9833      |
| set1  | 3dd   | 3       | set1 | 3dd    | 8        | -22.9673     | 23.0185      |
| set1  | 3dd   | 3       | set1 | 3dd    | 9        | -24.6810     | 21.3048      |
| set1  | 3dd   | 3       | set1 | 3dp    | 1        | -10.8279     | 12.6930      |
| set1  | 3dd   | 3       | set1 | 3dp    | 2        | -57.2581     | 58.5697      |
| set1  | 3dd   | 3       | set1 | 3dp    | 3        | -21.7324     | 22.2462      |
| set1  | 3dd   | 3       | set1 | 3dp    | 4        | -23.9902     | 26.5233      |
| set1  | 3dd   | 3       | set1 | 3dp    | 5        | -6.0939      | 10.3716      |
| set1  | 3dd   | 3       | set1 | 3dp    | 6        | -20.1617     | 22.5187      |
| set1  | 3dd   | 3       | set1 | 3dp    | 7        | -43.2686     | 45.0203      |
| set1  | 3dd   | 3       | set1 | 3dp    | 8        | -32.5499     | 34.7160      |
| set1  | 3dd   | 3       | set1 | 3dp    | 9        | -32.7132     | 34.5526      |
| set1  | 3dd   | 3       | set2 | 2dd    | 1        | -5.4508      | 8.0546       |
| set1  | 3dd   | 3       | set2 | 2dd    | 2        | -63.1961     | 66.5180      |
| set1  | 3dd   | 3       | set2 | 2dd    | 3        | -47.5098     | 47.8013      |
| set1  | 3dd   | 3       | set2 | 2dd    | 4        | -9.4125      | 11.7750      |
| set1  | 3dd   | 3       | set2 | 2dd    | 5        | -18.7475     | 25.7282      |
| set1  | 3dd   | 3       | set2 | 2dd    | 6        | 0.4793       | 8.0260       |
| set1  | 3dd   | 3       | set2 | 2dd    | 7        | -13.1370     | 14.9770      |
| set1  | 3dd   | 3       | set2 | 2dd    | 8        | -3.3541      | 4.1926       |
| set1  | 3dd   | 3       | set2 | 2dd    | 9        | -3.2944      | 4.2523       |
| set1  | 3dd   | 3       | set2 | 3dd    | 1        | -8.7919      | 10.0285      |
| set1  | 3dd   | 3       | set2 | 3dd    | 2        | -52.2137     | 53.9950      |
| set1  | 3dd   | 3       | set2 | 3dd    | 3        | -38.7748     | 39.3635      |
| set1  | 3dd   | 3       | set2 | 3dd    | 4        | -13.4722     | 13.0795      |
| set1  | 3dd   | 3       | set2 | 3dd    | 5        | -9.5522      | 14.3205      |
| set1  | 3dd   | 3       | set2 | 3dd    | 6        | -6.5065      | 9.5933       |
| set1  | 3dd   | 3       | set2 | 3dd    | 7        | -16.9894     | 16.5428      |
| set1  | 3dd   | 3       | set2 | 3dd    | 8        | -5.6307      | 7.1728       |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |          |                |      |         |         |        |       |          |         |
|---|-------|---------|------|--------|----------|----------|----------------|------|---------|---------|--------|-------|----------|---------|
| set   | media | pair_id | _set | _media | _pair_id | Estimate | Standard Error | DF   | t Value | Pr >  t | Adj P  | Alpha | Lower    | Upper   |
| set1  | 3dd   | 3       | set2 | 3dd    | 9        | 0.4237   | 1.5880         | 3823 | 0.27    | 0.7896  | 1.0000 | 0.05  | -2.6897  | 3.5370  |
| set1  | 3dd   | 3       | set2 | 3dp    | 1        | 1.5892   | 2.6416         | 3823 | 0.60    | 0.5475  | 1.0000 | 0.05  | -3.5899  | 6.7683  |
| set1  | 3dd   | 3       | set2 | 3dp    | 2        | 0.8232   | 8.2870         | 3823 | 0.10    | 0.9209  | 1.0000 | 0.05  | -15.4242 | 17.0705 |
| set1  | 3dd   | 3       | set2 | 3dp    | 3        | -0.1099  | 7.6010         | 3823 | -0.01   | 0.9885  | 1.0000 | 0.05  | -15.0124 | 14.7926 |
| set1  | 3dd   | 3       | set2 | 3dp    | 4        | 1.0795   | 1.6873         | 3823 | 0.64    | 0.5223  | 1.0000 | 0.05  | -2.2284  | 4.3875  |
| set1  | 3dd   | 3       | set2 | 3dp    | 5        | 1.6721   | 9.7349         | 3823 | 0.17    | 0.8636  | 1.0000 | 0.05  | -17.4140 | 20.7583 |
| set1  | 3dd   | 3       | set2 | 3dp    | 6        | 0.3897   | 3.3961         | 3823 | 0.11    | 0.9086  | 1.0000 | 0.05  | -6.2686  | 7.0481  |
| set1  | 3dd   | 3       | set2 | 3dp    | 7        | 0.6867   | 0.8849         | 3823 | 0.78    | 0.4378  | 1.0000 | 0.05  | -1.0482  | 2.4216  |
| set1  | 3dd   | 3       | set2 | 3dp    | 8        | 1.4168   | 3.3961         | 3823 | 0.42    | 0.6766  | 1.0000 | 0.05  | -5.2415  | 8.0751  |
| set1  | 3dd   | 3       | set2 | 3dp    | 9        | 0.8633   | 3.3961         | 3823 | 0.25    | 0.7994  | 1.0000 | 0.05  | -5.7950  | 7.5216  |
| set1  | 3dd   | 4       | set1 | 3dd    | 5        | 1.9845   | 2.3886         | 3823 | 0.83    | 0.4061  | 1.0000 | 0.05  | -2.6986  | 6.6676  |
| set1  | 3dd   | 4       | set1 | 3dd    | 6        | 0.3727   | 0.6551         | 3823 | 0.57    | 0.5694  | 1.0000 | 0.05  | -0.9117  | 1.6572  |
| set1  | 3dd   | 4       | set1 | 3dd    | 7        | 0.2251   | 4.7058         | 3823 | 0.05    | 0.9619  | 1.0000 | 0.05  | -9.0011  | 9.4513  |
| set1  | 3dd   | 4       | set1 | 3dd    | 8        | -0.2397  | 2.1152         | 3823 | -0.11   | 0.9098  | 1.0000 | 0.05  | -4.3868  | 3.9074  |
| set1  | 3dd   | 4       | set1 | 3dd    | 9        | -1.9535  | 2.1152         | 3823 | -0.92   | 0.3558  | 1.0000 | 0.05  | -6.1005  | 2.1936  |
| set1  | 3dd   | 4       | set1 | 3dp    | 1        | 0.6672   | 0.8220         | 3823 | 0.81    | 0.4170  | 1.0000 | 0.05  | -0.9444  | 2.2789  |
| set1  | 3dd   | 4       | set1 | 3dp    | 2        | 0.3905   | 17.9631        | 3823 | 0.02    | 0.9827  | 1.0000 | 0.05  | -34.8278 | 35.6087 |
| set1  | 3dd   | 4       | set1 | 3dp    | 3        | -0.00844 | 1.8852         | 3823 | -0.00   | 0.9964  | 1.0000 | 0.05  | -3.7045  | 3.6877  |
| set1  | 3dd   | 4       | set1 | 3dp    | 4        | 1.0012   | 2.6552         | 3823 | 0.38    | 0.7061  | 1.0000 | 0.05  | -4.2046  | 6.2071  |
| set1  | 3dd   | 4       | set1 | 3dp    | 5        | 1.8735   | 1.6911         | 3823 | 1.11    | 0.2680  | 1.0000 | 0.05  | -1.4420  | 5.1891  |
| set1  | 3dd   | 4       | set1 | 3dp    | 6        | 0.9132   | 1.7225         | 3823 | 0.53    | 0.5961  | 1.0000 | 0.05  | -2.4640  | 4.2904  |
| set1  | 3dd   | 4       | set1 | 3dp    | 7        | 0.6106   | 7.3483         | 3823 | 0.08    | 0.9338  | 1.0000 | 0.05  | -13.7965 | 15.0176 |
| set1  | 3dd   | 4       | set1 | 3dp    | 8        | 0.8177   | 4.7452         | 3823 | 0.17    | 0.8632  | 1.0000 | 0.05  | -8.4856  | 10.1210 |
| set1  | 3dd   | 4       | set1 | 3dp    | 9        | 0.6544   | 4.7452         | 3823 | 0.14    | 0.8903  | 1.0000 | 0.05  | -8.6489  | 9.9577  |
| set1  | 3dd   | 4       | set2 | 2dd    | 1        | 1.0365   | 2.0191         | 3823 | 0.51    | 0.6077  | 1.0000 | 0.05  | -2.9222  | 4.9952  |
| set1  | 3dd   | 4       | set2 | 2dd    | 2        | 1.3956   | 12.4836        | 3823 | 0.11    | 0.9110  | 1.0000 | 0.05  | -23.0796 | 25.8708 |
| set1  | 3dd   | 4       | set2 | 2dd    | 3        | -0.1196  | 8.2156         | 3823 | -0.01   | 0.9884  | 1.0000 | 0.05  | -16.2270 | 15.9878 |
| set1  | 3dd   | 4       | set2 | 2dd    | 4        | 0.9159   | 1.0601         | 3823 | 0.86    | 0.3876  | 1.0000 | 0.05  | -1.1625  | 2.9943  |
| set1  | 3dd   | 4       | set2 | 2dd    | 5        | 3.2250   | 9.1110         | 3823 | 0.35    | 0.7234  | 1.0000 | 0.05  | -14.6378 | 21.0878 |
| set1  | 3dd   | 4       | set2 | 2dd    | 6        | 3.9873   | 2.7722         | 3823 | 1.44    | 0.1504  | 1.0000 | 0.05  | -1.4479  | 9.4225  |
| set1  | 3dd   | 4       | set2 | 2dd    | 7        | 0.6547   | 0.3805         | 3823 | 1.72    | 0.0854  | 1.0000 | 0.05  | -0.09131 | 1.4006  |
| set1  | 3dd   | 4       | set2 | 2dd    | 8        | 0.1539   | 2.7722         | 3823 | 0.06    | 0.9557  | 1.0000 | 0.05  | -5.2813  | 5.5891  |
| set1  | 3dd   | 4       | set2 | 2dd    | 9        | 0.2136   | 2.7722         | 3823 | 0.08    | 0.9386  | 1.0000 | 0.05  | -5.2216  | 5.6488  |
| set1  | 3dd   | 4       | set2 | 3dd    | 1        | 0.3530   | 1.3760         | 3823 | 0.26    | 0.7976  | 1.0000 | 0.05  | -2.3448  | 3.0508  |
| set1  | 3dd   | 4       | set2 | 3dd    | 2        | 0.6253   | 9.5690         | 3823 | 0.07    | 0.9479  | 1.0000 | 0.05  | -18.1354 | 19.3861 |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |              |              |
|---|-------|---------|------|--------|----------|--------------|--------------|
| set   | media | pair_id | _set | _media | _pair_id | Adj<br>Lower | Adj<br>Upper |
| set1  | 3dd   | 3       | set2 | 3dd    | 9        | -5.9781      | 6.8254       |
| set1  | 3dd   | 3       | set2 | 3dp    | 1        | -9.0603      | 12.2387      |
| set1  | 3dd   | 3       | set2 | 3dp    | 2        | -32.5852     | 34.2315      |
| set1  | 3dd   | 3       | set2 | 3dp    | 3        | -30.7530     | 30.5332      |
| set1  | 3dd   | 3       | set2 | 3dp    | 4        | -5.7225      | 7.8816       |
| set1  | 3dd   | 3       | set2 | 3dp    | 5        | -37.5736     | 40.9178      |
| set1  | 3dd   | 3       | set2 | 3dp    | 6        | -13.3014     | 14.0808      |
| set1  | 3dd   | 3       | set2 | 3dp    | 7        | -2.8807      | 4.2541       |
| set1  | 3dd   | 3       | set2 | 3dp    | 8        | -12.2743     | 15.1079      |
| set1  | 3dd   | 3       | set2 | 3dp    | 9        | -12.8278     | 14.5544      |
| set1  | 3dd   | 4       | set1 | 3dd    | 5        | -7.6451      | 11.6141      |
| set1  | 3dd   | 4       | set1 | 3dd    | 6        | -2.2684      | 3.0138       |
| set1  | 3dd   | 4       | set1 | 3dd    | 7        | -18.7461     | 19.1963      |
| set1  | 3dd   | 4       | set1 | 3dd    | 8        | -8.7671      | 8.2876       |
| set1  | 3dd   | 4       | set1 | 3dd    | 9        | -10.4808     | 6.5739       |
| set1  | 3dd   | 4       | set1 | 3dp    | 1        | -2.6467      | 3.9812       |
| set1  | 3dd   | 4       | set1 | 3dp    | 2        | -72.0267     | 72.8076      |
| set1  | 3dd   | 4       | set1 | 3dp    | 3        | -7.6085      | 7.5916       |
| set1  | 3dd   | 4       | set1 | 3dp    | 4        | -9.7032      | 11.7057      |
| set1  | 3dd   | 4       | set1 | 3dp    | 5        | -4.9440      | 8.6911       |
| set1  | 3dd   | 4       | set1 | 3dp    | 6        | -6.0311      | 7.8575       |
| set1  | 3dd   | 4       | set1 | 3dp    | 7        | -29.0137     | 30.2348      |
| set1  | 3dd   | 4       | set1 | 3dp    | 8        | -18.3121     | 19.9476      |
| set1  | 3dd   | 4       | set1 | 3dp    | 9        | -18.4755     | 19.7842      |
| set1  | 3dd   | 4       | set2 | 2dd    | 1        | -7.1035      | 9.1766       |
| set1  | 3dd   | 4       | set2 | 2dd    | 2        | -48.9313     | 51.7225      |
| set1  | 3dd   | 4       | set2 | 2dd    | 3        | -33.2402     | 33.0010      |
| set1  | 3dd   | 4       | set2 | 2dd    | 4        | -3.3578      | 5.1896       |
| set1  | 3dd   | 4       | set2 | 2dd    | 5        | -33.5053     | 39.9553      |
| set1  | 3dd   | 4       | set2 | 2dd    | 6        | -7.1887      | 15.1633      |
| set1  | 3dd   | 4       | set2 | 2dd    | 7        | -0.8792      | 2.1886       |
| set1  | 3dd   | 4       | set2 | 2dd    | 8        | -11.0221     | 11.3299      |
| set1  | 3dd   | 4       | set2 | 2dd    | 9        | -10.9624     | 11.3896      |
| set1  | 3dd   | 4       | set2 | 3dd    | 1        | -5.1944      | 5.9003       |
| set1  | 3dd   | 4       | set2 | 3dd    | 2        | -37.9513     | 39.2020      |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |          |                   |      |         |         |        |       |          |         |
|---|-------|---------|------|--------|----------|----------|-------------------|------|---------|---------|--------|-------|----------|---------|
| set   | media | pair_id | _set | _media | _pair_id | Estimate | Standard<br>Error | DF   | t Value | Pr >  t | Adj P  | Alpha | Lower    | Upper   |
| set1  | 3dd   | 4       | set2 | 3dd    | 3        | 0.02902  | 6.0984            | 3823 | 0.00    | 0.9962  | 1.0000 | 0.05  | -11.9274 | 11.9854 |
| set1  | 3dd   | 4       | set2 | 3dd    | 4        | -0.4617  | 0.4864            | 3823 | -0.95   | 0.3426  | 1.0000 | 0.05  | -1.4153  | 0.4920  |
| set1  | 3dd   | 4       | set2 | 3dd    | 5        | 2.1189   | 6.5434            | 3823 | 0.32    | 0.7461  | 1.0000 | 0.05  | -10.7099 | 14.9476 |
| set1  | 3dd   | 4       | set2 | 3dd    | 6        | 1.2781   | 1.7082            | 3823 | 0.75    | 0.4544  | 1.0000 | 0.05  | -2.0711  | 4.6272  |
| set1  | 3dd   | 4       | set2 | 3dd    | 7        | -0.4886  | 0.6754            | 3823 | -0.72   | 0.4695  | 1.0000 | 0.05  | -1.8129  | 0.8356  |
| set1  | 3dd   | 4       | set2 | 3dd    | 8        | 0.5057   | 2.1223            | 3823 | 0.24    | 0.8117  | 1.0000 | 0.05  | -3.6553  | 4.6668  |
| set1  | 3dd   | 4       | set2 | 3dd    | 9        | 0.1583   | 2.1223            | 3823 | 0.07    | 0.9405  | 1.0000 | 0.05  | -4.0027  | 4.3194  |
| set1  | 3dd   | 4       | set2 | 3dp    | 1        | 1.3238   | 6.2196            | 3823 | 0.21    | 0.8315  | 1.0000 | 0.05  | -10.8703 | 13.5180 |
| set1  | 3dd   | 4       | set2 | 3dp    | 2        | 0.5578   | 4.6886            | 3823 | 0.12    | 0.9053  | 1.0000 | 0.05  | -8.6346  | 9.7502  |
| set1  | 3dd   | 4       | set2 | 3dp    | 3        | -0.3752  | 3.9963            | 3823 | -0.09   | 0.9252  | 1.0000 | 0.05  | -8.2103  | 7.4598  |
| set1  | 3dd   | 4       | set2 | 3dp    | 4        | 0.8142   | 5.2440            | 3823 | 0.16    | 0.8766  | 1.0000 | 0.05  | -9.4671  | 11.0956 |
| set1  | 3dd   | 4       | set2 | 3dp    | 5        | 1.4068   | 13.3336           | 3823 | 0.11    | 0.9160  | 1.0000 | 0.05  | -24.7349 | 27.5485 |
| set1  | 3dd   | 4       | set2 | 3dp    | 6        | 0.1244   | 6.9841            | 3823 | 0.02    | 0.9858  | 1.0000 | 0.05  | -13.5684 | 13.8172 |
| set1  | 3dd   | 4       | set2 | 3dp    | 7        | 0.4214   | 4.3822            | 3823 | 0.10    | 0.9234  | 1.0000 | 0.05  | -8.1704  | 9.0131  |
| set1  | 3dd   | 4       | set2 | 3dp    | 8        | 1.1514   | 6.9841            | 3823 | 0.16    | 0.8691  | 1.0000 | 0.05  | -12.5414 | 14.8443 |
| set1  | 3dd   | 4       | set2 | 3dp    | 9        | 0.5980   | 6.9841            | 3823 | 0.09    | 0.9318  | 1.0000 | 0.05  | -13.0949 | 14.2908 |
| set1  | 3dd   | 5       | set1 | 3dd    | 6        | -1.6117  | 1.8439            | 3823 | -0.87   | 0.3821  | 1.0000 | 0.05  | -5.2268  | 2.0033  |
| set1  | 3dd   | 5       | set1 | 3dd    | 7        | -1.7594  | 7.0719            | 3823 | -0.25   | 0.8035  | 1.0000 | 0.05  | -15.6245 | 12.1057 |
| set1  | 3dd   | 5       | set1 | 3dd    | 8        | -2.2242  | 4.4669            | 3823 | -0.50   | 0.6186  | 1.0000 | 0.05  | -10.9819 | 6.5336  |
| set1  | 3dd   | 5       | set1 | 3dd    | 9        | -3.9379  | 4.4669            | 3823 | -0.88   | 0.3781  | 1.0000 | 0.05  | -12.6957 | 4.8198  |
| set1  | 3dd   | 5       | set1 | 3dp    | 1        | -1.3173  | 1.6893            | 3823 | -0.78   | 0.4356  | 1.0000 | 0.05  | -4.6293  | 1.9948  |
| set1  | 3dd   | 5       | set1 | 3dp    | 2        | -1.5940  | 15.5923           | 3823 | -0.10   | 0.9186  | 1.0000 | 0.05  | -32.1640 | 28.9759 |
| set1  | 3dd   | 5       | set1 | 3dp    | 3        | -1.9929  | 4.2258            | 3823 | -0.47   | 0.6372  | 1.0000 | 0.05  | -10.2780 | 6.2922  |
| set1  | 3dd   | 5       | set1 | 3dp    | 4        | -0.9833  | 5.0264            | 3823 | -0.20   | 0.8449  | 1.0000 | 0.05  | -10.8380 | 8.8715  |
| set1  | 3dd   | 5       | set1 | 3dp    | 5        | -0.1109  | 0.8473            | 3823 | -0.13   | 0.8958  | 1.0000 | 0.05  | -1.7721  | 1.5502  |
| set1  | 3dd   | 5       | set1 | 3dp    | 6        | -1.0713  | 4.0581            | 3823 | -0.26   | 0.7918  | 1.0000 | 0.05  | -9.0275  | 6.8849  |
| set1  | 3dd   | 5       | set1 | 3dp    | 7        | -1.3739  | 9.7146            | 3823 | -0.14   | 0.8875  | 1.0000 | 0.05  | -20.4203 | 17.6725 |
| set1  | 3dd   | 5       | set1 | 3dp    | 8        | -1.1667  | 7.1067            | 3823 | -0.16   | 0.8696  | 1.0000 | 0.05  | -15.1000 | 12.7665 |
| set1  | 3dd   | 5       | set1 | 3dp    | 9        | -1.3301  | 7.1067            | 3823 | -0.19   | 0.8515  | 1.0000 | 0.05  | -15.2634 | 12.6031 |
| set1  | 3dd   | 5       | set2 | 2dd    | 1        | -0.9479  | 0.5034            | 3823 | -1.88   | 0.0598  | 0.9999 | 0.05  | -1.9350  | 0.03911 |
| set1  | 3dd   | 5       | set2 | 2dd    | 2        | -0.5889  | 14.8530           | 3823 | -0.04   | 0.9684  | 1.0000 | 0.05  | -29.7094 | 28.5316 |
| set1  | 3dd   | 5       | set2 | 2dd    | 3        | -2.1041  | 10.5818           | 3823 | -0.20   | 0.8424  | 1.0000 | 0.05  | -22.8506 | 18.6424 |
| set1  | 3dd   | 5       | set2 | 2dd    | 4        | -1.0686  | 1.3950            | 3823 | -0.77   | 0.4437  | 1.0000 | 0.05  | -3.8036  | 1.6665  |
| set1  | 3dd   | 5       | set2 | 2dd    | 5        | 1.2405   | 6.7401            | 3823 | 0.18    | 0.8540  | 1.0000 | 0.05  | -11.9739 | 14.4550 |
| set1  | 3dd   | 5       | set2 | 2dd    | 6        | 2.0028   | 0.4838            | 3823 | 4.14    | <.0001  | 0.0336 | 0.05  | 1.0543   | 2.9513  |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |              |              |
|---|-------|---------|------|--------|----------|--------------|--------------|
| set   | media | pair_id | _set | _media | _pair_id | Adj<br>Lower | Adj<br>Upper |
| set1  | 3dd   | 4       | set2 | 3dd    | 3        | -24.5562     | 24.6142      |
| set1  | 3dd   | 4       | set2 | 3dd    | 4        | -2.4226      | 1.4992       |
| set1  | 3dd   | 4       | set2 | 3dd    | 5        | -24.2602     | 28.4979      |
| set1  | 3dd   | 4       | set2 | 3dd    | 6        | -5.6085      | 8.1646       |
| set1  | 3dd   | 4       | set2 | 3dd    | 7        | -3.2116      | 2.2344       |
| set1  | 3dd   | 4       | set2 | 3dd    | 8        | -8.0504      | 9.0618       |
| set1  | 3dd   | 4       | set2 | 3dd    | 9        | -8.3978      | 8.7144       |
| set1  | 3dd   | 4       | set2 | 3dp    | 1        | -23.7502     | 26.3979      |
| set1  | 3dd   | 4       | set2 | 3dp    | 2        | -18.3440     | 19.4597      |
| set1  | 3dd   | 4       | set2 | 3dp    | 3        | -16.4859     | 15.7355      |
| set1  | 3dd   | 4       | set2 | 3dp    | 4        | -20.3267     | 21.9551      |
| set1  | 3dd   | 4       | set2 | 3dp    | 5        | -52.3468     | 55.1604      |
| set1  | 3dd   | 4       | set2 | 3dp    | 6        | -28.0313     | 28.2801      |
| set1  | 3dd   | 4       | set2 | 3dp    | 7        | -17.2454     | 18.0881      |
| set1  | 3dd   | 4       | set2 | 3dp    | 8        | -27.0043     | 29.3072      |
| set1  | 3dd   | 4       | set2 | 3dp    | 9        | -27.5578     | 28.7537      |
| set1  | 3dd   | 5       | set1 | 3dd    | 6        | -9.0452      | 5.8217       |
| set1  | 3dd   | 5       | set1 | 3dd    | 7        | -30.2694     | 26.7506      |
| set1  | 3dd   | 5       | set1 | 3dd    | 8        | -20.2322     | 15.7839      |
| set1  | 3dd   | 5       | set1 | 3dd    | 9        | -21.9460     | 14.0701      |
| set1  | 3dd   | 5       | set1 | 3dp    | 1        | -8.1276      | 5.4931       |
| set1  | 3dd   | 5       | set1 | 3dp    | 2        | -64.4532     | 61.2651      |
| set1  | 3dd   | 5       | set1 | 3dp    | 3        | -19.0290     | 15.0432      |
| set1  | 3dd   | 5       | set1 | 3dp    | 4        | -21.2470     | 19.2805      |
| set1  | 3dd   | 5       | set1 | 3dp    | 5        | -3.5266      | 3.3047       |
| set1  | 3dd   | 5       | set1 | 3dp    | 6        | -17.4311     | 15.2885      |
| set1  | 3dd   | 5       | set1 | 3dp    | 7        | -40.5379     | 37.7900      |
| set1  | 3dd   | 5       | set1 | 3dp    | 8        | -29.8169     | 27.4834      |
| set1  | 3dd   | 5       | set1 | 3dp    | 9        | -29.9802     | 27.3200      |
| set1  | 3dd   | 5       | set2 | 2dd    | 1        | -2.9775      | 1.0817       |
| set1  | 3dd   | 5       | set2 | 2dd    | 2        | -60.4676     | 59.2899      |
| set1  | 3dd   | 5       | set2 | 2dd    | 3        | -44.7638     | 40.5557      |
| set1  | 3dd   | 5       | set2 | 2dd    | 4        | -6.6924      | 4.5553       |
| set1  | 3dd   | 5       | set2 | 2dd    | 5        | -25.9316     | 28.4126      |
| set1  | 3dd   | 5       | set2 | 2dd    | 6        | 0.05242      | 3.9532       |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |          |                   |      |         |         |        |       |          |         |
|---|-------|---------|------|--------|----------|----------|-------------------|------|---------|---------|--------|-------|----------|---------|
| set   | media | pair_id | _set | _media | _pair_id | Estimate | Standard<br>Error | DF   | t Value | Pr >  t | Adj P  | Alpha | Lower    | Upper   |
| set1  | 3dd   | 5       | set2 | 2dd    | 7        | -1.3298  | 2.2543            | 3823 | -0.59   | 0.5553  | 1.0000 | 0.05  | -5.7495  | 3.0899  |
| set1  | 3dd   | 5       | set2 | 2dd    | 8        | -1.8306  | 0.4838            | 3823 | -3.78   | 0.0002  | 0.1148 | 0.05  | -2.7791  | -0.8821 |
| set1  | 3dd   | 5       | set2 | 2dd    | 9        | -1.7709  | 0.4838            | 3823 | -3.66   | 0.0003  | 0.1663 | 0.05  | -2.7194  | -0.8223 |
| set1  | 3dd   | 5       | set2 | 3dd    | 1        | -1.6315  | 1.1259            | 3823 | -1.45   | 0.1474  | 1.0000 | 0.05  | -3.8390  | 0.5760  |
| set1  | 3dd   | 5       | set2 | 3dd    | 2        | -1.3591  | 11.9372           | 3823 | -0.11   | 0.9094  | 1.0000 | 0.05  | -24.7631 | 22.0448 |
| set1  | 3dd   | 5       | set2 | 3dd    | 3        | -1.9555  | 8.4614            | 3823 | -0.23   | 0.8172  | 1.0000 | 0.05  | -18.5448 | 14.6338 |
| set1  | 3dd   | 5       | set2 | 3dd    | 4        | -2.4461  | 2.0631            | 3823 | -1.19   | 0.2358  | 1.0000 | 0.05  | -6.4911  | 1.5988  |
| set1  | 3dd   | 5       | set2 | 3dd    | 5        | 0.1344   | 4.1686            | 3823 | 0.03    | 0.9743  | 1.0000 | 0.05  | -8.0386  | 8.3073  |
| set1  | 3dd   | 5       | set2 | 3dd    | 6        | -0.7064  | 0.8023            | 3823 | -0.88   | 0.3787  | 1.0000 | 0.05  | -2.2795  | 0.8667  |
| set1  | 3dd   | 5       | set2 | 3dd    | 7        | -2.4731  | 2.9310            | 3823 | -0.84   | 0.3989  | 1.0000 | 0.05  | -8.2196  | 3.2734  |
| set1  | 3dd   | 5       | set2 | 3dd    | 8        | -1.4788  | 0.5010            | 3823 | -2.95   | 0.0032  | 0.7087 | 0.05  | -2.4610  | -0.4966 |
| set1  | 3dd   | 5       | set2 | 3dd    | 9        | -1.8262  | 0.5010            | 3823 | -3.65   | 0.0003  | 0.1736 | 0.05  | -2.8084  | -0.8440 |
| set1  | 3dd   | 5       | set2 | 3dp    | 1        | -0.6606  | 3.8535            | 3823 | -0.17   | 0.8639  | 1.0000 | 0.05  | -8.2157  | 6.8944  |
| set1  | 3dd   | 5       | set2 | 3dp    | 2        | -1.4267  | 7.0503            | 3823 | -0.20   | 0.8397  | 1.0000 | 0.05  | -15.2494 | 12.3961 |
| set1  | 3dd   | 5       | set2 | 3dp    | 3        | -2.3597  | 6.3590            | 3823 | -0.37   | 0.7106  | 1.0000 | 0.05  | -14.8271 | 10.1077 |
| set1  | 3dd   | 5       | set2 | 3dp    | 4        | -1.1703  | 2.8829            | 3823 | -0.41   | 0.6848  | 1.0000 | 0.05  | -6.8223  | 4.4818  |
| set1  | 3dd   | 5       | set2 | 3dp    | 5        | -0.5777  | 10.9632           | 3823 | -0.05   | 0.9580  | 1.0000 | 0.05  | -22.0721 | 20.9167 |
| set1  | 3dd   | 5       | set2 | 3dp    | 6        | -1.8601  | 4.6168            | 3823 | -0.40   | 0.6870  | 1.0000 | 0.05  | -10.9117 | 7.1915  |
| set1  | 3dd   | 5       | set2 | 3dp    | 7        | -1.5631  | 2.0322            | 3823 | -0.77   | 0.4418  | 1.0000 | 0.05  | -5.5474  | 2.4212  |
| set1  | 3dd   | 5       | set2 | 3dp    | 8        | -0.8330  | 4.6168            | 3823 | -0.18   | 0.8568  | 1.0000 | 0.05  | -9.8846  | 8.2186  |
| set1  | 3dd   | 5       | set2 | 3dp    | 9        | -1.3865  | 4.6168            | 3823 | -0.30   | 0.7639  | 1.0000 | 0.05  | -10.4381 | 7.6651  |
| set1  | 3dd   | 6       | set1 | 3dd    | 7        | -0.1477  | 5.2622            | 3823 | -0.03   | 0.9776  | 1.0000 | 0.05  | -10.4646 | 10.1693 |
| set1  | 3dd   | 6       | set1 | 3dd    | 8        | -0.6124  | 2.6689            | 3823 | -0.23   | 0.8185  | 1.0000 | 0.05  | -5.8451  | 4.6202  |
| set1  | 3dd   | 6       | set1 | 3dd    | 9        | -2.3262  | 2.6689            | 3823 | -0.87   | 0.3835  | 1.0000 | 0.05  | -7.5589  | 2.9065  |
| set1  | 3dd   | 6       | set1 | 3dp    | 1        | 0.2945   | 0.4163            | 3823 | 0.71    | 0.4793  | 1.0000 | 0.05  | -0.5216  | 1.1106  |
| set1  | 3dd   | 6       | set1 | 3dp    | 2        | 0.01773  | 17.4084           | 3823 | 0.00    | 0.9992  | 1.0000 | 0.05  | -34.1130 | 34.1484 |
| set1  | 3dd   | 6       | set1 | 3dp    | 3        | -0.3812  | 2.4269            | 3823 | -0.16   | 0.8752  | 1.0000 | 0.05  | -5.1393  | 4.3770  |
| set1  | 3dd   | 6       | set1 | 3dp    | 4        | 0.6285   | 3.2194            | 3823 | 0.20    | 0.8452  | 1.0000 | 0.05  | -5.6833  | 6.9403  |
| set1  | 3dd   | 6       | set1 | 3dp    | 5        | 1.5008   | 1.1564            | 3823 | 1.30    | 0.1944  | 1.0000 | 0.05  | -0.7664  | 3.7680  |
| set1  | 3dd   | 6       | set1 | 3dp    | 6        | 0.5404   | 2.2485            | 3823 | 0.24    | 0.8101  | 1.0000 | 0.05  | -3.8679  | 4.9487  |
| set1  | 3dd   | 6       | set1 | 3dp    | 7        | 0.2378   | 7.9012            | 3823 | 0.03    | 0.9760  | 1.0000 | 0.05  | -15.2531 | 15.7287 |
| set1  | 3dd   | 6       | set1 | 3dp    | 8        | 0.4450   | 5.2963            | 3823 | 0.08    | 0.9330  | 1.0000 | 0.05  | -9.9388  | 10.8288 |
| set1  | 3dd   | 6       | set1 | 3dp    | 9        | 0.2816   | 5.2963            | 3823 | 0.05    | 0.9576  | 1.0000 | 0.05  | -10.1022 | 10.6654 |
| set1  | 3dd   | 6       | set2 | 2dd    | 1        | 0.6638   | 1.4821            | 3823 | 0.45    | 0.6543  | 1.0000 | 0.05  | -2.2420  | 3.5697  |
| set1  | 3dd   | 6       | set2 | 2dd    | 2        | 1.0229   | 13.0381           | 3823 | 0.08    | 0.9375  | 1.0000 | 0.05  | -24.5394 | 26.5852 |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |              |              |
|---|-------|---------|------|--------|----------|--------------|--------------|
| set   | media | pair_id | _set | _media | _pair_id | Adj<br>Lower | Adj<br>Upper |
| set1  | 3dd   | 5       | set2 | 2dd    | 7        | -10.4178     | 7.7581       |
| set1  | 3dd   | 5       | set2 | 2dd    | 8        | -3.7810      | 0.1198       |
| set1  | 3dd   | 5       | set2 | 2dd    | 9        | -3.7212      | 0.1795       |
| set1  | 3dd   | 5       | set2 | 3dd    | 1        | -6.1706      | 2.9076       |
| set1  | 3dd   | 5       | set2 | 3dd    | 2        | -49.4833     | 46.7651      |
| set1  | 3dd   | 5       | set2 | 3dd    | 3        | -36.0670     | 32.1561      |
| set1  | 3dd   | 5       | set2 | 3dd    | 4        | -10.7636     | 5.8713       |
| set1  | 3dd   | 5       | set2 | 3dd    | 5        | -16.6711     | 16.9399      |
| set1  | 3dd   | 5       | set2 | 3dd    | 6        | -3.9410      | 2.5282       |
| set1  | 3dd   | 5       | set2 | 3dd    | 7        | -14.2894     | 9.3432       |
| set1  | 3dd   | 5       | set2 | 3dd    | 8        | -3.4984      | 0.5409       |
| set1  | 3dd   | 5       | set2 | 3dd    | 9        | -3.8458      | 0.1935       |
| set1  | 3dd   | 5       | set2 | 3dp    | 1        | -16.1956     | 14.8743      |
| set1  | 3dd   | 5       | set2 | 3dp    | 2        | -29.8495     | 26.9962      |
| set1  | 3dd   | 5       | set2 | 3dp    | 3        | -27.9957     | 23.2762      |
| set1  | 3dd   | 5       | set2 | 3dp    | 4        | -12.7923     | 10.4518      |
| set1  | 3dd   | 5       | set2 | 3dp    | 5        | -44.7753     | 43.6199      |
| set1  | 3dd   | 5       | set2 | 3dp    | 6        | -20.4723     | 16.7522      |
| set1  | 3dd   | 5       | set2 | 3dp    | 7        | -9.7558      | 6.6296       |
| set1  | 3dd   | 5       | set2 | 3dp    | 8        | -19.4453     | 17.7792      |
| set1  | 3dd   | 5       | set2 | 3dp    | 9        | -19.9987     | 17.2257      |
| set1  | 3dd   | 6       | set1 | 3dd    | 7        | -21.3618     | 21.0665      |
| set1  | 3dd   | 6       | set1 | 3dd    | 8        | -11.3720     | 10.1471      |
| set1  | 3dd   | 6       | set1 | 3dd    | 9        | -13.0858     | 8.4334       |
| set1  | 3dd   | 6       | set1 | 3dp    | 1        | -1.3836      | 1.9726       |
| set1  | 3dd   | 6       | set1 | 3dp    | 2        | -70.1632     | 70.1986      |
| set1  | 3dd   | 6       | set1 | 3dp    | 3        | -10.1650     | 9.4027       |
| set1  | 3dd   | 6       | set1 | 3dp    | 4        | -12.3501     | 13.6071      |
| set1  | 3dd   | 6       | set1 | 3dp    | 5        | -3.1611      | 6.1627       |
| set1  | 3dd   | 6       | set1 | 3dp    | 6        | -8.5241      | 9.6050       |
| set1  | 3dd   | 6       | set1 | 3dp    | 7        | -31.6152     | 32.0908      |
| set1  | 3dd   | 6       | set1 | 3dp    | 8        | -20.9065     | 21.7965      |
| set1  | 3dd   | 6       | set1 | 3dp    | 9        | -21.0699     | 21.6331      |
| set1  | 3dd   | 6       | set2 | 2dd    | 1        | -5.3113      | 6.6389       |
| set1  | 3dd   | 6       | set2 | 2dd    | 2        | -51.5393     | 53.5851      |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |          |                |      |         |         |        |       |          |         |
|---|-------|---------|------|--------|----------|----------|----------------|------|---------|---------|--------|-------|----------|---------|
| set   | media | pair_id | _set | _media | _pair_id | Estimate | Standard Error | DF   | t Value | Pr >  t | Adj P  | Alpha | Lower    | Upper   |
| set1  | 3dd   | 6       | set2 | 2dd    | 3        | -0.4923  | 8.7698         | 3823 | -0.06   | 0.9552  | 1.0000 | 0.05  | -17.6863 | 16.7016 |
| set1  | 3dd   | 6       | set2 | 2dd    | 4        | 0.5432   | 0.5882         | 3823 | 0.92    | 0.3558  | 1.0000 | 0.05  | -0.6100  | 1.6964  |
| set1  | 3dd   | 6       | set2 | 2dd    | 5        | 2.8523   | 8.5573         | 3823 | 0.33    | 0.7389  | 1.0000 | 0.05  | -13.9250 | 19.6295 |
| set1  | 3dd   | 6       | set2 | 2dd    | 6        | 3.6146   | 2.2267         | 3823 | 1.62    | 0.1046  | 1.0000 | 0.05  | -0.7512  | 7.9803  |
| set1  | 3dd   | 6       | set2 | 2dd    | 7        | 0.2819   | 0.5610         | 3823 | 0.50    | 0.6153  | 1.0000 | 0.05  | -0.8180  | 1.3819  |
| set1  | 3dd   | 6       | set2 | 2dd    | 8        | -0.2189  | 2.2267         | 3823 | -0.10   | 0.9217  | 1.0000 | 0.05  | -4.5846  | 4.1469  |
| set1  | 3dd   | 6       | set2 | 2dd    | 9        | -0.1591  | 2.2267         | 3823 | -0.07   | 0.9430  | 1.0000 | 0.05  | -4.5248  | 4.2066  |
| set1  | 3dd   | 6       | set2 | 3dd    | 1        | -0.01977 | 0.8803         | 3823 | -0.02   | 0.9821  | 1.0000 | 0.05  | -1.7457  | 1.7061  |
| set1  | 3dd   | 6       | set2 | 3dd    | 2        | 0.2526   | 10.1237        | 3823 | 0.02    | 0.9801  | 1.0000 | 0.05  | -19.5958 | 20.1010 |
| set1  | 3dd   | 6       | set2 | 3dd    | 3        | -0.3437  | 6.6520         | 3823 | -0.05   | 0.9588  | 1.0000 | 0.05  | -13.3856 | 12.6982 |
| set1  | 3dd   | 6       | set2 | 3dd    | 4        | -0.8344  | 0.4695         | 3823 | -1.78   | 0.0756  | 1.0000 | 0.05  | -1.7549  | 0.08613 |
| set1  | 3dd   | 6       | set2 | 3dd    | 5        | 1.7461   | 5.9913         | 3823 | 0.29    | 0.7707  | 1.0000 | 0.05  | -10.0003 | 13.4925 |
| set1  | 3dd   | 6       | set2 | 3dd    | 6        | 0.9053   | 1.1489         | 3823 | 0.79    | 0.4308  | 1.0000 | 0.05  | -1.3472  | 3.1578  |
| set1  | 3dd   | 6       | set2 | 3dd    | 7        | -0.8614  | 1.1781         | 3823 | -0.73   | 0.4647  | 1.0000 | 0.05  | -3.1711  | 1.4484  |
| set1  | 3dd   | 6       | set2 | 3dd    | 8        | 0.1330   | 1.5935         | 3823 | 0.08    | 0.9335  | 1.0000 | 0.05  | -2.9912  | 3.2572  |
| set1  | 3dd   | 6       | set2 | 3dd    | 9        | -0.2144  | 1.5935         | 3823 | -0.13   | 0.8930  | 1.0000 | 0.05  | -3.3386  | 2.9098  |
| set1  | 3dd   | 6       | set2 | 3dp    | 1        | 0.9511   | 5.6672         | 3823 | 0.17    | 0.8667  | 1.0000 | 0.05  | -10.1600 | 12.0622 |
| set1  | 3dd   | 6       | set2 | 3dp    | 2        | 0.1851   | 5.2402         | 3823 | 0.04    | 0.9718  | 1.0000 | 0.05  | -10.0888 | 10.4590 |
| set1  | 3dd   | 6       | set2 | 3dp    | 3        | -0.7480  | 4.5495         | 3823 | -0.16   | 0.8694  | 1.0000 | 0.05  | -9.6676  | 8.1716  |
| set1  | 3dd   | 6       | set2 | 3dp    | 4        | 0.4415   | 4.6942         | 3823 | 0.09    | 0.9251  | 1.0000 | 0.05  | -8.7620  | 9.6449  |
| set1  | 3dd   | 6       | set2 | 3dp    | 5        | 1.0341   | 12.7795        | 3823 | 0.08    | 0.9355  | 1.0000 | 0.05  | -24.0213 | 26.0894 |
| set1  | 3dd   | 6       | set2 | 3dp    | 6        | -0.2483  | 6.4315         | 3823 | -0.04   | 0.9692  | 1.0000 | 0.05  | -12.8578 | 12.3611 |
| set1  | 3dd   | 6       | set2 | 3dp    | 7        | 0.04862  | 3.8325         | 3823 | 0.01    | 0.9899  | 1.0000 | 0.05  | -7.4653  | 7.5625  |
| set1  | 3dd   | 6       | set2 | 3dp    | 8        | 0.7787   | 6.4315         | 3823 | 0.12    | 0.9036  | 1.0000 | 0.05  | -11.8308 | 13.3882 |
| set1  | 3dd   | 6       | set2 | 3dp    | 9        | 0.2252   | 6.4315         | 3823 | 0.04    | 0.9721  | 1.0000 | 0.05  | -12.3842 | 12.8347 |
| set1  | 3dd   | 7       | set1 | 3dd    | 8        | -0.4648  | 2.6176         | 3823 | -0.18   | 0.8591  | 1.0000 | 0.05  | -5.5969  | 4.6673  |
| set1  | 3dd   | 7       | set1 | 3dd    | 9        | -2.1785  | 2.6176         | 3823 | -0.83   | 0.4053  | 1.0000 | 0.05  | -7.3106  | 2.9535  |
| set1  | 3dd   | 7       | set1 | 3dp    | 1        | 0.4421   | 5.4294         | 3823 | 0.08    | 0.9351  | 1.0000 | 0.05  | -10.2027 | 11.0870 |
| set1  | 3dd   | 7       | set1 | 3dp    | 2        | 0.1654   | 22.6574        | 3823 | 0.01    | 0.9942  | 1.0000 | 0.05  | -44.2564 | 44.5872 |
| set1  | 3dd   | 7       | set1 | 3dp    | 3        | -0.2335  | 2.8865         | 3823 | -0.08   | 0.9355  | 1.0000 | 0.05  | -5.8928  | 5.4257  |
| set1  | 3dd   | 7       | set1 | 3dp    | 4        | 0.7761   | 2.0958         | 3823 | 0.37    | 0.7112  | 1.0000 | 0.05  | -3.3328  | 4.8851  |
| set1  | 3dd   | 7       | set1 | 3dp    | 5        | 1.6485   | 6.3303         | 3823 | 0.26    | 0.7946  | 1.0000 | 0.05  | -10.7626 | 14.0595 |
| set1  | 3dd   | 7       | set1 | 3dp    | 6        | 0.6881   | 3.0539         | 3823 | 0.23    | 0.8217  | 1.0000 | 0.05  | -5.2993  | 6.6754  |
| set1  | 3dd   | 7       | set1 | 3dp    | 7        | 0.3855   | 2.6552         | 3823 | 0.15    | 0.8846  | 1.0000 | 0.05  | -4.8204  | 5.5913  |
| set1  | 3dd   | 7       | set1 | 3dp    | 8        | 0.5927   | 0.3028         | 3823 | 1.96    | 0.0504  | 0.9997 | 0.05  | -0.00101 | 1.1863  |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |              |              |
|---|-------|---------|------|--------|----------|--------------|--------------|
| set   | media | pair_id | _set | _media | _pair_id | Adj<br>Lower | Adj<br>Upper |
| set1  | 3dd   | 6       | set2 | 2dd    | 3        | -35.8472     | 34.8626      |
| set1  | 3dd   | 6       | set2 | 2dd    | 4        | -1.8281      | 2.9144       |
| set1  | 3dd   | 6       | set2 | 2dd    | 5        | -31.6457     | 37.3503      |
| set1  | 3dd   | 6       | set2 | 2dd    | 6        | -5.3624      | 12.5915      |
| set1  | 3dd   | 6       | set2 | 2dd    | 7        | -1.9798      | 2.5437       |
| set1  | 3dd   | 6       | set2 | 2dd    | 8        | -9.1958      | 8.7581       |
| set1  | 3dd   | 6       | set2 | 2dd    | 9        | -9.1361      | 8.8178       |
| set1  | 3dd   | 6       | set2 | 3dd    | 1        | -3.5686      | 3.5291       |
| set1  | 3dd   | 6       | set2 | 3dd    | 2        | -40.5605     | 41.0657      |
| set1  | 3dd   | 6       | set2 | 3dd    | 3        | -27.1610     | 26.4736      |
| set1  | 3dd   | 6       | set2 | 3dd    | 4        | -2.7272      | 1.0584       |
| set1  | 3dd   | 6       | set2 | 3dd    | 5        | -22.4074     | 25.8996      |
| set1  | 3dd   | 6       | set2 | 3dd    | 6        | -3.7264      | 5.5370       |
| set1  | 3dd   | 6       | set2 | 3dd    | 7        | -5.6108      | 3.8880       |
| set1  | 3dd   | 6       | set2 | 3dd    | 8        | -6.2911      | 6.5570       |
| set1  | 3dd   | 6       | set2 | 3dd    | 9        | -6.6385      | 6.2096       |
| set1  | 3dd   | 6       | set2 | 3dp    | 1        | -21.8959     | 23.7982      |
| set1  | 3dd   | 6       | set2 | 3dp    | 2        | -20.9405     | 21.3107      |
| set1  | 3dd   | 6       | set2 | 3dp    | 3        | -19.0888     | 17.5929      |
| set1  | 3dd   | 6       | set2 | 3dp    | 4        | -18.4830     | 19.3660      |
| set1  | 3dd   | 6       | set2 | 3dp    | 5        | -50.4857     | 52.5538      |
| set1  | 3dd   | 6       | set2 | 3dp    | 6        | -26.1764     | 25.6798      |
| set1  | 3dd   | 6       | set2 | 3dp    | 7        | -15.4018     | 15.4990      |
| set1  | 3dd   | 6       | set2 | 3dp    | 8        | -25.1494     | 26.7068      |
| set1  | 3dd   | 6       | set2 | 3dp    | 9        | -25.7029     | 26.1533      |
| set1  | 3dd   | 7       | set1 | 3dd    | 8        | -11.0176     | 10.0880      |
| set1  | 3dd   | 7       | set1 | 3dd    | 9        | -12.7313     | 8.3742       |
| set1  | 3dd   | 7       | set1 | 3dp    | 1        | -21.4462     | 22.3305      |
| set1  | 3dd   | 7       | set1 | 3dp    | 2        | -91.1765     | 91.5072      |
| set1  | 3dd   | 7       | set1 | 3dp    | 3        | -11.8703     | 11.4033      |
| set1  | 3dd   | 7       | set1 | 3dp    | 4        | -7.6729      | 9.2252       |
| set1  | 3dd   | 7       | set1 | 3dp    | 5        | -23.8716     | 27.1685      |
| set1  | 3dd   | 7       | set1 | 3dp    | 6        | -11.6233     | 12.9995      |
| set1  | 3dd   | 7       | set1 | 3dp    | 7        | -10.3190     | 11.0899      |
| set1  | 3dd   | 7       | set1 | 3dp    | 8        | -0.6281      | 1.8134       |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |          |                |      |         |         |        |       |          |         |
|---|-------|---------|------|--------|----------|----------|----------------|------|---------|---------|--------|-------|----------|---------|
| set   | media | pair_id | _set | _media | _pair_id | Estimate | Standard Error | DF   | t Value | Pr >  t | Adj P  | Alpha | Lower    | Upper   |
| set1  | 3dd   | 7       | set1 | 3dp    | 9        | 0.4293   | 0.3028         | 3823 | 1.42    | 0.1564  | 1.0000 | 0.05  | -0.1644  | 1.0229  |
| set1  | 3dd   | 7       | set2 | 2dd    | 1        | 0.8115   | 6.6883         | 3823 | 0.12    | 0.9034  | 1.0000 | 0.05  | -12.3016 | 13.9245 |
| set1  | 3dd   | 7       | set2 | 2dd    | 2        | 1.1705   | 7.7962         | 3823 | 0.15    | 0.8807  | 1.0000 | 0.05  | -14.1145 | 16.4556 |
| set1  | 3dd   | 7       | set2 | 2dd    | 3        | -0.3447  | 3.5306         | 3823 | -0.10   | 0.9222  | 1.0000 | 0.05  | -7.2666  | 6.5773  |
| set1  | 3dd   | 7       | set2 | 2dd    | 4        | 0.6908   | 5.7140         | 3823 | 0.12    | 0.9038  | 1.0000 | 0.05  | -10.5120 | 11.8937 |
| set1  | 3dd   | 7       | set2 | 2dd    | 5        | 2.9999   | 13.8004        | 3823 | 0.22    | 0.8279  | 1.0000 | 0.05  | -24.0568 | 30.0567 |
| set1  | 3dd   | 7       | set2 | 2dd    | 6        | 3.7622   | 7.4490         | 3823 | 0.51    | 0.6135  | 1.0000 | 0.05  | -10.8422 | 18.3666 |
| set1  | 3dd   | 7       | set2 | 2dd    | 7        | 0.4296   | 4.8399         | 3823 | 0.09    | 0.9293  | 1.0000 | 0.05  | -9.0595  | 9.9186  |
| set1  | 3dd   | 7       | set2 | 2dd    | 8        | -0.07120 | 7.4490         | 3823 | -0.01   | 0.9924  | 1.0000 | 0.05  | -14.6756 | 14.5332 |
| set1  | 3dd   | 7       | set2 | 2dd    | 9        | -0.01147 | 7.4490         | 3823 | -0.00   | 0.9988  | 1.0000 | 0.05  | -14.6159 | 14.5929 |
| set1  | 3dd   | 7       | set2 | 3dd    | 1        | 0.1279   | 6.0159         | 3823 | 0.02    | 0.9830  | 1.0000 | 0.05  | -11.6669 | 11.9227 |
| set1  | 3dd   | 7       | set2 | 3dd    | 2        | 0.4003   | 4.8883         | 3823 | 0.08    | 0.9347  | 1.0000 | 0.05  | -9.1837  | 9.9842  |
| set1  | 3dd   | 7       | set2 | 3dd    | 3        | -0.1961  | 1.4392         | 3823 | -0.14   | 0.8916  | 1.0000 | 0.05  | -3.0177  | 2.6256  |
| set1  | 3dd   | 7       | set2 | 3dd    | 4        | -0.6867  | 5.0403         | 3823 | -0.14   | 0.8916  | 1.0000 | 0.05  | -10.5686 | 9.1951  |
| set1  | 3dd   | 7       | set2 | 3dd    | 5        | 1.8938   | 11.2333        | 3823 | 0.17    | 0.8661  | 1.0000 | 0.05  | -20.1301 | 23.9177 |
| set1  | 3dd   | 7       | set2 | 3dd    | 6        | 1.0530   | 6.3609         | 3823 | 0.17    | 0.8685  | 1.0000 | 0.05  | -11.4182 | 13.5241 |
| set1  | 3dd   | 7       | set2 | 3dd    | 7        | -0.7137  | 4.1686         | 3823 | -0.17   | 0.8641  | 1.0000 | 0.05  | -8.8866  | 7.4592  |
| set1  | 3dd   | 7       | set2 | 3dd    | 8        | 0.2806   | 6.7785         | 3823 | 0.04    | 0.9670  | 1.0000 | 0.05  | -13.0092 | 13.5705 |
| set1  | 3dd   | 7       | set2 | 3dd    | 9        | -0.06677 | 6.7785         | 3823 | -0.01   | 0.9921  | 1.0000 | 0.05  | -13.3566 | 13.2231 |
| set1  | 3dd   | 7       | set2 | 3dp    | 1        | 1.0988   | 10.9117        | 3823 | 0.10    | 0.9198  | 1.0000 | 0.05  | -20.2946 | 22.4921 |
| set1  | 3dd   | 7       | set2 | 3dp    | 2        | 0.3327   | 0.6302         | 3823 | 0.53    | 0.5975  | 1.0000 | 0.05  | -0.9028  | 1.5682  |
| set1  | 3dd   | 7       | set2 | 3dp    | 3        | -0.6003  | 0.8146         | 3823 | -0.74   | 0.4612  | 1.0000 | 0.05  | -2.1975  | 0.9968  |
| set1  | 3dd   | 7       | set2 | 3dp    | 4        | 0.5891   | 9.9373         | 3823 | 0.06    | 0.9527  | 1.0000 | 0.05  | -18.8939 | 20.0721 |
| set1  | 3dd   | 7       | set2 | 3dp    | 5        | 1.1817   | 18.0264        | 3823 | 0.07    | 0.9477  | 1.0000 | 0.05  | -34.1605 | 36.5239 |
| set1  | 3dd   | 7       | set2 | 3dp    | 6        | -0.1007  | 11.6749        | 3823 | -0.01   | 0.9931  | 1.0000 | 0.05  | -22.9904 | 22.7890 |
| set1  | 3dd   | 7       | set2 | 3dp    | 7        | 0.1963   | 9.0669         | 3823 | 0.02    | 0.9827  | 1.0000 | 0.05  | -17.5801 | 17.9727 |
| set1  | 3dd   | 7       | set2 | 3dp    | 8        | 0.9264   | 11.6749        | 3823 | 0.08    | 0.9368  | 1.0000 | 0.05  | -21.9633 | 23.8161 |
| set1  | 3dd   | 7       | set2 | 3dp    | 9        | 0.3729   | 11.6749        | 3823 | 0.03    | 0.9745  | 1.0000 | 0.05  | -22.5168 | 23.2626 |
| set1  | 3dd   | 8       | set1 | 3dd    | 9        | -1.7138  | 0              | 3823 | -Inf    | <.0001  | .      | .     | .        | .       |
| set1  | 3dd   | 8       | set1 | 3dp    | 1        | 0.9069   | 2.8372         | 3823 | 0.32    | 0.7492  | 1.0000 | 0.05  | -4.6556  | 6.4694  |
| set1  | 3dd   | 8       | set1 | 3dp    | 2        | 0.6302   | 20.0493        | 3823 | 0.03    | 0.9749  | 1.0000 | 0.05  | -38.6782 | 39.9386 |
| set1  | 3dd   | 8       | set1 | 3dp    | 3        | 0.2313   | 0.4915         | 3823 | 0.47    | 0.6380  | 1.0000 | 0.05  | -0.7323  | 1.1949  |
| set1  | 3dd   | 8       | set1 | 3dp    | 4        | 1.2409   | 0.7296         | 3823 | 1.70    | 0.0891  | 1.0000 | 0.05  | -0.1895  | 2.6714  |
| set1  | 3dd   | 8       | set1 | 3dp    | 5        | 2.1132   | 3.7237         | 3823 | 0.57    | 0.5704  | 1.0000 | 0.05  | -5.1873  | 9.4138  |
| set1  | 3dd   | 8       | set1 | 3dp    | 6        | 1.1529   | 0.5885         | 3823 | 1.96    | 0.0502  | 0.9997 | 0.05  | -0.00095 | 2.3067  |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |              |              |
|---|-------|---------|------|--------|----------|--------------|--------------|
| set   | media | pair_id | _set | _media | _pair_id | Adj<br>Lower | Adj<br>Upper |
| set1  | 3dd   | 7       | set1 | 3dp    | 9        | -0.7914      | 1.6500       |
| set1  | 3dd   | 7       | set2 | 2dd    | 1        | -26.1521     | 27.7750      |
| set1  | 3dd   | 7       | set2 | 2dd    | 2        | -30.2593     | 32.6003      |
| set1  | 3dd   | 7       | set2 | 2dd    | 3        | -14.5779     | 13.8885      |
| set1  | 3dd   | 7       | set2 | 2dd    | 4        | -22.3449     | 23.7266      |
| set1  | 3dd   | 7       | set2 | 2dd    | 5        | -52.6353     | 58.6351      |
| set1  | 3dd   | 7       | set2 | 2dd    | 6        | -26.2680     | 33.7924      |
| set1  | 3dd   | 7       | set2 | 2dd    | 7        | -19.0822     | 19.9413      |
| set1  | 3dd   | 7       | set2 | 2dd    | 8        | -30.1014     | 29.9590      |
| set1  | 3dd   | 7       | set2 | 2dd    | 9        | -30.0416     | 30.0187      |
| set1  | 3dd   | 7       | set2 | 3dd    | 1        | -24.1250     | 24.3808      |
| set1  | 3dd   | 7       | set2 | 3dd    | 2        | -19.3067     | 20.1072      |
| set1  | 3dd   | 7       | set2 | 3dd    | 3        | -5.9980      | 5.6059       |
| set1  | 3dd   | 7       | set2 | 3dd    | 4        | -21.0062     | 19.6328      |
| set1  | 3dd   | 7       | set2 | 3dd    | 5        | -43.3927     | 47.1802      |
| set1  | 3dd   | 7       | set2 | 3dd    | 6        | -24.5907     | 26.6967      |
| set1  | 3dd   | 7       | set2 | 3dd    | 7        | -17.5192     | 16.0918      |
| set1  | 3dd   | 7       | set2 | 3dd    | 8        | -27.0464     | 27.6077      |
| set1  | 3dd   | 7       | set2 | 3dd    | 9        | -27.3938     | 27.2603      |
| set1  | 3dd   | 7       | set2 | 3dp    | 1        | -42.8910     | 45.0886      |
| set1  | 3dd   | 7       | set2 | 3dp    | 2        | -2.2078      | 2.8732       |
| set1  | 3dd   | 7       | set2 | 3dp    | 3        | -3.8844      | 2.6838       |
| set1  | 3dd   | 7       | set2 | 3dp    | 4        | -39.4726     | 40.6509      |
| set1  | 3dd   | 7       | set2 | 3dp    | 5        | -71.4904     | 73.8538      |
| set1  | 3dd   | 7       | set2 | 3dp    | 6        | -47.1674     | 46.9660      |
| set1  | 3dd   | 7       | set2 | 3dp    | 7        | -36.3563     | 36.7488      |
| set1  | 3dd   | 7       | set2 | 3dp    | 8        | -46.1403     | 47.9931      |
| set1  | 3dd   | 7       | set2 | 3dp    | 9        | -46.6938     | 47.4396      |
| set1  | 3dd   | 8       | set1 | 3dd    | 9        | .            | .            |
| set1  | 3dd   | 8       | set1 | 3dp    | 1        | -10.5310     | 12.3448      |
| set1  | 3dd   | 8       | set1 | 3dp    | 2        | -80.1973     | 81.4577      |
| set1  | 3dd   | 8       | set1 | 3dp    | 3        | -1.7501      | 2.2126       |
| set1  | 3dd   | 8       | set1 | 3dp    | 4        | -1.7004      | 4.1823       |
| set1  | 3dd   | 8       | set1 | 3dp    | 5        | -12.8985     | 17.1250      |
| set1  | 3dd   | 8       | set1 | 3dp    | 6        | -1.2197      | 3.5254       |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |          |                |      |         |         |        |       |          |         |
|---|-------|---------|------|--------|----------|----------|----------------|------|---------|---------|--------|-------|----------|---------|
| set   | media | pair_id | _set | _media | _pair_id | Estimate | Standard Error | DF   | t Value | Pr >  t | Adj P  | Alpha | Lower    | Upper   |
| set1  | 3dd   | 8       | set1 | 3dp    | 7        | 0.8503   | 5.2643         | 3823 | 0.16    | 0.8717  | 1.0000 | 0.05  | -9.4709  | 11.1714 |
| set1  | 3dd   | 8       | set1 | 3dp    | 8        | 1.0574   | 2.6552         | 3823 | 0.40    | 0.6905  | 1.0000 | 0.05  | -4.1484  | 6.2633  |
| set1  | 3dd   | 8       | set1 | 3dp    | 9        | 0.8941   | 2.6552         | 3823 | 0.34    | 0.7364  | 1.0000 | 0.05  | -4.3118  | 6.0999  |
| set1  | 3dd   | 8       | set2 | 2dd    | 1        | 1.2763   | 4.0830         | 3823 | 0.31    | 0.7546  | 1.0000 | 0.05  | -6.7288  | 9.2813  |
| set1  | 3dd   | 8       | set2 | 2dd    | 2        | 1.6353   | 10.4040        | 3823 | 0.16    | 0.8751  | 1.0000 | 0.05  | -18.7626 | 22.0333 |
| set1  | 3dd   | 8       | set2 | 2dd    | 3        | 0.1201   | 6.1307         | 3823 | 0.02    | 0.9844  | 1.0000 | 0.05  | -11.8997 | 12.1399 |
| set1  | 3dd   | 8       | set2 | 2dd    | 4        | 1.1556   | 3.1132         | 3823 | 0.37    | 0.7105  | 1.0000 | 0.05  | -4.9480  | 7.2593  |
| set1  | 3dd   | 8       | set2 | 2dd    | 5        | 3.4647   | 11.1902        | 3823 | 0.31    | 0.7569  | 1.0000 | 0.05  | -18.4747 | 25.4041 |
| set1  | 3dd   | 8       | set2 | 2dd    | 6        | 4.2270   | 4.8399         | 3823 | 0.87    | 0.3825  | 1.0000 | 0.05  | -5.2620  | 13.7160 |
| set1  | 3dd   | 8       | set2 | 2dd    | 7        | 0.8944   | 2.2507         | 3823 | 0.40    | 0.6911  | 1.0000 | 0.05  | -3.5183  | 5.3070  |
| set1  | 3dd   | 8       | set2 | 2dd    | 8        | 0.3936   | 4.8399         | 3823 | 0.08    | 0.9352  | 1.0000 | 0.05  | -9.0954  | 9.8826  |
| set1  | 3dd   | 8       | set2 | 2dd    | 9        | 0.4533   | 4.8399         | 3823 | 0.09    | 0.9254  | 1.0000 | 0.05  | -9.0357  | 9.9424  |
| set1  | 3dd   | 8       | set2 | 3dd    | 1        | 0.5927   | 3.4089         | 3823 | 0.17    | 0.8620  | 1.0000 | 0.05  | -6.0908  | 7.2761  |
| set1  | 3dd   | 8       | set2 | 3dd    | 2        | 0.8650   | 7.4918         | 3823 | 0.12    | 0.9081  | 1.0000 | 0.05  | -13.8232 | 15.5533 |
| set1  | 3dd   | 8       | set2 | 3dd    | 3        | 0.2687   | 4.0115         | 3823 | 0.07    | 0.9466  | 1.0000 | 0.05  | -7.5962  | 8.1336  |
| set1  | 3dd   | 8       | set2 | 3dd    | 4        | -0.2219  | 2.4368         | 3823 | -0.09   | 0.9274  | 1.0000 | 0.05  | -4.9996  | 4.5557  |
| set1  | 3dd   | 8       | set2 | 3dd    | 5        | 2.3586   | 8.6261         | 3823 | 0.27    | 0.7845  | 1.0000 | 0.05  | -14.5537 | 19.2708 |
| set1  | 3dd   | 8       | set2 | 3dd    | 6        | 1.5178   | 3.7568         | 3823 | 0.40    | 0.6862  | 1.0000 | 0.05  | -5.8478  | 8.8833  |
| set1  | 3dd   | 8       | set2 | 3dd    | 7        | -0.2489  | 1.5845         | 3823 | -0.16   | 0.8752  | 1.0000 | 0.05  | -3.3554  | 2.8576  |
| set1  | 3dd   | 8       | set2 | 3dd    | 8        | 0.7454   | 4.1686         | 3823 | 0.18    | 0.8581  | 1.0000 | 0.05  | -7.4275  | 8.9183  |
| set1  | 3dd   | 8       | set2 | 3dd    | 9        | 0.3980   | 4.1686         | 3823 | 0.10    | 0.9239  | 1.0000 | 0.05  | -7.7749  | 8.5709  |
| set1  | 3dd   | 8       | set2 | 3dp    | 1        | 1.5636   | 8.3048         | 3823 | 0.19    | 0.8507  | 1.0000 | 0.05  | -14.7187 | 17.8458 |
| set1  | 3dd   | 8       | set2 | 3dp    | 2        | 0.7975   | 2.6651         | 3823 | 0.30    | 0.7648  | 1.0000 | 0.05  | -4.4277  | 6.0228  |
| set1  | 3dd   | 8       | set2 | 3dp    | 3        | -0.1355  | 1.9370         | 3823 | -0.07   | 0.9442  | 1.0000 | 0.05  | -3.9331  | 3.6621  |
| set1  | 3dd   | 8       | set2 | 3dp    | 4        | 1.0539   | 7.3321         | 3823 | 0.14    | 0.8857  | 1.0000 | 0.05  | -13.3213 | 15.4292 |
| set1  | 3dd   | 8       | set2 | 3dp    | 5        | 1.6465   | 15.4172        | 3823 | 0.11    | 0.9150  | 1.0000 | 0.05  | -28.5802 | 31.8732 |
| set1  | 3dd   | 8       | set2 | 3dp    | 6        | 0.3641   | 9.0669         | 3823 | 0.04    | 0.9680  | 1.0000 | 0.05  | -17.4123 | 18.1405 |
| set1  | 3dd   | 8       | set2 | 3dp    | 7        | 0.6611   | 6.4666         | 3823 | 0.10    | 0.9186  | 1.0000 | 0.05  | -12.0173 | 13.3394 |
| set1  | 3dd   | 8       | set2 | 3dp    | 8        | 1.3912   | 9.0669         | 3823 | 0.15    | 0.8781  | 1.0000 | 0.05  | -16.3853 | 19.1676 |
| set1  | 3dd   | 8       | set2 | 3dp    | 9        | 0.8377   | 9.0669         | 3823 | 0.09    | 0.9264  | 1.0000 | 0.05  | -16.9387 | 18.6141 |
| set1  | 3dd   | 9       | set1 | 3dp    | 1        | 2.6207   | 2.8372         | 3823 | 0.92    | 0.3557  | 1.0000 | 0.05  | -2.9418  | 8.1832  |
| set1  | 3dd   | 9       | set1 | 3dp    | 2        | 2.3439   | 20.0493        | 3823 | 0.12    | 0.9069  | 1.0000 | 0.05  | -36.9645 | 41.6523 |
| set1  | 3dd   | 9       | set1 | 3dp    | 3        | 1.9450   | 0.4915         | 3823 | 3.96    | <.0001  | 0.0649 | 0.05  | 0.9814   | 2.9086  |
| set1  | 3dd   | 9       | set1 | 3dp    | 4        | 2.9547   | 0.7296         | 3823 | 4.05    | <.0001  | 0.0468 | 0.05  | 1.5242   | 4.3851  |
| set1  | 3dd   | 9       | set1 | 3dp    | 5        | 3.8270   | 3.7237         | 3823 | 1.03    | 0.3041  | 1.0000 | 0.05  | -3.4736  | 11.1276 |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |              |              |
|---|-------|---------|------|--------|----------|--------------|--------------|
| set   | media | pair_id | _set | _media | _pair_id | Adj<br>Lower | Adj<br>Upper |
| set1  | 3dd   | 8       | set1 | 3dp    | 7        | -20.3724     | 22.0729      |
| set1  | 3dd   | 8       | set1 | 3dp    | 8        | -9.6470      | 11.7619      |
| set1  | 3dd   | 8       | set1 | 3dp    | 9        | -9.8104      | 11.5985      |
| set1  | 3dd   | 8       | set2 | 2dd    | 1        | -15.1840     | 17.7365      |
| set1  | 3dd   | 8       | set2 | 2dd    | 2        | -40.3077     | 43.5784      |
| set1  | 3dd   | 8       | set2 | 2dd    | 3        | -24.5954     | 24.8357      |
| set1  | 3dd   | 8       | set2 | 2dd    | 4        | -11.3949     | 13.7062      |
| set1  | 3dd   | 8       | set2 | 2dd    | 5        | -41.6480     | 48.5774      |
| set1  | 3dd   | 8       | set2 | 2dd    | 6        | -15.2847     | 23.7387      |
| set1  | 3dd   | 8       | set2 | 2dd    | 7        | -8.1791      | 9.9678       |
| set1  | 3dd   | 8       | set2 | 2dd    | 8        | -19.1181     | 19.9053      |
| set1  | 3dd   | 8       | set2 | 2dd    | 9        | -19.0584     | 19.9651      |
| set1  | 3dd   | 8       | set2 | 3dd    | 1        | -13.1501     | 14.3355      |
| set1  | 3dd   | 8       | set2 | 3dd    | 2        | -29.3375     | 31.0676      |
| set1  | 3dd   | 8       | set2 | 3dd    | 3        | -15.9034     | 16.4408      |
| set1  | 3dd   | 8       | set2 | 3dd    | 4        | -10.0459     | 9.6020       |
| set1  | 3dd   | 8       | set2 | 3dd    | 5        | -32.4171     | 37.1343      |
| set1  | 3dd   | 8       | set2 | 3dd    | 6        | -13.6276     | 16.6631      |
| set1  | 3dd   | 8       | set2 | 3dd    | 7        | -6.6366      | 6.1388       |
| set1  | 3dd   | 8       | set2 | 3dd    | 8        | -16.0601     | 17.5509      |
| set1  | 3dd   | 8       | set2 | 3dd    | 9        | -16.4075     | 17.2035      |
| set1  | 3dd   | 8       | set2 | 3dp    | 1        | -31.9167     | 35.0438      |
| set1  | 3dd   | 8       | set2 | 3dp    | 2        | -9.9468      | 11.5419      |
| set1  | 3dd   | 8       | set2 | 3dp    | 3        | -7.9443      | 7.6733       |
| set1  | 3dd   | 8       | set2 | 3dp    | 4        | -28.5050     | 30.6129      |
| set1  | 3dd   | 8       | set2 | 3dp    | 5        | -60.5068     | 63.7998      |
| set1  | 3dd   | 8       | set2 | 3dp    | 6        | -36.1884     | 36.9167      |
| set1  | 3dd   | 8       | set2 | 3dp    | 7        | -25.4086     | 26.7307      |
| set1  | 3dd   | 8       | set2 | 3dp    | 8        | -35.1614     | 37.9437      |
| set1  | 3dd   | 8       | set2 | 3dp    | 9        | -35.7149     | 37.3902      |
| set1  | 3dd   | 9       | set1 | 3dp    | 1        | -8.8172      | 14.0586      |
| set1  | 3dd   | 9       | set1 | 3dp    | 2        | -78.4836     | 83.1714      |
| set1  | 3dd   | 9       | set1 | 3dp    | 3        | -0.03634     | 3.9264       |
| set1  | 3dd   | 9       | set1 | 3dp    | 4        | 0.01336      | 5.8960       |
| set1  | 3dd   | 9       | set1 | 3dp    | 5        | -11.1847     | 18.8387      |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |          |                |      |         |         |        |       |          |         |
|---|-------|---------|------|--------|----------|----------|----------------|------|---------|---------|--------|-------|----------|---------|
| set   | media | pair_id | _set | _media | _pair_id | Estimate | Standard Error | DF   | t Value | Pr >  t | Adj P  | Alpha | Lower    | Upper   |
| set1  | 3dd   | 9       | set1 | 3dp    | 6        | 2.8666   | 0.5885         | 3823 | 4.87    | <.0001  | 0.0014 | 0.05  | 1.7128   | 4.0205  |
| set1  | 3dd   | 9       | set1 | 3dp    | 7        | 2.5640   | 5.2643         | 3823 | 0.49    | 0.6262  | 1.0000 | 0.05  | -7.7571  | 12.8851 |
| set1  | 3dd   | 9       | set1 | 3dp    | 8        | 2.7712   | 2.6552         | 3823 | 1.04    | 0.2967  | 1.0000 | 0.05  | -2.4346  | 7.9770  |
| set1  | 3dd   | 9       | set1 | 3dp    | 9        | 2.6078   | 2.6552         | 3823 | 0.98    | 0.3261  | 1.0000 | 0.05  | -2.5980  | 7.8136  |
| set1  | 3dd   | 9       | set2 | 2dd    | 1        | 2.9900   | 4.0830         | 3823 | 0.73    | 0.4640  | 1.0000 | 0.05  | -5.0150  | 10.9950 |
| set1  | 3dd   | 9       | set2 | 2dd    | 2        | 3.3491   | 10.4040        | 3823 | 0.32    | 0.7475  | 1.0000 | 0.05  | -17.0489 | 23.7470 |
| set1  | 3dd   | 9       | set2 | 2dd    | 3        | 1.8339   | 6.1307         | 3823 | 0.30    | 0.7649  | 1.0000 | 0.05  | -10.1859 | 13.8536 |
| set1  | 3dd   | 9       | set2 | 2dd    | 4        | 2.8694   | 3.1132         | 3823 | 0.92    | 0.3568  | 1.0000 | 0.05  | -3.2343  | 8.9730  |
| set1  | 3dd   | 9       | set2 | 2dd    | 5        | 5.1785   | 11.1902        | 3823 | 0.46    | 0.6436  | 1.0000 | 0.05  | -16.7609 | 27.1179 |
| set1  | 3dd   | 9       | set2 | 2dd    | 6        | 5.9407   | 4.8399         | 3823 | 1.23    | 0.2197  | 1.0000 | 0.05  | -3.5483  | 15.4298 |
| set1  | 3dd   | 9       | set2 | 2dd    | 7        | 2.6081   | 2.2507         | 3823 | 1.16    | 0.2466  | 1.0000 | 0.05  | -1.8045  | 7.0208  |
| set1  | 3dd   | 9       | set2 | 2dd    | 8        | 2.1073   | 4.8399         | 3823 | 0.44    | 0.6633  | 1.0000 | 0.05  | -7.3817  | 11.5964 |
| set1  | 3dd   | 9       | set2 | 2dd    | 9        | 2.1671   | 4.8399         | 3823 | 0.45    | 0.6544  | 1.0000 | 0.05  | -7.3220  | 11.6561 |
| set1  | 3dd   | 9       | set2 | 3dd    | 1        | 2.3064   | 3.4089         | 3823 | 0.68    | 0.4987  | 1.0000 | 0.05  | -4.3770  | 8.9899  |
| set1  | 3dd   | 9       | set2 | 3dd    | 2        | 2.5788   | 7.4918         | 3823 | 0.34    | 0.7307  | 1.0000 | 0.05  | -12.1094 | 17.2670 |
| set1  | 3dd   | 9       | set2 | 3dd    | 3        | 1.9825   | 4.0115         | 3823 | 0.49    | 0.6212  | 1.0000 | 0.05  | -5.8824  | 9.8474  |
| set1  | 3dd   | 9       | set2 | 3dd    | 4        | 1.4918   | 2.4368         | 3823 | 0.61    | 0.5404  | 1.0000 | 0.05  | -3.2858  | 6.2694  |
| set1  | 3dd   | 9       | set2 | 3dd    | 5        | 4.0723   | 8.6261         | 3823 | 0.47    | 0.6369  | 1.0000 | 0.05  | -12.8400 | 20.9846 |
| set1  | 3dd   | 9       | set2 | 3dd    | 6        | 3.2315   | 3.7568         | 3823 | 0.86    | 0.3897  | 1.0000 | 0.05  | -4.1340  | 10.5971 |
| set1  | 3dd   | 9       | set2 | 3dd    | 7        | 1.4648   | 1.5845         | 3823 | 0.92    | 0.3553  | 1.0000 | 0.05  | -1.6417  | 4.5713  |
| set1  | 3dd   | 9       | set2 | 3dd    | 8        | 2.4592   | 4.1686         | 3823 | 0.59    | 0.5553  | 1.0000 | 0.05  | -5.7137  | 10.6321 |
| set1  | 3dd   | 9       | set2 | 3dd    | 9        | 2.1118   | 4.1686         | 3823 | 0.51    | 0.6125  | 1.0000 | 0.05  | -6.0611  | 10.2847 |
| set1  | 3dd   | 9       | set2 | 3dp    | 1        | 3.2773   | 8.3048         | 3823 | 0.39    | 0.6931  | 1.0000 | 0.05  | -13.0050 | 19.5596 |
| set1  | 3dd   | 9       | set2 | 3dp    | 2        | 2.5113   | 2.6651         | 3823 | 0.94    | 0.3461  | 1.0000 | 0.05  | -2.7140  | 7.7365  |
| set1  | 3dd   | 9       | set2 | 3dp    | 3        | 1.5782   | 1.9370         | 3823 | 0.81    | 0.4152  | 1.0000 | 0.05  | -2.2194  | 5.3758  |
| set1  | 3dd   | 9       | set2 | 3dp    | 4        | 2.7677   | 7.3321         | 3823 | 0.38    | 0.7058  | 1.0000 | 0.05  | -11.6076 | 17.1429 |
| set1  | 3dd   | 9       | set2 | 3dp    | 5        | 3.3602   | 15.4172        | 3823 | 0.22    | 0.8275  | 1.0000 | 0.05  | -26.8664 | 33.5869 |
| set1  | 3dd   | 9       | set2 | 3dp    | 6        | 2.0779   | 9.0669         | 3823 | 0.23    | 0.8187  | 1.0000 | 0.05  | -15.6985 | 19.8543 |
| set1  | 3dd   | 9       | set2 | 3dp    | 7        | 2.3748   | 6.4666         | 3823 | 0.37    | 0.7135  | 1.0000 | 0.05  | -10.3035 | 15.0531 |
| set1  | 3dd   | 9       | set2 | 3dp    | 8        | 3.1049   | 9.0669         | 3823 | 0.34    | 0.7320  | 1.0000 | 0.05  | -14.6715 | 20.8813 |
| set1  | 3dd   | 9       | set2 | 3dp    | 9        | 2.5514   | 9.0669         | 3823 | 0.28    | 0.7784  | 1.0000 | 0.05  | -15.2250 | 20.3278 |
| set1  | 3dp   | 1       | set1 | 3dp    | 2        | -0.2768  | 17.2422        | 3823 | -0.02   | 0.9872  | 1.0000 | 0.05  | -34.0815 | 33.5280 |
| set1  | 3dp   | 1       | set1 | 3dp    | 3        | -0.6757  | 2.5791         | 3823 | -0.26   | 0.7934  | 1.0000 | 0.05  | -5.7323  | 4.3810  |
| set1  | 3dp   | 1       | set1 | 3dp    | 4        | 0.3340   | 3.3804         | 3823 | 0.10    | 0.9213  | 1.0000 | 0.05  | -6.2935  | 6.9615  |
| set1  | 3dp   | 1       | set1 | 3dp    | 5        | 1.2063   | 0.9731         | 3823 | 1.24    | 0.2152  | 1.0000 | 0.05  | -0.7015  | 3.1142  |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |              |              |
|---|-------|---------|------|--------|----------|--------------|--------------|
| set   | media | pair_id | _set | _media | _pair_id | Adj<br>Lower | Adj<br>Upper |
| set1  | 3dd   | 9       | set1 | 3dp    | 6        | 0.4941       | 5.2392       |
| set1  | 3dd   | 9       | set1 | 3dp    | 7        | -18.6587     | 23.7867      |
| set1  | 3dd   | 9       | set1 | 3dp    | 8        | -7.9332      | 13.4756      |
| set1  | 3dd   | 9       | set1 | 3dp    | 9        | -8.0966      | 13.3123      |
| set1  | 3dd   | 9       | set2 | 2dd    | 1        | -13.4702     | 19.4502      |
| set1  | 3dd   | 9       | set2 | 2dd    | 2        | -38.5940     | 45.2921      |
| set1  | 3dd   | 9       | set2 | 2dd    | 3        | -22.8817     | 26.5494      |
| set1  | 3dd   | 9       | set2 | 2dd    | 4        | -9.6812      | 15.4199      |
| set1  | 3dd   | 9       | set2 | 2dd    | 5        | -39.9342     | 50.2912      |
| set1  | 3dd   | 9       | set2 | 2dd    | 6        | -13.5710     | 25.4525      |
| set1  | 3dd   | 9       | set2 | 2dd    | 7        | -6.4653      | 11.6816      |
| set1  | 3dd   | 9       | set2 | 2dd    | 8        | -17.4044     | 21.6191      |
| set1  | 3dd   | 9       | set2 | 2dd    | 9        | -17.3447     | 21.6788      |
| set1  | 3dd   | 9       | set2 | 3dd    | 1        | -11.4364     | 16.0492      |
| set1  | 3dd   | 9       | set2 | 3dd    | 2        | -27.6237     | 32.7813      |
| set1  | 3dd   | 9       | set2 | 3dd    | 3        | -14.1896     | 18.1546      |
| set1  | 3dd   | 9       | set2 | 3dd    | 4        | -8.3321      | 11.3157      |
| set1  | 3dd   | 9       | set2 | 3dd    | 5        | -30.7034     | 38.8480      |
| set1  | 3dd   | 9       | set2 | 3dd    | 6        | -11.9138     | 18.3769      |
| set1  | 3dd   | 9       | set2 | 3dd    | 7        | -4.9229      | 7.8525       |
| set1  | 3dd   | 9       | set2 | 3dd    | 8        | -14.3463     | 19.2647      |
| set1  | 3dd   | 9       | set2 | 3dd    | 9        | -14.6937     | 18.9173      |
| set1  | 3dd   | 9       | set2 | 3dp    | 1        | -30.2029     | 36.7575      |
| set1  | 3dd   | 9       | set2 | 3dp    | 2        | -8.2331      | 13.2556      |
| set1  | 3dd   | 9       | set2 | 3dp    | 3        | -6.2306      | 9.3870       |
| set1  | 3dd   | 9       | set2 | 3dp    | 4        | -26.7913     | 32.3266      |
| set1  | 3dd   | 9       | set2 | 3dp    | 5        | -58.7930     | 65.5135      |
| set1  | 3dd   | 9       | set2 | 3dp    | 6        | -34.4747     | 38.6304      |
| set1  | 3dd   | 9       | set2 | 3dp    | 7        | -23.6949     | 28.4445      |
| set1  | 3dd   | 9       | set2 | 3dp    | 8        | -33.4477     | 39.6575      |
| set1  | 3dd   | 9       | set2 | 3dp    | 9        | -34.0011     | 39.1040      |
| set1  | 3dp   | 1       | set1 | 3dp    | 2        | -69.7875     | 69.2340      |
| set1  | 3dp   | 1       | set1 | 3dp    | 3        | -11.0733     | 9.7220       |
| set1  | 3dp   | 1       | set1 | 3dp    | 4        | -13.2938     | 13.9618      |
| set1  | 3dp   | 1       | set1 | 3dp    | 5        | -2.7167      | 5.1293       |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |          |                |      |         |         |        |       |          |          |
|---|-------|---------|------|--------|----------|----------|----------------|------|---------|---------|--------|-------|----------|----------|
| set   | media | pair_id | _set | _media | _pair_id | Estimate | Standard Error | DF   | t Value | Pr >  t | Adj P  | Alpha | Lower    | Upper    |
| set1  | 3dp   | 1       | set1 | 3dp    | 6        | 0.2460   | 2.4100         | 3823 | 0.10    | 0.9187  | 1.0000 | 0.05  | -4.4790  | 4.9709   |
| set1  | 3dp   | 1       | set1 | 3dp    | 7        | -0.05666 | 8.0643         | 3823 | -0.01   | 0.9944  | 1.0000 | 0.05  | -15.8674 | 15.7540  |
| set1  | 3dp   | 1       | set1 | 3dp    | 8        | 0.1505   | 5.4583         | 3823 | 0.03    | 0.9780  | 1.0000 | 0.05  | -10.5509 | 10.8520  |
| set1  | 3dp   | 1       | set1 | 3dp    | 9        | -0.01286 | 5.4583         | 3823 | -0.00   | 0.9981  | 1.0000 | 0.05  | -10.7143 | 10.6886  |
| set1  | 3dp   | 1       | set2 | 2dd    | 1        | 0.3693   | 1.3218         | 3823 | 0.28    | 0.7799  | 1.0000 | 0.05  | -2.2221  | 2.9608   |
| set1  | 3dp   | 1       | set2 | 2dd    | 2        | 0.7284   | 13.2062        | 3823 | 0.06    | 0.9560  | 1.0000 | 0.05  | -25.1634 | 26.6202  |
| set1  | 3dp   | 1       | set2 | 2dd    | 3        | -0.7868  | 8.9382         | 3823 | -0.09   | 0.9299  | 1.0000 | 0.05  | -18.3109 | 16.7372  |
| set1  | 3dp   | 1       | set2 | 2dd    | 4        | 0.2487   | 0.4963         | 3823 | 0.50    | 0.6163  | 1.0000 | 0.05  | -0.7243  | 1.2217   |
| set1  | 3dp   | 1       | set2 | 2dd    | 5        | 2.5578   | 8.3884         | 3823 | 0.30    | 0.7604  | 1.0000 | 0.05  | -13.8883 | 19.0039  |
| set1  | 3dp   | 1       | set2 | 2dd    | 6        | 3.3201   | 2.0566         | 3823 | 1.61    | 0.1065  | 1.0000 | 0.05  | -0.7120  | 7.3522   |
| set1  | 3dp   | 1       | set2 | 2dd    | 7        | -0.01256 | 0.6690         | 3823 | -0.02   | 0.9850  | 1.0000 | 0.05  | -1.3242  | 1.2991   |
| set1  | 3dp   | 1       | set2 | 2dd    | 8        | -0.5133  | 2.0566         | 3823 | -0.25   | 0.8029  | 1.0000 | 0.05  | -4.5454  | 3.5188   |
| set1  | 3dp   | 1       | set2 | 2dd    | 9        | -0.4536  | 2.0566         | 3823 | -0.22   | 0.8254  | 1.0000 | 0.05  | -4.4857  | 3.5785   |
| set1  | 3dp   | 1       | set2 | 3dd    | 1        | -0.3142  | 0.7190         | 3823 | -0.44   | 0.6621  | 1.0000 | 0.05  | -1.7238  | 1.0953   |
| set1  | 3dp   | 1       | set2 | 3dd    | 2        | -0.04188 | 10.2930        | 3823 | -0.00   | 0.9968  | 1.0000 | 0.05  | -20.2222 | 20.1385  |
| set1  | 3dp   | 1       | set2 | 3dd    | 3        | -0.6382  | 6.8177         | 3823 | -0.09   | 0.9254  | 1.0000 | 0.05  | -14.0049 | 12.7285  |
| set1  | 3dp   | 1       | set2 | 3dd    | 4        | -1.1289  | 0.5589         | 3823 | -2.02   | 0.0435  | 0.9994 | 0.05  | -2.2246  | -0.03311 |
| set1  | 3dp   | 1       | set2 | 3dd    | 5        | 1.4516   | 5.8212         | 3823 | 0.25    | 0.8031  | 1.0000 | 0.05  | -9.9612  | 12.8645  |
| set1  | 3dp   | 1       | set2 | 3dd    | 6        | 0.6108   | 1.0099         | 3823 | 0.60    | 0.5453  | 1.0000 | 0.05  | -1.3691  | 2.5908   |
| set1  | 3dp   | 1       | set2 | 3dd    | 7        | -1.1558  | 1.3086         | 3823 | -0.88   | 0.3771  | 1.0000 | 0.05  | -3.7214  | 1.4097   |
| set1  | 3dp   | 1       | set2 | 3dd    | 8        | -0.1615  | 1.4149         | 3823 | -0.11   | 0.9091  | 1.0000 | 0.05  | -2.9356  | 2.6126   |
| set1  | 3dp   | 1       | set2 | 3dd    | 9        | -0.5089  | 1.4149         | 3823 | -0.36   | 0.7191  | 1.0000 | 0.05  | -3.2830  | 2.2652   |
| set1  | 3dp   | 1       | set2 | 3dp    | 1        | 0.6566   | 5.4989         | 3823 | 0.12    | 0.9050  | 1.0000 | 0.05  | -10.1244 | 11.4376  |
| set1  | 3dp   | 1       | set2 | 3dp    | 2        | -0.1094  | 5.4124         | 3823 | -0.02   | 0.9839  | 1.0000 | 0.05  | -10.7209 | 10.5022  |
| set1  | 3dp   | 1       | set2 | 3dp    | 3        | -1.0425  | 4.7169         | 3823 | -0.22   | 0.8251  | 1.0000 | 0.05  | -10.2903 | 8.2053   |
| set1  | 3dp   | 1       | set2 | 3dp    | 4        | 0.1470   | 4.5283         | 3823 | 0.03    | 0.9741  | 1.0000 | 0.05  | -8.7312  | 9.0252   |
| set1  | 3dp   | 1       | set2 | 3dp    | 5        | 0.7396   | 12.6105        | 3823 | 0.06    | 0.9532  | 1.0000 | 0.05  | -23.9843 | 25.4635  |
| set1  | 3dp   | 1       | set2 | 3dp    | 6        | -0.5428  | 6.2614         | 3823 | -0.09   | 0.9309  | 1.0000 | 0.05  | -12.8188 | 11.7332  |
| set1  | 3dp   | 1       | set2 | 3dp    | 7        | -0.2459  | 3.6593         | 3823 | -0.07   | 0.9464  | 1.0000 | 0.05  | -7.4202  | 6.9285   |
| set1  | 3dp   | 1       | set2 | 3dp    | 8        | 0.4842   | 6.2614         | 3823 | 0.08    | 0.9384  | 1.0000 | 0.05  | -11.7917 | 12.7602  |
| set1  | 3dp   | 1       | set2 | 3dp    | 9        | -0.06925 | 6.2614         | 3823 | -0.01   | 0.9912  | 1.0000 | 0.05  | -12.3452 | 12.2067  |
| set1  | 3dp   | 2       | set1 | 3dp    | 3        | -0.3989  | 19.7994        | 3823 | -0.02   | 0.9839  | 1.0000 | 0.05  | -39.2173 | 38.4195  |
| set1  | 3dp   | 2       | set1 | 3dp    | 4        | 0.6108   | 20.6047        | 3823 | 0.03    | 0.9764  | 1.0000 | 0.05  | -39.7865 | 41.0080  |
| set1  | 3dp   | 2       | set1 | 3dp    | 5        | 1.4831   | 16.3399        | 3823 | 0.09    | 0.9277  | 1.0000 | 0.05  | -30.5526 | 33.5188  |
| set1  | 3dp   | 2       | set1 | 3dp    | 6        | 0.5227   | 19.6316        | 3823 | 0.03    | 0.9788  | 1.0000 | 0.05  | -37.9667 | 39.0121  |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |              |              |
|---|-------|---------|------|--------|----------|--------------|--------------|
| set   | media | pair_id | _set | _media | _pair_id | Adj<br>Lower | Adj<br>Upper |
| set1  | 3dp   | 1       | set1 | 3dp    | 6        | -9.4696      | 9.9615       |
| set1  | 3dp   | 1       | set1 | 3dp    | 7        | -32.5673     | 32.4539      |
| set1  | 3dp   | 1       | set1 | 3dp    | 8        | -21.8542     | 22.1552      |
| set1  | 3dp   | 1       | set1 | 3dp    | 9        | -22.0176     | 21.9919      |
| set1  | 3dp   | 1       | set2 | 2dd    | 1        | -4.9594      | 5.6980       |
| set1  | 3dp   | 1       | set2 | 2dd    | 2        | -52.5113     | 53.9681      |
| set1  | 3dp   | 1       | set2 | 2dd    | 3        | -36.8205     | 35.2468      |
| set1  | 3dp   | 1       | set2 | 2dd    | 4        | -1.7520      | 2.2494       |
| set1  | 3dp   | 1       | set2 | 2dd    | 5        | -31.2594     | 36.3750      |
| set1  | 3dp   | 1       | set2 | 2dd    | 6        | -4.9709      | 11.6110      |
| set1  | 3dp   | 1       | set2 | 2dd    | 7        | -2.7096      | 2.6845       |
| set1  | 3dp   | 1       | set2 | 2dd    | 8        | -8.8043      | 7.7776       |
| set1  | 3dp   | 1       | set2 | 2dd    | 9        | -8.7446      | 7.8374       |
| set1  | 3dp   | 1       | set2 | 3dd    | 1        | -3.2127      | 2.5842       |
| set1  | 3dp   | 1       | set2 | 3dd    | 2        | -41.5375     | 41.4537      |
| set1  | 3dp   | 1       | set2 | 3dd    | 3        | -28.1233     | 26.8469      |
| set1  | 3dp   | 1       | set2 | 3dd    | 4        | -3.3820      | 1.1243       |
| set1  | 3dp   | 1       | set2 | 3dd    | 5        | -22.0160     | 24.9192      |
| set1  | 3dp   | 1       | set2 | 3dd    | 6        | -3.4604      | 4.6821       |
| set1  | 3dp   | 1       | set2 | 3dd    | 7        | -6.4312      | 4.1195       |
| set1  | 3dp   | 1       | set2 | 3dd    | 8        | -5.8656      | 5.5426       |
| set1  | 3dp   | 1       | set2 | 3dd    | 9        | -6.2130      | 5.1952       |
| set1  | 3dp   | 1       | set2 | 3dp    | 1        | -21.5117     | 22.8250      |
| set1  | 3dp   | 1       | set2 | 3dp    | 2        | -21.9293     | 21.7105      |
| set1  | 3dp   | 1       | set2 | 3dp    | 3        | -20.0581     | 17.9732      |
| set1  | 3dp   | 1       | set2 | 3dp    | 4        | -18.1087     | 18.4027      |
| set1  | 3dp   | 1       | set2 | 3dp    | 5        | -50.0987     | 51.5778      |
| set1  | 3dp   | 1       | set2 | 3dp    | 6        | -25.7851     | 24.6995      |
| set1  | 3dp   | 1       | set2 | 3dp    | 7        | -14.9981     | 14.5064      |
| set1  | 3dp   | 1       | set2 | 3dp    | 8        | -24.7581     | 25.7266      |
| set1  | 3dp   | 1       | set2 | 3dp    | 9        | -25.3116     | 25.1731      |
| set1  | 3dp   | 2       | set1 | 3dp    | 3        | -80.2188     | 79.4210      |
| set1  | 3dp   | 2       | set1 | 3dp    | 4        | -82.4557     | 83.6772      |
| set1  | 3dp   | 2       | set1 | 3dp    | 5        | -64.3900     | 67.3561      |
| set1  | 3dp   | 2       | set1 | 3dp    | 6        | -78.6208     | 79.6662      |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |          |                |      |         |         |        |       |          |         |
|---|-------|---------|------|--------|----------|----------|----------------|------|---------|---------|--------|-------|----------|---------|
| set   | media | pair_id | _set | _media | _pair_id | Estimate | Standard Error | DF   | t Value | Pr >  t | Adj P  | Alpha | Lower    | Upper   |
| set1  | 3dp   | 2       | set1 | 3dp    | 7        | 0.2201   | 25.2990        | 3823 | 0.01    | 0.9931  | 1.0000 | 0.05  | -49.3808 | 49.8210 |
| set1  | 3dp   | 2       | set1 | 3dp    | 8        | 0.4273   | 22.6902        | 3823 | 0.02    | 0.9850  | 1.0000 | 0.05  | -44.0589 | 44.9134 |
| set1  | 3dp   | 2       | set1 | 3dp    | 9        | 0.2639   | 22.6902        | 3823 | 0.01    | 0.9907  | 1.0000 | 0.05  | -44.2223 | 44.7500 |
| set1  | 3dp   | 2       | set2 | 2dd    | 1        | 0.6461   | 15.9780        | 3823 | 0.04    | 0.9677  | 1.0000 | 0.05  | -30.6802 | 31.9724 |
| set1  | 3dp   | 2       | set2 | 2dd    | 2        | 1.0051   | 30.4390        | 3823 | 0.03    | 0.9737  | 1.0000 | 0.05  | -58.6732 | 60.6835 |
| set1  | 3dp   | 2       | set2 | 2dd    | 3        | -0.5101  | 26.1655        | 3823 | -0.02   | 0.9844  | 1.0000 | 0.05  | -51.8097 | 50.7896 |
| set1  | 3dp   | 2       | set2 | 2dd    | 4        | 0.5254   | 16.9524        | 3823 | 0.03    | 0.9753  | 1.0000 | 0.05  | -32.7112 | 33.7620 |
| set1  | 3dp   | 2       | set2 | 2dd    | 5        | 2.8345   | 8.8671         | 3823 | 0.32    | 0.7492  | 1.0000 | 0.05  | -14.5502 | 20.2193 |
| set1  | 3dp   | 2       | set2 | 2dd    | 6        | 3.5968   | 15.2152        | 3823 | 0.24    | 0.8131  | 1.0000 | 0.05  | -26.2338 | 33.4274 |
| set1  | 3dp   | 2       | set2 | 2dd    | 7        | 0.2642   | 17.8234        | 3823 | 0.01    | 0.9882  | 1.0000 | 0.05  | -34.6801 | 35.2085 |
| set1  | 3dp   | 2       | set2 | 2dd    | 8        | -0.2366  | 15.2152        | 3823 | -0.02   | 0.9876  | 1.0000 | 0.05  | -30.0672 | 29.5940 |
| set1  | 3dp   | 2       | set2 | 2dd    | 9        | -0.1768  | 15.2152        | 3823 | -0.01   | 0.9907  | 1.0000 | 0.05  | -30.0075 | 29.6538 |
| set1  | 3dp   | 2       | set2 | 3dd    | 1        | -0.03750 | 16.6529        | 3823 | -0.00   | 0.9982  | 1.0000 | 0.05  | -32.6869 | 32.6119 |
| set1  | 3dp   | 2       | set2 | 3dd    | 2        | 0.2349   | 27.5204        | 3823 | 0.01    | 0.9932  | 1.0000 | 0.05  | -53.7211 | 54.1909 |
| set1  | 3dp   | 2       | set2 | 3dd    | 3        | -0.3614  | 24.0437        | 3823 | -0.02   | 0.9880  | 1.0000 | 0.05  | -47.5011 | 46.7783 |
| set1  | 3dp   | 2       | set2 | 3dd    | 4        | -0.8521  | 17.6267        | 3823 | -0.05   | 0.9614  | 1.0000 | 0.05  | -35.4108 | 33.7066 |
| set1  | 3dp   | 2       | set2 | 3dd    | 5        | 1.7284   | 11.4345        | 3823 | 0.15    | 0.8799  | 1.0000 | 0.05  | -20.6900 | 24.1467 |
| set1  | 3dp   | 2       | set2 | 3dd    | 6        | 0.8876   | 16.3083        | 3823 | 0.05    | 0.9566  | 1.0000 | 0.05  | -31.0861 | 32.8613 |
| set1  | 3dp   | 2       | set2 | 3dd    | 7        | -0.8791  | 18.4984        | 3823 | -0.05   | 0.9621  | 1.0000 | 0.05  | -37.1467 | 35.3885 |
| set1  | 3dp   | 2       | set2 | 3dd    | 8        | 0.1153   | 15.8910        | 3823 | 0.01    | 0.9942  | 1.0000 | 0.05  | -31.0405 | 31.2710 |
| set1  | 3dp   | 2       | set2 | 3dd    | 9        | -0.2321  | 15.8910        | 3823 | -0.01   | 0.9883  | 1.0000 | 0.05  | -31.3879 | 30.9236 |
| set1  | 3dp   | 2       | set2 | 3dp    | 1        | 0.9334   | 11.7557        | 3823 | 0.08    | 0.9367  | 1.0000 | 0.05  | -22.1147 | 23.9815 |
| set1  | 3dp   | 2       | set2 | 3dp    | 2        | 0.1674   | 22.6247        | 3823 | 0.01    | 0.9941  | 1.0000 | 0.05  | -44.1903 | 44.5250 |
| set1  | 3dp   | 2       | set2 | 3dp    | 3        | -0.7657  | 21.9408        | 3823 | -0.03   | 0.9722  | 1.0000 | 0.05  | -43.7825 | 42.2511 |
| set1  | 3dp   | 2       | set2 | 3dp    | 4        | 0.4237   | 12.7300        | 3823 | 0.03    | 0.9734  | 1.0000 | 0.05  | -24.5345 | 25.3820 |
| set1  | 3dp   | 2       | set2 | 3dp    | 5        | 1.0163   | 4.6578         | 3823 | 0.22    | 0.8273  | 1.0000 | 0.05  | -8.1156  | 10.1482 |
| set1  | 3dp   | 2       | set2 | 3dp    | 6        | -0.2661  | 10.9948        | 3823 | -0.02   | 0.9807  | 1.0000 | 0.05  | -21.8223 | 21.2902 |
| set1  | 3dp   | 2       | set2 | 3dp    | 7        | 0.03090  | 13.6024        | 3823 | 0.00    | 0.9982  | 1.0000 | 0.05  | -26.6378 | 26.6996 |
| set1  | 3dp   | 2       | set2 | 3dp    | 8        | 0.7610   | 10.9948        | 3823 | 0.07    | 0.9448  | 1.0000 | 0.05  | -20.7953 | 22.3172 |
| set1  | 3dp   | 2       | set2 | 3dp    | 9        | 0.2075   | 10.9948        | 3823 | 0.02    | 0.9849  | 1.0000 | 0.05  | -21.3487 | 21.7637 |
| set1  | 3dp   | 3       | set1 | 3dp    | 4        | 1.0097   | 0.8818         | 3823 | 1.15    | 0.2523  | 1.0000 | 0.05  | -0.7192  | 2.7385  |
| set1  | 3dp   | 3       | set1 | 3dp    | 5        | 1.8820   | 3.4794         | 3823 | 0.54    | 0.5886  | 1.0000 | 0.05  | -4.9398  | 8.7037  |
| set1  | 3dp   | 3       | set1 | 3dp    | 6        | 0.9216   | 0.3707         | 3823 | 2.49    | 0.0130  | 0.9619 | 0.05  | 0.1948   | 1.6484  |
| set1  | 3dp   | 3       | set1 | 3dp    | 7        | 0.6190   | 5.5098         | 3823 | 0.11    | 0.9106  | 1.0000 | 0.05  | -10.1835 | 11.4215 |
| set1  | 3dp   | 3       | set1 | 3dp    | 8        | 0.8262   | 2.9081         | 3823 | 0.28    | 0.7764  | 1.0000 | 0.05  | -4.8755  | 6.5278  |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |              |              |
|---|-------|---------|------|--------|----------|--------------|--------------|
| set   | media | pair_id | _set | _media | _pair_id | Adj<br>Lower | Adj<br>Upper |
| set1  | 3dp   | 2       | set1 | 3dp    | 7        | -101.77      | 102.21       |
| set1  | 3dp   | 2       | set1 | 3dp    | 8        | -91.0469     | 91.9015      |
| set1  | 3dp   | 2       | set1 | 3dp    | 9        | -91.2103     | 91.7381      |
| set1  | 3dp   | 2       | set2 | 2dd    | 1        | -63.7683     | 65.0604      |
| set1  | 3dp   | 2       | set2 | 2dd    | 2        | -121.71      | 123.72       |
| set1  | 3dp   | 2       | set2 | 2dd    | 3        | -105.99      | 104.97       |
| set1  | 3dp   | 2       | set2 | 2dd    | 4        | -67.8170     | 68.8679      |
| set1  | 3dp   | 2       | set2 | 2dd    | 5        | -32.9128     | 38.5819      |
| set1  | 3dp   | 2       | set2 | 2dd    | 6        | -57.7421     | 64.9357      |
| set1  | 3dp   | 2       | set2 | 2dd    | 7        | -71.5896     | 72.1180      |
| set1  | 3dp   | 2       | set2 | 2dd    | 8        | -61.5755     | 61.1023      |
| set1  | 3dp   | 2       | set2 | 2dd    | 9        | -61.5157     | 61.1620      |
| set1  | 3dp   | 2       | set2 | 3dd    | 1        | -67.1725     | 67.0975      |
| set1  | 3dp   | 2       | set2 | 3dd    | 2        | -110.71      | 111.18       |
| set1  | 3dp   | 2       | set2 | 3dd    | 3        | -97.2920     | 96.5691      |
| set1  | 3dp   | 2       | set2 | 3dd    | 4        | -71.9131     | 70.2088      |
| set1  | 3dp   | 2       | set2 | 3dd    | 5        | -44.3691     | 47.8259      |
| set1  | 3dp   | 2       | set2 | 3dd    | 6        | -64.8580     | 66.6332      |
| set1  | 3dp   | 2       | set2 | 3dd    | 7        | -75.4540     | 73.6958      |
| set1  | 3dp   | 2       | set2 | 3dd    | 8        | -63.9484     | 64.1789      |
| set1  | 3dp   | 2       | set2 | 3dd    | 9        | -64.2958     | 63.8315      |
| set1  | 3dp   | 2       | set2 | 3dp    | 1        | -46.4591     | 48.3258      |
| set1  | 3dp   | 2       | set2 | 3dp    | 2        | -91.0426     | 91.3773      |
| set1  | 3dp   | 2       | set2 | 3dp    | 3        | -89.2187     | 87.6872      |
| set1  | 3dp   | 2       | set2 | 3dp    | 4        | -50.8963     | 51.7438      |
| set1  | 3dp   | 2       | set2 | 3dp    | 5        | -17.7611     | 19.7938      |
| set1  | 3dp   | 2       | set2 | 3dp    | 6        | -44.5909     | 44.0587      |
| set1  | 3dp   | 2       | set2 | 3dp    | 7        | -54.8063     | 54.8681      |
| set1  | 3dp   | 2       | set2 | 3dp    | 8        | -43.5638     | 45.0858      |
| set1  | 3dp   | 2       | set2 | 3dp    | 9        | -44.1173     | 44.5323      |
| set1  | 3dp   | 3       | set1 | 3dp    | 4        | -2.5452      | 4.5646       |
| set1  | 3dp   | 3       | set1 | 3dp    | 5        | -12.1452     | 15.9091      |
| set1  | 3dp   | 3       | set1 | 3dp    | 6        | -0.5729      | 2.4161       |
| set1  | 3dp   | 3       | set1 | 3dp    | 7        | -21.5935     | 22.8315      |
| set1  | 3dp   | 3       | set1 | 3dp    | 8        | -10.8978     | 12.5502      |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |          |                |      |         |         |        |       |          |         |
|---|-------|---------|------|--------|----------|----------|----------------|------|---------|---------|--------|-------|----------|---------|
| set   | media | pair_id | _set | _media | _pair_id | Estimate | Standard Error | DF   | t Value | Pr >  t | Adj P  | Alpha | Lower    | Upper   |
| set1  | 3dp   | 3       | set1 | 3dp    | 9        | 0.6628   | 2.9081         | 3823 | 0.23    | 0.8197  | 1.0000 | 0.05  | -5.0389  | 6.3645  |
| set1  | 3dp   | 3       | set2 | 2dd    | 1        | 1.0450   | 3.8431         | 3823 | 0.27    | 0.7857  | 1.0000 | 0.05  | -6.4898  | 8.5798  |
| set1  | 3dp   | 3       | set2 | 2dd    | 2        | 1.4040   | 10.6514        | 3823 | 0.13    | 0.8951  | 1.0000 | 0.05  | -19.4790 | 22.2871 |
| set1  | 3dp   | 3       | set2 | 2dd    | 3        | -0.1112  | 6.3847         | 3823 | -0.02   | 0.9861  | 1.0000 | 0.05  | -12.6289 | 12.4066 |
| set1  | 3dp   | 3       | set2 | 2dd    | 4        | 0.9243   | 2.8759         | 3823 | 0.32    | 0.7479  | 1.0000 | 0.05  | -4.7141  | 6.5628  |
| set1  | 3dp   | 3       | set2 | 2dd    | 5        | 3.2335   | 10.9450        | 3823 | 0.30    | 0.7677  | 1.0000 | 0.05  | -18.2251 | 24.6920 |
| set1  | 3dp   | 3       | set2 | 2dd    | 6        | 3.9957   | 4.6001         | 3823 | 0.87    | 0.3851  | 1.0000 | 0.05  | -5.0233  | 13.0147 |
| set1  | 3dp   | 3       | set2 | 2dd    | 7        | 0.6631   | 2.0102         | 3823 | 0.33    | 0.7415  | 1.0000 | 0.05  | -3.2780  | 4.6042  |
| set1  | 3dp   | 3       | set2 | 2dd    | 8        | 0.1623   | 4.6001         | 3823 | 0.04    | 0.9719  | 1.0000 | 0.05  | -8.8567  | 9.1813  |
| set1  | 3dp   | 3       | set2 | 2dd    | 9        | 0.2221   | 4.6001         | 3823 | 0.05    | 0.9615  | 1.0000 | 0.05  | -8.7969  | 9.2410  |
| set1  | 3dp   | 3       | set2 | 3dd    | 1        | 0.3614   | 3.1766         | 3823 | 0.11    | 0.9094  | 1.0000 | 0.05  | -5.8665  | 6.5893  |
| set1  | 3dp   | 3       | set2 | 3dd    | 2        | 0.6338   | 7.7401         | 3823 | 0.08    | 0.9347  | 1.0000 | 0.05  | -14.5414 | 15.8089 |
| set1  | 3dp   | 3       | set2 | 3dd    | 3        | 0.03746  | 4.2744         | 3823 | 0.01    | 0.9930  | 1.0000 | 0.05  | -8.3429  | 8.4179  |
| set1  | 3dp   | 3       | set2 | 3dd    | 4        | -0.4532  | 2.2109         | 3823 | -0.20   | 0.8376  | 1.0000 | 0.05  | -4.7879  | 3.8814  |
| set1  | 3dp   | 3       | set2 | 3dd    | 5        | 2.1273   | 8.3774         | 3823 | 0.25    | 0.7996  | 1.0000 | 0.05  | -14.2973 | 18.5519 |
| set1  | 3dp   | 3       | set2 | 3dd    | 6        | 1.2865   | 3.5160         | 3823 | 0.37    | 0.7145  | 1.0000 | 0.05  | -5.6069  | 8.1799  |
| set1  | 3dp   | 3       | set2 | 3dd    | 7        | -0.4802  | 1.3626         | 3823 | -0.35   | 0.7245  | 1.0000 | 0.05  | -3.1516  | 2.1913  |
| set1  | 3dp   | 3       | set2 | 3dd    | 8        | 0.5142   | 3.9351         | 3823 | 0.13    | 0.8961  | 1.0000 | 0.05  | -7.2009  | 8.2292  |
| set1  | 3dp   | 3       | set2 | 3dd    | 9        | 0.1668   | 3.9351         | 3823 | 0.04    | 0.9662  | 1.0000 | 0.05  | -7.5483  | 7.8818  |
| set1  | 3dp   | 3       | set2 | 3dp    | 1        | 1.3323   | 8.0562         | 3823 | 0.17    | 0.8687  | 1.0000 | 0.05  | -14.4626 | 17.1271 |
| set1  | 3dp   | 3       | set2 | 3dp    | 2        | 0.5663   | 2.8894         | 3823 | 0.20    | 0.8446  | 1.0000 | 0.05  | -5.0986  | 6.2311  |
| set1  | 3dp   | 3       | set2 | 3dp    | 3        | -0.3668  | 2.1827         | 3823 | -0.17   | 0.8666  | 1.0000 | 0.05  | -4.6461  | 3.9125  |
| set1  | 3dp   | 3       | set2 | 3dp    | 4        | 0.8227   | 7.0833         | 3823 | 0.12    | 0.9075  | 1.0000 | 0.05  | -13.0647 | 14.7100 |
| set1  | 3dp   | 3       | set2 | 3dp    | 5        | 1.4152   | 15.1688        | 3823 | 0.09    | 0.9257  | 1.0000 | 0.05  | -28.3245 | 31.1550 |
| set1  | 3dp   | 3       | set2 | 3dp    | 6        | 0.1328   | 8.8192         | 3823 | 0.02    | 0.9880  | 1.0000 | 0.05  | -17.1580 | 17.4237 |
| set1  | 3dp   | 3       | set2 | 3dp    | 7        | 0.4298   | 6.2150         | 3823 | 0.07    | 0.9449  | 1.0000 | 0.05  | -11.7551 | 12.6147 |
| set1  | 3dp   | 3       | set2 | 3dp    | 8        | 1.1599   | 8.8192         | 3823 | 0.13    | 0.8954  | 1.0000 | 0.05  | -16.1310 | 18.4507 |
| set1  | 3dp   | 3       | set2 | 3dp    | 9        | 0.6064   | 8.8192         | 3823 | 0.07    | 0.9452  | 1.0000 | 0.05  | -16.6844 | 17.8973 |
| set1  | 3dp   | 4       | set1 | 3dp    | 5        | 0.8723   | 4.2871         | 3823 | 0.20    | 0.8388  | 1.0000 | 0.05  | -7.5329  | 9.2775  |
| set1  | 3dp   | 4       | set1 | 3dp    | 6        | -0.08805 | 1.0337         | 3823 | -0.09   | 0.9321  | 1.0000 | 0.05  | -2.1148  | 1.9387  |
| set1  | 3dp   | 4       | set1 | 3dp    | 7        | -0.3907  | 4.7058         | 3823 | -0.08   | 0.9338  | 1.0000 | 0.05  | -9.6168  | 8.8355  |
| set1  | 3dp   | 4       | set1 | 3dp    | 8        | -0.1835  | 2.1152         | 3823 | -0.09   | 0.9309  | 1.0000 | 0.05  | -4.3306  | 3.9636  |
| set1  | 3dp   | 4       | set1 | 3dp    | 9        | -0.3469  | 2.1152         | 3823 | -0.16   | 0.8697  | 1.0000 | 0.05  | -4.4939  | 3.8002  |
| set1  | 3dp   | 4       | set2 | 2dd    | 1        | 0.03532  | 4.6461         | 3823 | 0.01    | 0.9939  | 1.0000 | 0.05  | -9.0737  | 9.1443  |
| set1  | 3dp   | 4       | set2 | 2dd    | 2        | 0.3944   | 9.8432         | 3823 | 0.04    | 0.9680  | 1.0000 | 0.05  | -18.9040 | 19.6928 |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |              |              |
|---|-------|---------|------|--------|----------|--------------|--------------|
| set   | media | pair_id | _set | _media | _pair_id | Adj<br>Lower | Adj<br>Upper |
| set1  | 3dp   | 3       | set1 | 3dp    | 9        | -11.0612     | 12.3868      |
| set1  | 3dp   | 3       | set2 | 2dd    | 1        | -14.4483     | 16.5383      |
| set1  | 3dp   | 3       | set2 | 2dd    | 2        | -41.5364     | 44.3445      |
| set1  | 3dp   | 3       | set2 | 2dd    | 3        | -25.8506     | 25.6283      |
| set1  | 3dp   | 3       | set2 | 2dd    | 4        | -10.6697     | 12.5184      |
| set1  | 3dp   | 3       | set2 | 2dd    | 5        | -40.8904     | 47.3573      |
| set1  | 3dp   | 3       | set2 | 2dd    | 6        | -14.5495     | 22.5409      |
| set1  | 3dp   | 3       | set2 | 2dd    | 7        | -7.4407      | 8.7669       |
| set1  | 3dp   | 3       | set2 | 2dd    | 8        | -18.3829     | 18.7075      |
| set1  | 3dp   | 3       | set2 | 2dd    | 9        | -18.3231     | 18.7672      |
| set1  | 3dp   | 3       | set2 | 3dd    | 1        | -12.4447     | 13.1675      |
| set1  | 3dp   | 3       | set2 | 3dd    | 2        | -30.5699     | 31.8375      |
| set1  | 3dp   | 3       | set2 | 3dd    | 3        | -17.1947     | 17.2696      |
| set1  | 3dp   | 3       | set2 | 3dd    | 4        | -9.3663      | 8.4598       |
| set1  | 3dp   | 3       | set2 | 3dd    | 5        | -31.6456     | 35.9002      |
| set1  | 3dp   | 3       | set2 | 3dd    | 6        | -12.8880     | 15.4610      |
| set1  | 3dp   | 3       | set2 | 3dd    | 7        | -5.9733      | 5.0129       |
| set1  | 3dp   | 3       | set2 | 3dd    | 8        | -15.3499     | 16.3782      |
| set1  | 3dp   | 3       | set2 | 3dd    | 9        | -15.6973     | 16.0308      |
| set1  | 3dp   | 3       | set2 | 3dp    | 1        | -31.1457     | 33.8103      |
| set1  | 3dp   | 3       | set2 | 3dp    | 2        | -11.0820     | 12.2145      |
| set1  | 3dp   | 3       | set2 | 3dp    | 3        | -9.1661      | 8.4325       |
| set1  | 3dp   | 3       | set2 | 3dp    | 4        | -27.7330     | 29.3783      |
| set1  | 3dp   | 3       | set2 | 3dp    | 5        | -59.7369     | 62.5673      |
| set1  | 3dp   | 3       | set2 | 3dp    | 6        | -35.4213     | 35.6870      |
| set1  | 3dp   | 3       | set2 | 3dp    | 7        | -24.6254     | 25.4850      |
| set1  | 3dp   | 3       | set2 | 3dp    | 8        | -34.3942     | 36.7140      |
| set1  | 3dp   | 3       | set2 | 3dp    | 9        | -34.9477     | 36.1605      |
| set1  | 3dp   | 4       | set1 | 3dp    | 5        | -16.4108     | 18.1554      |
| set1  | 3dp   | 4       | set1 | 3dp    | 6        | -4.2555      | 4.0794       |
| set1  | 3dp   | 4       | set1 | 3dp    | 7        | -19.3619     | 18.5805      |
| set1  | 3dp   | 4       | set1 | 3dp    | 8        | -8.7108      | 8.3439       |
| set1  | 3dp   | 4       | set1 | 3dp    | 9        | -8.8742      | 8.1805       |
| set1  | 3dp   | 4       | set2 | 2dd    | 1        | -18.6949     | 18.7656      |
| set1  | 3dp   | 4       | set2 | 2dd    | 2        | -39.2877     | 40.0765      |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |          |                |      |         |         |        |       |          |         |
|---|-------|---------|------|--------|----------|----------|----------------|------|---------|---------|--------|-------|----------|---------|
| set   | media | pair_id | _set | _media | _pair_id | Estimate | Standard Error | DF   | t Value | Pr >  t | Adj P  | Alpha | Lower    | Upper   |
| set1  | 3dp   | 4       | set2 | 2dd    | 3        | -1.1208  | 5.5834         | 3823 | -0.20   | 0.8409  | 1.0000 | 0.05  | -12.0676 | 9.8260  |
| set1  | 3dp   | 4       | set2 | 2dd    | 4        | -0.08532 | 3.6727         | 3823 | -0.02   | 0.9815  | 1.0000 | 0.05  | -7.2860  | 7.1154  |
| set1  | 3dp   | 4       | set2 | 2dd    | 5        | 2.2238   | 11.7527        | 3823 | 0.19    | 0.8499  | 1.0000 | 0.05  | -20.8184 | 25.2660 |
| set1  | 3dp   | 4       | set2 | 2dd    | 6        | 2.9861   | 5.4074         | 3823 | 0.55    | 0.5808  | 1.0000 | 0.05  | -7.6157  | 13.5878 |
| set1  | 3dp   | 4       | set2 | 2dd    | 7        | -0.3466  | 2.8088         | 3823 | -0.12   | 0.9018  | 1.0000 | 0.05  | -5.8534  | 5.1603  |
| set1  | 3dp   | 4       | set2 | 2dd    | 8        | -0.8473  | 5.4074         | 3823 | -0.16   | 0.8755  | 1.0000 | 0.05  | -11.4491 | 9.7544  |
| set1  | 3dp   | 4       | set2 | 2dd    | 9        | -0.7876  | 5.4074         | 3823 | -0.15   | 0.8842  | 1.0000 | 0.05  | -11.3893 | 9.8141  |
| set1  | 3dp   | 4       | set2 | 3dd    | 1        | -0.6483  | 3.9834         | 3823 | -0.16   | 0.8707  | 1.0000 | 0.05  | -8.4581  | 7.1616  |
| set1  | 3dp   | 4       | set2 | 3dd    | 2        | -0.3759  | 6.9331         | 3823 | -0.05   | 0.9568  | 1.0000 | 0.05  | -13.9688 | 13.2170 |
| set1  | 3dp   | 4       | set2 | 3dd    | 3        | -0.9722  | 3.4769         | 3823 | -0.28   | 0.7798  | 1.0000 | 0.05  | -7.7891  | 5.8446  |
| set1  | 3dp   | 4       | set2 | 3dd    | 4        | -1.4629  | 3.0112         | 3823 | -0.49   | 0.6271  | 1.0000 | 0.05  | -7.3665  | 4.4408  |
| set1  | 3dp   | 4       | set2 | 3dd    | 5        | 1.1176   | 9.1835         | 3823 | 0.12    | 0.9031  | 1.0000 | 0.05  | -16.8875 | 19.1227 |
| set1  | 3dp   | 4       | set2 | 3dd    | 6        | 0.2768   | 4.3210         | 3823 | 0.06    | 0.9489  | 1.0000 | 0.05  | -8.1949  | 8.7486  |
| set1  | 3dp   | 4       | set2 | 3dd    | 7        | -1.4898  | 2.1601         | 3823 | -0.69   | 0.4904  | 1.0000 | 0.05  | -5.7249  | 2.7452  |
| set1  | 3dp   | 4       | set2 | 3dd    | 8        | -0.4955  | 4.7460         | 3823 | -0.10   | 0.9169  | 1.0000 | 0.05  | -9.8005  | 8.8095  |
| set1  | 3dp   | 4       | set2 | 3dd    | 9        | -0.8429  | 4.7460         | 3823 | -0.18   | 0.8590  | 1.0000 | 0.05  | -10.1479 | 8.4621  |
| set1  | 3dp   | 4       | set2 | 3dp    | 1        | 0.3226   | 8.8601         | 3823 | 0.04    | 0.9710  | 1.0000 | 0.05  | -17.0484 | 17.6936 |
| set1  | 3dp   | 4       | set2 | 3dp    | 2        | -0.4434  | 2.0806         | 3823 | -0.21   | 0.8312  | 1.0000 | 0.05  | -4.5226  | 3.6358  |
| set1  | 3dp   | 4       | set2 | 3dp    | 3        | -1.3765  | 1.3991         | 3823 | -0.98   | 0.3253  | 1.0000 | 0.05  | -4.1195  | 1.3666  |
| set1  | 3dp   | 4       | set2 | 3dp    | 4        | -0.1870  | 7.8850         | 3823 | -0.02   | 0.9811  | 1.0000 | 0.05  | -15.6463 | 15.2723 |
| set1  | 3dp   | 4       | set2 | 3dp    | 5        | 0.4056   | 15.9753        | 3823 | 0.03    | 0.9797  | 1.0000 | 0.05  | -30.9154 | 31.7265 |
| set1  | 3dp   | 4       | set2 | 3dp    | 6        | -0.8768  | 9.6250         | 3823 | -0.09   | 0.9274  | 1.0000 | 0.05  | -19.7475 | 17.9938 |
| set1  | 3dp   | 4       | set2 | 3dp    | 7        | -0.5799  | 7.0184         | 3823 | -0.08   | 0.9342  | 1.0000 | 0.05  | -14.3399 | 13.1802 |
| set1  | 3dp   | 4       | set2 | 3dp    | 8        | 0.1502   | 9.6250         | 3823 | 0.02    | 0.9875  | 1.0000 | 0.05  | -18.7204 | 19.0209 |
| set1  | 3dp   | 4       | set2 | 3dp    | 9        | -0.4033  | 9.6250         | 3823 | -0.04   | 0.9666  | 1.0000 | 0.05  | -19.2739 | 18.4674 |
| set1  | 3dp   | 5       | set1 | 3dp    | 6        | -0.9604  | 3.3087         | 3823 | -0.29   | 0.7716  | 1.0000 | 0.05  | -7.4473  | 5.5266  |
| set1  | 3dp   | 5       | set1 | 3dp    | 7        | -1.2630  | 8.9663         | 3823 | -0.14   | 0.8880  | 1.0000 | 0.05  | -18.8422 | 16.3162 |
| set1  | 3dp   | 5       | set1 | 3dp    | 8        | -1.0558  | 6.3543         | 3823 | -0.17   | 0.8680  | 1.0000 | 0.05  | -13.5140 | 11.4023 |
| set1  | 3dp   | 5       | set1 | 3dp    | 9        | -1.2192  | 6.3543         | 3823 | -0.19   | 0.8479  | 1.0000 | 0.05  | -13.6773 | 11.2390 |
| set1  | 3dp   | 5       | set2 | 2dd    | 1        | -0.8370  | 0.5197         | 3823 | -1.61   | 0.1074  | 1.0000 | 0.05  | -1.8560  | 0.1820  |
| set1  | 3dp   | 5       | set2 | 2dd    | 2        | -0.4779  | 14.1130        | 3823 | -0.03   | 0.9730  | 1.0000 | 0.05  | -28.1477 | 27.1918 |
| set1  | 3dp   | 5       | set2 | 2dd    | 3        | -1.9931  | 9.8396         | 3823 | -0.20   | 0.8395  | 1.0000 | 0.05  | -21.2846 | 17.2983 |
| set1  | 3dp   | 5       | set2 | 2dd    | 4        | -0.9576  | 0.7420         | 3823 | -1.29   | 0.1969  | 1.0000 | 0.05  | -2.4124  | 0.4971  |
| set1  | 3dp   | 5       | set2 | 2dd    | 5        | 1.3515   | 7.4814         | 3823 | 0.18    | 0.8567  | 1.0000 | 0.05  | -13.3165 | 16.0195 |
| set1  | 3dp   | 5       | set2 | 2dd    | 6        | 2.1137   | 1.1695         | 3823 | 1.81    | 0.0708  | 1.0000 | 0.05  | -0.1791  | 4.4066  |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |              |              |
|---|-------|---------|------|--------|----------|--------------|--------------|
| set   | media | pair_id | _set | _media | _pair_id | Adj<br>Lower | Adj<br>Upper |
| set1  | 3dp   | 4       | set2 | 2dd    | 3        | -23.6300     | 21.3884      |
| set1  | 3dp   | 4       | set2 | 2dd    | 4        | -14.8917     | 14.7211      |
| set1  | 3dp   | 4       | set2 | 2dd    | 5        | -45.1566     | 49.6041      |
| set1  | 3dp   | 4       | set2 | 2dd    | 6        | -18.8136     | 24.7858      |
| set1  | 3dp   | 4       | set2 | 2dd    | 7        | -11.6700     | 10.9769      |
| set1  | 3dp   | 4       | set2 | 2dd    | 8        | -22.6470     | 20.9524      |
| set1  | 3dp   | 4       | set2 | 2dd    | 9        | -22.5873     | 21.0121      |
| set1  | 3dp   | 4       | set2 | 3dd    | 1        | -16.7071     | 15.4106      |
| set1  | 3dp   | 4       | set2 | 3dd    | 2        | -28.3261     | 27.5743      |
| set1  | 3dp   | 4       | set2 | 3dd    | 3        | -14.9893     | 13.0449      |
| set1  | 3dp   | 4       | set2 | 3dd    | 4        | -13.6022     | 10.6764      |
| set1  | 3dp   | 4       | set2 | 3dd    | 5        | -35.9052     | 38.1404      |
| set1  | 3dp   | 4       | set2 | 3dd    | 6        | -17.1432     | 17.6968      |
| set1  | 3dp   | 4       | set2 | 3dd    | 7        | -10.1982     | 7.2185       |
| set1  | 3dp   | 4       | set2 | 3dd    | 8        | -19.6288     | 18.6378      |
| set1  | 3dp   | 4       | set2 | 3dd    | 9        | -19.9762     | 18.2904      |
| set1  | 3dp   | 4       | set2 | 3dp    | 1        | -35.3963     | 36.0415      |
| set1  | 3dp   | 4       | set2 | 3dp    | 2        | -8.8312      | 7.9444       |
| set1  | 3dp   | 4       | set2 | 3dp    | 3        | -7.0168      | 4.2639       |
| set1  | 3dp   | 4       | set2 | 3dp    | 4        | -31.9750     | 31.6009      |
| set1  | 3dp   | 4       | set2 | 3dp    | 5        | -63.9979     | 64.8090      |
| set1  | 3dp   | 4       | set2 | 3dp    | 6        | -39.6794     | 37.9258      |
| set1  | 3dp   | 4       | set2 | 3dp    | 7        | -28.8739     | 27.7141      |
| set1  | 3dp   | 4       | set2 | 3dp    | 8        | -38.6523     | 38.9528      |
| set1  | 3dp   | 4       | set2 | 3dp    | 9        | -39.2058     | 38.3993      |
| set1  | 3dp   | 5       | set1 | 3dp    | 6        | -14.2991     | 12.3784      |
| set1  | 3dp   | 5       | set1 | 3dp    | 7        | -37.4100     | 34.8840      |
| set1  | 3dp   | 5       | set1 | 3dp    | 8        | -26.6728     | 24.5611      |
| set1  | 3dp   | 5       | set1 | 3dp    | 9        | -26.8361     | 24.3978      |
| set1  | 3dp   | 5       | set2 | 2dd    | 1        | -2.9323      | 1.2583       |
| set1  | 3dp   | 5       | set2 | 2dd    | 2        | -57.3736     | 56.4177      |
| set1  | 3dp   | 5       | set2 | 2dd    | 3        | -41.6610     | 37.6747      |
| set1  | 3dp   | 5       | set2 | 2dd    | 4        | -3.9490      | 2.0337       |
| set1  | 3dp   | 5       | set2 | 2dd    | 5        | -28.8094     | 31.5124      |
| set1  | 3dp   | 5       | set2 | 2dd    | 6        | -2.6009      | 6.8284       |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |          |                |      |         |         |        |       |          |         |
|---|-------|---------|------|--------|----------|----------|----------------|------|---------|---------|--------|-------|----------|---------|
| set   | media | pair_id | _set | _media | _pair_id | Estimate | Standard Error | DF   | t Value | Pr >  t | Adj P  | Alpha | Lower    | Upper   |
| set1  | 3dp   | 5       | set2 | 2dd    | 7        | -1.2189  | 1.5373         | 3823 | -0.79   | 0.4279  | 1.0000 | 0.05  | -4.2329  | 1.7951  |
| set1  | 3dp   | 5       | set2 | 2dd    | 8        | -1.7197  | 1.1695         | 3823 | -1.47   | 0.1415  | 1.0000 | 0.05  | -4.0125  | 0.5732  |
| set1  | 3dp   | 5       | set2 | 2dd    | 9        | -1.6599  | 1.1695         | 3823 | -1.42   | 0.1559  | 1.0000 | 0.05  | -3.9528  | 0.6329  |
| set1  | 3dp   | 5       | set2 | 3dd    | 1        | -1.5206  | 0.4710         | 3823 | -3.23   | 0.0013  | 0.4662 | 0.05  | -2.4441  | -0.5971 |
| set1  | 3dp   | 5       | set2 | 3dd    | 2        | -1.2482  | 11.2001        | 3823 | -0.11   | 0.9113  | 1.0000 | 0.05  | -23.2070 | 20.7106 |
| set1  | 3dp   | 5       | set2 | 3dd    | 3        | -1.8445  | 7.7178         | 3823 | -0.24   | 0.8111  | 1.0000 | 0.05  | -16.9759 | 13.2869 |
| set1  | 3dp   | 5       | set2 | 3dd    | 4        | -2.3352  | 1.3411         | 3823 | -1.74   | 0.0817  | 1.0000 | 0.05  | -4.9646  | 0.2942  |
| set1  | 3dp   | 5       | set2 | 3dd    | 5        | 0.2453   | 4.9248         | 3823 | 0.05    | 0.9603  | 1.0000 | 0.05  | -9.4102  | 9.9008  |
| set1  | 3dp   | 5       | set2 | 3dd    | 6        | -0.5955  | 0.3640         | 3823 | -1.64   | 0.1019  | 1.0000 | 0.05  | -1.3091  | 0.1181  |
| set1  | 3dp   | 5       | set2 | 3dd    | 7        | -2.3622  | 2.1932         | 3823 | -1.08   | 0.2815  | 1.0000 | 0.05  | -6.6620  | 1.9377  |
| set1  | 3dp   | 5       | set2 | 3dd    | 8        | -1.3678  | 0.5675         | 3823 | -2.41   | 0.0160  | 0.9769 | 0.05  | -2.4804  | -0.2552 |
| set1  | 3dp   | 5       | set2 | 3dd    | 9        | -1.7152  | 0.5675         | 3823 | -3.02   | 0.0025  | 0.6486 | 0.05  | -2.8278  | -0.6026 |
| set1  | 3dp   | 5       | set2 | 3dp    | 1        | -0.5497  | 4.6037         | 3823 | -0.12   | 0.9050  | 1.0000 | 0.05  | -9.5756  | 8.4763  |
| set1  | 3dp   | 5       | set2 | 3dp    | 2        | -1.3157  | 6.3280         | 3823 | -0.21   | 0.8353  | 1.0000 | 0.05  | -13.7222 | 11.0908 |
| set1  | 3dp   | 5       | set2 | 3dp    | 3        | -2.2488  | 5.6223         | 3823 | -0.40   | 0.6892  | 1.0000 | 0.05  | -13.2717 | 8.7742  |
| set1  | 3dp   | 5       | set2 | 3dp    | 4        | -1.0593  | 3.6392         | 3823 | -0.29   | 0.7710  | 1.0000 | 0.05  | -8.1943  | 6.0756  |
| set1  | 3dp   | 5       | set2 | 3dp    | 5        | -0.4668  | 11.7075        | 3823 | -0.04   | 0.9682  | 1.0000 | 0.05  | -23.4202 | 22.4867 |
| set1  | 3dp   | 5       | set2 | 3dp    | 6        | -1.7491  | 5.3644         | 3823 | -0.33   | 0.7444  | 1.0000 | 0.05  | -12.2664 | 8.7682  |
| set1  | 3dp   | 5       | set2 | 3dp    | 7        | -1.4522  | 2.7820         | 3823 | -0.52   | 0.6017  | 1.0000 | 0.05  | -6.9066  | 4.0022  |
| set1  | 3dp   | 5       | set2 | 3dp    | 8        | -0.7221  | 5.3644         | 3823 | -0.13   | 0.8929  | 1.0000 | 0.05  | -11.2394 | 9.7952  |
| set1  | 3dp   | 5       | set2 | 3dp    | 9        | -1.2756  | 5.3644         | 3823 | -0.24   | 0.8121  | 1.0000 | 0.05  | -11.7929 | 9.2417  |
| set1  | 3dp   | 6       | set1 | 3dp    | 7        | -0.3026  | 5.6772         | 3823 | -0.05   | 0.9575  | 1.0000 | 0.05  | -11.4332 | 10.8279 |
| set1  | 3dp   | 6       | set1 | 3dp    | 8        | -0.09544 | 3.0725         | 3823 | -0.03   | 0.9752  | 1.0000 | 0.05  | -6.1192  | 5.9284  |
| set1  | 3dp   | 6       | set1 | 3dp    | 9        | -0.2588  | 3.0725         | 3823 | -0.08   | 0.9329  | 1.0000 | 0.05  | -6.2826  | 5.7650  |
| set1  | 3dp   | 6       | set2 | 2dd    | 1        | 0.1234   | 3.6773         | 3823 | 0.03    | 0.9732  | 1.0000 | 0.05  | -7.0863  | 7.3331  |
| set1  | 3dp   | 6       | set2 | 2dd    | 2        | 0.4824   | 10.8195        | 3823 | 0.04    | 0.9644  | 1.0000 | 0.05  | -20.7301 | 21.6950 |
| set1  | 3dp   | 6       | set2 | 2dd    | 3        | -1.0328  | 6.5556         | 3823 | -0.16   | 0.8748  | 1.0000 | 0.05  | -13.8855 | 11.8200 |
| set1  | 3dp   | 6       | set2 | 2dd    | 4        | 0.002729 | 2.7125         | 3823 | 0.00    | 0.9992  | 1.0000 | 0.05  | -5.3154  | 5.3208  |
| set1  | 3dp   | 6       | set2 | 2dd    | 5        | 2.3118   | 10.7764        | 3823 | 0.21    | 0.8301  | 1.0000 | 0.05  | -18.8162 | 23.4399 |
| set1  | 3dp   | 6       | set2 | 2dd    | 6        | 3.0741   | 4.4319         | 3823 | 0.69    | 0.4880  | 1.0000 | 0.05  | -5.6151  | 11.7633 |
| set1  | 3dp   | 6       | set2 | 2dd    | 7        | -0.2585  | 1.8468         | 3823 | -0.14   | 0.8887  | 1.0000 | 0.05  | -3.8794  | 3.3623  |
| set1  | 3dp   | 6       | set2 | 2dd    | 8        | -0.7593  | 4.4319         | 3823 | -0.17   | 0.8640  | 1.0000 | 0.05  | -9.4485  | 7.9299  |
| set1  | 3dp   | 6       | set2 | 2dd    | 9        | -0.6996  | 4.4319         | 3823 | -0.16   | 0.8746  | 1.0000 | 0.05  | -9.3888  | 7.9896  |
| set1  | 3dp   | 6       | set2 | 3dd    | 1        | -0.5602  | 3.0111         | 3823 | -0.19   | 0.8524  | 1.0000 | 0.05  | -6.4637  | 5.3432  |
| set1  | 3dp   | 6       | set2 | 3dd    | 2        | -0.2878  | 7.9096         | 3823 | -0.04   | 0.9710  | 1.0000 | 0.05  | -15.7953 | 15.2197 |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |              |              |
|---|-------|---------|------|--------|----------|--------------|--------------|
| set   | media | pair_id | _set | _media | _pair_id | Adj<br>Lower | Adj<br>Upper |
| set1  | 3dp   | 5       | set2 | 2dd    | 7        | -7.4164      | 4.9786       |
| set1  | 3dp   | 5       | set2 | 2dd    | 8        | -6.4343      | 2.9950       |
| set1  | 3dp   | 5       | set2 | 2dd    | 9        | -6.3745      | 3.0547       |
| set1  | 3dp   | 5       | set2 | 3dd    | 1        | -3.4195      | 0.3784       |
| set1  | 3dp   | 5       | set2 | 3dd    | 2        | -46.4008     | 43.9044      |
| set1  | 3dp   | 5       | set2 | 3dd    | 3        | -32.9583     | 29.2693      |
| set1  | 3dp   | 5       | set2 | 3dd    | 4        | -7.7418      | 3.0714       |
| set1  | 3dp   | 5       | set2 | 3dd    | 5        | -19.6088     | 20.0994      |
| set1  | 3dp   | 5       | set2 | 3dd    | 6        | -2.0628      | 0.8718       |
| set1  | 3dp   | 5       | set2 | 3dd    | 7        | -11.2037     | 6.4794       |
| set1  | 3dp   | 5       | set2 | 3dd    | 8        | -3.6556      | 0.9200       |
| set1  | 3dp   | 5       | set2 | 3dd    | 9        | -4.0030      | 0.5726       |
| set1  | 3dp   | 5       | set2 | 3dp    | 1        | -19.1092     | 18.0098      |
| set1  | 3dp   | 5       | set2 | 3dp    | 2        | -26.8264     | 24.1950      |
| set1  | 3dp   | 5       | set2 | 3dp    | 3        | -24.9146     | 20.4170      |
| set1  | 3dp   | 5       | set2 | 3dp    | 4        | -15.7305     | 13.6118      |
| set1  | 3dp   | 5       | set2 | 3dp    | 5        | -47.6646     | 46.7311      |
| set1  | 3dp   | 5       | set2 | 3dp    | 6        | -23.3752     | 19.8770      |
| set1  | 3dp   | 5       | set2 | 3dp    | 7        | -12.6677     | 9.7634       |
| set1  | 3dp   | 5       | set2 | 3dp    | 8        | -22.3482     | 20.9040      |
| set1  | 3dp   | 5       | set2 | 3dp    | 9        | -22.9017     | 20.3505      |
| set1  | 3dp   | 6       | set1 | 3dp    | 7        | -23.1897     | 22.5845      |
| set1  | 3dp   | 6       | set1 | 3dp    | 8        | -12.4818     | 12.2909      |
| set1  | 3dp   | 6       | set1 | 3dp    | 9        | -12.6452     | 12.1276      |
| set1  | 3dp   | 6       | set2 | 2dd    | 1        | -14.7015     | 14.9482      |
| set1  | 3dp   | 6       | set2 | 2dd    | 2        | -43.1357     | 44.1006      |
| set1  | 3dp   | 6       | set2 | 2dd    | 3        | -27.4611     | 25.3956      |
| set1  | 3dp   | 6       | set2 | 2dd    | 4        | -10.9326     | 10.9380      |
| set1  | 3dp   | 6       | set2 | 2dd    | 5        | -41.1325     | 45.7562      |
| set1  | 3dp   | 6       | set2 | 2dd    | 6        | -14.7930     | 20.9412      |
| set1  | 3dp   | 6       | set2 | 2dd    | 7        | -7.7038      | 7.1868       |
| set1  | 3dp   | 6       | set2 | 2dd    | 8        | -18.6264     | 17.1078      |
| set1  | 3dp   | 6       | set2 | 2dd    | 9        | -18.5666     | 17.1675      |
| set1  | 3dp   | 6       | set2 | 3dd    | 1        | -12.6991     | 11.5787      |
| set1  | 3dp   | 6       | set2 | 3dd    | 2        | -32.1750     | 31.5993      |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |          |                |      |         |         |        |       |          |         |
|---|-------|---------|------|--------|----------|----------|----------------|------|---------|---------|--------|-------|----------|---------|
| set   | media | pair_id | _set | _media | _pair_id | Estimate | Standard Error | DF   | t Value | Pr >  t | Adj P  | Alpha | Lower    | Upper   |
| set1  | 3dp   | 6       | set2 | 3dd    | 3        | -0.8842  | 4.4402         | 3823 | -0.20   | 0.8422  | 1.0000 | 0.05  | -9.5895  | 7.8212  |
| set1  | 3dp   | 6       | set2 | 3dd    | 4        | -1.3748  | 2.0489         | 3823 | -0.67   | 0.5022  | 1.0000 | 0.05  | -5.3918  | 2.6421  |
| set1  | 3dp   | 6       | set2 | 3dd    | 5        | 1.2057   | 8.2091         | 3823 | 0.15    | 0.8832  | 1.0000 | 0.05  | -14.8890 | 17.3004 |
| set1  | 3dp   | 6       | set2 | 3dd    | 6        | 0.3649   | 3.3537         | 3823 | 0.11    | 0.9134  | 1.0000 | 0.05  | -6.2102  | 6.9400  |
| set1  | 3dp   | 6       | set2 | 3dd    | 7        | -1.4018  | 1.2040         | 3823 | -1.16   | 0.2444  | 1.0000 | 0.05  | -3.7623  | 0.9587  |
| set1  | 3dp   | 6       | set2 | 3dd    | 8        | -0.4075  | 3.7668         | 3823 | -0.11   | 0.9139  | 1.0000 | 0.05  | -7.7926  | 6.9776  |
| set1  | 3dp   | 6       | set2 | 3dd    | 9        | -0.7549  | 3.7668         | 3823 | -0.20   | 0.8412  | 1.0000 | 0.05  | -8.1400  | 6.6302  |
| set1  | 3dp   | 6       | set2 | 3dp    | 1        | 0.4107   | 7.8869         | 3823 | 0.05    | 0.9585  | 1.0000 | 0.05  | -15.0523 | 15.8736 |
| set1  | 3dp   | 6       | set2 | 3dp    | 2        | -0.3554  | 3.0540         | 3823 | -0.12   | 0.9074  | 1.0000 | 0.05  | -6.3429  | 5.6322  |
| set1  | 3dp   | 6       | set2 | 3dp    | 3        | -1.2884  | 2.3502         | 3823 | -0.55   | 0.5836  | 1.0000 | 0.05  | -5.8962  | 3.3194  |
| set1  | 3dp   | 6       | set2 | 3dp    | 4        | -0.09896 | 6.9143         | 3823 | -0.01   | 0.9886  | 1.0000 | 0.05  | -13.6550 | 13.4571 |
| set1  | 3dp   | 6       | set2 | 3dp    | 5        | 0.4936   | 14.9993        | 3823 | 0.03    | 0.9737  | 1.0000 | 0.05  | -28.9139 | 29.9011 |
| set1  | 3dp   | 6       | set2 | 3dp    | 6        | -0.7888  | 8.6491         | 3823 | -0.09   | 0.9273  | 1.0000 | 0.05  | -17.7461 | 16.1686 |
| set1  | 3dp   | 6       | set2 | 3dp    | 7        | -0.4918  | 6.0452         | 3823 | -0.08   | 0.9352  | 1.0000 | 0.05  | -12.3438 | 11.3602 |
| set1  | 3dp   | 6       | set2 | 3dp    | 8        | 0.2383   | 8.6491         | 3823 | 0.03    | 0.9780  | 1.0000 | 0.05  | -16.7191 | 17.1957 |
| set1  | 3dp   | 6       | set2 | 3dp    | 9        | -0.3152  | 8.6491         | 3823 | -0.04   | 0.9709  | 1.0000 | 0.05  | -17.2726 | 16.6422 |
| set1  | 3dp   | 7       | set1 | 3dp    | 8        | 0.2072   | 2.6176         | 3823 | 0.08    | 0.9369  | 1.0000 | 0.05  | -4.9249  | 5.3393  |
| set1  | 3dp   | 7       | set1 | 3dp    | 9        | 0.04380  | 2.6176         | 3823 | 0.02    | 0.9867  | 1.0000 | 0.05  | -5.0883  | 5.1759  |
| set1  | 3dp   | 7       | set2 | 2dd    | 1        | 0.4260   | 9.3298         | 3823 | 0.05    | 0.9636  | 1.0000 | 0.05  | -17.8659 | 18.7179 |
| set1  | 3dp   | 7       | set2 | 2dd    | 2        | 0.7851   | 5.1605         | 3823 | 0.15    | 0.8791  | 1.0000 | 0.05  | -9.3325  | 10.9026 |
| set1  | 3dp   | 7       | set2 | 2dd    | 3        | -0.7301  | 0.9727         | 3823 | -0.75   | 0.4529  | 1.0000 | 0.05  | -2.6373  | 1.1770  |
| set1  | 3dp   | 7       | set2 | 2dd    | 4        | 0.3054   | 8.3557         | 3823 | 0.04    | 0.9709  | 1.0000 | 0.05  | -16.0768 | 16.6875 |
| set1  | 3dp   | 7       | set2 | 2dd    | 5        | 2.6145   | 16.4429        | 3823 | 0.16    | 0.8737  | 1.0000 | 0.05  | -29.6233 | 34.8522 |
| set1  | 3dp   | 7       | set2 | 2dd    | 6        | 3.3767   | 10.0919        | 3823 | 0.33    | 0.7379  | 1.0000 | 0.05  | -16.4092 | 23.1627 |
| set1  | 3dp   | 7       | set2 | 2dd    | 7        | 0.04411  | 7.4814         | 3823 | 0.01    | 0.9953  | 1.0000 | 0.05  | -14.6239 | 14.7121 |
| set1  | 3dp   | 7       | set2 | 2dd    | 8        | -0.4567  | 10.0919        | 3823 | -0.05   | 0.9639  | 1.0000 | 0.05  | -20.2426 | 19.3293 |
| set1  | 3dp   | 7       | set2 | 2dd    | 9        | -0.3969  | 10.0919        | 3823 | -0.04   | 0.9686  | 1.0000 | 0.05  | -20.1829 | 19.3890 |
| set1  | 3dp   | 7       | set2 | 3dd    | 1        | -0.2576  | 8.6584         | 3823 | -0.03   | 0.9763  | 1.0000 | 0.05  | -17.2332 | 16.7180 |
| set1  | 3dp   | 7       | set2 | 3dd    | 2        | 0.01478  | 2.2806         | 3823 | 0.01    | 0.9948  | 1.0000 | 0.05  | -4.4565  | 4.4860  |
| set1  | 3dp   | 7       | set2 | 3dd    | 3        | -0.5815  | 1.3315         | 3823 | -0.44   | 0.6623  | 1.0000 | 0.05  | -3.1921  | 2.0290  |
| set1  | 3dp   | 7       | set2 | 3dd    | 4        | -1.0722  | 7.6836         | 3823 | -0.14   | 0.8890  | 1.0000 | 0.05  | -16.1365 | 13.9921 |
| set1  | 3dp   | 7       | set2 | 3dd    | 5        | 1.5083   | 13.8749        | 3823 | 0.11    | 0.9134  | 1.0000 | 0.05  | -25.6946 | 28.7112 |
| set1  | 3dp   | 7       | set2 | 3dd    | 6        | 0.6675   | 9.0010         | 3823 | 0.07    | 0.9409  | 1.0000 | 0.05  | -16.9797 | 18.3147 |
| set1  | 3dp   | 7       | set2 | 3dd    | 7        | -1.0992  | 6.8110         | 3823 | -0.16   | 0.8718  | 1.0000 | 0.05  | -14.4528 | 12.2544 |
| set1  | 3dp   | 7       | set2 | 3dd    | 8        | -0.1048  | 9.4219         | 3823 | -0.01   | 0.9911  | 1.0000 | 0.05  | -18.5772 | 18.3675 |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |              |              |
|---|-------|---------|------|--------|----------|--------------|--------------|
| set   | media | pair_id | _set | _media | _pair_id | Adj<br>Lower | Adj<br>Upper |
| set1  | 3dp   | 6       | set2 | 3dd    | 3        | -18.7844     | 17.0161      |
| set1  | 3dp   | 6       | set2 | 3dd    | 4        | -9.6347      | 6.8850       |
| set1  | 3dp   | 6       | set2 | 3dd    | 5        | -31.8889     | 34.3002      |
| set1  | 3dp   | 6       | set2 | 3dd    | 6        | -13.1551     | 13.8849      |
| set1  | 3dp   | 6       | set2 | 3dd    | 7        | -6.2556      | 3.4520       |
| set1  | 3dp   | 6       | set2 | 3dd    | 8        | -15.5930     | 14.7781      |
| set1  | 3dp   | 6       | set2 | 3dd    | 9        | -15.9404     | 14.4307      |
| set1  | 3dp   | 6       | set2 | 3dp    | 1        | -31.3849     | 32.2062      |
| set1  | 3dp   | 6       | set2 | 3dp    | 2        | -12.6673     | 11.9565      |
| set1  | 3dp   | 6       | set2 | 3dp    | 3        | -10.7632     | 8.1864       |
| set1  | 3dp   | 6       | set2 | 3dp    | 4        | -27.9735     | 27.7756      |
| set1  | 3dp   | 6       | set2 | 3dp    | 5        | -59.9752     | 60.9625      |
| set1  | 3dp   | 6       | set2 | 3dp    | 6        | -35.6572     | 34.0797      |
| set1  | 3dp   | 6       | set2 | 3dp    | 7        | -24.8624     | 23.8788      |
| set1  | 3dp   | 6       | set2 | 3dp    | 8        | -34.6302     | 35.1067      |
| set1  | 3dp   | 6       | set2 | 3dp    | 9        | -35.1837     | 34.5532      |
| set1  | 3dp   | 7       | set1 | 3dp    | 8        | -10.3456     | 10.7600      |
| set1  | 3dp   | 7       | set1 | 3dp    | 9        | -10.5090     | 10.5966      |
| set1  | 3dp   | 7       | set2 | 2dd    | 1        | -37.1865     | 38.0385      |
| set1  | 3dp   | 7       | set2 | 2dd    | 2        | -20.0190     | 21.5892      |
| set1  | 3dp   | 7       | set2 | 2dd    | 3        | -4.6517      | 3.1914       |
| set1  | 3dp   | 7       | set2 | 2dd    | 4        | -33.3802     | 33.9909      |
| set1  | 3dp   | 7       | set2 | 2dd    | 5        | -63.6740     | 68.9030      |
| set1  | 3dp   | 7       | set2 | 2dd    | 6        | -37.3079     | 44.0614      |
| set1  | 3dp   | 7       | set2 | 2dd    | 7        | -30.1168     | 30.2050      |
| set1  | 3dp   | 7       | set2 | 2dd    | 8        | -41.1413     | 40.2280      |
| set1  | 3dp   | 7       | set2 | 2dd    | 9        | -41.0816     | 40.2877      |
| set1  | 3dp   | 7       | set2 | 3dd    | 1        | -35.1635     | 34.6483      |
| set1  | 3dp   | 7       | set2 | 3dd    | 2        | -9.1792      | 9.2087       |
| set1  | 3dp   | 7       | set2 | 3dd    | 3        | -5.9494      | 4.7864       |
| set1  | 3dp   | 7       | set2 | 3dd    | 4        | -32.0481     | 29.9037      |
| set1  | 3dp   | 7       | set2 | 3dd    | 5        | -54.4274     | 57.4439      |
| set1  | 3dp   | 7       | set2 | 3dd    | 6        | -35.6193     | 36.9544      |
| set1  | 3dp   | 7       | set2 | 3dd    | 7        | -28.5573     | 26.3590      |
| set1  | 3dp   | 7       | set2 | 3dd    | 8        | -38.0884     | 37.8787      |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |          |                |      |         |         |        |       |          |         |
|---|-------|---------|------|--------|----------|----------|----------------|------|---------|---------|--------|-------|----------|---------|
| set   | media | pair_id | _set | _media | _pair_id | Estimate | Standard Error | DF   | t Value | Pr >  t | Adj P  | Alpha | Lower    | Upper   |
| set1  | 3dp   | 7       | set2 | 3dd    | 9        | -0.4522  | 9.4219         | 3823 | -0.05   | 0.9617  | 1.0000 | 0.05  | -18.9246 | 18.0201 |
| set1  | 3dp   | 7       | set2 | 3dp    | 1        | 0.7133   | 13.5531        | 3823 | 0.05    | 0.9580  | 1.0000 | 0.05  | -25.8586 | 27.2852 |
| set1  | 3dp   | 7       | set2 | 3dp    | 2        | -0.05273 | 2.7469         | 3823 | -0.02   | 0.9847  | 1.0000 | 0.05  | -5.4383  | 5.3329  |
| set1  | 3dp   | 7       | set2 | 3dp    | 3        | -0.9858  | 3.3843         | 3823 | -0.29   | 0.7709  | 1.0000 | 0.05  | -7.6210  | 5.6495  |
| set1  | 3dp   | 7       | set2 | 3dp    | 4        | 0.2037   | 12.5789        | 3823 | 0.02    | 0.9871  | 1.0000 | 0.05  | -24.4582 | 24.8656 |
| set1  | 3dp   | 7       | set2 | 3dp    | 5        | 0.7962   | 20.6683        | 3823 | 0.04    | 0.9693  | 1.0000 | 0.05  | -39.7257 | 41.3182 |
| set1  | 3dp   | 7       | set2 | 3dp    | 6        | -0.4861  | 14.3168        | 3823 | -0.03   | 0.9729  | 1.0000 | 0.05  | -28.5554 | 27.5831 |
| set1  | 3dp   | 7       | set2 | 3dp    | 7        | -0.1892  | 11.7075        | 3823 | -0.02   | 0.9871  | 1.0000 | 0.05  | -23.1426 | 22.7643 |
| set1  | 3dp   | 7       | set2 | 3dp    | 8        | 0.5409   | 14.3168        | 3823 | 0.04    | 0.9699  | 1.0000 | 0.05  | -27.5284 | 28.6102 |
| set1  | 3dp   | 7       | set2 | 3dp    | 9        | -0.01259 | 14.3168        | 3823 | -0.00   | 0.9993  | 1.0000 | 0.05  | -28.0819 | 28.0567 |
| set1  | 3dp   | 8       | set1 | 3dp    | 9        | -0.1634  | 0              | 3823 | -Infy   | <.0001  | .      | .     | .        | .       |
| set1  | 3dp   | 8       | set2 | 2dd    | 1        | 0.2188   | 6.7210         | 3823 | 0.03    | 0.9740  | 1.0000 | 0.05  | -12.9583 | 13.3959 |
| set1  | 3dp   | 8       | set2 | 2dd    | 2        | 0.5779   | 7.7642         | 3823 | 0.07    | 0.9407  | 1.0000 | 0.05  | -14.6445 | 15.8002 |
| set1  | 3dp   | 8       | set2 | 2dd    | 3        | -0.9373  | 3.5009         | 3823 | -0.27   | 0.7889  | 1.0000 | 0.05  | -7.8012  | 5.9265  |
| set1  | 3dp   | 8       | set2 | 2dd    | 4        | 0.09817  | 5.7488         | 3823 | 0.02    | 0.9864  | 1.0000 | 0.05  | -11.1729 | 11.3693 |
| set1  | 3dp   | 8       | set2 | 2dd    | 5        | 2.4073   | 13.8322        | 3823 | 0.17    | 0.8618  | 1.0000 | 0.05  | -24.7120 | 29.5265 |
| set1  | 3dp   | 8       | set2 | 2dd    | 6        | 3.1696   | 7.4814         | 3823 | 0.42    | 0.6718  | 1.0000 | 0.05  | -11.4984 | 17.8375 |
| set1  | 3dp   | 8       | set2 | 2dd    | 7        | -0.1631  | 4.8788         | 3823 | -0.03   | 0.9733  | 1.0000 | 0.05  | -9.7283  | 9.4021  |
| set1  | 3dp   | 8       | set2 | 2dd    | 8        | -0.6638  | 7.4814         | 3823 | -0.09   | 0.9293  | 1.0000 | 0.05  | -15.3318 | 14.0041 |
| set1  | 3dp   | 8       | set2 | 2dd    | 9        | -0.6041  | 7.4814         | 3823 | -0.08   | 0.9356  | 1.0000 | 0.05  | -15.2721 | 14.0639 |
| set1  | 3dp   | 8       | set2 | 3dd    | 1        | -0.4648  | 6.0487         | 3823 | -0.08   | 0.9388  | 1.0000 | 0.05  | -12.3238 | 11.3943 |
| set1  | 3dp   | 8       | set2 | 3dd    | 2        | -0.1924  | 4.8601         | 3823 | -0.04   | 0.9684  | 1.0000 | 0.05  | -9.7211  | 9.3363  |
| set1  | 3dp   | 8       | set2 | 3dd    | 3        | -0.7887  | 1.4083         | 3823 | -0.56   | 0.5755  | 1.0000 | 0.05  | -3.5497  | 1.9723  |
| set1  | 3dp   | 8       | set2 | 3dd    | 4        | -1.2794  | 5.0755         | 3823 | -0.25   | 0.8010  | 1.0000 | 0.05  | -11.2304 | 8.6716  |
| set1  | 3dp   | 8       | set2 | 3dd    | 5        | 1.3011   | 11.2661        | 3823 | 0.12    | 0.9081  | 1.0000 | 0.05  | -20.7870 | 23.3892 |
| set1  | 3dp   | 8       | set2 | 3dd    | 6        | 0.4603   | 6.3921         | 3823 | 0.07    | 0.9426  | 1.0000 | 0.05  | -12.0720 | 12.9926 |
| set1  | 3dp   | 8       | set2 | 3dd    | 7        | -1.3064  | 4.2086         | 3823 | -0.31   | 0.7563  | 1.0000 | 0.05  | -9.5577  | 6.9450  |
| set1  | 3dp   | 8       | set2 | 3dd    | 8        | -0.3120  | 6.8110         | 3823 | -0.05   | 0.9635  | 1.0000 | 0.05  | -13.6656 | 13.0416 |
| set1  | 3dp   | 8       | set2 | 3dd    | 9        | -0.6594  | 6.8110         | 3823 | -0.10   | 0.9229  | 1.0000 | 0.05  | -14.0130 | 12.6942 |
| set1  | 3dp   | 8       | set2 | 3dp    | 1        | 0.5061   | 10.9444        | 3823 | 0.05    | 0.9631  | 1.0000 | 0.05  | -20.9513 | 21.9635 |
| set1  | 3dp   | 8       | set2 | 3dp    | 2        | -0.2599  | 0.6640         | 3823 | -0.39   | 0.6955  | 1.0000 | 0.05  | -1.5618  | 1.0419  |
| set1  | 3dp   | 8       | set2 | 3dp    | 3        | -1.1930  | 0.8552         | 3823 | -1.40   | 0.1631  | 1.0000 | 0.05  | -2.8696  | 0.4837  |
| set1  | 3dp   | 8       | set2 | 3dp    | 4        | -0.00352 | 9.9713         | 3823 | -0.00   | 0.9997  | 1.0000 | 0.05  | -19.5530 | 19.5460 |
| set1  | 3dp   | 8       | set2 | 3dp    | 5        | 0.5891   | 18.0584        | 3823 | 0.03    | 0.9740  | 1.0000 | 0.05  | -34.8160 | 35.9941 |
| set1  | 3dp   | 8       | set2 | 3dp    | 6        | -0.6933  | 11.7075        | 3823 | -0.06   | 0.9528  | 1.0000 | 0.05  | -23.6468 | 22.2601 |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |              |              |
|---|-------|---------|------|--------|----------|--------------|--------------|
| set   | media | pair_id | _set | _media | _pair_id | Adj<br>Lower | Adj<br>Upper |
| set1  | 3dp   | 7       | set2 | 3dd    | 9        | -38.4358     | 37.5313      |
| set1  | 3dp   | 7       | set2 | 3dp    | 1        | -53.9250     | 55.3516      |
| set1  | 3dp   | 7       | set2 | 3dp    | 2        | -11.1268     | 11.0214      |
| set1  | 3dp   | 7       | set2 | 3dp    | 3        | -14.6295     | 12.6579      |
| set1  | 3dp   | 7       | set2 | 3dp    | 4        | -50.5071     | 50.9144      |
| set1  | 3dp   | 7       | set2 | 3dp    | 5        | -82.5266     | 84.1191      |
| set1  | 3dp   | 7       | set2 | 3dp    | 6        | -58.2033     | 57.2310      |
| set1  | 3dp   | 7       | set2 | 3dp    | 7        | -47.3870     | 47.0086      |
| set1  | 3dp   | 7       | set2 | 3dp    | 8        | -57.1763     | 58.2581      |
| set1  | 3dp   | 7       | set2 | 3dp    | 9        | -57.7298     | 57.7046      |
| set1  | 3dp   | 8       | set1 | 3dp    | 9        | .            | .            |
| set1  | 3dp   | 8       | set2 | 2dd    | 1        | -26.8764     | 27.3140      |
| set1  | 3dp   | 8       | set2 | 2dd    | 2        | -30.7230     | 31.8787      |
| set1  | 3dp   | 8       | set2 | 2dd    | 3        | -15.0510     | 13.1764      |
| set1  | 3dp   | 8       | set2 | 2dd    | 4        | -23.0779     | 23.2742      |
| set1  | 3dp   | 8       | set2 | 2dd    | 5        | -53.3564     | 58.1710      |
| set1  | 3dp   | 8       | set2 | 2dd    | 6        | -26.9914     | 33.3305      |
| set1  | 3dp   | 8       | set2 | 2dd    | 7        | -19.8314     | 19.5053      |
| set1  | 3dp   | 8       | set2 | 2dd    | 8        | -30.8248     | 29.4971      |
| set1  | 3dp   | 8       | set2 | 2dd    | 9        | -30.7650     | 29.5568      |
| set1  | 3dp   | 8       | set2 | 3dd    | 1        | -24.8498     | 23.9203      |
| set1  | 3dp   | 8       | set2 | 3dd    | 2        | -19.7857     | 19.4009      |
| set1  | 3dp   | 8       | set2 | 3dd    | 3        | -6.4660      | 4.8886       |
| set1  | 3dp   | 8       | set2 | 3dd    | 4        | -21.7410     | 19.1822      |
| set1  | 3dp   | 8       | set2 | 3dd    | 5        | -44.1173     | 46.7195      |
| set1  | 3dp   | 8       | set2 | 3dd    | 6        | -25.3091     | 26.2297      |
| set1  | 3dp   | 8       | set2 | 3dd    | 7        | -18.2731     | 15.6604      |
| set1  | 3dp   | 8       | set2 | 3dd    | 8        | -27.7702     | 27.1461      |
| set1  | 3dp   | 8       | set2 | 3dd    | 9        | -28.1176     | 26.7987      |
| set1  | 3dp   | 8       | set2 | 3dp    | 1        | -43.6154     | 44.6276      |
| set1  | 3dp   | 8       | set2 | 3dp    | 2        | -2.9368      | 2.4170       |
| set1  | 3dp   | 8       | set2 | 3dp    | 3        | -4.6406      | 2.2546       |
| set1  | 3dp   | 8       | set2 | 3dp    | 4        | -40.2020     | 40.1949      |
| set1  | 3dp   | 8       | set2 | 3dp    | 5        | -72.2123     | 73.3904      |
| set1  | 3dp   | 8       | set2 | 3dp    | 6        | -47.8911     | 46.5045      |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |          |                |      |         |         |        |       |          |         |
|---|-------|---------|------|--------|----------|----------|----------------|------|---------|---------|--------|-------|----------|---------|
| set   | media | pair_id | _set | _media | _pair_id | Estimate | Standard Error | DF   | t Value | Pr >  t | Adj P  | Alpha | Lower    | Upper   |
| set1  | 3dp   | 8       | set2 | 3dp    | 7        | -0.3964  | 9.1029         | 3823 | -0.04   | 0.9653  | 1.0000 | 0.05  | -18.2433 | 17.4506 |
| set1  | 3dp   | 8       | set2 | 3dp    | 8        | 0.3337   | 11.7075        | 3823 | 0.03    | 0.9773  | 1.0000 | 0.05  | -22.6197 | 23.2872 |
| set1  | 3dp   | 8       | set2 | 3dp    | 9        | -0.2198  | 11.7075        | 3823 | -0.02   | 0.9850  | 1.0000 | 0.05  | -23.1732 | 22.7337 |
| set1  | 3dp   | 9       | set2 | 2dd    | 1        | 0.3822   | 6.7210         | 3823 | 0.06    | 0.9547  | 1.0000 | 0.05  | -12.7949 | 13.5593 |
| set1  | 3dp   | 9       | set2 | 2dd    | 2        | 0.7413   | 7.7642         | 3823 | 0.10    | 0.9239  | 1.0000 | 0.05  | -14.4811 | 15.9636 |
| set1  | 3dp   | 9       | set2 | 2dd    | 3        | -0.7739  | 3.5009         | 3823 | -0.22   | 0.8250  | 1.0000 | 0.05  | -7.6378  | 6.0899  |
| set1  | 3dp   | 9       | set2 | 2dd    | 4        | 0.2616   | 5.7488         | 3823 | 0.05    | 0.9637  | 1.0000 | 0.05  | -11.0095 | 11.5326 |
| set1  | 3dp   | 9       | set2 | 2dd    | 5        | 2.5707   | 13.8322        | 3823 | 0.19    | 0.8526  | 1.0000 | 0.05  | -24.5486 | 29.6899 |
| set1  | 3dp   | 9       | set2 | 2dd    | 6        | 3.3329   | 7.4814         | 3823 | 0.45    | 0.6560  | 1.0000 | 0.05  | -11.3351 | 18.0009 |
| set1  | 3dp   | 9       | set2 | 2dd    | 7        | 0.000307 | 4.8788         | 3823 | 0.00    | 0.9999  | 1.0000 | 0.05  | -9.5649  | 9.5655  |
| set1  | 3dp   | 9       | set2 | 2dd    | 8        | -0.5005  | 7.4814         | 3823 | -0.07   | 0.9467  | 1.0000 | 0.05  | -15.1685 | 14.1675 |
| set1  | 3dp   | 9       | set2 | 2dd    | 9        | -0.4407  | 7.4814         | 3823 | -0.06   | 0.9530  | 1.0000 | 0.05  | -15.1087 | 14.2273 |
| set1  | 3dp   | 9       | set2 | 3dd    | 1        | -0.3014  | 6.0487         | 3823 | -0.05   | 0.9603  | 1.0000 | 0.05  | -12.1604 | 11.5577 |
| set1  | 3dp   | 9       | set2 | 3dd    | 2        | -0.02902 | 4.8601         | 3823 | -0.01   | 0.9952  | 1.0000 | 0.05  | -9.5577  | 9.4997  |
| set1  | 3dp   | 9       | set2 | 3dd    | 3        | -0.6253  | 1.4083         | 3823 | -0.44   | 0.6570  | 1.0000 | 0.05  | -3.3864  | 2.1357  |
| set1  | 3dp   | 9       | set2 | 3dd    | 4        | -1.1160  | 5.0755         | 3823 | -0.22   | 0.8260  | 1.0000 | 0.05  | -11.0670 | 8.8350  |
| set1  | 3dp   | 9       | set2 | 3dd    | 5        | 1.4645   | 11.2661        | 3823 | 0.13    | 0.8966  | 1.0000 | 0.05  | -20.6236 | 23.5526 |
| set1  | 3dp   | 9       | set2 | 3dd    | 6        | 0.6237   | 6.3921         | 3823 | 0.10    | 0.9223  | 1.0000 | 0.05  | -11.9086 | 13.1560 |
| set1  | 3dp   | 9       | set2 | 3dd    | 7        | -1.1430  | 4.2086         | 3823 | -0.27   | 0.7860  | 1.0000 | 0.05  | -9.3943  | 7.1084  |
| set1  | 3dp   | 9       | set2 | 3dd    | 8        | -0.1486  | 6.8110         | 3823 | -0.02   | 0.9826  | 1.0000 | 0.05  | -13.5022 | 13.2049 |
| set1  | 3dp   | 9       | set2 | 3dd    | 9        | -0.4960  | 6.8110         | 3823 | -0.07   | 0.9419  | 1.0000 | 0.05  | -13.8496 | 12.8575 |
| set1  | 3dp   | 9       | set2 | 3dp    | 1        | 0.6695   | 10.9444        | 3823 | 0.06    | 0.9512  | 1.0000 | 0.05  | -20.7879 | 22.1269 |
| set1  | 3dp   | 9       | set2 | 3dp    | 2        | -0.09653 | 0.6640         | 3823 | -0.15   | 0.8844  | 1.0000 | 0.05  | -1.3984  | 1.2053  |
| set1  | 3dp   | 9       | set2 | 3dp    | 3        | -1.0296  | 0.8552         | 3823 | -1.20   | 0.2287  | 1.0000 | 0.05  | -2.7062  | 0.6471  |
| set1  | 3dp   | 9       | set2 | 3dp    | 4        | 0.1599   | 9.9713         | 3823 | 0.02    | 0.9872  | 1.0000 | 0.05  | -19.3896 | 19.7094 |
| set1  | 3dp   | 9       | set2 | 3dp    | 5        | 0.7524   | 18.0584        | 3823 | 0.04    | 0.9668  | 1.0000 | 0.05  | -34.6526 | 36.1575 |
| set1  | 3dp   | 9       | set2 | 3dp    | 6        | -0.5299  | 11.7075        | 3823 | -0.05   | 0.9639  | 1.0000 | 0.05  | -23.4834 | 22.4235 |
| set1  | 3dp   | 9       | set2 | 3dp    | 7        | -0.2330  | 9.1029         | 3823 | -0.03   | 0.9796  | 1.0000 | 0.05  | -18.0799 | 17.6140 |
| set1  | 3dp   | 9       | set2 | 3dp    | 8        | 0.4971   | 11.7075        | 3823 | 0.04    | 0.9661  | 1.0000 | 0.05  | -22.4564 | 23.4505 |
| set1  | 3dp   | 9       | set2 | 3dp    | 9        | -0.05639 | 11.7075        | 3823 | -0.00   | 0.9962  | 1.0000 | 0.05  | -23.0098 | 22.8971 |
| set2  | 2dd   | 1       | set2 | 2dd    | 2        | 0.3591   | 14.4696        | 3823 | 0.02    | 0.9802  | 1.0000 | 0.05  | -28.0098 | 28.7279 |
| set2  | 2dd   | 1       | set2 | 2dd    | 3        | -1.1561  | 10.1961        | 3823 | -0.11   | 0.9097  | 1.0000 | 0.05  | -21.1465 | 18.8342 |
| set2  | 2dd   | 1       | set2 | 2dd    | 4        | -0.1206  | 1.0111         | 3823 | -0.12   | 0.9050  | 1.0000 | 0.05  | -2.1031  | 1.8618  |
| set2  | 2dd   | 1       | set2 | 2dd    | 5        | 2.1885   | 7.1223         | 3823 | 0.31    | 0.7587  | 1.0000 | 0.05  | -11.7754 | 16.1524 |
| set2  | 2dd   | 1       | set2 | 2dd    | 6        | 2.9507   | 0.8047         | 3823 | 3.67    | 0.0002  | 0.1632 | 0.05  | 1.3731   | 4.5284  |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |              |              |
|---|-------|---------|------|--------|----------|--------------|--------------|
| set   | media | pair_id | _set | _media | _pair_id | Adj<br>Lower | Adj<br>Upper |
| set1  | 3dp   | 8       | set2 | 3dp    | 7        | -37.0940     | 36.3012      |
| set1  | 3dp   | 8       | set2 | 3dp    | 8        | -46.8641     | 47.5315      |
| set1  | 3dp   | 8       | set2 | 3dp    | 9        | -47.4176     | 46.9780      |
| set1  | 3dp   | 9       | set2 | 2dd    | 1        | -26.7130     | 27.4774      |
| set1  | 3dp   | 9       | set2 | 2dd    | 2        | -30.5596     | 32.0421      |
| set1  | 3dp   | 9       | set2 | 2dd    | 3        | -14.8876     | 13.3397      |
| set1  | 3dp   | 9       | set2 | 2dd    | 4        | -22.9145     | 23.4376      |
| set1  | 3dp   | 9       | set2 | 2dd    | 5        | -53.1930     | 58.3344      |
| set1  | 3dp   | 9       | set2 | 2dd    | 6        | -26.8280     | 33.4938      |
| set1  | 3dp   | 9       | set2 | 2dd    | 7        | -19.6681     | 19.6687      |
| set1  | 3dp   | 9       | set2 | 2dd    | 8        | -30.6614     | 29.6604      |
| set1  | 3dp   | 9       | set2 | 2dd    | 9        | -30.6017     | 29.7202      |
| set1  | 3dp   | 9       | set2 | 3dd    | 1        | -24.6864     | 24.0836      |
| set1  | 3dp   | 9       | set2 | 3dd    | 2        | -19.6224     | 19.5643      |
| set1  | 3dp   | 9       | set2 | 3dd    | 3        | -6.3027      | 5.0520       |
| set1  | 3dp   | 9       | set2 | 3dd    | 4        | -21.5776     | 19.3456      |
| set1  | 3dp   | 9       | set2 | 3dd    | 5        | -43.9539     | 46.8829      |
| set1  | 3dp   | 9       | set2 | 3dd    | 6        | -25.1457     | 26.3931      |
| set1  | 3dp   | 9       | set2 | 3dd    | 7        | -18.1098     | 15.8238      |
| set1  | 3dp   | 9       | set2 | 3dd    | 8        | -27.6068     | 27.3095      |
| set1  | 3dp   | 9       | set2 | 3dd    | 9        | -27.9542     | 26.9621      |
| set1  | 3dp   | 9       | set2 | 3dp    | 1        | -43.4520     | 44.7910      |
| set1  | 3dp   | 9       | set2 | 3dp    | 2        | -2.7734      | 2.5804       |
| set1  | 3dp   | 9       | set2 | 3dp    | 3        | -4.4772      | 2.4180       |
| set1  | 3dp   | 9       | set2 | 3dp    | 4        | -40.0386     | 40.3583      |
| set1  | 3dp   | 9       | set2 | 3dp    | 5        | -72.0489     | 73.5538      |
| set1  | 3dp   | 9       | set2 | 3dp    | 6        | -47.7278     | 46.6679      |
| set1  | 3dp   | 9       | set2 | 3dp    | 7        | -36.9306     | 36.4646      |
| set1  | 3dp   | 9       | set2 | 3dp    | 8        | -46.7007     | 47.6949      |
| set1  | 3dp   | 9       | set2 | 3dp    | 9        | -47.2542     | 47.1414      |
| set2  | 2dd   | 1       | set2 | 2dd    | 2        | -57.9741     | 58.6922      |
| set2  | 2dd   | 1       | set2 | 2dd    | 3        | -42.2610     | 39.9487      |
| set2  | 2dd   | 1       | set2 | 2dd    | 4        | -4.1970      | 3.9557       |
| set2  | 2dd   | 1       | set2 | 2dd    | 5        | -26.5247     | 30.9016      |
| set2  | 2dd   | 1       | set2 | 2dd    | 6        | -0.2933      | 6.1948       |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |          |                |      |         |         |        |       |          |         |
|---|-------|---------|------|--------|----------|----------|----------------|------|---------|---------|--------|-------|----------|---------|
| set   | media | pair_id | _set | _media | _pair_id | Estimate | Standard Error | DF   | t Value | Pr >  t | Adj P  | Alpha | Lower    | Upper   |
| set2  | 2dd   | 1       | set2 | 2dd    | 7        | -0.3819  | 1.8707         | 3823 | -0.20   | 0.8383  | 1.0000 | 0.05  | -4.0496  | 3.2859  |
| set2  | 2dd   | 1       | set2 | 2dd    | 8        | -0.8827  | 0.8047         | 3823 | -1.10   | 0.2728  | 1.0000 | 0.05  | -2.4603  | 0.6950  |
| set2  | 2dd   | 1       | set2 | 2dd    | 9        | -0.8229  | 0.8047         | 3823 | -1.02   | 0.3065  | 1.0000 | 0.05  | -2.4006  | 0.7548  |
| set2  | 2dd   | 1       | set2 | 3dd    | 1        | -0.6836  | 0.7022         | 3823 | -0.97   | 0.3304  | 1.0000 | 0.05  | -2.0603  | 0.6931  |
| set2  | 2dd   | 1       | set2 | 3dd    | 2        | -0.4112  | 11.5535        | 3823 | -0.04   | 0.9716  | 1.0000 | 0.05  | -23.0627 | 22.2403 |
| set2  | 2dd   | 1       | set2 | 3dd    | 3        | -1.0075  | 8.0752         | 3823 | -0.12   | 0.9007  | 1.0000 | 0.05  | -16.8397 | 14.8247 |
| set2  | 2dd   | 1       | set2 | 3dd    | 4        | -1.4982  | 1.6768         | 3823 | -0.89   | 0.3717  | 1.0000 | 0.05  | -4.7858  | 1.7894  |
| set2  | 2dd   | 1       | set2 | 3dd    | 5        | 1.0823   | 4.5613         | 3823 | 0.24    | 0.8125  | 1.0000 | 0.05  | -7.8606  | 10.0252 |
| set2  | 2dd   | 1       | set2 | 3dd    | 6        | 0.2415   | 0.4770         | 3823 | 0.51    | 0.6126  | 1.0000 | 0.05  | -0.6936  | 1.1766  |
| set2  | 2dd   | 1       | set2 | 3dd    | 7        | -1.5252  | 2.5471         | 3823 | -0.60   | 0.5493  | 1.0000 | 0.05  | -6.5189  | 3.4686  |
| set2  | 2dd   | 1       | set2 | 3dd    | 8        | -0.5308  | 0.3785         | 3823 | -1.40   | 0.1608  | 1.0000 | 0.05  | -1.2729  | 0.2112  |
| set2  | 2dd   | 1       | set2 | 3dd    | 9        | -0.8782  | 0.3785         | 3823 | -2.32   | 0.0204  | 0.9882 | 0.05  | -1.6203  | -0.1362 |
| set2  | 2dd   | 1       | set2 | 3dp    | 1        | 0.2873   | 4.2345         | 3823 | 0.07    | 0.9459  | 1.0000 | 0.05  | -8.0148  | 8.5894  |
| set2  | 2dd   | 1       | set2 | 3dp    | 2        | -0.4787  | 6.6744         | 3823 | -0.07   | 0.9428  | 1.0000 | 0.05  | -13.5645 | 12.6070 |
| set2  | 2dd   | 1       | set2 | 3dp    | 3        | -1.4118  | 5.9798         | 3823 | -0.24   | 0.8134  | 1.0000 | 0.05  | -13.1358 | 10.3122 |
| set2  | 2dd   | 1       | set2 | 3dp    | 4        | -0.2223  | 3.2745         | 3823 | -0.07   | 0.9459  | 1.0000 | 0.05  | -6.6423  | 6.1976  |
| set2  | 2dd   | 1       | set2 | 3dp    | 5        | 0.3702   | 11.3502        | 3823 | 0.03    | 0.9740  | 1.0000 | 0.05  | -21.8828 | 22.6233 |
| set2  | 2dd   | 1       | set2 | 3dp    | 6        | -0.9121  | 5.0063         | 3823 | -0.18   | 0.8554  | 1.0000 | 0.05  | -10.7275 | 8.9032  |
| set2  | 2dd   | 1       | set2 | 3dp    | 7        | -0.6152  | 2.4255         | 3823 | -0.25   | 0.7998  | 1.0000 | 0.05  | -5.3705  | 4.1402  |
| set2  | 2dd   | 1       | set2 | 3dp    | 8        | 0.1149   | 5.0063         | 3823 | 0.02    | 0.9817  | 1.0000 | 0.05  | -9.7004  | 9.9302  |
| set2  | 2dd   | 1       | set2 | 3dp    | 9        | -0.4386  | 5.0063         | 3823 | -0.09   | 0.9302  | 1.0000 | 0.05  | -10.2539 | 9.3767  |
| set2  | 2dd   | 2       | set2 | 2dd    | 3        | -1.5152  | 4.3026         | 3823 | -0.35   | 0.7247  | 1.0000 | 0.05  | -9.9507  | 6.9203  |
| set2  | 2dd   | 2       | set2 | 2dd    | 4        | -0.4797  | 13.4939        | 3823 | -0.04   | 0.9716  | 1.0000 | 0.05  | -26.9355 | 25.9761 |
| set2  | 2dd   | 2       | set2 | 2dd    | 5        | 1.8294   | 21.5853        | 3823 | 0.08    | 0.9325  | 1.0000 | 0.05  | -40.4905 | 44.1493 |
| set2  | 2dd   | 2       | set2 | 2dd    | 6        | 2.5917   | 15.2332        | 3823 | 0.17    | 0.8649  | 1.0000 | 0.05  | -27.2743 | 32.4577 |
| set2  | 2dd   | 2       | set2 | 2dd    | 7        | -0.7409  | 12.6245        | 3823 | -0.06   | 0.9532  | 1.0000 | 0.05  | -25.4923 | 24.0104 |
| set2  | 2dd   | 2       | set2 | 2dd    | 8        | -1.2417  | 15.2332        | 3823 | -0.08   | 0.9350  | 1.0000 | 0.05  | -31.1077 | 28.6243 |
| set2  | 2dd   | 2       | set2 | 2dd    | 9        | -1.1820  | 15.2332        | 3823 | -0.08   | 0.9382  | 1.0000 | 0.05  | -31.0480 | 28.6840 |
| set2  | 2dd   | 2       | set2 | 3dd    | 1        | -1.0426  | 13.8001        | 3823 | -0.08   | 0.9398  | 1.0000 | 0.05  | -28.0989 | 26.0136 |
| set2  | 2dd   | 2       | set2 | 3dd    | 2        | -0.7703  | 2.9354         | 3823 | -0.26   | 0.7930  | 1.0000 | 0.05  | -6.5254  | 4.9849  |
| set2  | 2dd   | 2       | set2 | 3dd    | 3        | -1.3666  | 6.4195         | 3823 | -0.21   | 0.8314  | 1.0000 | 0.05  | -13.9526 | 11.2194 |
| set2  | 2dd   | 2       | set2 | 3dd    | 4        | -1.8573  | 12.8240        | 3823 | -0.14   | 0.8849  | 1.0000 | 0.05  | -26.9997 | 23.2852 |
| set2  | 2dd   | 2       | set2 | 3dd    | 5        | 0.7232   | 19.0151        | 3823 | 0.04    | 0.9697  | 1.0000 | 0.05  | -36.5575 | 38.0040 |
| set2  | 2dd   | 2       | set2 | 3dd    | 6        | -0.1176  | 14.1424        | 3823 | -0.01   | 0.9934  | 1.0000 | 0.05  | -27.8448 | 27.6097 |
| set2  | 2dd   | 2       | set2 | 3dd    | 7        | -1.8842  | 11.9560        | 3823 | -0.16   | 0.8748  | 1.0000 | 0.05  | -25.3250 | 21.5565 |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |              |              |
|---|-------|---------|------|--------|----------|--------------|--------------|
| set   | media | pair_id | _set | _media | _pair_id | Adj<br>Lower | Adj<br>Upper |
| set2  | 2dd   | 1       | set2 | 2dd    | 7        | -7.9236      | 7.1599       |
| set2  | 2dd   | 1       | set2 | 2dd    | 8        | -4.1268      | 2.3614       |
| set2  | 2dd   | 1       | set2 | 2dd    | 9        | -4.0670      | 2.4212       |
| set2  | 2dd   | 1       | set2 | 3dd    | 1        | -3.5144      | 2.1472       |
| set2  | 2dd   | 1       | set2 | 3dd    | 2        | -46.9882     | 46.1658      |
| set2  | 2dd   | 1       | set2 | 3dd    | 3        | -33.5623     | 31.5472      |
| set2  | 2dd   | 1       | set2 | 3dd    | 4        | -8.2582      | 5.2618       |
| set2  | 2dd   | 1       | set2 | 3dd    | 5        | -17.3064     | 19.4710      |
| set2  | 2dd   | 1       | set2 | 3dd    | 6        | -1.6813      | 2.1643       |
| set2  | 2dd   | 1       | set2 | 3dd    | 7        | -11.7936     | 8.7432       |
| set2  | 2dd   | 1       | set2 | 3dd    | 8        | -2.0566      | 0.9950       |
| set2  | 2dd   | 1       | set2 | 3dd    | 9        | -2.4040      | 0.6476       |
| set2  | 2dd   | 1       | set2 | 3dp    | 1        | -16.7837     | 17.3584      |
| set2  | 2dd   | 1       | set2 | 3dp    | 2        | -27.3862     | 26.4287      |
| set2  | 2dd   | 1       | set2 | 3dp    | 3        | -25.5191     | 22.6956      |
| set2  | 2dd   | 1       | set2 | 3dp    | 4        | -13.4233     | 12.9786      |
| set2  | 2dd   | 1       | set2 | 3dp    | 5        | -45.3873     | 46.1278      |
| set2  | 2dd   | 1       | set2 | 3dp    | 6        | -21.0948     | 19.2705      |
| set2  | 2dd   | 1       | set2 | 3dp    | 7        | -10.3933     | 9.1630       |
| set2  | 2dd   | 1       | set2 | 3dp    | 8        | -20.0678     | 20.2976      |
| set2  | 2dd   | 1       | set2 | 3dp    | 9        | -20.6212     | 19.7441      |
| set2  | 2dd   | 2       | set2 | 2dd    | 3        | -18.8607     | 15.8303      |
| set2  | 2dd   | 2       | set2 | 2dd    | 4        | -54.8793     | 53.9199      |
| set2  | 2dd   | 2       | set2 | 2dd    | 5        | -85.1904     | 88.8492      |
| set2  | 2dd   | 2       | set2 | 2dd    | 6        | -58.8200     | 64.0034      |
| set2  | 2dd   | 2       | set2 | 2dd    | 7        | -51.6356     | 50.1537      |
| set2  | 2dd   | 2       | set2 | 2dd    | 8        | -62.6534     | 60.1700      |
| set2  | 2dd   | 2       | set2 | 2dd    | 9        | -62.5937     | 60.2297      |
| set2  | 2dd   | 2       | set2 | 3dd    | 1        | -56.6768     | 54.5915      |
| set2  | 2dd   | 2       | set2 | 3dd    | 2        | -12.6043     | 11.0638      |
| set2  | 2dd   | 2       | set2 | 3dd    | 3        | -27.2464     | 24.5133      |
| set2  | 2dd   | 2       | set2 | 3dd    | 4        | -53.5562     | 49.8417      |
| set2  | 2dd   | 2       | set2 | 3dd    | 5        | -75.9349     | 77.3814      |
| set2  | 2dd   | 2       | set2 | 3dd    | 6        | -57.1315     | 56.8964      |
| set2  | 2dd   | 2       | set2 | 3dd    | 7        | -50.0840     | 46.3156      |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |          |                |      |         |         |        |       |          |         |
|---|-------|---------|------|--------|----------|----------|----------------|------|---------|---------|--------|-------|----------|---------|
| set   | media | pair_id | _set | _media | _pair_id | Estimate | Standard Error | DF   | t Value | Pr >  t | Adj P  | Alpha | Lower    | Upper   |
| set2  | 2dd   | 2       | set2 | 3dd    | 8        | -0.8899  | 14.5646        | 3823 | -0.06   | 0.9513  | 1.0000 | 0.05  | -29.4450 | 27.6652 |
| set2  | 2dd   | 2       | set2 | 3dd    | 9        | -1.2373  | 14.5646        | 3823 | -0.08   | 0.9323  | 1.0000 | 0.05  | -29.7924 | 27.3178 |
| set2  | 2dd   | 2       | set2 | 3dp    | 1        | -0.07176 | 18.6929        | 3823 | -0.00   | 0.9969  | 1.0000 | 0.05  | -36.7209 | 36.5773 |
| set2  | 2dd   | 2       | set2 | 3dp    | 2        | -0.8378  | 7.8248         | 3823 | -0.11   | 0.9147  | 1.0000 | 0.05  | -16.1790 | 14.5034 |
| set2  | 2dd   | 2       | set2 | 3dp    | 3        | -1.7708  | 8.5110         | 3823 | -0.21   | 0.8352  | 1.0000 | 0.05  | -18.4573 | 14.9156 |
| set2  | 2dd   | 2       | set2 | 3dp    | 4        | -0.5814  | 17.7175        | 3823 | -0.03   | 0.9738  | 1.0000 | 0.05  | -35.3181 | 34.1553 |
| set2  | 2dd   | 2       | set2 | 3dp    | 5        | 0.01118  | 25.8099        | 3823 | 0.00    | 0.9997  | 1.0000 | 0.05  | -50.5914 | 50.6137 |
| set2  | 2dd   | 2       | set2 | 3dp    | 6        | -1.2712  | 19.4575        | 3823 | -0.07   | 0.9479  | 1.0000 | 0.05  | -39.4192 | 36.8768 |
| set2  | 2dd   | 2       | set2 | 3dp    | 7        | -0.9742  | 16.8489        | 3823 | -0.06   | 0.9539  | 1.0000 | 0.05  | -34.0080 | 32.0595 |
| set2  | 2dd   | 2       | set2 | 3dp    | 8        | -0.2442  | 19.4575        | 3823 | -0.01   | 0.9900  | 1.0000 | 0.05  | -38.3922 | 37.9039 |
| set2  | 2dd   | 2       | set2 | 3dp    | 9        | -0.7976  | 19.4575        | 3823 | -0.04   | 0.9673  | 1.0000 | 0.05  | -38.9457 | 37.3504 |
| set2  | 2dd   | 3       | set2 | 2dd    | 4        | 1.0355   | 9.2209         | 3823 | 0.11    | 0.9106  | 1.0000 | 0.05  | -17.0429 | 19.1139 |
| set2  | 2dd   | 3       | set2 | 2dd    | 5        | 3.3446   | 17.3103        | 3823 | 0.19    | 0.8468  | 1.0000 | 0.05  | -30.5936 | 37.2828 |
| set2  | 2dd   | 3       | set2 | 2dd    | 6        | 4.1069   | 10.9591        | 3823 | 0.37    | 0.7079  | 1.0000 | 0.05  | -17.3793 | 25.5931 |
| set2  | 2dd   | 3       | set2 | 2dd    | 7        | 0.7743   | 8.3528         | 3823 | 0.09    | 0.9262  | 1.0000 | 0.05  | -15.6021 | 17.1507 |
| set2  | 2dd   | 3       | set2 | 2dd    | 8        | 0.2735   | 10.9591        | 3823 | 0.02    | 0.9801  | 1.0000 | 0.05  | -21.2127 | 21.7597 |
| set2  | 2dd   | 3       | set2 | 2dd    | 9        | 0.3332   | 10.9591        | 3823 | 0.03    | 0.9757  | 1.0000 | 0.05  | -21.1530 | 21.8194 |
| set2  | 2dd   | 3       | set2 | 3dd    | 1        | 0.4726   | 9.5263         | 3823 | 0.05    | 0.9604  | 1.0000 | 0.05  | -18.2046 | 19.1497 |
| set2  | 2dd   | 3       | set2 | 3dd    | 2        | 0.7449   | 1.4372         | 3823 | 0.52    | 0.6043  | 1.0000 | 0.05  | -2.0728  | 3.5626  |
| set2  | 2dd   | 3       | set2 | 3dd    | 3        | 0.1486   | 2.1567         | 3823 | 0.07    | 0.9451  | 1.0000 | 0.05  | -4.0798  | 4.3771  |
| set2  | 2dd   | 3       | set2 | 3dd    | 4        | -0.3421  | 8.5505         | 3823 | -0.04   | 0.9681  | 1.0000 | 0.05  | -17.1061 | 16.4220 |
| set2  | 2dd   | 3       | set2 | 3dd    | 5        | 2.2384   | 14.7432        | 3823 | 0.15    | 0.8793  | 1.0000 | 0.05  | -26.6669 | 31.1438 |
| set2  | 2dd   | 3       | set2 | 3dd    | 6        | 1.3977   | 9.8695         | 3823 | 0.14    | 0.8874  | 1.0000 | 0.05  | -17.9524 | 20.7477 |
| set2  | 2dd   | 3       | set2 | 3dd    | 7        | -0.3690  | 7.6847         | 3823 | -0.05   | 0.9617  | 1.0000 | 0.05  | -15.4355 | 14.6975 |
| set2  | 2dd   | 3       | set2 | 3dd    | 8        | 0.6253   | 10.2905        | 3823 | 0.06    | 0.9515  | 1.0000 | 0.05  | -19.5501 | 20.8007 |
| set2  | 2dd   | 3       | set2 | 3dd    | 9        | 0.2779   | 10.2905        | 3823 | 0.03    | 0.9785  | 1.0000 | 0.05  | -19.8975 | 20.4533 |
| set2  | 2dd   | 3       | set2 | 3dp    | 1        | 1.4434   | 14.4230        | 3823 | 0.10    | 0.9203  | 1.0000 | 0.05  | -26.8341 | 29.7210 |
| set2  | 2dd   | 3       | set2 | 3dp    | 2        | 0.6774   | 3.6009         | 3823 | 0.19    | 0.8508  | 1.0000 | 0.05  | -6.3825  | 7.7373  |
| set2  | 2dd   | 3       | set2 | 3dp    | 3        | -0.2556  | 4.2345         | 3823 | -0.06   | 0.9519  | 1.0000 | 0.05  | -8.5577  | 8.0464  |
| set2  | 2dd   | 3       | set2 | 3dp    | 4        | 0.9338   | 13.4484        | 3823 | 0.07    | 0.9446  | 1.0000 | 0.05  | -25.4328 | 27.3004 |
| set2  | 2dd   | 3       | set2 | 3dp    | 5        | 1.5264   | 21.5378        | 3823 | 0.07    | 0.9435  | 1.0000 | 0.05  | -40.7003 | 43.7531 |
| set2  | 2dd   | 3       | set2 | 3dp    | 6        | 0.2440   | 15.1872        | 3823 | 0.02    | 0.9872  | 1.0000 | 0.05  | -29.5317 | 30.0197 |
| set2  | 2dd   | 3       | set2 | 3dp    | 7        | 0.5410   | 12.5812        | 3823 | 0.04    | 0.9657  | 1.0000 | 0.05  | -24.1255 | 25.2074 |
| set2  | 2dd   | 3       | set2 | 3dp    | 8        | 1.2710   | 15.1872        | 3823 | 0.08    | 0.9333  | 1.0000 | 0.05  | -28.5047 | 31.0468 |
| set2  | 2dd   | 3       | set2 | 3dp    | 9        | 0.7176   | 15.1872        | 3823 | 0.05    | 0.9623  | 1.0000 | 0.05  | -29.0582 | 30.4933 |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |              |              |
|---|-------|---------|------|--------|----------|--------------|--------------|
| set   | media | pair_id | _set | _media | _pair_id | Adj<br>Lower | Adj<br>Upper |
| set2  | 2dd   | 2       | set2 | 3dd    | 8        | -59.6061     | 57.8263      |
| set2  | 2dd   | 2       | set2 | 3dd    | 9        | -59.9535     | 57.4789      |
| set2  | 2dd   | 2       | set2 | 3dp    | 1        | -75.4311     | 75.2876      |
| set2  | 2dd   | 2       | set2 | 3dp    | 2        | -32.3831     | 30.7075      |
| set2  | 2dd   | 2       | set2 | 3dp    | 3        | -36.0823     | 32.5406      |
| set2  | 2dd   | 2       | set2 | 3dp    | 4        | -72.0084     | 70.8456      |
| set2  | 2dd   | 2       | set2 | 3dp    | 5        | -104.04      | 104.06       |
| set2  | 2dd   | 2       | set2 | 3dp    | 6        | -79.7127     | 77.1703      |
| set2  | 2dd   | 2       | set2 | 3dp    | 7        | -68.8996     | 66.9511      |
| set2  | 2dd   | 2       | set2 | 3dp    | 8        | -78.6857     | 78.1973      |
| set2  | 2dd   | 2       | set2 | 3dp    | 9        | -79.2391     | 77.6438      |
| set2  | 2dd   | 3       | set2 | 2dd    | 4        | -36.1380     | 38.2090      |
| set2  | 2dd   | 3       | set2 | 2dd    | 5        | -66.4405     | 73.1298      |
| set2  | 2dd   | 3       | set2 | 2dd    | 6        | -40.0739     | 48.2877      |
| set2  | 2dd   | 3       | set2 | 2dd    | 7        | -32.8996     | 34.4481      |
| set2  | 2dd   | 3       | set2 | 2dd    | 8        | -43.9073     | 44.4543      |
| set2  | 2dd   | 3       | set2 | 2dd    | 9        | -43.8476     | 44.5140      |
| set2  | 2dd   | 3       | set2 | 3dd    | 1        | -37.9321     | 38.8772      |
| set2  | 2dd   | 3       | set2 | 3dd    | 2        | -5.0490      | 6.5388       |
| set2  | 2dd   | 3       | set2 | 3dd    | 3        | -8.5461      | 8.8433       |
| set2  | 2dd   | 3       | set2 | 3dd    | 4        | -34.8130     | 34.1289      |
| set2  | 2dd   | 3       | set2 | 3dd    | 5        | -57.1978     | 61.6747      |
| set2  | 2dd   | 3       | set2 | 3dd    | 6        | -38.3907     | 41.1861      |
| set2  | 2dd   | 3       | set2 | 3dd    | 7        | -31.3494     | 30.6113      |
| set2  | 2dd   | 3       | set2 | 3dd    | 8        | -40.8601     | 42.1107      |
| set2  | 2dd   | 3       | set2 | 3dd    | 9        | -41.2075     | 41.7633      |
| set2  | 2dd   | 3       | set2 | 3dp    | 1        | -56.7021     | 59.5889      |
| set2  | 2dd   | 3       | set2 | 3dp    | 2        | -13.8395     | 15.1943      |
| set2  | 2dd   | 3       | set2 | 3dp    | 3        | -17.3267     | 16.8154      |
| set2  | 2dd   | 3       | set2 | 3dp    | 4        | -53.2823     | 55.1499      |
| set2  | 2dd   | 3       | set2 | 3dp    | 5        | -85.3018     | 88.3546      |
| set2  | 2dd   | 3       | set2 | 3dp    | 6        | -60.9820     | 61.4700      |
| set2  | 2dd   | 3       | set2 | 3dp    | 7        | -50.1791     | 51.2611      |
| set2  | 2dd   | 3       | set2 | 3dp    | 8        | -59.9550     | 62.4971      |
| set2  | 2dd   | 3       | set2 | 3dp    | 9        | -60.5085     | 61.9436      |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |          |                |      |         |         |        |       |          |          |
|---|-------|---------|------|--------|----------|----------|----------------|------|---------|---------|--------|-------|----------|----------|
| set   | media | pair_id | _set | _media | _pair_id | Estimate | Standard Error | DF   | t Value | Pr >  t | Adj P  | Alpha | Lower    | Upper    |
| set2  | 2dd   | 4       | set2 | 2dd    | 5        | 2.3091   | 8.0978         | 3823 | 0.29    | 0.7755  | 1.0000 | 0.05  | -13.5674 | 18.1856  |
| set2  | 2dd   | 4       | set2 | 2dd    | 6        | 3.0714   | 1.7584         | 3823 | 1.75    | 0.0808  | 1.0000 | 0.05  | -0.3761  | 6.5189   |
| set2  | 2dd   | 4       | set2 | 2dd    | 7        | -0.2612  | 0.9162         | 3823 | -0.29   | 0.7755  | 1.0000 | 0.05  | -2.0575  | 1.5350   |
| set2  | 2dd   | 4       | set2 | 2dd    | 8        | -0.7620  | 1.7584         | 3823 | -0.43   | 0.6648  | 1.0000 | 0.05  | -4.2096  | 2.6855   |
| set2  | 2dd   | 4       | set2 | 2dd    | 9        | -0.7023  | 1.7584         | 3823 | -0.40   | 0.6896  | 1.0000 | 0.05  | -4.1498  | 2.7452   |
| set2  | 2dd   | 4       | set2 | 3dd    | 1        | -0.5629  | 0.4682         | 3823 | -1.20   | 0.2293  | 1.0000 | 0.05  | -1.4808  | 0.3549   |
| set2  | 2dd   | 4       | set2 | 3dd    | 2        | -0.2906  | 10.5778        | 3823 | -0.03   | 0.9781  | 1.0000 | 0.05  | -21.0292 | 20.4481  |
| set2  | 2dd   | 4       | set2 | 3dd    | 3        | -0.8869  | 7.1016         | 3823 | -0.12   | 0.9006  | 1.0000 | 0.05  | -14.8102 | 13.0364  |
| set2  | 2dd   | 4       | set2 | 3dd    | 4        | -1.3776  | 0.7022         | 3823 | -1.96   | 0.0499  | 0.9997 | 0.05  | -2.7542  | -0.00088 |
| set2  | 2dd   | 4       | set2 | 3dd    | 5        | 1.2029   | 5.5340         | 3823 | 0.22    | 0.8279  | 1.0000 | 0.05  | -9.6470  | 12.0529  |
| set2  | 2dd   | 4       | set2 | 3dd    | 6        | 0.3622   | 0.7391         | 3823 | 0.49    | 0.6242  | 1.0000 | 0.05  | -1.0869  | 1.8112   |
| set2  | 2dd   | 4       | set2 | 3dd    | 7        | -1.4045  | 1.5909         | 3823 | -0.88   | 0.3774  | 1.0000 | 0.05  | -4.5237  | 1.7147   |
| set2  | 2dd   | 4       | set2 | 3dd    | 8        | -0.4102  | 1.1364         | 3823 | -0.36   | 0.7182  | 1.0000 | 0.05  | -2.6382  | 1.8179   |
| set2  | 2dd   | 4       | set2 | 3dd    | 9        | -0.7576  | 1.1364         | 3823 | -0.67   | 0.5050  | 1.0000 | 0.05  | -2.9856  | 1.4705   |
| set2  | 2dd   | 4       | set2 | 3dp    | 1        | 0.4079   | 5.2138         | 3823 | 0.08    | 0.9376  | 1.0000 | 0.05  | -9.8142  | 10.6301  |
| set2  | 2dd   | 4       | set2 | 3dp    | 2        | -0.3581  | 5.6993         | 3823 | -0.06   | 0.9499  | 1.0000 | 0.05  | -11.5321 | 10.8160  |
| set2  | 2dd   | 4       | set2 | 3dp    | 3        | -1.2911  | 5.0054         | 3823 | -0.26   | 0.7965  | 1.0000 | 0.05  | -11.1048 | 8.5225   |
| set2  | 2dd   | 4       | set2 | 3dp    | 4        | -0.1017  | 4.2345         | 3823 | -0.02   | 0.9808  | 1.0000 | 0.05  | -8.4038  | 8.2004   |
| set2  | 2dd   | 4       | set2 | 3dp    | 5        | 0.4909   | 12.3250        | 3823 | 0.04    | 0.9682  | 1.0000 | 0.05  | -23.6733 | 24.6551  |
| set2  | 2dd   | 4       | set2 | 3dp    | 6        | -0.7915  | 5.9782         | 3823 | -0.13   | 0.8947  | 1.0000 | 0.05  | -12.5122 | 10.9292  |
| set2  | 2dd   | 4       | set2 | 3dp    | 7        | -0.4945  | 3.3843         | 3823 | -0.15   | 0.8838  | 1.0000 | 0.05  | -7.1298  | 6.1407   |
| set2  | 2dd   | 4       | set2 | 3dp    | 8        | 0.2355   | 5.9782         | 3823 | 0.04    | 0.9686  | 1.0000 | 0.05  | -11.4852 | 11.9563  |
| set2  | 2dd   | 4       | set2 | 3dp    | 9        | -0.3179  | 5.9782         | 3823 | -0.05   | 0.9576  | 1.0000 | 0.05  | -12.0387 | 11.4028  |
| set2  | 2dd   | 5       | set2 | 2dd    | 6        | 0.7623   | 6.3543         | 3823 | 0.12    | 0.9045  | 1.0000 | 0.05  | -11.6959 | 13.2204  |
| set2  | 2dd   | 5       | set2 | 2dd    | 7        | -2.5704  | 8.9663         | 3823 | -0.29   | 0.7744  | 1.0000 | 0.05  | -20.1495 | 15.0088  |
| set2  | 2dd   | 5       | set2 | 2dd    | 8        | -3.0711  | 6.3543         | 3823 | -0.48   | 0.6289  | 1.0000 | 0.05  | -15.5293 | 9.3870   |
| set2  | 2dd   | 5       | set2 | 2dd    | 9        | -3.0114  | 6.3543         | 3823 | -0.47   | 0.6356  | 1.0000 | 0.05  | -15.4695 | 9.4468   |
| set2  | 2dd   | 5       | set2 | 3dd    | 1        | -2.8720  | 7.7945         | 3823 | -0.37   | 0.7125  | 1.0000 | 0.05  | -18.1538 | 12.4097  |
| set2  | 2dd   | 5       | set2 | 3dd    | 2        | -2.5997  | 18.6690        | 3823 | -0.14   | 0.8893  | 1.0000 | 0.05  | -39.2018 | 34.0024  |
| set2  | 2dd   | 5       | set2 | 3dd    | 3        | -3.1960  | 15.1867        | 3823 | -0.21   | 0.8333  | 1.0000 | 0.05  | -32.9708 | 26.5788  |
| set2  | 2dd   | 5       | set2 | 3dd    | 4        | -3.6867  | 8.7691         | 3823 | -0.42   | 0.6742  | 1.0000 | 0.05  | -20.8793 | 13.5060  |
| set2  | 2dd   | 5       | set2 | 3dd    | 5        | -1.1062  | 2.5871         | 3823 | -0.43   | 0.6690  | 1.0000 | 0.05  | -6.1784  | 3.9661   |
| set2  | 2dd   | 5       | set2 | 3dd    | 6        | -1.9470  | 7.4512         | 3823 | -0.26   | 0.7939  | 1.0000 | 0.05  | -16.5557 | 12.6618  |
| set2  | 2dd   | 5       | set2 | 3dd    | 7        | -3.7136  | 9.6393         | 3823 | -0.39   | 0.7001  | 1.0000 | 0.05  | -22.6123 | 15.1850  |
| set2  | 2dd   | 5       | set2 | 3dd    | 8        | -2.7193  | 7.0290         | 3823 | -0.39   | 0.6989  | 1.0000 | 0.05  | -16.5002 | 11.0616  |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |              |              |
|---|-------|---------|------|--------|----------|--------------|--------------|
| set   | media | pair_id | _set | _media | _pair_id | Adj<br>Lower | Adj<br>Upper |
| set2  | 2dd   | 4       | set2 | 2dd    | 5        | -30.3368     | 34.9550      |
| set2  | 2dd   | 4       | set2 | 2dd    | 6        | -4.0176      | 10.1603      |
| set2  | 2dd   | 4       | set2 | 2dd    | 7        | -3.9548      | 3.4323       |
| set2  | 2dd   | 4       | set2 | 2dd    | 8        | -7.8510      | 6.3269       |
| set2  | 2dd   | 4       | set2 | 2dd    | 9        | -7.7912      | 6.3867       |
| set2  | 2dd   | 4       | set2 | 3dd    | 1        | -2.4503      | 1.3244       |
| set2  | 2dd   | 4       | set2 | 3dd    | 2        | -42.9343     | 42.3531      |
| set2  | 2dd   | 4       | set2 | 3dd    | 3        | -29.5166     | 27.7428      |
| set2  | 2dd   | 4       | set2 | 3dd    | 4        | -4.2083      | 1.4532       |
| set2  | 2dd   | 4       | set2 | 3dd    | 5        | -21.1071     | 23.5130      |
| set2  | 2dd   | 4       | set2 | 3dd    | 6        | -2.6174      | 3.3417       |
| set2  | 2dd   | 4       | set2 | 3dd    | 7        | -7.8183      | 5.0093       |
| set2  | 2dd   | 4       | set2 | 3dd    | 8        | -4.9916      | 4.1712       |
| set2  | 2dd   | 4       | set2 | 3dd    | 9        | -5.3390      | 3.8238       |
| set2  | 2dd   | 4       | set2 | 3dp    | 1        | -20.6113     | 21.4272      |
| set2  | 2dd   | 4       | set2 | 3dp    | 2        | -23.3346     | 22.6184      |
| set2  | 2dd   | 4       | set2 | 3dp    | 3        | -21.4703     | 18.8880      |
| set2  | 2dd   | 4       | set2 | 3dp    | 4        | -17.1727     | 16.9694      |
| set2  | 2dd   | 4       | set2 | 3dp    | 5        | -49.1965     | 50.1782      |
| set2  | 2dd   | 4       | set2 | 3dp    | 6        | -24.8921     | 23.3092      |
| set2  | 2dd   | 4       | set2 | 3dp    | 7        | -14.1382     | 13.1491      |
| set2  | 2dd   | 4       | set2 | 3dp    | 8        | -23.8651     | 24.3362      |
| set2  | 2dd   | 4       | set2 | 3dp    | 9        | -24.4186     | 23.7827      |
| set2  | 2dd   | 5       | set2 | 2dd    | 6        | -24.8547     | 26.3792      |
| set2  | 2dd   | 5       | set2 | 2dd    | 7        | -38.7174     | 33.5767      |
| set2  | 2dd   | 5       | set2 | 2dd    | 8        | -28.6881     | 22.5458      |
| set2  | 2dd   | 5       | set2 | 2dd    | 9        | -28.6283     | 22.6056      |
| set2  | 2dd   | 5       | set2 | 3dd    | 1        | -34.2950     | 28.5509      |
| set2  | 2dd   | 5       | set2 | 3dd    | 2        | -77.8624     | 72.6630      |
| set2  | 2dd   | 5       | set2 | 3dd    | 3        | -64.4201     | 58.0281      |
| set2  | 2dd   | 5       | set2 | 3dd    | 4        | -39.0389     | 31.6656      |
| set2  | 2dd   | 5       | set2 | 3dd    | 5        | -11.5360     | 9.3236       |
| set2  | 2dd   | 5       | set2 | 3dd    | 6        | -31.9860     | 28.0921      |
| set2  | 2dd   | 5       | set2 | 3dd    | 7        | -42.5738     | 35.1466      |
| set2  | 2dd   | 5       | set2 | 3dd    | 8        | -31.0562     | 25.6176      |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |          |                |      |         |         |        |       |          |         |
|---|-------|---------|------|--------|----------|----------|----------------|------|---------|---------|--------|-------|----------|---------|
| set   | media | pair_id | _set | _media | _pair_id | Estimate | Standard Error | DF   | t Value | Pr >  t | Adj P  | Alpha | Lower    | Upper   |
| set2  | 2dd   | 5       | set2 | 3dd    | 9        | -3.0667  | 7.0290         | 3823 | -0.44   | 0.6626  | 1.0000 | 0.05  | -16.8476 | 10.7142 |
| set2  | 2dd   | 5       | set2 | 3dp    | 1        | -1.9012  | 2.9137         | 3823 | -0.65   | 0.5141  | 1.0000 | 0.05  | -7.6137  | 3.8114  |
| set2  | 2dd   | 5       | set2 | 3dp    | 2        | -2.6672  | 13.7802        | 3823 | -0.19   | 0.8465  | 1.0000 | 0.05  | -29.6844 | 24.3500 |
| set2  | 2dd   | 5       | set2 | 3dp    | 3        | -3.6003  | 13.0872        | 3823 | -0.28   | 0.7833  | 1.0000 | 0.05  | -29.2588 | 22.0583 |
| set2  | 2dd   | 5       | set2 | 3dp    | 4        | -2.4108  | 3.8867         | 3823 | -0.62   | 0.5351  | 1.0000 | 0.05  | -10.0310 | 5.2094  |
| set2  | 2dd   | 5       | set2 | 3dp    | 5        | -1.8182  | 4.2345         | 3823 | -0.43   | 0.6677  | 1.0000 | 0.05  | -10.1203 | 6.4838  |
| set2  | 2dd   | 5       | set2 | 3dp    | 6        | -3.1006  | 2.1504         | 3823 | -1.44   | 0.1494  | 1.0000 | 0.05  | -7.3167  | 1.1155  |
| set2  | 2dd   | 5       | set2 | 3dp    | 7        | -2.8037  | 4.7549         | 3823 | -0.59   | 0.5555  | 1.0000 | 0.05  | -12.1261 | 6.5188  |
| set2  | 2dd   | 5       | set2 | 3dp    | 8        | -2.0736  | 2.1504         | 3823 | -0.96   | 0.3350  | 1.0000 | 0.05  | -6.2897  | 2.1425  |
| set2  | 2dd   | 5       | set2 | 3dp    | 9        | -2.6270  | 2.1504         | 3823 | -1.22   | 0.2219  | 1.0000 | 0.05  | -6.8431  | 1.5891  |
| set2  | 2dd   | 6       | set2 | 2dd    | 7        | -3.3326  | 2.6176         | 3823 | -1.27   | 0.2030  | 1.0000 | 0.05  | -8.4647  | 1.7994  |
| set2  | 2dd   | 6       | set2 | 2dd    | 8        | -3.8334  | 0              | 3823 | -Inf    | <.0001  | .      | .     | .        | .       |
| set2  | 2dd   | 6       | set2 | 2dd    | 9        | -3.7737  | 0              | 3823 | -Inf    | <.0001  | .      | .     | .        | .       |
| set2  | 2dd   | 6       | set2 | 3dd    | 1        | -3.6343  | 1.4622         | 3823 | -2.49   | 0.0130  | 0.9620 | 0.05  | -6.5010  | -0.7676 |
| set2  | 2dd   | 6       | set2 | 3dd    | 2        | -3.3620  | 12.3177        | 3823 | -0.27   | 0.7849  | 1.0000 | 0.05  | -27.5119 | 20.7880 |
| set2  | 2dd   | 6       | set2 | 3dd    | 3        | -3.9583  | 8.8359         | 3823 | -0.45   | 0.6542  | 1.0000 | 0.05  | -21.2817 | 13.3652 |
| set2  | 2dd   | 6       | set2 | 3dd    | 4        | -4.4489  | 2.4246         | 3823 | -1.83   | 0.0666  | 1.0000 | 0.05  | -9.2026  | 0.3047  |
| set2  | 2dd   | 6       | set2 | 3dd    | 5        | -1.8684  | 3.7924         | 3823 | -0.49   | 0.6223  | 1.0000 | 0.05  | -9.3037  | 5.5668  |
| set2  | 2dd   | 6       | set2 | 3dd    | 6        | -2.7092  | 1.1250         | 3823 | -2.41   | 0.0161  | 0.9773 | 0.05  | -4.9150  | -0.5035 |
| set2  | 2dd   | 6       | set2 | 3dd    | 7        | -4.4759  | 3.2920         | 3823 | -1.36   | 0.1740  | 1.0000 | 0.05  | -10.9302 | 1.9783  |
| set2  | 2dd   | 6       | set2 | 3dd    | 8        | -3.4816  | 0.7022         | 3823 | -4.96   | <.0001  | 0.0009 | 0.05  | -4.8582  | -2.1049 |
| set2  | 2dd   | 6       | set2 | 3dd    | 9        | -3.8290  | 0.7022         | 3823 | -5.45   | <.0001  | <.0001 | 0.05  | -5.2056  | -2.4523 |
| set2  | 2dd   | 6       | set2 | 3dp    | 1        | -2.6634  | 3.4776         | 3823 | -0.77   | 0.4438  | 1.0000 | 0.05  | -9.4815  | 4.1546  |
| set2  | 2dd   | 6       | set2 | 3dp    | 2        | -3.4295  | 7.4371         | 3823 | -0.46   | 0.6447  | 1.0000 | 0.05  | -18.0105 | 11.1515 |
| set2  | 2dd   | 6       | set2 | 3dp    | 3        | -4.3625  | 6.7390         | 3823 | -0.65   | 0.5174  | 1.0000 | 0.05  | -17.5750 | 8.8499  |
| set2  | 2dd   | 6       | set2 | 3dp    | 4        | -3.1731  | 2.5114         | 3823 | -1.26   | 0.2065  | 1.0000 | 0.05  | -8.0969  | 1.7507  |
| set2  | 2dd   | 6       | set2 | 3dp    | 5        | -2.5805  | 10.5826        | 3823 | -0.24   | 0.8074  | 1.0000 | 0.05  | -23.3286 | 18.1676 |
| set2  | 2dd   | 6       | set2 | 3dp    | 6        | -3.8629  | 4.2345         | 3823 | -0.91   | 0.3617  | 1.0000 | 0.05  | -12.1650 | 4.4392  |
| set2  | 2dd   | 6       | set2 | 3dp    | 7        | -3.5659  | 1.6584         | 3823 | -2.15   | 0.0316  | 0.9975 | 0.05  | -6.8174  | -0.3144 |
| set2  | 2dd   | 6       | set2 | 3dp    | 8        | -2.8358  | 4.2345         | 3823 | -0.67   | 0.5031  | 1.0000 | 0.05  | -11.1379 | 5.4662  |
| set2  | 2dd   | 6       | set2 | 3dp    | 9        | -3.3893  | 4.2345         | 3823 | -0.80   | 0.4235  | 1.0000 | 0.05  | -11.6914 | 4.9127  |
| set2  | 2dd   | 7       | set2 | 2dd    | 8        | -0.5008  | 2.6176         | 3823 | -0.19   | 0.8483  | 1.0000 | 0.05  | -5.6329  | 4.6313  |
| set2  | 2dd   | 7       | set2 | 2dd    | 9        | -0.4410  | 2.6176         | 3823 | -0.17   | 0.8662  | 1.0000 | 0.05  | -5.5731  | 4.6910  |
| set2  | 2dd   | 7       | set2 | 3dd    | 1        | -0.3017  | 1.2238         | 3823 | -0.25   | 0.8053  | 1.0000 | 0.05  | -2.7011  | 2.0977  |
| set2  | 2dd   | 7       | set2 | 3dd    | 2        | -0.02932 | 9.7101         | 3823 | -0.00   | 0.9976  | 1.0000 | 0.05  | -19.0667 | 19.0081 |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |              |              |
|---|-------|---------|------|--------|----------|--------------|--------------|
| set   | media | pair_id | _set | _media | _pair_id | Adj<br>Lower | Adj<br>Upper |
| set2  | 2dd   | 5       | set2 | 3dd    | 9        | -31.4036     | 25.2702      |
| set2  | 2dd   | 5       | set2 | 3dp    | 1        | -13.6476     | 9.8453       |
| set2  | 2dd   | 5       | set2 | 3dp    | 2        | -58.2211     | 52.8867      |
| set2  | 2dd   | 5       | set2 | 3dp    | 3        | -56.3604     | 49.1599      |
| set2  | 2dd   | 5       | set2 | 3dp    | 4        | -18.0797     | 13.2581      |
| set2  | 2dd   | 5       | set2 | 3dp    | 5        | -18.8893     | 15.2528      |
| set2  | 2dd   | 5       | set2 | 3dp    | 6        | -11.7699     | 5.5687       |
| set2  | 2dd   | 5       | set2 | 3dp    | 7        | -21.9727     | 16.3654      |
| set2  | 2dd   | 5       | set2 | 3dp    | 8        | -10.7429     | 6.5957       |
| set2  | 2dd   | 5       | set2 | 3dp    | 9        | -11.2964     | 6.0423       |
| set2  | 2dd   | 6       | set2 | 2dd    | 7        | -13.8854     | 7.2202       |
| set2  | 2dd   | 6       | set2 | 2dd    | 8        | .            | .            |
| set2  | 2dd   | 6       | set2 | 2dd    | 9        | .            | .            |
| set2  | 2dd   | 6       | set2 | 3dd    | 1        | -9.5290      | 2.2603       |
| set2  | 2dd   | 6       | set2 | 3dd    | 2        | -53.0201     | 46.2962      |
| set2  | 2dd   | 6       | set2 | 3dd    | 3        | -39.5795     | 31.6629      |
| set2  | 2dd   | 6       | set2 | 3dd    | 4        | -14.2236     | 5.3257       |
| set2  | 2dd   | 6       | set2 | 3dd    | 5        | -17.1572     | 13.4203      |
| set2  | 2dd   | 6       | set2 | 3dd    | 6        | -7.2447      | 1.8263       |
| set2  | 2dd   | 6       | set2 | 3dd    | 7        | -17.7474     | 8.7956       |
| set2  | 2dd   | 6       | set2 | 3dd    | 8        | -6.3123      | -0.6508      |
| set2  | 2dd   | 6       | set2 | 3dd    | 9        | -6.6597      | -0.9982      |
| set2  | 2dd   | 6       | set2 | 3dp    | 1        | -16.6831     | 11.3562      |
| set2  | 2dd   | 6       | set2 | 3dp    | 2        | -33.4115     | 26.5526      |
| set2  | 2dd   | 6       | set2 | 3dp    | 3        | -31.5305     | 22.8054      |
| set2  | 2dd   | 6       | set2 | 3dp    | 4        | -13.2976     | 6.9515       |
| set2  | 2dd   | 6       | set2 | 3dp    | 5        | -45.2436     | 40.0826      |
| set2  | 2dd   | 6       | set2 | 3dp    | 6        | -20.9339     | 13.2082      |
| set2  | 2dd   | 6       | set2 | 3dp    | 7        | -10.2518     | 3.1199       |
| set2  | 2dd   | 6       | set2 | 3dp    | 8        | -19.9069     | 14.2352      |
| set2  | 2dd   | 6       | set2 | 3dp    | 9        | -20.4604     | 13.6817      |
| set2  | 2dd   | 7       | set2 | 2dd    | 8        | -11.0536     | 10.0520      |
| set2  | 2dd   | 7       | set2 | 2dd    | 9        | -10.9938     | 10.1117      |
| set2  | 2dd   | 7       | set2 | 3dd    | 1        | -5.2355      | 4.6321       |
| set2  | 2dd   | 7       | set2 | 3dd    | 2        | -39.1747     | 39.1161      |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |          |                |      |         |         |        |       |          |         |
|---|-------|---------|------|--------|----------|----------|----------------|------|---------|---------|--------|-------|----------|---------|
| set   | media | pair_id | _set | _media | _pair_id | Estimate | Standard Error | DF   | t Value | Pr >  t | Adj P  | Alpha | Lower    | Upper   |
| set2  | 2dd   | 7       | set2 | 3dd    | 3        | -0.6256  | 6.2322         | 3823 | -0.10   | 0.9200  | 1.0000 | 0.05  | -12.8444 | 11.5932 |
| set2  | 2dd   | 7       | set2 | 3dd    | 4        | -1.1163  | 0.3658         | 3823 | -3.05   | 0.0023  | 0.6227 | 0.05  | -1.8334  | -0.3992 |
| set2  | 2dd   | 7       | set2 | 3dd    | 5        | 1.4642   | 6.3991         | 3823 | 0.23    | 0.8190  | 1.0000 | 0.05  | -11.0818 | 14.0102 |
| set2  | 2dd   | 7       | set2 | 3dd    | 6        | 0.6234   | 1.5500         | 3823 | 0.40    | 0.6876  | 1.0000 | 0.05  | -2.4155  | 3.6623  |
| set2  | 2dd   | 7       | set2 | 3dd    | 7        | -1.1433  | 0.7022         | 3823 | -1.63   | 0.1036  | 1.0000 | 0.05  | -2.5200  | 0.2334  |
| set2  | 2dd   | 7       | set2 | 3dd    | 8        | -0.1489  | 1.9628         | 3823 | -0.08   | 0.9395  | 1.0000 | 0.05  | -3.9972  | 3.6994  |
| set2  | 2dd   | 7       | set2 | 3dd    | 9        | -0.4963  | 1.9628         | 3823 | -0.25   | 0.8004  | 1.0000 | 0.05  | -4.3446  | 3.3520  |
| set2  | 2dd   | 7       | set2 | 3dp    | 1        | 0.6692   | 6.0810         | 3823 | 0.11    | 0.9124  | 1.0000 | 0.05  | -11.2531 | 12.5914 |
| set2  | 2dd   | 7       | set2 | 3dp    | 2        | -0.09684 | 4.8366         | 3823 | -0.02   | 0.9840  | 1.0000 | 0.05  | -9.5795  | 9.3858  |
| set2  | 2dd   | 7       | set2 | 3dp    | 3        | -1.0299  | 4.1371         | 3823 | -0.25   | 0.8034  | 1.0000 | 0.05  | -9.1410  | 7.0812  |
| set2  | 2dd   | 7       | set2 | 3dp    | 4        | 0.1596   | 5.1075         | 3823 | 0.03    | 0.9751  | 1.0000 | 0.05  | -9.8542  | 10.1733 |
| set2  | 2dd   | 7       | set2 | 3dp    | 5        | 0.7521   | 13.1925        | 3823 | 0.06    | 0.9545  | 1.0000 | 0.05  | -25.1128 | 26.6171 |
| set2  | 2dd   | 7       | set2 | 3dp    | 6        | -0.5303  | 6.8422         | 3823 | -0.08   | 0.9382  | 1.0000 | 0.05  | -13.9449 | 12.8844 |
| set2  | 2dd   | 7       | set2 | 3dp    | 7        | -0.2333  | 4.2345         | 3823 | -0.06   | 0.9561  | 1.0000 | 0.05  | -8.5354  | 8.0688  |
| set2  | 2dd   | 7       | set2 | 3dp    | 8        | 0.4968   | 6.8422         | 3823 | 0.07    | 0.9421  | 1.0000 | 0.05  | -12.9179 | 13.9114 |
| set2  | 2dd   | 7       | set2 | 3dp    | 9        | -0.05669 | 6.8422         | 3823 | -0.01   | 0.9934  | 1.0000 | 0.05  | -13.4714 | 13.3580 |
| set2  | 2dd   | 8       | set2 | 2dd    | 9        | 0.05973  | 0              | 3823 | Infly   | <.0001  | .      | .     | .        | .       |
| set2  | 2dd   | 8       | set2 | 3dd    | 1        | 0.1991   | 1.4622         | 3823 | 0.14    | 0.8917  | 1.0000 | 0.05  | -2.6676  | 3.0658  |
| set2  | 2dd   | 8       | set2 | 3dd    | 2        | 0.4715   | 12.3177        | 3823 | 0.04    | 0.9695  | 1.0000 | 0.05  | -23.6785 | 24.6214 |
| set2  | 2dd   | 8       | set2 | 3dd    | 3        | -0.1249  | 8.8359         | 3823 | -0.01   | 0.9887  | 1.0000 | 0.05  | -17.4483 | 17.1986 |
| set2  | 2dd   | 8       | set2 | 3dd    | 4        | -0.6155  | 2.4246         | 3823 | -0.25   | 0.7996  | 1.0000 | 0.05  | -5.3692  | 4.1381  |
| set2  | 2dd   | 8       | set2 | 3dd    | 5        | 1.9650   | 3.7924         | 3823 | 0.52    | 0.6044  | 1.0000 | 0.05  | -5.4703  | 9.4002  |
| set2  | 2dd   | 8       | set2 | 3dd    | 6        | 1.1242   | 1.1250         | 3823 | 1.00    | 0.3177  | 1.0000 | 0.05  | -1.0815  | 3.3299  |
| set2  | 2dd   | 8       | set2 | 3dd    | 7        | -0.6425  | 3.2920         | 3823 | -0.20   | 0.8453  | 1.0000 | 0.05  | -7.0968  | 5.8117  |
| set2  | 2dd   | 8       | set2 | 3dd    | 8        | 0.3518   | 0.7022         | 3823 | 0.50    | 0.6164  | 1.0000 | 0.05  | -1.0248  | 1.7285  |
| set2  | 2dd   | 8       | set2 | 3dd    | 9        | 0.004432 | 0.7022         | 3823 | 0.01    | 0.9950  | 1.0000 | 0.05  | -1.3722  | 1.3811  |
| set2  | 2dd   | 8       | set2 | 3dp    | 1        | 1.1700   | 3.4776         | 3823 | 0.34    | 0.7366  | 1.0000 | 0.05  | -5.6481  | 7.9880  |
| set2  | 2dd   | 8       | set2 | 3dp    | 2        | 0.4039   | 7.4371         | 3823 | 0.05    | 0.9567  | 1.0000 | 0.05  | -14.1771 | 14.9849 |
| set2  | 2dd   | 8       | set2 | 3dp    | 3        | -0.5291  | 6.7390         | 3823 | -0.08   | 0.9374  | 1.0000 | 0.05  | -13.7416 | 12.6833 |
| set2  | 2dd   | 8       | set2 | 3dp    | 4        | 0.6603   | 2.5114         | 3823 | 0.26    | 0.7926  | 1.0000 | 0.05  | -4.2635  | 5.5841  |
| set2  | 2dd   | 8       | set2 | 3dp    | 5        | 1.2529   | 10.5826        | 3823 | 0.12    | 0.9058  | 1.0000 | 0.05  | -19.4952 | 22.0010 |
| set2  | 2dd   | 8       | set2 | 3dp    | 6        | -0.02948 | 4.2345         | 3823 | -0.01   | 0.9944  | 1.0000 | 0.05  | -8.3315  | 8.2726  |
| set2  | 2dd   | 8       | set2 | 3dp    | 7        | 0.2675   | 1.6584         | 3823 | 0.16    | 0.8719  | 1.0000 | 0.05  | -2.9840  | 3.5190  |
| set2  | 2dd   | 8       | set2 | 3dp    | 8        | 0.9976   | 4.2345         | 3823 | 0.24    | 0.8138  | 1.0000 | 0.05  | -7.3045  | 9.2996  |
| set2  | 2dd   | 8       | set2 | 3dp    | 9        | 0.4441   | 4.2345         | 3823 | 0.10    | 0.9165  | 1.0000 | 0.05  | -7.8580  | 8.7462  |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |              |              |
|---|-------|---------|------|--------|----------|--------------|--------------|
| set   | media | pair_id | _set | _media | _pair_id | Adj<br>Lower | Adj<br>Upper |
| set2  | 2dd   | 7       | set2 | 3dd    | 3        | -25.7504     | 24.4992      |
| set2  | 2dd   | 7       | set2 | 3dd    | 4        | -2.5909      | 0.3582       |
| set2  | 2dd   | 7       | set2 | 3dd    | 5        | -24.3334     | 27.2618      |
| set2  | 2dd   | 7       | set2 | 3dd    | 6        | -5.6254      | 6.8722       |
| set2  | 2dd   | 7       | set2 | 3dd    | 7        | -3.9741      | 1.6875       |
| set2  | 2dd   | 7       | set2 | 3dd    | 8        | -8.0620      | 7.7641       |
| set2  | 2dd   | 7       | set2 | 3dd    | 9        | -8.4094      | 7.4167       |
| set2  | 2dd   | 7       | set2 | 3dp    | 1        | -23.8458     | 25.1842      |
| set2  | 2dd   | 7       | set2 | 3dp    | 2        | -19.5954     | 19.4018      |
| set2  | 2dd   | 7       | set2 | 3dp    | 3        | -17.7082     | 15.6484      |
| set2  | 2dd   | 7       | set2 | 3dp    | 4        | -20.4312     | 20.7503      |
| set2  | 2dd   | 7       | set2 | 3dp    | 5        | -52.4325     | 53.9367      |
| set2  | 2dd   | 7       | set2 | 3dp    | 6        | -28.1140     | 27.0535      |
| set2  | 2dd   | 7       | set2 | 3dp    | 7        | -17.3043     | 16.8378      |
| set2  | 2dd   | 7       | set2 | 3dp    | 8        | -27.0870     | 28.0805      |
| set2  | 2dd   | 7       | set2 | 3dp    | 9        | -27.6404     | 27.5271      |
| set2  | 2dd   | 8       | set2 | 2dd    | 9        | .            | .            |
| set2  | 2dd   | 8       | set2 | 3dd    | 1        | -5.6956      | 6.0937       |
| set2  | 2dd   | 8       | set2 | 3dd    | 2        | -49.1867     | 50.1296      |
| set2  | 2dd   | 8       | set2 | 3dd    | 3        | -35.7461     | 35.4963      |
| set2  | 2dd   | 8       | set2 | 3dd    | 4        | -10.3902     | 9.1591       |
| set2  | 2dd   | 8       | set2 | 3dd    | 5        | -13.3238     | 17.2537      |
| set2  | 2dd   | 8       | set2 | 3dd    | 6        | -3.4113      | 5.6597       |
| set2  | 2dd   | 8       | set2 | 3dd    | 7        | -13.9140     | 12.6290      |
| set2  | 2dd   | 8       | set2 | 3dd    | 8        | -2.4789      | 3.1826       |
| set2  | 2dd   | 8       | set2 | 3dd    | 9        | -2.8263      | 2.8352       |
| set2  | 2dd   | 8       | set2 | 3dp    | 1        | -12.8497     | 15.1896      |
| set2  | 2dd   | 8       | set2 | 3dp    | 2        | -29.5781     | 30.3860      |
| set2  | 2dd   | 8       | set2 | 3dp    | 3        | -27.6971     | 26.6389      |
| set2  | 2dd   | 8       | set2 | 3dp    | 4        | -9.4642      | 10.7849      |
| set2  | 2dd   | 8       | set2 | 3dp    | 5        | -41.4102     | 43.9160      |
| set2  | 2dd   | 8       | set2 | 3dp    | 6        | -17.1005     | 17.0416      |
| set2  | 2dd   | 8       | set2 | 3dp    | 7        | -6.4184      | 6.9533       |
| set2  | 2dd   | 8       | set2 | 3dp    | 8        | -16.0735     | 18.0686      |
| set2  | 2dd   | 8       | set2 | 3dp    | 9        | -16.6270     | 17.5151      |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |          |                |      |         |         |        |       |          |         |
|---|-------|---------|------|--------|----------|----------|----------------|------|---------|---------|--------|-------|----------|---------|
| set   | media | pair_id | _set | _media | _pair_id | Estimate | Standard Error | DF   | t Value | Pr >  t | Adj P  | Alpha | Lower    | Upper   |
| set2  | 2dd   | 9       | set2 | 3dd    | 1        | 0.1394   | 1.4622         | 3823 | 0.10    | 0.9241  | 1.0000 | 0.05  | -2.7274  | 3.0061  |
| set2  | 2dd   | 9       | set2 | 3dd    | 2        | 0.4117   | 12.3177        | 3823 | 0.03    | 0.9733  | 1.0000 | 0.05  | -23.7383 | 24.5617 |
| set2  | 2dd   | 9       | set2 | 3dd    | 3        | -0.1846  | 8.8359         | 3823 | -0.02   | 0.9833  | 1.0000 | 0.05  | -17.5081 | 17.1389 |
| set2  | 2dd   | 9       | set2 | 3dd    | 4        | -0.6753  | 2.4246         | 3823 | -0.28   | 0.7806  | 1.0000 | 0.05  | -5.4289  | 4.0784  |
| set2  | 2dd   | 9       | set2 | 3dd    | 5        | 1.9052   | 3.7924         | 3823 | 0.50    | 0.6154  | 1.0000 | 0.05  | -5.5300  | 9.3405  |
| set2  | 2dd   | 9       | set2 | 3dd    | 6        | 1.0644   | 1.1250         | 3823 | 0.95    | 0.3441  | 1.0000 | 0.05  | -1.1413  | 3.2702  |
| set2  | 2dd   | 9       | set2 | 3dd    | 7        | -0.7022  | 3.2920         | 3823 | -0.21   | 0.8311  | 1.0000 | 0.05  | -7.1565  | 5.7520  |
| set2  | 2dd   | 9       | set2 | 3dd    | 8        | 0.2921   | 0.7022         | 3823 | 0.42    | 0.6774  | 1.0000 | 0.05  | -1.0846  | 1.6688  |
| set2  | 2dd   | 9       | set2 | 3dd    | 9        | -0.05530 | 0.7022         | 3823 | -0.08   | 0.9372  | 1.0000 | 0.05  | -1.4320  | 1.3214  |
| set2  | 2dd   | 9       | set2 | 3dp    | 1        | 1.1102   | 3.4776         | 3823 | 0.32    | 0.7496  | 1.0000 | 0.05  | -5.7079  | 7.9283  |
| set2  | 2dd   | 9       | set2 | 3dp    | 2        | 0.3442   | 7.4371         | 3823 | 0.05    | 0.9631  | 1.0000 | 0.05  | -14.2368 | 14.9252 |
| set2  | 2dd   | 9       | set2 | 3dp    | 3        | -0.5889  | 6.7390         | 3823 | -0.09   | 0.9304  | 1.0000 | 0.05  | -13.8013 | 12.6236 |
| set2  | 2dd   | 9       | set2 | 3dp    | 4        | 0.6006   | 2.5114         | 3823 | 0.24    | 0.8110  | 1.0000 | 0.05  | -4.3232  | 5.5244  |
| set2  | 2dd   | 9       | set2 | 3dp    | 5        | 1.1932   | 10.5826        | 3823 | 0.11    | 0.9102  | 1.0000 | 0.05  | -19.5549 | 21.9413 |
| set2  | 2dd   | 9       | set2 | 3dp    | 6        | -0.08921 | 4.2345         | 3823 | -0.02   | 0.9832  | 1.0000 | 0.05  | -8.3913  | 8.2129  |
| set2  | 2dd   | 9       | set2 | 3dp    | 7        | 0.2077   | 1.6584         | 3823 | 0.13    | 0.9003  | 1.0000 | 0.05  | -3.0437  | 3.4592  |
| set2  | 2dd   | 9       | set2 | 3dp    | 8        | 0.9378   | 4.2345         | 3823 | 0.22    | 0.8247  | 1.0000 | 0.05  | -7.3642  | 9.2399  |
| set2  | 2dd   | 9       | set2 | 3dp    | 9        | 0.3844   | 4.2345         | 3823 | 0.09    | 0.9277  | 1.0000 | 0.05  | -7.9177  | 8.6864  |
| set2  | 3dd   | 1       | set2 | 3dd    | 2        | 0.2724   | 10.8844        | 3823 | 0.03    | 0.9800  | 1.0000 | 0.05  | -21.0674 | 21.6122 |
| set2  | 3dd   | 1       | set2 | 3dd    | 3        | -0.3239  | 7.4027         | 3823 | -0.04   | 0.9651  | 1.0000 | 0.05  | -14.8377 | 14.1898 |
| set2  | 3dd   | 1       | set2 | 3dd    | 4        | -0.8146  | 1.0111         | 3823 | -0.81   | 0.4205  | 1.0000 | 0.05  | -2.7970  | 1.1678  |
| set2  | 3dd   | 1       | set2 | 3dd    | 5        | 1.7659   | 5.2320         | 3823 | 0.34    | 0.7357  | 1.0000 | 0.05  | -8.4920  | 12.0237 |
| set2  | 3dd   | 1       | set2 | 3dd    | 6        | 0.9251   | 0.4811         | 3823 | 1.92    | 0.0546  | 0.9998 | 0.05  | -0.01810 | 1.8683  |
| set2  | 3dd   | 1       | set2 | 3dd    | 7        | -0.8416  | 1.8707         | 3823 | -0.45   | 0.6528  | 1.0000 | 0.05  | -4.5093  | 2.8261  |
| set2  | 3dd   | 1       | set2 | 3dd    | 8        | 0.1528   | 0.8047         | 3823 | 0.19    | 0.8495  | 1.0000 | 0.05  | -1.4249  | 1.7304  |
| set2  | 3dd   | 1       | set2 | 3dd    | 9        | -0.1946  | 0.8047         | 3823 | -0.24   | 0.8089  | 1.0000 | 0.05  | -1.7723  | 1.3830  |
| set2  | 3dd   | 1       | set2 | 3dp    | 1        | 0.9709   | 4.9080         | 3823 | 0.20    | 0.8432  | 1.0000 | 0.05  | -8.6517  | 10.5934 |
| set2  | 3dd   | 1       | set2 | 3dp    | 2        | 0.2049   | 6.0155         | 3823 | 0.03    | 0.9728  | 1.0000 | 0.05  | -11.5891 | 11.9988 |
| set2  | 3dd   | 1       | set2 | 3dp    | 3        | -0.7282  | 5.3116         | 3823 | -0.14   | 0.8910  | 1.0000 | 0.05  | -11.1420 | 9.6856  |
| set2  | 3dd   | 1       | set2 | 3dp    | 4        | 0.4612   | 3.9476         | 3823 | 0.12    | 0.9070  | 1.0000 | 0.05  | -7.2784  | 8.2009  |
| set2  | 3dd   | 1       | set2 | 3dp    | 5        | 1.0538   | 12.0216        | 3823 | 0.09    | 0.9302  | 1.0000 | 0.05  | -22.5155 | 24.6231 |
| set2  | 3dd   | 1       | set2 | 3dp    | 6        | -0.2286  | 5.6761         | 3823 | -0.04   | 0.9679  | 1.0000 | 0.05  | -11.3570 | 10.8999 |
| set2  | 3dd   | 1       | set2 | 3dp    | 7        | 0.06839  | 3.0896         | 3823 | 0.02    | 0.9823  | 1.0000 | 0.05  | -5.9890  | 6.1258  |
| set2  | 3dd   | 1       | set2 | 3dp    | 8        | 0.7985   | 5.6761         | 3823 | 0.14    | 0.8881  | 1.0000 | 0.05  | -10.3300 | 11.9270 |
| set2  | 3dd   | 1       | set2 | 3dp    | 9        | 0.2450   | 5.6761         | 3823 | 0.04    | 0.9656  | 1.0000 | 0.05  | -10.8835 | 11.3735 |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |              |              |
|---|-------|---------|------|--------|----------|--------------|--------------|
| set   | media | pair_id | _set | _media | _pair_id | Adj<br>Lower | Adj<br>Upper |
| set2  | 2dd   | 9       | set2 | 3dd    | 1        | -5.7553      | 6.0340       |
| set2  | 2dd   | 9       | set2 | 3dd    | 2        | -49.2464     | 50.0699      |
| set2  | 2dd   | 9       | set2 | 3dd    | 3        | -35.8058     | 35.4366      |
| set2  | 2dd   | 9       | set2 | 3dd    | 4        | -10.4499     | 9.0994       |
| set2  | 2dd   | 9       | set2 | 3dd    | 5        | -13.3835     | 17.1939      |
| set2  | 2dd   | 9       | set2 | 3dd    | 6        | -3.4710      | 5.5999       |
| set2  | 2dd   | 9       | set2 | 3dd    | 7        | -13.9737     | 12.5693      |
| set2  | 2dd   | 9       | set2 | 3dd    | 8        | -2.5387      | 3.1229       |
| set2  | 2dd   | 9       | set2 | 3dd    | 9        | -2.8861      | 2.7755       |
| set2  | 2dd   | 9       | set2 | 3dp    | 1        | -12.9094     | 15.1299      |
| set2  | 2dd   | 9       | set2 | 3dp    | 2        | -29.6378     | 30.3263      |
| set2  | 2dd   | 9       | set2 | 3dp    | 3        | -27.7568     | 26.5791      |
| set2  | 2dd   | 9       | set2 | 3dp    | 4        | -9.5240      | 10.7252      |
| set2  | 2dd   | 9       | set2 | 3dp    | 5        | -41.4699     | 43.8563      |
| set2  | 2dd   | 9       | set2 | 3dp    | 6        | -17.1603     | 16.9818      |
| set2  | 2dd   | 9       | set2 | 3dp    | 7        | -6.4781      | 6.8936       |
| set2  | 2dd   | 9       | set2 | 3dp    | 8        | -16.1332     | 18.0089      |
| set2  | 2dd   | 9       | set2 | 3dp    | 9        | -16.6867     | 17.4554      |
| set2  | 3dd   | 1       | set2 | 3dd    | 2        | -43.6074     | 44.1521      |
| set2  | 3dd   | 1       | set2 | 3dd    | 3        | -30.1676     | 29.5197      |
| set2  | 3dd   | 1       | set2 | 3dd    | 4        | -4.8910      | 3.2617       |
| set2  | 3dd   | 1       | set2 | 3dd    | 5        | -19.3267     | 22.8585      |
| set2  | 3dd   | 1       | set2 | 3dd    | 6        | -1.0143      | 2.8645       |
| set2  | 3dd   | 1       | set2 | 3dd    | 7        | -8.3833      | 6.7002       |
| set2  | 3dd   | 1       | set2 | 3dd    | 8        | -3.0913      | 3.3968       |
| set2  | 3dd   | 1       | set2 | 3dd    | 9        | -3.4387      | 3.0494       |
| set2  | 3dd   | 1       | set2 | 3dp    | 1        | -18.8154     | 20.7571      |
| set2  | 3dd   | 1       | set2 | 3dp    | 2        | -24.0463     | 24.4560      |
| set2  | 3dd   | 1       | set2 | 3dp    | 3        | -22.1415     | 20.6851      |
| set2  | 3dd   | 1       | set2 | 3dp    | 4        | -15.4533     | 16.3758      |
| set2  | 3dd   | 1       | set2 | 3dp    | 5        | -47.4103     | 49.5180      |
| set2  | 3dd   | 1       | set2 | 3dp    | 6        | -23.1114     | 22.6543      |
| set2  | 3dd   | 1       | set2 | 3dp    | 7        | -12.3870     | 12.5238      |
| set2  | 3dd   | 1       | set2 | 3dp    | 8        | -22.0844     | 23.6813      |
| set2  | 3dd   | 1       | set2 | 3dp    | 9        | -22.6378     | 23.1278      |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |          |                |      |         |         |        |       |          |         |
|---|-------|---------|------|--------|----------|----------|----------------|------|---------|---------|--------|-------|----------|---------|
| set   | media | pair_id | _set | _media | _pair_id | Estimate | Standard Error | DF   | t Value | Pr >  t | Adj P  | Alpha | Lower    | Upper   |
| set2  | 3dd   | 2       | set2 | 3dd    | 3        | -0.5963  | 3.5177         | 3823 | -0.17   | 0.8654  | 1.0000 | 0.05  | -7.4931  | 6.3005  |
| set2  | 3dd   | 2       | set2 | 3dd    | 4        | -1.0870  | 9.9083         | 3823 | -0.11   | 0.9126  | 1.0000 | 0.05  | -20.5130 | 18.3390 |
| set2  | 3dd   | 2       | set2 | 3dd    | 5        | 1.4935   | 16.0987        | 3823 | 0.09    | 0.9261  | 1.0000 | 0.05  | -30.0694 | 33.0564 |
| set2  | 3dd   | 2       | set2 | 3dd    | 6        | 0.6527   | 11.2271        | 3823 | 0.06    | 0.9536  | 1.0000 | 0.05  | -21.3590 | 22.6645 |
| set2  | 3dd   | 2       | set2 | 3dd    | 7        | -1.1140  | 9.0426         | 3823 | -0.12   | 0.9020  | 1.0000 | 0.05  | -18.8427 | 16.6148 |
| set2  | 3dd   | 2       | set2 | 3dd    | 8        | -0.1196  | 11.6498        | 3823 | -0.01   | 0.9918  | 1.0000 | 0.05  | -22.9600 | 22.7208 |
| set2  | 3dd   | 2       | set2 | 3dd    | 9        | -0.4670  | 11.6498        | 3823 | -0.04   | 0.9680  | 1.0000 | 0.05  | -23.3074 | 22.3734 |
| set2  | 3dd   | 2       | set2 | 3dp    | 1        | 0.6985   | 15.7776        | 3823 | 0.04    | 0.9647  | 1.0000 | 0.05  | -30.2347 | 31.6317 |
| set2  | 3dd   | 2       | set2 | 3dp    | 2        | -0.06752 | 4.9080         | 3823 | -0.01   | 0.9890  | 1.0000 | 0.05  | -9.6901  | 9.5550  |
| set2  | 3dd   | 2       | set2 | 3dp    | 3        | -1.0006  | 5.6019         | 3823 | -0.18   | 0.8583  | 1.0000 | 0.05  | -11.9836 | 9.9824  |
| set2  | 3dd   | 2       | set2 | 3dp    | 4        | 0.1889   | 14.8023        | 3823 | 0.01    | 0.9898  | 1.0000 | 0.05  | -28.8323 | 29.2100 |
| set2  | 3dd   | 2       | set2 | 3dp    | 5        | 0.7814   | 22.8943        | 3823 | 0.03    | 0.9728  | 1.0000 | 0.05  | -44.1047 | 45.6676 |
| set2  | 3dd   | 2       | set2 | 3dp    | 6        | -0.5009  | 16.5427        | 3823 | -0.03   | 0.9758  | 1.0000 | 0.05  | -32.9343 | 31.9324 |
| set2  | 3dd   | 2       | set2 | 3dp    | 7        | -0.2040  | 13.9351        | 3823 | -0.01   | 0.9883  | 1.0000 | 0.05  | -27.5249 | 27.1169 |
| set2  | 3dd   | 2       | set2 | 3dp    | 8        | 0.5261   | 16.5427        | 3823 | 0.03    | 0.9746  | 1.0000 | 0.05  | -31.9072 | 32.9594 |
| set2  | 3dd   | 2       | set2 | 3dp    | 9        | -0.02737 | 16.5427        | 3823 | -0.00   | 0.9987  | 1.0000 | 0.05  | -32.4607 | 32.4060 |
| set2  | 3dd   | 3       | set2 | 3dd    | 4        | -0.4907  | 6.4281         | 3823 | -0.08   | 0.9392  | 1.0000 | 0.05  | -13.0935 | 12.1121 |
| set2  | 3dd   | 3       | set2 | 3dd    | 5        | 2.0898   | 12.6194        | 3823 | 0.17    | 0.8685  | 1.0000 | 0.05  | -22.6516 | 26.8312 |
| set2  | 3dd   | 3       | set2 | 3dd    | 6        | 1.2490   | 7.7460         | 3823 | 0.16    | 0.8719  | 1.0000 | 0.05  | -13.9377 | 16.4358 |
| set2  | 3dd   | 3       | set2 | 3dd    | 7        | -0.5176  | 5.5612         | 3823 | -0.09   | 0.9258  | 1.0000 | 0.05  | -11.4208 | 10.3855 |
| set2  | 3dd   | 3       | set2 | 3dd    | 8        | 0.4767   | 8.1650         | 3823 | 0.06    | 0.9534  | 1.0000 | 0.05  | -15.5314 | 16.4848 |
| set2  | 3dd   | 3       | set2 | 3dd    | 9        | 0.1293   | 8.1650         | 3823 | 0.02    | 0.9874  | 1.0000 | 0.05  | -15.8788 | 16.1374 |
| set2  | 3dd   | 3       | set2 | 3dp    | 1        | 1.2948   | 12.2998        | 3823 | 0.11    | 0.9162  | 1.0000 | 0.05  | -22.8201 | 25.4097 |
| set2  | 3dd   | 3       | set2 | 3dp    | 2        | 0.5288   | 1.5772         | 3823 | 0.34    | 0.7374  | 1.0000 | 0.05  | -2.5634  | 3.6210  |
| set2  | 3dd   | 3       | set2 | 3dp    | 3        | -0.4043  | 2.1437         | 3823 | -0.19   | 0.8504  | 1.0000 | 0.05  | -4.6072  | 3.7987  |
| set2  | 3dd   | 3       | set2 | 3dp    | 4        | 0.7852   | 11.3260        | 3823 | 0.07    | 0.9447  | 1.0000 | 0.05  | -21.4204 | 22.9908 |
| set2  | 3dd   | 3       | set2 | 3dp    | 5        | 1.3778   | 19.4134        | 3823 | 0.07    | 0.9434  | 1.0000 | 0.05  | -36.6839 | 39.4394 |
| set2  | 3dd   | 3       | set2 | 3dp    | 6        | 0.09539  | 13.0627        | 3823 | 0.01    | 0.9942  | 1.0000 | 0.05  | -25.5151 | 25.7059 |
| set2  | 3dd   | 3       | set2 | 3dp    | 7        | 0.3923   | 10.4580        | 3823 | 0.04    | 0.9701  | 1.0000 | 0.05  | -20.1115 | 20.8961 |
| set2  | 3dd   | 3       | set2 | 3dp    | 8        | 1.1224   | 13.0627        | 3823 | 0.09    | 0.9315  | 1.0000 | 0.05  | -24.4881 | 26.7330 |
| set2  | 3dd   | 3       | set2 | 3dp    | 9        | 0.5689   | 13.0627        | 3823 | 0.04    | 0.9653  | 1.0000 | 0.05  | -25.0416 | 26.1795 |
| set2  | 3dd   | 4       | set2 | 3dd    | 5        | 2.5805   | 6.2040         | 3823 | 0.42    | 0.6775  | 1.0000 | 0.05  | -9.5830  | 14.7441 |
| set2  | 3dd   | 4       | set2 | 3dd    | 6        | 1.7397   | 1.3588         | 3823 | 1.28    | 0.2005  | 1.0000 | 0.05  | -0.9244  | 4.4038  |
| set2  | 3dd   | 4       | set2 | 3dd    | 7        | -0.02697 | 0.9162         | 3823 | -0.03   | 0.9765  | 1.0000 | 0.05  | -1.8232  | 1.7693  |
| set2  | 3dd   | 4       | set2 | 3dd    | 8        | 0.9674   | 1.7584         | 3823 | 0.55    | 0.5823  | 1.0000 | 0.05  | -2.4802  | 4.4149  |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |              |              |
|---|-------|---------|------|--------|----------|--------------|--------------|
| set   | media | pair_id | _set | _media | _pair_id | Adj<br>Lower | Adj<br>Upper |
| set2  | 3dd   | 2       | set2 | 3dd    | 3        | -14.7778     | 13.5852      |
| set2  | 3dd   | 2       | set2 | 3dd    | 4        | -41.0316     | 38.8576      |
| set2  | 3dd   | 2       | set2 | 3dd    | 5        | -63.4073     | 66.3944      |
| set2  | 3dd   | 2       | set2 | 3dd    | 6        | -44.6087     | 45.9142      |
| set2  | 3dd   | 2       | set2 | 3dd    | 7        | -37.5685     | 35.3405      |
| set2  | 3dd   | 2       | set2 | 3dd    | 8        | -47.0849     | 46.8457      |
| set2  | 3dd   | 2       | set2 | 3dd    | 9        | -47.4323     | 46.4983      |
| set2  | 3dd   | 2       | set2 | 3dp    | 1        | -62.9076     | 64.3046      |
| set2  | 3dd   | 2       | set2 | 3dp    | 2        | -19.8538     | 19.7187      |
| set2  | 3dd   | 2       | set2 | 3dp    | 3        | -23.5843     | 21.5832      |
| set2  | 3dd   | 2       | set2 | 3dp    | 4        | -59.4855     | 59.8633      |
| set2  | 3dd   | 2       | set2 | 3dp    | 5        | -91.5153     | 93.0782      |
| set2  | 3dd   | 2       | set2 | 3dp    | 6        | -67.1916     | 66.1898      |
| set2  | 3dd   | 2       | set2 | 3dp    | 7        | -56.3823     | 55.9743      |
| set2  | 3dd   | 2       | set2 | 3dp    | 8        | -66.1646     | 67.2168      |
| set2  | 3dd   | 2       | set2 | 3dp    | 9        | -66.7181     | 66.6633      |
| set2  | 3dd   | 3       | set2 | 3dd    | 4        | -26.4051     | 25.4237      |
| set2  | 3dd   | 3       | set2 | 3dd    | 5        | -48.7844     | 52.9641      |
| set2  | 3dd   | 3       | set2 | 3dd    | 6        | -29.9786     | 32.4767      |
| set2  | 3dd   | 3       | set2 | 3dd    | 7        | -22.9372     | 21.9019      |
| set2  | 3dd   | 3       | set2 | 3dd    | 8        | -32.4398     | 33.3931      |
| set2  | 3dd   | 3       | set2 | 3dd    | 9        | -32.7872     | 33.0457      |
| set2  | 3dd   | 3       | set2 | 3dp    | 1        | -48.2912     | 50.8808      |
| set2  | 3dd   | 3       | set2 | 3dp    | 2        | -5.8295      | 6.8871       |
| set2  | 3dd   | 3       | set2 | 3dp    | 3        | -9.0464      | 8.2379       |
| set2  | 3dd   | 3       | set2 | 3dp    | 4        | -44.8749     | 46.4453      |
| set2  | 3dd   | 3       | set2 | 3dp    | 5        | -76.8861     | 79.6416      |
| set2  | 3dd   | 3       | set2 | 3dp    | 6        | -52.5660     | 52.7568      |
| set2  | 3dd   | 3       | set2 | 3dp    | 7        | -41.7684     | 42.5531      |
| set2  | 3dd   | 3       | set2 | 3dp    | 8        | -51.5390     | 53.7838      |
| set2  | 3dd   | 3       | set2 | 3dp    | 9        | -52.0925     | 53.2303      |
| set2  | 3dd   | 4       | set2 | 3dd    | 5        | -22.4307     | 27.5917      |
| set2  | 3dd   | 4       | set2 | 3dd    | 6        | -3.7384      | 7.2178       |
| set2  | 3dd   | 4       | set2 | 3dd    | 7        | -3.7205      | 3.6666       |
| set2  | 3dd   | 4       | set2 | 3dd    | 8        | -6.1216      | 8.0563       |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |          |                   |      |         |         |        |       |          |          |
|---|-------|---------|------|--------|----------|----------|-------------------|------|---------|---------|--------|-------|----------|----------|
| set   | media | pair_id | _set | _media | _pair_id | Estimate | Standard<br>Error | DF   | t Value | Pr >  t | Adj P  | Alpha | Lower    | Upper    |
| set2  | 3dd   | 4       | set2 | 3dd    | 9        | 0.6200   | 1.7584            | 3823 | 0.35    | 0.7244  | 1.0000 | 0.05  | -2.8276  | 4.0675   |
| set2  | 3dd   | 4       | set2 | 3dp    | 1        | 1.7855   | 5.8854            | 3823 | 0.30    | 0.7616  | 1.0000 | 0.05  | -9.7533  | 13.3243  |
| set2  | 3dd   | 4       | set2 | 3dp    | 2        | 1.0195   | 5.0416            | 3823 | 0.20    | 0.8398  | 1.0000 | 0.05  | -8.8649  | 10.9039  |
| set2  | 3dd   | 4       | set2 | 3dp    | 3        | 0.08642  | 4.3365            | 3823 | 0.02    | 0.9841  | 1.0000 | 0.05  | -8.4157  | 8.5885   |
| set2  | 3dd   | 4       | set2 | 3dp    | 4        | 1.2759   | 4.9080            | 3823 | 0.26    | 0.7949  | 1.0000 | 0.05  | -8.3467  | 10.8984  |
| set2  | 3dd   | 4       | set2 | 3dp    | 5        | 1.8684   | 12.9959           | 3823 | 0.14    | 0.8857  | 1.0000 | 0.05  | -23.6111 | 27.3480  |
| set2  | 3dd   | 4       | set2 | 3dp    | 6        | 0.5861   | 6.6475            | 3823 | 0.09    | 0.9298  | 1.0000 | 0.05  | -12.4470 | 13.6191  |
| set2  | 3dd   | 4       | set2 | 3dp    | 7        | 0.8830   | 4.0512            | 3823 | 0.22    | 0.8275  | 1.0000 | 0.05  | -7.0598  | 8.8258   |
| set2  | 3dd   | 4       | set2 | 3dp    | 8        | 1.6131   | 6.6475            | 3823 | 0.24    | 0.8083  | 1.0000 | 0.05  | -11.4200 | 14.6462  |
| set2  | 3dd   | 4       | set2 | 3dp    | 9        | 1.0596   | 6.6475            | 3823 | 0.16    | 0.8734  | 1.0000 | 0.05  | -11.9735 | 14.0927  |
| set2  | 3dd   | 5       | set2 | 3dd    | 6        | -0.8408  | 4.8869            | 3823 | -0.17   | 0.8634  | 1.0000 | 0.05  | -10.4220 | 8.7405   |
| set2  | 3dd   | 5       | set2 | 3dd    | 7        | -2.6075  | 7.0719            | 3823 | -0.37   | 0.7124  | 1.0000 | 0.05  | -16.4726 | 11.2576  |
| set2  | 3dd   | 5       | set2 | 3dd    | 8        | -1.6131  | 4.4669            | 3823 | -0.36   | 0.7180  | 1.0000 | 0.05  | -10.3709 | 7.1446   |
| set2  | 3dd   | 5       | set2 | 3dd    | 9        | -1.9605  | 4.4669            | 3823 | -0.44   | 0.6608  | 1.0000 | 0.05  | -10.7183 | 6.7972   |
| set2  | 3dd   | 5       | set2 | 3dp    | 1        | -0.7950  | 0.4614            | 3823 | -1.72   | 0.0850  | 1.0000 | 0.05  | -1.6996  | 0.1096   |
| set2  | 3dd   | 5       | set2 | 3dp    | 2        | -1.5610  | 11.2087           | 3823 | -0.14   | 0.8892  | 1.0000 | 0.05  | -23.5366 | 20.4146  |
| set2  | 3dd   | 5       | set2 | 3dp    | 3        | -2.4941  | 10.5184           | 3823 | -0.24   | 0.8126  | 1.0000 | 0.05  | -23.1163 | 18.1281  |
| set2  | 3dd   | 5       | set2 | 3dp    | 4        | -1.3046  | 1.3422            | 3823 | -0.97   | 0.3311  | 1.0000 | 0.05  | -3.9362  | 1.3270   |
| set2  | 3dd   | 5       | set2 | 3dp    | 5        | -0.7121  | 6.8021            | 3823 | -0.10   | 0.9166  | 1.0000 | 0.05  | -14.0482 | 12.6241  |
| set2  | 3dd   | 5       | set2 | 3dp    | 6        | -1.9944  | 0.5236            | 3823 | -3.81   | 0.0001  | 0.1061 | 0.05  | -3.0211  | -0.9678  |
| set2  | 3dd   | 5       | set2 | 3dp    | 7        | -1.6975  | 2.1928            | 3823 | -0.77   | 0.4389  | 1.0000 | 0.05  | -5.9966  | 2.6016   |
| set2  | 3dd   | 5       | set2 | 3dp    | 8        | -0.9674  | 0.5236            | 3823 | -1.85   | 0.0648  | 0.9999 | 0.05  | -1.9940  | 0.05922  |
| set2  | 3dd   | 5       | set2 | 3dp    | 9        | -1.5209  | 0.5236            | 3823 | -2.90   | 0.0037  | 0.7468 | 0.05  | -2.5475  | -0.4943  |
| set2  | 3dd   | 6       | set2 | 3dd    | 7        | -1.7667  | 2.2139            | 3823 | -0.80   | 0.4249  | 1.0000 | 0.05  | -6.1073  | 2.5739   |
| set2  | 3dd   | 6       | set2 | 3dd    | 8        | -0.7723  | 0.5218            | 3823 | -1.48   | 0.1389  | 1.0000 | 0.05  | -1.7954  | 0.2507   |
| set2  | 3dd   | 6       | set2 | 3dd    | 9        | -1.1197  | 0.5218            | 3823 | -2.15   | 0.0320  | 0.9976 | 0.05  | -2.1428  | -0.09666 |
| set2  | 3dd   | 6       | set2 | 3dp    | 1        | 0.04579  | 4.5702            | 3823 | 0.01    | 0.9920  | 1.0000 | 0.05  | -8.9145  | 9.0060   |
| set2  | 3dd   | 6       | set2 | 3dp    | 2        | -0.7202  | 6.3507            | 3823 | -0.11   | 0.9097  | 1.0000 | 0.05  | -13.1713 | 11.7308  |
| set2  | 3dd   | 6       | set2 | 3dp    | 3        | -1.6533  | 5.6510            | 3823 | -0.29   | 0.7699  | 1.0000 | 0.05  | -12.7327 | 9.4261   |
| set2  | 3dd   | 6       | set2 | 3dp    | 4        | -0.4638  | 3.6020            | 3823 | -0.13   | 0.8975  | 1.0000 | 0.05  | -7.5259  | 6.5982   |
| set2  | 3dd   | 6       | set2 | 3dp    | 5        | 0.1287   | 11.6768           | 3823 | 0.01    | 0.9912  | 1.0000 | 0.05  | -22.7647 | 23.0221  |
| set2  | 3dd   | 6       | set2 | 3dp    | 6        | -1.1536  | 5.3301            | 3823 | -0.22   | 0.8287  | 1.0000 | 0.05  | -11.6037 | 9.2964   |
| set2  | 3dd   | 6       | set2 | 3dp    | 7        | -0.8567  | 2.7412            | 3823 | -0.31   | 0.7547  | 1.0000 | 0.05  | -6.2310  | 4.5176   |
| set2  | 3dd   | 6       | set2 | 3dp    | 8        | -0.1266  | 5.3301            | 3823 | -0.02   | 0.9810  | 1.0000 | 0.05  | -10.5767 | 10.3235  |
| set2  | 3dd   | 6       | set2 | 3dp    | 9        | -0.6801  | 5.3301            | 3823 | -0.13   | 0.8985  | 1.0000 | 0.05  | -11.1302 | 9.7700   |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |              |              |
|---|-------|---------|------|--------|----------|--------------|--------------|
| set   | media | pair_id | _set | _media | _pair_id | Adj<br>Lower | Adj<br>Upper |
| set2  | 3dd   | 4       | set2 | 3dd    | 9        | -6.4690      | 7.7089       |
| set2  | 3dd   | 4       | set2 | 3dp    | 1        | -21.9411     | 25.5121      |
| set2  | 3dd   | 4       | set2 | 3dp    | 2        | -19.3052     | 21.3441      |
| set2  | 3dd   | 4       | set2 | 3dp    | 3        | -17.3959     | 17.5688      |
| set2  | 3dd   | 4       | set2 | 3dp    | 4        | -18.5104     | 21.0621      |
| set2  | 3dd   | 4       | set2 | 3dp    | 5        | -50.5236     | 54.2604      |
| set2  | 3dd   | 4       | set2 | 3dp    | 6        | -26.2131     | 27.3852      |
| set2  | 3dd   | 4       | set2 | 3dp    | 7        | -15.4492     | 17.2153      |
| set2  | 3dd   | 4       | set2 | 3dp    | 8        | -25.1860     | 28.4122      |
| set2  | 3dd   | 4       | set2 | 3dp    | 9        | -25.7395     | 27.8587      |
| set2  | 3dd   | 5       | set2 | 3dd    | 6        | -20.5421     | 18.8605      |
| set2  | 3dd   | 5       | set2 | 3dd    | 7        | -31.1174     | 25.9025      |
| set2  | 3dd   | 5       | set2 | 3dd    | 8        | -19.6212     | 16.3949      |
| set2  | 3dd   | 5       | set2 | 3dd    | 9        | -19.9686     | 16.0475      |
| set2  | 3dd   | 5       | set2 | 3dp    | 1        | -2.6551      | 1.0651       |
| set2  | 3dd   | 5       | set2 | 3dp    | 2        | -46.7481     | 43.6260      |
| set2  | 3dd   | 5       | set2 | 3dp    | 3        | -44.8983     | 39.9101      |
| set2  | 3dd   | 5       | set2 | 3dp    | 4        | -6.7158      | 4.1065       |
| set2  | 3dd   | 5       | set2 | 3dp    | 5        | -28.1344     | 26.7103      |
| set2  | 3dd   | 5       | set2 | 3dp    | 6        | -4.1054      | 0.1165       |
| set2  | 3dd   | 5       | set2 | 3dp    | 7        | -10.5374     | 7.1424       |
| set2  | 3dd   | 5       | set2 | 3dp    | 8        | -3.0784      | 1.1436       |
| set2  | 3dd   | 5       | set2 | 3dp    | 9        | -3.6319      | 0.5901       |
| set2  | 3dd   | 6       | set2 | 3dd    | 7        | -10.6919     | 7.1586       |
| set2  | 3dd   | 6       | set2 | 3dd    | 8        | -2.8760      | 1.3314       |
| set2  | 3dd   | 6       | set2 | 3dd    | 9        | -3.2234      | 0.9840       |
| set2  | 3dd   | 6       | set2 | 3dp    | 1        | -18.3786     | 18.4702      |
| set2  | 3dd   | 6       | set2 | 3dp    | 2        | -26.3226     | 24.8822      |
| set2  | 3dd   | 6       | set2 | 3dp    | 3        | -24.4351     | 21.1285      |
| set2  | 3dd   | 6       | set2 | 3dp    | 4        | -14.9851     | 14.0574      |
| set2  | 3dd   | 6       | set2 | 3dp    | 5        | -46.9456     | 47.2031      |
| set2  | 3dd   | 6       | set2 | 3dp    | 6        | -22.6415     | 20.3342      |
| set2  | 3dd   | 6       | set2 | 3dp    | 7        | -11.9076     | 10.1942      |
| set2  | 3dd   | 6       | set2 | 3dp    | 8        | -21.6145     | 21.3612      |
| set2  | 3dd   | 6       | set2 | 3dp    | 9        | -22.1680     | 20.8078      |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |          |                |      |         |         |        |       |          |         |
|---|-------|---------|------|--------|----------|----------|----------------|------|---------|---------|--------|-------|----------|---------|
| set   | media | pair_id | _set | _media | _pair_id | Estimate | Standard Error | DF   | t Value | Pr >  t | Adj P  | Alpha | Lower    | Upper   |
| set2  | 3dd   | 7       | set2 | 3dd    | 8        | 0.9943   | 2.6176         | 3823 | 0.38    | 0.7041  | 1.0000 | 0.05  | -4.1377  | 6.1264  |
| set2  | 3dd   | 7       | set2 | 3dd    | 9        | 0.6469   | 2.6176         | 3823 | 0.25    | 0.8048  | 1.0000 | 0.05  | -4.4851  | 5.7790  |
| set2  | 3dd   | 7       | set2 | 3dp    | 1        | 1.8125   | 6.7550         | 3823 | 0.27    | 0.7885  | 1.0000 | 0.05  | -11.4314 | 15.0563 |
| set2  | 3dd   | 7       | set2 | 3dp    | 2        | 1.0464   | 4.1865         | 3823 | 0.25    | 0.8026  | 1.0000 | 0.05  | -7.1615  | 9.2544  |
| set2  | 3dd   | 7       | set2 | 3dp    | 3        | 0.1134   | 3.4734         | 3823 | 0.03    | 0.9740  | 1.0000 | 0.05  | -6.6966  | 6.9233  |
| set2  | 3dd   | 7       | set2 | 3dp    | 4        | 1.3028   | 5.7830         | 3823 | 0.23    | 0.8218  | 1.0000 | 0.05  | -10.0352 | 12.6409 |
| set2  | 3dd   | 7       | set2 | 3dp    | 5        | 1.8954   | 13.8646        | 3823 | 0.14    | 0.8913  | 1.0000 | 0.05  | -25.2874 | 29.0782 |
| set2  | 3dd   | 7       | set2 | 3dp    | 6        | 0.6130   | 7.5143         | 3823 | 0.08    | 0.9350  | 1.0000 | 0.05  | -14.1194 | 15.3455 |
| set2  | 3dd   | 7       | set2 | 3dp    | 7        | 0.9100   | 4.9080         | 3823 | 0.19    | 0.8529  | 1.0000 | 0.05  | -8.7126  | 10.5325 |
| set2  | 3dd   | 7       | set2 | 3dp    | 8        | 1.6401   | 7.5143         | 3823 | 0.22    | 0.8272  | 1.0000 | 0.05  | -13.0924 | 16.3725 |
| set2  | 3dd   | 7       | set2 | 3dp    | 9        | 1.0866   | 7.5143         | 3823 | 0.14    | 0.8850  | 1.0000 | 0.05  | -13.6459 | 15.8191 |
| set2  | 3dd   | 8       | set2 | 3dd    | 9        | -0.3474  | 0              | 3823 | -Infy   | <.0001  | .      | .     | .        | .       |
| set2  | 3dd   | 8       | set2 | 3dp    | 1        | 0.8181   | 4.1538         | 3823 | 0.20    | 0.8439  | 1.0000 | 0.05  | -7.3257  | 8.9619  |
| set2  | 3dd   | 8       | set2 | 3dp    | 2        | 0.05210  | 6.7787         | 3823 | 0.01    | 0.9939  | 1.0000 | 0.05  | -13.2382 | 13.3424 |
| set2  | 3dd   | 8       | set2 | 3dp    | 3        | -0.8810  | 6.0722         | 3823 | -0.15   | 0.8847  | 1.0000 | 0.05  | -12.7860 | 11.0241 |
| set2  | 3dd   | 8       | set2 | 3dp    | 4        | 0.3085   | 3.1892         | 3823 | 0.10    | 0.9229  | 1.0000 | 0.05  | -5.9442  | 6.5612  |
| set2  | 3dd   | 8       | set2 | 3dp    | 5        | 0.9011   | 11.2555        | 3823 | 0.08    | 0.9362  | 1.0000 | 0.05  | -21.1662 | 22.9684 |
| set2  | 3dd   | 8       | set2 | 3dp    | 6        | -0.3813  | 4.9080         | 3823 | -0.08   | 0.9381  | 1.0000 | 0.05  | -10.0038 | 9.2412  |
| set2  | 3dd   | 8       | set2 | 3dp    | 7        | -0.08436 | 2.3271         | 3823 | -0.04   | 0.9711  | 1.0000 | 0.05  | -4.6469  | 4.4782  |
| set2  | 3dd   | 8       | set2 | 3dp    | 8        | 0.6457   | 4.9080         | 3823 | 0.13    | 0.8953  | 1.0000 | 0.05  | -8.9768  | 10.2683 |
| set2  | 3dd   | 8       | set2 | 3dp    | 9        | 0.09225  | 4.9080         | 3823 | 0.02    | 0.9850  | 1.0000 | 0.05  | -9.5303  | 9.7148  |
| set2  | 3dd   | 9       | set2 | 3dp    | 1        | 1.1655   | 4.1538         | 3823 | 0.28    | 0.7790  | 1.0000 | 0.05  | -6.9783  | 9.3093  |
| set2  | 3dd   | 9       | set2 | 3dp    | 2        | 0.3995   | 6.7787         | 3823 | 0.06    | 0.9530  | 1.0000 | 0.05  | -12.8908 | 13.6898 |
| set2  | 3dd   | 9       | set2 | 3dp    | 3        | -0.5336  | 6.0722         | 3823 | -0.09   | 0.9300  | 1.0000 | 0.05  | -12.4386 | 11.3715 |
| set2  | 3dd   | 9       | set2 | 3dp    | 4        | 0.6559   | 3.1892         | 3823 | 0.21    | 0.8371  | 1.0000 | 0.05  | -5.5968  | 6.9086  |
| set2  | 3dd   | 9       | set2 | 3dp    | 5        | 1.2485   | 11.2555        | 3823 | 0.11    | 0.9117  | 1.0000 | 0.05  | -20.8188 | 23.3158 |
| set2  | 3dd   | 9       | set2 | 3dp    | 6        | -0.03391 | 4.9080         | 3823 | -0.01   | 0.9945  | 1.0000 | 0.05  | -9.6564  | 9.5886  |
| set2  | 3dd   | 9       | set2 | 3dp    | 7        | 0.2630   | 2.3271         | 3823 | 0.11    | 0.9100  | 1.0000 | 0.05  | -4.2995  | 4.8256  |
| set2  | 3dd   | 9       | set2 | 3dp    | 8        | 0.9931   | 4.9080         | 3823 | 0.20    | 0.8397  | 1.0000 | 0.05  | -8.6294  | 10.6157 |
| set2  | 3dd   | 9       | set2 | 3dp    | 9        | 0.4396   | 4.9080         | 3823 | 0.09    | 0.9286  | 1.0000 | 0.05  | -9.1829  | 10.0622 |
| set2  | 3dp   | 1       | set2 | 3dp    | 2        | -0.7660  | 10.8844        | 3823 | -0.07   | 0.9439  | 1.0000 | 0.05  | -22.1058 | 20.5738 |
| set2  | 3dp   | 1       | set2 | 3dp    | 3        | -1.6991  | 10.1961        | 3823 | -0.17   | 0.8677  | 1.0000 | 0.05  | -21.6894 | 18.2912 |
| set2  | 3dp   | 1       | set2 | 3dp    | 4        | -0.5096  | 1.0111         | 3823 | -0.50   | 0.6143  | 1.0000 | 0.05  | -2.4921  | 1.4728  |
| set2  | 3dp   | 1       | set2 | 3dp    | 5        | 0.08294  | 7.1223         | 3823 | 0.01    | 0.9907  | 1.0000 | 0.05  | -13.8810 | 14.0469 |
| set2  | 3dp   | 1       | set2 | 3dp    | 6        | -1.1994  | 0.8047         | 3823 | -1.49   | 0.1362  | 1.0000 | 0.05  | -2.7771  | 0.3782  |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |              |              |
|---|-------|---------|------|--------|----------|--------------|--------------|
| set   | media | pair_id | _set | _media | _pair_id | Adj<br>Lower | Adj<br>Upper |
| set2  | 3dd   | 7       | set2 | 3dd    | 8        | -9.5584      | 11.5471      |
| set2  | 3dd   | 7       | set2 | 3dd    | 9        | -9.9058      | 11.1997      |
| set2  | 3dd   | 7       | set2 | 3dp    | 1        | -25.4200     | 29.0450      |
| set2  | 3dd   | 7       | set2 | 3dp    | 2        | -15.8310     | 17.9239      |
| set2  | 3dd   | 7       | set2 | 3dp    | 3        | -13.8895     | 14.1163      |
| set2  | 3dd   | 7       | set2 | 3dp    | 4        | -22.0110     | 24.6166      |
| set2  | 3dd   | 7       | set2 | 3dp    | 5        | -53.9989     | 57.7897      |
| set2  | 3dd   | 7       | set2 | 3dp    | 6        | -29.6805     | 30.9065      |
| set2  | 3dd   | 7       | set2 | 3dp    | 7        | -18.8763     | 20.6962      |
| set2  | 3dd   | 7       | set2 | 3dp    | 8        | -28.6534     | 31.9336      |
| set2  | 3dd   | 7       | set2 | 3dp    | 9        | -29.2069     | 31.3801      |
| set2  | 3dd   | 8       | set2 | 3dd    | 9        | .            | .            |
| set2  | 3dd   | 8       | set2 | 3dp    | 1        | -15.9275     | 17.5637      |
| set2  | 3dd   | 8       | set2 | 3dp    | 2        | -27.2759     | 27.3801      |
| set2  | 3dd   | 8       | set2 | 3dp    | 3        | -25.3607     | 23.5988      |
| set2  | 3dd   | 8       | set2 | 3dp    | 4        | -12.5486     | 13.1656      |
| set2  | 3dd   | 8       | set2 | 3dp    | 5        | -44.4746     | 46.2767      |
| set2  | 3dd   | 8       | set2 | 3dp    | 6        | -20.1676     | 19.4049      |
| set2  | 3dd   | 8       | set2 | 3dp    | 7        | -9.4661      | 9.2974       |
| set2  | 3dd   | 8       | set2 | 3dp    | 8        | -19.1405     | 20.4320      |
| set2  | 3dd   | 8       | set2 | 3dp    | 9        | -19.6940     | 19.8785      |
| set2  | 3dd   | 9       | set2 | 3dp    | 1        | -15.5801     | 17.9111      |
| set2  | 3dd   | 9       | set2 | 3dp    | 2        | -26.9285     | 27.7275      |
| set2  | 3dd   | 9       | set2 | 3dp    | 3        | -25.0133     | 23.9462      |
| set2  | 3dd   | 9       | set2 | 3dp    | 4        | -12.2012     | 13.5130      |
| set2  | 3dd   | 9       | set2 | 3dp    | 5        | -44.1272     | 46.6241      |
| set2  | 3dd   | 9       | set2 | 3dp    | 6        | -19.8202     | 19.7523      |
| set2  | 3dd   | 9       | set2 | 3dp    | 7        | -9.1187      | 9.6448       |
| set2  | 3dd   | 9       | set2 | 3dp    | 8        | -18.7931     | 20.7794      |
| set2  | 3dd   | 9       | set2 | 3dp    | 9        | -19.3466     | 20.2259      |
| set2  | 3dp   | 1       | set2 | 3dp    | 2        | -44.6458     | 43.1137      |
| set2  | 3dp   | 1       | set2 | 3dp    | 3        | -42.8040     | 39.4058      |
| set2  | 3dp   | 1       | set2 | 3dp    | 4        | -4.5860      | 3.5667       |
| set2  | 3dp   | 1       | set2 | 3dp    | 5        | -28.6302     | 28.7961      |
| set2  | 3dp   | 1       | set2 | 3dp    | 6        | -4.4435      | 2.0447       |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |          |                |      |         |         |        |       |          |         |
|---|-------|---------|------|--------|----------|----------|----------------|------|---------|---------|--------|-------|----------|---------|
| set   | media | pair_id | _set | _media | _pair_id | Estimate | Standard Error | DF   | t Value | Pr >  t | Adj P  | Alpha | Lower    | Upper   |
| set2  | 3dp   | 1       | set2 | 3dp    | 7        | -0.9025  | 1.8707         | 3823 | -0.48   | 0.6295  | 1.0000 | 0.05  | -4.5702  | 2.7653  |
| set2  | 3dp   | 1       | set2 | 3dp    | 8        | -0.1724  | 0.8047         | 3823 | -0.21   | 0.8304  | 1.0000 | 0.05  | -1.7501  | 1.4053  |
| set2  | 3dp   | 1       | set2 | 3dp    | 9        | -0.7259  | 0.8047         | 3823 | -0.90   | 0.3671  | 1.0000 | 0.05  | -2.3036  | 0.8518  |
| set2  | 3dp   | 2       | set2 | 3dp    | 3        | -0.9331  | 0.8697         | 3823 | -1.07   | 0.2834  | 1.0000 | 0.05  | -2.6382  | 0.7721  |
| set2  | 3dp   | 2       | set2 | 3dp    | 4        | 0.2564   | 9.9083         | 3823 | 0.03    | 0.9794  | 1.0000 | 0.05  | -19.1696 | 19.6824 |
| set2  | 3dp   | 2       | set2 | 3dp    | 5        | 0.8490   | 17.9996        | 3823 | 0.05    | 0.9624  | 1.0000 | 0.05  | -34.4407 | 36.1387 |
| set2  | 3dp   | 2       | set2 | 3dp    | 6        | -0.4334  | 11.6498        | 3823 | -0.04   | 0.9703  | 1.0000 | 0.05  | -23.2738 | 22.4070 |
| set2  | 3dp   | 2       | set2 | 3dp    | 7        | -0.1365  | 9.0426         | 3823 | -0.02   | 0.9880  | 1.0000 | 0.05  | -17.8652 | 17.5923 |
| set2  | 3dp   | 2       | set2 | 3dp    | 8        | 0.5936   | 11.6498        | 3823 | 0.05    | 0.9594  | 1.0000 | 0.05  | -22.2468 | 23.4340 |
| set2  | 3dp   | 2       | set2 | 3dp    | 9        | 0.04015  | 11.6498        | 3823 | 0.00    | 0.9973  | 1.0000 | 0.05  | -22.8002 | 22.8805 |
| set2  | 3dp   | 3       | set2 | 3dp    | 4        | 1.1895   | 9.2209         | 3823 | 0.13    | 0.8974  | 1.0000 | 0.05  | -16.8890 | 19.2679 |
| set2  | 3dp   | 3       | set2 | 3dp    | 5        | 1.7820   | 17.3103        | 3823 | 0.10    | 0.9180  | 1.0000 | 0.05  | -32.1562 | 35.7203 |
| set2  | 3dp   | 3       | set2 | 3dp    | 6        | 0.4996   | 10.9591        | 3823 | 0.05    | 0.9636  | 1.0000 | 0.05  | -20.9866 | 21.9858 |
| set2  | 3dp   | 3       | set2 | 3dp    | 7        | 0.7966   | 8.3528         | 3823 | 0.10    | 0.9240  | 1.0000 | 0.05  | -15.5798 | 17.1730 |
| set2  | 3dp   | 3       | set2 | 3dp    | 8        | 1.5267   | 10.9591        | 3823 | 0.14    | 0.8892  | 1.0000 | 0.05  | -19.9595 | 23.0129 |
| set2  | 3dp   | 3       | set2 | 3dp    | 9        | 0.9732   | 10.9591        | 3823 | 0.09    | 0.9292  | 1.0000 | 0.05  | -20.5130 | 22.4594 |
| set2  | 3dp   | 4       | set2 | 3dp    | 5        | 0.5926   | 8.0978         | 3823 | 0.07    | 0.9417  | 1.0000 | 0.05  | -15.2839 | 16.4691 |
| set2  | 3dp   | 4       | set2 | 3dp    | 6        | -0.6898  | 1.7584         | 3823 | -0.39   | 0.6949  | 1.0000 | 0.05  | -4.1373  | 2.7577  |
| set2  | 3dp   | 4       | set2 | 3dp    | 7        | -0.3929  | 0.9162         | 3823 | -0.43   | 0.6681  | 1.0000 | 0.05  | -2.1891  | 1.4034  |
| set2  | 3dp   | 4       | set2 | 3dp    | 8        | 0.3372   | 1.7584         | 3823 | 0.19    | 0.8479  | 1.0000 | 0.05  | -3.1103  | 3.7848  |
| set2  | 3dp   | 4       | set2 | 3dp    | 9        | -0.2162  | 1.7584         | 3823 | -0.12   | 0.9021  | 1.0000 | 0.05  | -3.6638  | 3.2313  |
| set2  | 3dp   | 5       | set2 | 3dp    | 6        | -1.2824  | 6.3543         | 3823 | -0.20   | 0.8401  | 1.0000 | 0.05  | -13.7405 | 11.1758 |
| set2  | 3dp   | 5       | set2 | 3dp    | 7        | -0.9854  | 8.9663         | 3823 | -0.11   | 0.9125  | 1.0000 | 0.05  | -18.5646 | 16.5938 |
| set2  | 3dp   | 5       | set2 | 3dp    | 8        | -0.2553  | 6.3543         | 3823 | -0.04   | 0.9679  | 1.0000 | 0.05  | -12.7135 | 12.2028 |
| set2  | 3dp   | 5       | set2 | 3dp    | 9        | -0.8088  | 6.3543         | 3823 | -0.13   | 0.8987  | 1.0000 | 0.05  | -13.2670 | 11.6493 |
| set2  | 3dp   | 6       | set2 | 3dp    | 7        | 0.2970   | 2.6176         | 3823 | 0.11    | 0.9097  | 1.0000 | 0.05  | -4.8351  | 5.4290  |
| set2  | 3dp   | 6       | set2 | 3dp    | 8        | 1.0270   | 0              | 3823 | Infy    | <.0001  | .      | .     | .        | .       |
| set2  | 3dp   | 6       | set2 | 3dp    | 9        | 0.4736   | 0              | 3823 | Infy    | <.0001  | .      | .     | .        | .       |
| set2  | 3dp   | 7       | set2 | 3dp    | 8        | 0.7301   | 2.6176         | 3823 | 0.28    | 0.7803  | 1.0000 | 0.05  | -4.4020  | 5.8622  |
| set2  | 3dp   | 7       | set2 | 3dp    | 9        | 0.1766   | 2.6176         | 3823 | 0.07    | 0.9462  | 1.0000 | 0.05  | -4.9555  | 5.3087  |
| set2  | 3dp   | 8       | set2 | 3dp    | 9        | -0.5535  | 0              | 3823 | -Infy   | <.0001  | .      | .     | .        | .       |

## The GLIMMIX Procedure

| Differences of set*media*pair_id Least Squares Means<br>Adjustment for Multiple Comparisons: Tukey-Kramer |       |         |      |        |          |              |              |
|---|-------|---------|------|--------|----------|--------------|--------------|
| set   | media | pair_id | _set | _media | _pair_id | Adj<br>Lower | Adj<br>Upper |
| set2  | 3dp   | 1       | set2 | 3dp    | 7        | -8.4442      | 6.6393       |
| set2  | 3dp   | 1       | set2 | 3dp    | 8        | -3.4165      | 3.0717       |
| set2  | 3dp   | 1       | set2 | 3dp    | 9        | -3.9700      | 2.5182       |
| set2  | 3dp   | 2       | set2 | 3dp    | 3        | -4.4392      | 2.5731       |
| set2  | 3dp   | 2       | set2 | 3dp    | 4        | -39.6882     | 40.2010      |
| set2  | 3dp   | 2       | set2 | 3dp    | 5        | -71.7151     | 73.4130      |
| set2  | 3dp   | 2       | set2 | 3dp    | 6        | -47.3987     | 46.5319      |
| set2  | 3dp   | 2       | set2 | 3dp    | 7        | -36.5909     | 36.3180      |
| set2  | 3dp   | 2       | set2 | 3dp    | 8        | -46.3717     | 47.5589      |
| set2  | 3dp   | 2       | set2 | 3dp    | 9        | -46.9252     | 47.0054      |
| set2  | 3dp   | 3       | set2 | 3dp    | 4        | -35.9841     | 38.3630      |
| set2  | 3dp   | 3       | set2 | 3dp    | 5        | -68.0031     | 71.5672      |
| set2  | 3dp   | 3       | set2 | 3dp    | 6        | -43.6811     | 44.6804      |
| set2  | 3dp   | 3       | set2 | 3dp    | 7        | -32.8772     | 34.4704      |
| set2  | 3dp   | 3       | set2 | 3dp    | 8        | -42.6541     | 45.7075      |
| set2  | 3dp   | 3       | set2 | 3dp    | 9        | -43.2076     | 45.1540      |
| set2  | 3dp   | 4       | set2 | 3dp    | 5        | -32.0533     | 33.2384      |
| set2  | 3dp   | 4       | set2 | 3dp    | 6        | -7.7788      | 6.3992       |
| set2  | 3dp   | 4       | set2 | 3dp    | 7        | -4.0864      | 3.3007       |
| set2  | 3dp   | 4       | set2 | 3dp    | 8        | -6.7517      | 7.4262       |
| set2  | 3dp   | 4       | set2 | 3dp    | 9        | -7.3052      | 6.8727       |
| set2  | 3dp   | 5       | set2 | 3dp    | 6        | -26.8993     | 24.3346      |
| set2  | 3dp   | 5       | set2 | 3dp    | 7        | -37.1324     | 35.1616      |
| set2  | 3dp   | 5       | set2 | 3dp    | 8        | -25.8723     | 25.3616      |
| set2  | 3dp   | 5       | set2 | 3dp    | 9        | -26.4258     | 24.8081      |
| set2  | 3dp   | 6       | set2 | 3dp    | 7        | -10.2558     | 10.8497      |
| set2  | 3dp   | 6       | set2 | 3dp    | 8        | .            | .            |
| set2  | 3dp   | 6       | set2 | 3dp    | 9        | .            | .            |
| set2  | 3dp   | 7       | set2 | 3dp    | 8        | -9.8227      | 11.2829      |
| set2  | 3dp   | 7       | set2 | 3dp    | 9        | -10.3762     | 10.7294      |
| set2  | 3dp   | 8       | set2 | 3dp    | 9        | .            | .            |