

On-Line Attachment

Parameter Estimates for the 24 Subjects: GnRH and Free Te on LH Secretion

Basal	eta0	eta1	Potency Coef	Eff	TeFdbk	beta1	beta2	beta3	SD Resid	SD RE
0.1003	-1.3428	0.0038	-3.4969	6.9255	0.0638	10.3724	0.0005	0.2383	0.0811	14.9686
0.0312	4.4356	-1.3874	-5.1563	5.0361	0.0370	9.1119	0.0033	0.2853	0.0386	19.5219
0.2154	1.4641	0.0016	-3.8012	7.4669	0.0590	12.9337	0.0000	0.1692	0.1002	11.5305
0.0299	-2.4003	1.0582	-4.0004	4.1762	0.0741	6.5007	0.0311	0.3510	0.0466	14.3453
0.0750	0.0037	0.5893	-4.8827	15.0978	0.0879	14.1831	0.0001	0.2310	0.0451	15.4536
0.0239	-0.3285	2.3962	-5.6031	23.8869	0.0602	13.6710	0.0000	0.2085	0.0608	9.8637
0.0889	0.0434	0.3394	-10.4602	5.8860	0.0517	9.8791	0.0002	0.1929	0.1024	93.5098
0.1930	8.4415	0.7161	-8.2576	12.4042	0.0755	14.1689	0.0005	0.3061	0.0837	9.3669
0.0000	0.0208	0.5728	-5.3581	28.7783	0.0704	12.0794	0.0001	0.2397	0.0319	6.6892
0.1008	0.1250	0.5213	-3.6972	6.6931	0.0693	4.9042	0.0856	0.3894	0.0714	8.5949
0.0075	-0.0031	0.2295	-2.7867	1.8360	0.0307	23.9960	0.0000	0.2122	0.0232	6.5030
0.0692	-0.6399	0.4095	-5.3707	27.7629	0.0991	9.1565	0.0021	0.2747	0.0614	15.5325
0.0130	0.0004	0.3325	-3.0610	3.7131	0.0633	12.1303	0.0001	0.2425	0.0446	7.1757
0.0595	-3.6323	0.9472	-4.8564	11.8682	0.0869	13.6945	0.0000	0.2120	0.0454	16.1403
0.0457	-2.0388	0.5899	-3.8134	10.7289	0.0519	9.2440	0.0008	0.2426	0.0541	8.7747
0.0290	-1.0553	0.4722	-5.7606	26.7685	0.0412	7.5408	0.0104	0.3162	0.0365	8.5280
0.0338	4.6374	2.2505	-6.3065	8.8341	0.0623	10.2029	0.0001	0.2081	0.0694	11.5448
0.2112	-0.5479	-0.0967	-4.5138	15.1788	0.0821	10.4690	0.0003	0.2358	0.0935	17.6862
0.0464	1.5044	0.1490	-4.6277	12.7079	0.1006	13.5103	0.0000	0.2287	0.0840	9.3103
0.0610	-0.9851	-0.2054	-4.3506	3.5427	0.0360	6.6388	0.0160	0.3072	0.0268	15.5850
0.1308	-8.8173	2.3410	-6.9763	9.2667	0.1019	24.6712	0.0000	0.1751	0.0694	22.8695
0.0000	2.4051	0.0010	-5.0105	26.2404	0.0661	7.4186	0.0070	0.2991	0.0810	9.4089
0.0132	0.1406	0.1029	-3.4429	5.6734	0.0741	10.7702	0.0007	0.2657	0.0514	10.4807
0.0316	-0.0929	0.4591	-5.1178	20.3331	0.0870	12.7727	0.0000	0.2075	0.0576	13.2217
Sample Mean										
0.0671	0.0557	0.5331	-5.0295	12.5336	0.0680	11.6675	0.0066	0.2516	0.0608	15.6919
Sample SD										
0.0641	3.1496	0.8388	1.7065	8.5957	0.0203	4.7051	0.0183	0.0551	0.0229	17.1159
Sample SEM										
0.0131	0.6429	0.1712	0.3483	1.7546	0.0041	0.9604	0.0037	0.0112	0.0047	3.4938
Sample CORR										
1.0000	0.0657	-0.0348	-0.2277	-0.1787	0.2385	0.1158	0.0281	-0.1456	0.6599	0.1624
0.0657	1.0000	-0.3162	-0.1729	0.0215	-0.2577	-0.2811	-0.0508	0.2228	0.1925	-0.0989
-0.0348	-0.3162	1.0000	-0.2897	0.1722	0.3289	0.3496	-0.0224	-0.2798	0.0595	-0.0460
-0.2277	-0.1729	-0.2897	1.0000	-0.2056	-0.1092	-0.0661	0.2073	0.1855	-0.3996	-0.7031
-0.1787	0.0215	0.1722	-0.2056	1.0000	0.3048	-0.1268	-0.1830	0.0131	0.0010	-0.1985
0.2385	-0.2577	0.3289	-0.1092	0.3048	1.0000	0.2007	-0.0639	-0.1649	0.3409	-0.0852
0.1158	-0.2811	0.3496	-0.0661	-0.1268	0.2007	1.0000	-0.4598	-0.6526	-0.0728	-0.0460
0.0281	-0.0508	-0.0224	0.2073	-0.1830	-0.0639	-0.4598	1.0000	0.7316	-0.0259	-0.1051

-0.1456 0.2228 -0.2798 0.1855 0.0131 -0.1649 -0.6526 0.7316 1.0000 -0.2413 -0.2620
 0.6599 0.1925 0.0595 -0.3996 0.0010 0.3409 -0.0728 -0.0259 -0.2413 1.0000 0.4003
 0.1624 -0.0989 -0.0460 -0.7031 -0.1985 -0.0852 -0.0460 -0.1051 -0.2620 0.4003 1.0000

Parameter Estimates for the 24 Subjects: LH on Te:

Fast	slow	basal	Pot	Sens	Eff	sd RE	sd Error
0.7645	0.2276	0.0000	-3.1201	1.3393	4.6159	0.6774	76.9945
1.0133	0.2756	0.0000	-1.4960	1.6114	4.3099	1.3694	43.9822
0.9504	0.1980	0.6519	-6.5170	2.9635	2.9628	1.0182	80.9020
0.9872	0.1543	0.0000	-1.1908	1.8135	3.8262	1.6425	121.0804
1.1969	0.1064	0.0000	-5.5738	4.0235	2.8616	2.1428	94.3381
0.7482	0.1248	0.0000	-1.9799	1.3707	3.1637	1.1830	47.3581
1.0583	0.2642	0.0000	-2.2944	1.2564	6.0033	2.0189	71.7690
0.5710	0.0954	0.0000	-4.3118	1.8835	2.8834	1.4793	57.7664
0.6366	0.0809	0.0000	-4.3773	3.5564	1.5888	1.0574	29.8051
0.4943	0.1815	0.0171	-2.8359	1.5683	2.0354	0.4394	36.2906
0.7661	0.1912	0.0000	-1.4794	2.7734	1.9162	0.4192	22.9671
0.7317	0.0753	0.0000	-5.3952	3.9351	2.2518	0.7835	41.8905
0.8292	0.1436	0.1221	-5.0047	3.5786	2.4212	0.9066	63.1354
1.5105	0.2475	0.0000	-2.6603	1.8751	9.6483	2.0225	52.2829
0.8872	0.1189	0.0000	-3.9561	1.6750	3.2229	0.1594	31.1054
1.0604	0.1212	0.0000	-2.3933	2.5933	2.1968	0.6878	14.5256
0.7839	0.1593	0.0000	-2.0537	1.0497	2.1243	1.6831	34.6099
0.7813	0.1237	0.0000	-4.3598	2.1190	3.1183	1.1579	34.4985
0.5435	0.0942	0.0000	-2.4467	0.6351	2.7798	6.3977	20.8543
0.7654	0.3125	0.0000	-2.2174	1.8973	3.9343	1.7362	27.9210
0.3954	0.1037	0.0000	-3.6570	0.8454	7.8345	1.8745	24.3684
0.6683	0.2900	0.0000	-1.3838	0.8750	4.2515	1.5084	61.1344
0.6362	0.4140	0.0000	-1.4989	1.3308	4.8206	4.5540	95.8391
0.8284	0.2915	0.0000	-2.6765	2.1797	7.4840	2.6486	82.0063

Sample Mean =

0.8170 0.1831 0.0330 -3.1200 2.0312 3.8440 1.6487 52.8094

Sample SD =

0.2432 0.0891 0.1342 1.5023 0.9862 2.0530 1.3556 27.9721

Sample Stand Err of Mean

0.0496 0.0182 0.0274 0.3067 0.2013 0.4191 0.2767 5.7098

Sample CORR =

1.0000 0.1583 0.1104 -0.0245 0.2915 0.3170 -0.1409 0.3024
 0.1583 1.0000 0.0176 0.5174 -0.3471 0.4606 0.2427 0.3660
 0.1104 0.0176 1.0000 -0.5262 0.2592 -0.1230 -0.1248 0.2235
 -0.0245 0.5174 -0.5262 1.0000 -0.6595 0.2245 0.2481 -0.0351
 0.2915 -0.3471 0.2592 -0.6595 1.0000 -0.3803 -0.3771 0.1003
 0.3170 0.4606 -0.1230 0.2245 -0.3803 1.0000 0.2506 0.2405
 -0.1409 0.2427 -0.1248 0.2481 -0.3771 0.2506 1.0000 0.1515
 0.3024 0.3660 0.2235 -0.0351 0.1003 0.2405 0.1515 1.0000

Parameter Estimates: Te Half-Lives

FrTe-fast -Slow Half Lives of Total Te for the 4 GRX Levels

0.9067	3.0454	63.0000	66.0000	65.0000	65.0000
0.6840	2.5148	29.0000	34.0000	29.0000	31.0000
0.7294	3.5004	60.0000	48.0000	51.0000	56.0000
0.7021	4.4913	49.0000	46.0000	50.0000	47.0000
0.5791	6.5147	45.0000	44.0000	38.0000	45.0000
0.9264	5.5553	43.0000	46.0000	46.0000	41.0000
0.6549	2.6236	41.0000	35.0000	36.0000	38.0000
1.2139	7.2650	63.0000	64.0000	64.0000	64.0000
1.0888	8.5710	70.0000	66.0000	66.0000	59.0000
1.4024	3.8188	75.0000	68.0000	69.0000	75.0000
0.9047	3.6256	49.0000	50.0000	50.0000	43.0000
0.9473	9.2085	45.0000	45.0000	44.0000	49.0000
0.8359	4.8260	70.0000	78.0000	66.0000	70.0000
0.4589	2.8008	25.0000	22.0000	22.0000	23.0000
0.7813	5.8283	49.0000	55.0000	58.0000	59.0000
0.6537	5.7196	33.0000	35.0000	33.0000	31.0000
0.8843	4.3510	55.0000	68.0000	66.0000	51.0000
0.8872	5.6048	45.0000	46.0000	48.0000	44.0000
1.2754	7.3550	59.0000	66.0000	69.0000	62.0000
0.9057	2.2180	50.0000	47.0000	51.0000	37.0000
1.7531	6.6871	87.0000	89.0000	80.0000	83.0000
1.0372	2.3900	56.0000	58.0000	56.0000	54.0000
1.0895	1.6741	69.0000	72.0000	67.0000	71.0000
0.8368	2.3779	48.0000	47.0000	47.0000	50.0000

Sample Mean

0.9224	4.6903	53.2500	53.9583	52.9583	52.0000
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Sample SD

0.2841	2.1373	14.8155	15.7907	14.6123	15.0420
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Sample SEM

0.0580	0.4363	3.0242	3.2233	2.9827	3.0704
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GnRH and Te on LH Secretion – For EACH INDIVIDUAL - based on the parameter est for that INDIVIDUAL’S parameter - Est of Asymptotic Covariance Matrix (based on Observed Information Matrix)

Basal	eta0	eta1	ED50	Eff	TeFdbk	beta1	beta2	beta3	SD Error	SD RE
jj=1										
theta =										
0.1003	-1.3428	0.0038	-3.4969	6.9255	0.0638	10.3724	0.0005	0.2383	0.0811	14.9686
SE =										
0.0076	0.2462	0.0507	0.0754	0.6586	0.0058	0.1304	0.0001	0.0022	0.0525	0.7136
CORR =										
1.0000	-0.0305	-0.0540	-0.1957	-0.2620	-0.4036	0.1352	-0.0678	0.1423	0	0
-0.0305	1.0000	-0.7567	-0.2601	0.1343	-0.0298	0.1259	0.4197	0.3057	0	0
-0.0540	-0.7567	1.0000	-0.1009	0.0734	0.2656	0.2195	-0.2208	0.0195	0	0
-0.1957	-0.2601	-0.1009	1.0000	-0.7346	-0.4060	-0.7184	-0.6501	-0.7157	0	0
-0.2620	0.1343	0.0734	-0.7346	1.0000	0.8509	0.3723	0.5852	0.3592	0	0
-0.4036	-0.0298	0.2656	-0.4060	0.8509	1.0000	0.1380	0.1913	0.0191	0	0
0.1352	0.1259	0.2195	-0.7184	0.3723	0.1380	1.0000	0.5204	0.8988	0	0
-0.0678	0.4197	-0.2208	-0.6501	0.5852	0.1913	0.5204	1.0000	0.7906	0	0
0.1423	0.3057	0.0195	-0.7157	0.3592	0.0191	0.8988	0.7906	1.0000	0	0
0	0	0	0	0	0	0	0	0	1.0000	0
0	0	0	0	0	0	0	0	0	0	1.0000
jj= 2										
theta =										
0.0312	4.4356	-1.3874	-5.1563	5.0361	0.0370	9.1119	0.0033	0.2853	0.0386	19.5219
SE =										
0.0025	0.1754	0.0252	0.0854	0.4674	0.0040	0.0617	0.0004	0.0021	0.0362	0.8150
CORR =										
1.0000	0.0106	0.0765	-0.0494	-0.2024	-0.1942	0.3148	-0.1705	0.0225	0	0
0.0106	1.0000	-0.6497	-0.3809	0.0275	-0.5343	0.1002	0.1742	0.2760	0	0
0.0765	-0.6497	1.0000	0.3562	-0.2413	0.4801	0.2452	-0.2959	-0.1940	0	0
-0.0494	-0.3809	0.3562	1.0000	-0.8218	0.0072	0.2929	-0.8063	-0.7947	0	0
-0.2024	0.0275	-0.2413	-0.8218	1.0000	0.4535	-0.5934	0.7922	0.5517	0	0
-0.1942	-0.5343	0.4801	0.0072	0.4535	1.0000	-0.2841	0.0344	-0.1896	0	0
0.3148	0.1002	0.2452	0.2929	-0.5934	-0.2841	1.0000	-0.6426	-0.2077	0	0
-0.1705	0.1742	-0.2959	-0.8063	0.7922	0.0344	-0.6426	1.0000	0.8680	0	0
0.0225	0.2760	-0.1940	-0.7947	0.5517	-0.1896	-0.2077	0.8680	1.0000	0	0
0	0	0	0	0	0	0	0	0	1.0000	0
0	0	0	0	0	0	0	0	0	0	1.0000
jj= 3										
theta =										
0.2154	1.4641	0.0016	-3.8012	7.4669	0.0590	12.9337	0.0000	0.1692	0.1002	11.5305
SE =										
0.0091	0.3015	0.0604	0.1307	2.6158	0.0097	0.4097	0.0004	0.0025	0.0584	0.6263

CORR =

1.0000	-0.1416	-0.0578	-0.1645	-0.2816	-0.0068	-0.0256	-0.3325	-0.0589	0	0
-0.1416	1.0000	-0.4497	-0.0632	0.2655	-0.2760	0.0075	0.4236	0.1339	0	0
-0.0578	-0.4497	1.0000	-0.4527	0.3735	0.2300	0.5681	0.2950	0.5246	0	0
-0.1645	-0.0632	-0.4527	1.0000	-0.7644	-0.0878	-0.6987	-0.6046	-0.6869	0	0
-0.2816	0.2655	0.3735	-0.7644	1.0000	0.0541	0.5846	0.9320	0.6539	0	0
-0.0068	-0.2760	0.2300	-0.0878	0.0541	1.0000	-0.1315	-0.2468	-0.2288	0	0
-0.0256	0.0075	0.5681	-0.6987	0.5846	-0.1315	1.0000	0.5811	0.9774	0	0
-0.3325	0.4236	0.2950	-0.6046	0.9320	-0.2468	0.5811	1.0000	0.6988	0	0
-0.0589	0.1339	0.5246	-0.6869	0.6539	-0.2288	0.9774	0.6988	1.0000	0	0
0	0	0	0	0	0	0	0	0	1.0000	0
0	0	0	0	0	0	0	0	0	0	1.0000

jj= 4

theta =

0.0299	-2.4003	1.0582	-4.0004	4.1762	0.0741	6.5007	0.0311	0.3510	0.0466	14.3453
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SE =

0.0041	0.1984	0.0468	0.0769	0.2942	0.0041	0.8684	0.0263	0.0287	0.0398	0.6986
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CORR =

1.0000	-0.1263	0.2554	-0.4423	-0.0061	-0.1324	-0.1750	0.1876	0.2090	0	0
-0.1263	1.0000	-0.6466	-0.0569	0.1431	0.2733	0.0284	-0.0301	-0.0236	0	0
0.2554	-0.6466	1.0000	-0.3402	-0.1979	-0.2569	0.1093	-0.0752	-0.0411	0	0
-0.4423	-0.0569	-0.3402	1.0000	-0.5904	-0.2161	0.6306	-0.6632	-0.6930	0	0
-0.0061	0.1431	-0.1979	-0.5904	1.0000	0.8146	-0.5532	0.5614	0.5550	0	0
-0.1324	0.2733	-0.2569	-0.2161	0.8146	1.0000	-0.0546	0.0641	0.0658	0	0
-0.1750	0.0284	0.1093	0.6306	-0.5532	-0.0546	1.0000	-0.9980	-0.9914	0	0
0.1876	-0.0301	-0.0752	-0.6632	0.5614	0.0641	-0.9980	1.0000	0.9973	0	0
0.2090	-0.0236	-0.0411	-0.6930	0.5550	0.0658	-0.9914	0.9973	1.0000	0	0
0	0	0	0	0	0	0	0	0	1.0000	0
0	0	0	0	0	0	0	0	0	0	1.0000

jj = 5

theta =

0.0750	0.0037	0.5893	-4.8827	15.0978	0.0879	14.1831	0.0001	0.2310	0.0451	15.4536
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SE =

0.0037	0.0960	0.0176	0.0586	1.6303	0.0026	0.0777	0.0001	0.0006	0.0392	0.7251
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CORR =

1.0000	0.1114	0.0826	-0.1607	-0.3817	-0.1601	0.0238	-0.4700	0.0325	0	0
0.1114	1.0000	-0.4050	-0.1808	-0.0460	-0.2284	0.2035	0.0658	0.2639	0	0
0.0826	-0.4050	1.0000	0.0621	-0.1851	-0.2934	0.3508	0.0735	0.3574	0	0
-0.1607	-0.1808	0.0621	1.0000	-0.6898	-0.3777	-0.4509	-0.2972	-0.3720	0	0
-0.3817	-0.0460	-0.1851	-0.6898	1.0000	0.5528	0.2835	0.7499	0.2380	0	0
-0.1601	-0.2284	-0.2934	-0.3777	0.5528	1.0000	-0.1903	-0.0213	-0.3226	0	0
0.0238	0.2035	0.3508	-0.4509	0.2835	-0.1903	1.0000	0.4442	0.9690	0	0
-0.4700	0.0658	0.0735	-0.2972	0.7499	-0.0213	0.4442	1.0000	0.5193	0	0
0.0325	0.2639	0.3574	-0.3720	0.2380	-0.3226	0.9690	0.5193	1.0000	0	0
0	0	0	0	0	0	0	0	0	1.0000	0

0 0 0 0 0 0 0 0 0 0 1.0000

jj=6

theta =

0.0239 -0.3285 2.3962 -5.6031 23.8869 0.0602 13.6710 0.0000 0.2085 0.0608 9.8637

SE =

0.0058 0.1096 0.0206 0.1076 4.9857 0.0038 0.1150 0.0002 0.0009 0.0455 0.5793

CORR =

1.0000	-0.2057	0.1301	0.0008	-0.5148	-0.2871	0.1490	-0.4876	0.1565	0	0
-0.2057	1.0000	-0.2262	-0.1580	0.2782	0.2177	-0.0665	0.2532	-0.0535	0	0
0.1301	-0.2262	1.0000	0.2261	-0.0179	-0.1457	0.7028	0.3157	0.7134	0	0
0.0008	-0.1580	0.2261	1.0000	-0.6244	-0.5233	0.0300	-0.0382	0.1585	0	0
-0.5148	0.2782	-0.0179	-0.6244	1.0000	0.4100	0.1474	0.7638	0.1109	0	0
-0.2871	0.2177	-0.1457	-0.5233	0.4100	1.0000	-0.3780	-0.0730	-0.4795	0	0
0.1490	-0.0665	0.7028	0.0300	0.1474	-0.3780	1.0000	0.4512	0.9774	0	0
-0.4876	0.2532	0.3157	-0.0382	0.7638	-0.0730	0.4512	1.0000	0.5139	0	0
0.1565	-0.0535	0.7134	0.1585	0.1109	-0.4795	0.9774	0.5139	1.0000	0	0
0	0	0	0	0	0	0	0	0	1.0000	0
0	0	0	0	0	0	0	0	0	0	1.0000

jj=7

theta =

0.0889 0.0434 0.3394 -10.4602 5.8860 0.0517 9.8791 0.0002 0.1929 0.1024 93.5098

SE =

0.0073 0.9262 0.1557 0.2593 28.1982 0.0032 0.0732 0.0048 0.0012 0.0590 1.7836

CORR =

1.0000	-0.2302	0.3263	-0.0631	-0.4442	-0.1371	0.0595	-0.4438	0.0437	0	0
-0.2302	1.0000	-0.7039	-0.2645	0.3355	-0.0797	0.1212	0.3354	0.1663	0	0
0.3263	-0.7039	1.0000	-0.3969	-0.1130	-0.0747	0.3089	-0.1121	0.4086	0	0
-0.0631	-0.2645	-0.3969	1.0000	-0.5479	-0.0112	-0.7265	-0.5467	-0.9314	0	0
-0.4442	0.3355	-0.1130	-0.5479	1.0000	0.1871	0.1884	0.9999	0.4250	0	0
-0.1371	-0.0797	-0.0747	-0.0112	0.1871	1.0000	0.2371	0.1787	0.1200	0	0
0.0595	0.1212	0.3089	-0.7265	0.1884	0.2371	1.0000	0.1833	0.9138	0	0
-0.4438	0.3354	-0.1121	-0.5467	0.9999	0.1787	0.1833	1.0000	0.4222	0	0
0.0437	0.1663	0.4086	-0.9314	0.4250	0.1200	0.9138	0.4222	1.0000	0	0
0	0	0	0	0	0	0	0	0	1.0000	0
0	0	0	0	0	0	0	0	0	0	1.0000

jj=8

theta =

0.1930 8.4415 0.7161 -8.2576 12.4042 0.0755 14.1689 0.0005 0.3061 0.0837 9.3669

SE =

0.0057 0.1539 0.0228 0.1147 2.8006 0.0021 0.1731 0.0002 0.0018 0.0534 0.5645

CORR =

1.0000	-0.0337	0.0446	-0.0005	-0.5643	-0.0020	0.0109	-0.5846	-0.0088	0	0
-0.0337	1.0000	-0.1701	-0.6324	0.2111	-0.2374	0.3405	0.2204	0.3460	0	0

0.0446	-0.1701	1.0000	0.1602	-0.2162	0.3590	-0.4014	-0.2436	-0.4572	0	0
-0.0005	-0.6324	0.1602	1.0000	-0.4732	0.1558	-0.8498	-0.4267	-0.8450	0	0
-0.5643	0.2111	-0.2162	-0.4732	1.0000	0.0490	0.3934	0.9898	0.4254	0	0
-0.0020	-0.2374	0.3590	0.1558	0.0490	1.0000	-0.2602	-0.0502	-0.2988	0	0
0.0109	0.3405	-0.4014	-0.8498	0.3934	-0.2602	1.0000	0.3631	0.9934	0	0
-0.5846	0.2204	-0.2436	-0.4267	0.9898	-0.0502	0.3631	1.0000	0.4043	0	0
-0.0088	0.3460	-0.4572	-0.8450	0.4254	-0.2988	0.9934	0.4043	1.0000	0	0
0	0	0	0	0	0	0	0	0	1.0000	0
0	0	0	0	0	0	0	0	0	0	1.0000

jj =9

theta =

-0.0087	0.0208	0.5728	-5.3581	28.7783	0.0704	12.0794	0.0001	0.2397	0.0319	6.6892
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SE =

0.0030	0.0745	0.0119	0.2561	7.6913	0.0052	0.1326	0.0000	0.0013	0.0330	0.4770
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CORR =

1.0000	-0.1839	0.1143	-0.1542	0.0441	-0.1225	0.0558	-0.5484	0.0286	0	0
-0.1839	1.0000	-0.5192	-0.0346	0.0625	0.2653	-0.3350	0.0475	-0.3278	0	0
0.1143	-0.5192	1.0000	0.1729	-0.2036	-0.0400	0.4143	-0.0432	0.3408	0	0
-0.1542	-0.0346	0.1729	1.0000	-0.9887	-0.4811	0.0517	-0.0340	0.1413	0	0
0.0441	0.0625	-0.2036	-0.9887	1.0000	0.5586	-0.0819	0.1173	-0.1665	0	0
-0.1225	0.2653	-0.0400	-0.4811	0.5586	1.0000	-0.2404	-0.0114	-0.3253	0	0
0.0558	-0.3350	0.4143	0.0517	-0.0819	-0.2404	1.0000	0.4611	0.9798	0	0
-0.5484	0.0475	-0.0432	-0.0340	0.1173	-0.0114	0.4611	1.0000	0.5372	0	0
0.0286	-0.3278	0.3408	0.1413	-0.1665	-0.3253	0.9798	0.5372	1.0000	0	0
0	0	0	0	0	0	0	0	0	1.0000	0
0	0	0	0	0	0	0	0	0	0	1.0000

jj =10

theta =

0.1008	0.1250	0.5213	-3.6972	6.6931	0.0693	4.9042	0.0856	0.3894	0.0714	8.5949
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SE =

0.0058	0.1397	0.0224	0.0865	0.4664	0.0066	2.1645	0.1877	0.0963	0.0493	0.5407
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CORR =

1.0000	-0.0620	0.2737	-0.4102	0.1485	0.0335	-0.1854	0.1904	0.2024	0	0
-0.0620	1.0000	-0.4018	-0.1481	0.2043	0.4814	0.1181	-0.1144	-0.1115	0	0
0.2737	-0.4018	1.0000	-0.3730	0.1320	0.0147	-0.2820	0.2889	0.2997	0	0
-0.4102	-0.1481	-0.3730	1.0000	-0.8557	-0.2094	0.7776	-0.7861	-0.7943	0	0
0.1485	0.2043	0.1320	-0.8557	1.0000	0.5080	-0.7064	0.7116	0.7114	0	0
0.0335	0.4814	0.0147	-0.2094	0.5080	1.0000	0.0544	-0.0493	-0.0455	0	0
-0.1854	0.1181	-0.2820	0.7776	-0.7064	0.0544	1.0000	-0.9998	-0.9990	0	0
0.1904	-0.1144	0.2889	-0.7861	0.7116	-0.0493	-0.9998	1.0000	0.9996	0	0
0.2024	-0.1115	0.2997	-0.7943	0.7114	-0.0455	-0.9990	0.9996	1.0000	0	0
0	0	0	0	0	0	0	0	0	1.0000	0
0	0	0	0	0	0	0	0	0	0	1.0000

jj =11

theta =

0.0075 -0.0031 0.2295 -2.7867 1.8360 0.0307 23.9960 0.0000 0.2122 0.0232 6.5030
 SE =
 0.0021 0.0982 0.0163 0.0358 0.1107 0.0061 0.3361 0.0001 0.0011 0.0281 0.4704

CORR =
 1.0000 -0.2052 0.1477 -0.1425 -0.3927 -0.0087 -0.0002 -0.4459 -0.0134 0 0
 -0.2052 1.0000 -0.6756 -0.2131 0.0516 -0.3327 0.0042 0.1679 0.0237 0 0
 0.1477 -0.6756 1.0000 -0.2136 0.1357 0.4024 0.1968 -0.0176 0.1421 0 0
 -0.1425 -0.2131 -0.2136 1.0000 -0.6376 -0.0556 -0.3734 -0.4832 -0.3397 0 0
 -0.3927 0.0516 0.1357 -0.6376 1.0000 0.3223 0.3266 0.8571 0.3255 0 0
 -0.0087 -0.3327 0.4024 -0.0556 0.3223 1.0000 -0.2369 -0.1251 -0.2723 0 0
 -0.0002 0.0042 0.1968 -0.3734 0.3266 -0.2369 1.0000 0.5619 0.9920 0 0
 -0.4459 0.1679 -0.0176 -0.4832 0.8571 -0.1251 0.5619 1.0000 0.5921 0 0
 -0.0134 0.0237 0.1421 -0.3397 0.3255 -0.2723 0.9920 0.5921 1.0000 0 0
 0 0 0 0 0 0 0 0 0 1.0000 0
 0 0 0 0 0 0 0 0 0 0 1.0000

jj =12
 theta =
 0.0692 -0.6399 0.4095 -5.3707 27.7629 0.0991 9.1565 0.0021 0.2747 0.0614 15.5325
 SE =
 0.0046 0.1276 0.0167 0.0855 2.9311 0.0032 0.0455 0.0002 0.0014 0.0457 0.7269

CORR =
 1.0000 -0.0120 0.0748 0.0951 -0.3274 -0.2361 0.2801 -0.3530 -0.0285 0 0
 -0.0120 1.0000 -0.7197 -0.2951 0.2002 -0.0114 0.0017 -0.0189 -0.0537 0 0
 0.0748 -0.7197 1.0000 0.1715 -0.1858 0.1281 0.2771 0.0001 0.1792 0 0
 0.0951 -0.2951 0.1715 1.0000 -0.9128 -0.3978 -0.2904 -0.6655 -0.6080 0 0
 -0.3274 0.2002 -0.1858 -0.9128 1.0000 0.6292 0.0279 0.6834 0.4267 0 0
 -0.2361 -0.0114 0.1281 -0.3978 0.6292 1.0000 -0.0713 0.1024 -0.0906 0 0
 0.2801 0.0017 0.2771 -0.2904 0.0279 -0.0713 1.0000 0.0222 0.5974 0 0
 -0.3530 -0.0189 0.0001 -0.6655 0.6834 0.1024 0.0222 1.0000 0.7842 0 0
 -0.0285 -0.0537 0.1792 -0.6080 0.4267 -0.0906 0.5974 0.7842 1.0000 0 0
 0 0 0 0 0 0 0 0 0 1.0000 0
 0 0 0 0 0 0 0 0 0 0 1.0000

jj =13
 theta =
 0.0130 0.0004 0.3325 -3.0610 3.7131 0.0633 12.1303 0.0001 0.2425 0.0446 7.1757
 SE =
 0.0048 0.1146 0.0172 0.0705 0.2537 0.0053 0.2199 0.0001 0.0022 0.0390 0.4941

CORR =
 1.0000 -0.1690 0.2090 -0.1860 -0.1919 0.0738 0.0309 -0.4349 -0.0147 0 0
 -0.1690 1.0000 -0.3901 -0.3415 0.1810 -0.1782 0.2609 0.2952 0.2417 0 0
 0.2090 -0.3901 1.0000 -0.3531 0.2899 0.4969 0.2421 -0.0678 0.1192 0 0
 -0.1860 -0.3415 -0.3531 1.0000 -0.8017 -0.2773 -0.6282 -0.4424 -0.5062 0 0
 -0.1919 0.1810 0.2899 -0.8017 1.0000 0.5819 0.4778 0.6366 0.4081 0 0
 0.0738 -0.1782 0.4969 -0.2773 0.5819 1.0000 0.0788 0.0337 0.0160 0 0
 0.0309 0.2609 0.2421 -0.6282 0.4778 0.0788 1.0000 0.6508 0.9663 0 0

-0.4349	0.2952	-0.0678	-0.4424	0.6366	0.0337	0.6508	1.0000	0.7386	0	0
-0.0147	0.2417	0.1192	-0.5062	0.4081	0.0160	0.9663	0.7386	1.0000	0	0
0	0	0	0	0	0	0	0	0	1.0000	0
0	0	0	0	0	0	0	0	0	0	1.0000

jj =14

theta =

0.0595	-3.6323	0.9472	-4.8564	11.8682	0.0869	13.6945	0.0000	0.2120	0.0454	16.1403
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SE =

0.0045	0.1563	0.0231	0.0569	2.0885	0.0030	0.1171	0.0002	0.0009	0.0393	0.7410
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CORR =

1.0000	-0.1613	0.1588	0.0045	-0.6968	0.1374	-0.0813	-0.7295	-0.1262	0	0
-0.1613	1.0000	-0.5504	-0.2284	0.2388	-0.1415	0.1174	0.2789	0.1667	0	0
0.1588	-0.5504	1.0000	-0.0825	-0.1584	-0.2834	0.4000	-0.0294	0.4029	0	0
0.0045	-0.2284	-0.0825	1.0000	-0.5259	-0.3582	-0.6561	-0.2864	-0.5696	0	0
-0.6968	0.2388	-0.1584	-0.5259	1.0000	0.0692	0.3515	0.9063	0.3714	0	0
0.1374	-0.1415	-0.2834	-0.3582	0.0692	1.0000	-0.1380	-0.3421	-0.3237	0	0
-0.0813	0.1174	0.4000	-0.6561	0.3515	-0.1380	1.0000	0.3595	0.9702	0	0
-0.7295	0.2789	-0.0294	-0.2864	0.9063	-0.3421	0.3595	1.0000	0.4618	0	0
-0.1262	0.1667	0.4029	-0.5696	0.3714	-0.3237	0.9702	0.4618	1.0000	0	0
0	0	0	0	0	0	0	0	0	1.0000	0
0	0	0	0	0	0	0	0	0	0	1.0000

jj =15

theta =

0.0457	-2.0388	0.5899	-3.8134	10.7289	0.0519	9.2440	0.0008	0.2426	0.0541	8.7747
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SE =

0.0059	0.1338	0.0216	0.1240	1.5211	0.0048	0.1046	0.0001	0.0022	0.0429	0.5464
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CORR =

1.0000	-0.1597	0.1297	0.0981	-0.2827	-0.4004	0.0731	-0.3393	-0.0085	0	0
-0.1597	1.0000	-0.7375	0.0886	-0.0827	0.0509	0.0703	0.1101	0.1250	0	0
0.1297	-0.7375	1.0000	-0.2756	0.1940	0.1043	0.3760	0.1204	0.2605	0	0
0.0981	0.0886	-0.2756	1.0000	-0.9650	-0.7592	-0.4132	-0.4142	-0.2690	0	0
-0.2827	-0.0827	0.1940	-0.9650	1.0000	0.8675	0.2720	0.4252	0.1605	0	0
-0.4004	0.0509	0.1043	-0.7592	0.8675	1.0000	0.1236	0.2706	0.0025	0	0
0.0731	0.0703	0.3760	-0.4132	0.2720	0.1236	1.0000	0.5531	0.8951	0	0
-0.3393	0.1101	0.1204	-0.4142	0.4252	0.2706	0.5531	1.0000	0.8020	0	0
-0.0085	0.1250	0.2605	-0.2690	0.1605	0.0025	0.8951	0.8020	1.0000	0	0
0	0	0	0	0	0	0	0	0	1.0000	0
0	0	0	0	0	0	0	0	0	0	1.0000

jj =16

theta =

0.0290	-1.0553	0.4722	-5.7606	26.7685	0.0412	7.5408	0.0104	0.3162	0.0365	8.5280
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SE =

0.0031	0.1581	0.0237	1.0274	27.7840	0.0079	0.1383	0.0019	0.0054	0.0352	0.5386
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CORR =

1.0000	-0.0474	0.0658	-0.1124	0.0873	-0.1729	0.3345	-0.2287	-0.0956	0	0
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-0.0474	1.0000	-0.6333	-0.0765	0.0630	-0.1260	-0.2423	0.3046	0.3320	0	0
0.0658	-0.6333	1.0000	0.1375	-0.1388	0.1526	0.1642	-0.1058	-0.0706	0	0
-0.1124	-0.0765	0.1375	1.0000	-0.9991	-0.6772	0.0815	-0.2155	-0.1432	0	0
0.0873	0.0630	-0.1388	-0.9991	1.0000	0.6990	-0.0900	0.2144	0.1331	0	0
-0.1729	-0.1260	0.1526	-0.6772	0.6990	1.0000	-0.0728	0.0857	-0.0469	0	0
0.3345	-0.2423	0.1642	0.0815	-0.0900	-0.0728	1.0000	-0.9031	-0.7331	0	0
-0.2287	0.3046	-0.1058	-0.2155	0.2144	0.0857	-0.9031	1.0000	0.9442	0	0
-0.0956	0.3320	-0.0706	-0.1432	0.1331	-0.0469	-0.7331	0.9442	1.0000	0	0
0	0	0	0	0	0	0	0	0	1.0000	0
0	0	0	0	0	0	0	0	0	0	1.0000

jj =17

theta =

0.0338	4.6374	2.2505	-6.3065	8.8341	0.0623	10.2029	0.0001	0.2081	0.0694	11.5448
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SE =

0.0069	0.2346	0.0524	0.0977	2.5980	0.0039	0.1582	0.0003	0.0018	0.0486	0.6267
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CORR =

1.0000	0.0091	0.2014	-0.2375	-0.6396	0.0863	0.1266	-0.6411	0.0803	0	0
0.0091	1.0000	-0.4412	-0.1158	0.1050	0.1191	-0.0842	0.1730	0.0385	0	0
0.2014	-0.4412	1.0000	-0.5652	-0.0093	-0.2069	0.7019	0.0254	0.6319	0	0
-0.2375	-0.1158	-0.5652	1.0000	-0.3459	-0.1197	-0.7253	-0.3035	-0.7463	0	0
-0.6396	0.1050	-0.0093	-0.3459	1.0000	0.0763	0.2023	0.9787	0.3245	0	0
0.0863	0.1191	-0.2069	-0.1197	0.0763	1.0000	0.1706	0.0126	0.2019	0	0
0.1266	-0.0842	0.7019	-0.7253	0.2023	0.1706	1.0000	0.2282	0.9681	0	0
-0.6411	0.1730	0.0254	-0.3035	0.9787	0.0126	0.2282	1.0000	0.3727	0	0
0.0803	0.0385	0.6319	-0.7463	0.3245	0.2019	0.9681	0.3727	1.0000	0	0
0	0	0	0	0	0	0	0	0	1.0000	0
0	0	0	0	0	0	0	0	0	0	1.0000

jj =18

theta =

0.2112	-0.5479	-0.0967	-4.5138	15.1788	0.0821	10.4690	0.0003	0.2358	0.0935	17.6862
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SE =

0.0075	0.1930	0.0279	0.0600	1.0778	0.0027	0.0943	0.0001	0.0014	0.0564	0.7757
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CORR =

1.0000	-0.1231	0.1763	-0.1102	-0.3345	-0.1811	0.1433	-0.3433	0.0707	0	0
-0.1231	1.0000	-0.6345	-0.3156	0.1282	-0.1645	0.1745	0.1749	0.1753	0	0
0.1763	-0.6345	1.0000	-0.1934	0.0569	0.3616	0.2751	-0.0363	0.2166	0	0
-0.1102	-0.3156	-0.1934	1.0000	-0.7195	-0.2585	-0.8271	-0.6813	-0.8642	0	0
-0.3345	0.1282	0.0569	-0.7195	1.0000	0.6123	0.4893	0.8843	0.5946	0	0
-0.1811	-0.1645	0.3616	-0.2585	0.6123	1.0000	0.1819	0.2601	0.1224	0	0
0.1433	0.1745	0.2751	-0.8271	0.4893	0.1819	1.0000	0.4622	0.9262	0	0
-0.3433	0.1749	-0.0363	-0.6813	0.8843	0.2601	0.4622	1.0000	0.6906	0	0
0.0707	0.1753	0.2166	-0.8642	0.5946	0.1224	0.9262	0.6906	1.0000	0	0
0	0	0	0	0	0	0	0	0	1.0000	0
0	0	0	0	0	0	0	0	0	0	1.0000

jj =19

theta =
 0.0464 1.5044 0.1490 -4.6277 12.7079 0.1006 13.5103 0.0000 0.2287 0.0840 9.3103
 SE =
 0.0073 0.1297 0.0185 0.0910 1.8421 0.0054 0.2529 0.0001 0.0019 0.0535 0.5628
 CORR =
 1.0000 -0.1574 0.1159 -0.1377 -0.4732 -0.1689 0.0968 -0.5587 0.0943 0 0
 -0.1574 1.0000 -0.0540 -0.3966 0.3144 0.1501 0.1455 0.2738 0.0973 0 0
 0.1159 -0.0540 1.0000 0.0078 -0.1997 0.0831 0.2979 -0.0617 0.2609 0 0
 -0.1377 -0.3966 0.0078 1.0000 -0.6363 -0.1672 -0.5464 -0.3090 -0.4746 0 0
 -0.4732 0.3144 -0.1997 -0.6363 1.0000 0.3816 0.3134 0.8445 0.3067 0 0
 -0.1689 0.1501 0.0831 -0.1672 0.3816 1.0000 -0.0172 0.1306 -0.0337 0 0
 0.0968 0.1455 0.2979 -0.5464 0.3134 -0.0172 1.0000 0.3667 0.9790 0 0
 -0.5587 0.2738 -0.0617 -0.3090 0.8445 0.1306 0.3667 1.0000 0.4269 0 0
 0.0943 0.0973 0.2609 -0.4746 0.3067 -0.0337 0.9790 0.4269 1.0000 0 0
 0 0 0 0 0 0 0 0 0 1.0000 0
 0 0 0 0 0 0 0 0 0 0 1.0000

jj = 20
 theta =
 0.0610 -0.9851 -0.2054 -4.3506 3.5427 0.0360 6.6388 0.0160 0.3072 0.0268 15.5850
 SE =
 0.0018 0.2227 0.0265 0.0490 0.1906 0.0020 0.3272 0.0059 0.0087 0.0302 0.7282
 CORR =
 1.0000 -0.2863 0.3177 -0.2168 -0.0504 -0.0911 0.0486 -0.0209 0.0266 0 0
 -0.2863 1.0000 -0.6742 0.0777 -0.1094 -0.0995 0.1382 -0.1508 -0.1774 0 0
 0.3177 -0.6742 1.0000 -0.1573 -0.0814 0.0710 0.0284 -0.0100 0.0180 0 0
 -0.2168 0.0777 -0.1573 1.0000 -0.8462 -0.6891 0.7988 -0.8351 -0.8585 0 0
 -0.0504 -0.1094 -0.0814 -0.8462 1.0000 0.8720 -0.9263 0.9335 0.9092 0 0
 -0.0911 -0.0995 0.0710 -0.6891 0.8720 1.0000 -0.7569 0.7583 0.7257 0 0
 0.0486 0.1382 0.0284 0.7988 -0.9263 -0.7569 1.0000 -0.9951 -0.9740 0 0
 -0.0209 -0.1508 -0.0100 -0.8351 0.9335 0.7583 -0.9951 1.0000 0.9905 0 0
 0.0266 -0.1774 0.0180 -0.8585 0.9092 0.7257 -0.9740 0.9905 1.0000 0 0
 0 0 0 0 0 0 0 0 0 1.0000 0
 0 0 0 0 0 0 0 0 0 0 1.0000

jj = 21
 theta =
 0.1308 -8.8173 2.3410 -6.9763 9.2667 0.1019 24.6712 0.0000 0.1751 0.0694 22.8695
 SE =
 0.0063 0.1907 0.0309 0.0773 26.4614 0.0066 0.1520 0.0029 0.0004 0.0486 0.8821
 CORR =
 1.0000 -0.3263 0.1737 0.0349 -0.7492 0.1387 -0.0378 -0.7506 -0.0639 0 0
 -0.3263 1.0000 -0.5194 0.0343 0.3321 -0.4042 -0.1583 0.3425 -0.0844 0 0
 0.1737 -0.5194 1.0000 -0.6025 -0.0249 -0.0290 0.5974 -0.0294 0.5885 0 0
 0.0349 0.0343 -0.6025 1.0000 -0.3811 0.0758 -0.7766 -0.3722 -0.7907 0 0
 -0.7492 0.3321 -0.0249 -0.3811 1.0000 -0.2122 0.2412 0.9997 0.2958 0 0
 0.1387 -0.4042 -0.0290 0.0758 -0.2122 1.0000 -0.1311 -0.2314 -0.1960 0 0
 -0.0378 -0.1583 0.5974 -0.7766 0.2412 -0.1311 1.0000 0.2357 0.9813 0 0

-0.7506	0.3425	-0.0294	-0.3722	0.9997	-0.2314	0.2357	1.0000	0.2924	0	0
-0.0639	-0.0844	0.5885	-0.7907	0.2958	-0.1960	0.9813	0.2924	1.0000	0	0
0	0	0	0	0	0	0	0	0	1.0000	0
0	0	0	0	0	0	0	0	0	0	1.0000

jj =22
theta =
-0.0012 2.4051 0.0010 -5.0105 26.2404 0.0661 7.4186 0.0070 0.2991 0.0810 9.4089
SE =
0.0065 0.1394 0.0228 0.1168 3.7691 0.0039 0.1974 0.0021 0.0069 0.0525 0.5658
CORR =
1.0000 -0.2156 0.2858 0.2530 -0.4072 -0.0944 0.4375 -0.3579 -0.2278 0 0
-0.2156 1.0000 -0.6699 -0.2866 0.2103 -0.1379 -0.3991 0.3670 0.3345 0 0
0.2858 -0.6699 1.0000 0.1095 -0.1517 0.3864 0.4279 -0.2452 -0.1113 0 0
0.2530 -0.2866 0.1095 1.0000 -0.9528 -0.5235 0.7138 -0.7845 -0.7436 0 0
-0.4072 0.2103 -0.1517 -0.9528 1.0000 0.6154 -0.6989 0.7134 0.6165 0 0
-0.0944 -0.1379 0.3864 -0.5235 0.6154 1.0000 0.0153 0.0605 0.0493 0 0
0.4375 -0.3991 0.4279 0.7138 -0.6989 0.0153 1.0000 -0.9485 -0.8437 0 0
-0.3579 0.3670 -0.2452 -0.7845 0.7134 0.0605 -0.9485 1.0000 0.9669 0 0
-0.2278 0.3345 -0.1113 -0.7436 0.6165 0.0493 -0.8437 0.9669 1.0000 0 0
0 0 0 0 0 0 0 0 0 1.0000 0
0 0 0 0 0 0 0 0 0 0 1.0000

jj =23
theta =
0.0132 0.1406 0.1029 -3.4429 5.6734 0.0741 10.7702 0.0007 0.2657 0.0514 10.4807
SE =
0.0044 0.1716 0.0273 0.0752 0.4489 0.0018 0.1231 0.0001 0.0024 0.0418 0.5971
CORR =
1.0000 -0.0875 0.1366 -0.0466 -0.3537 -0.1160 0.1657 -0.3636 0.0007 0 0
-0.0875 1.0000 -0.4932 -0.2446 0.0812 0.0462 0.1022 0.1038 0.1184 0 0
0.1366 -0.4932 1.0000 -0.1011 -0.0431 0.2590 0.0733 -0.2762 -0.1841 0 0
-0.0466 -0.2446 -0.1011 1.0000 -0.7958 -0.3105 -0.6949 -0.6875 -0.7335 0 0
-0.3537 0.0812 -0.0431 -0.7958 1.0000 0.5248 0.4151 0.8940 0.6186 0 0
-0.1160 0.0462 0.2590 -0.3105 0.5248 1.0000 0.0767 0.2596 0.0758 0 0
0.1657 0.1022 0.0733 -0.6949 0.4151 0.0767 1.0000 0.4754 0.8822 0 0
-0.3636 0.1038 -0.2762 -0.6875 0.8940 0.2596 0.4754 1.0000 0.7864 0 0
0.0007 0.1184 -0.1841 -0.7335 0.6186 0.0758 0.8822 0.7864 1.0000 0 0
0 0 0 0 0 0 0 0 0 1.0000 0
0 0 0 0 0 0 0 0 0 0 1.0000

jj =24
theta =
0.0316 -0.0929 0.4591 -5.1178 20.3331 0.0870 12.7727 0.0000 0.2075 0.0576 13.2217
SE =
0.0057 0.1212 0.0183 0.0564 3.4995 0.0019 0.1390 0.0002 0.0011 0.0443 0.6707
CORR =
1.0000 -0.0640 0.1068 -0.0455 -0.6712 0.0291 -0.0033 -0.6671 -0.0296 0 0
-0.0640 1.0000 -0.3682 -0.1357 0.1038 -0.1699 0.1318 0.1747 0.1677 0 0

0.1068	-0.3682	1.0000	-0.5571	0.1593	-0.3137	0.6503	0.1847	0.6130	0	0
-0.0455	-0.1357	-0.5571	1.0000	-0.5306	0.1608	-0.7737	-0.4681	-0.7608	0	0
-0.6712	0.1038	0.1593	-0.5306	1.0000	-0.1084	0.4181	0.9684	0.4629	0	0
0.0291	-0.1699	-0.3137	0.1608	-0.1084	1.0000	-0.3825	-0.3063	-0.4527	0	0
-0.0033	0.1318	0.6503	-0.7737	0.4181	-0.3825	1.0000	0.4659	0.9866	0	0
-0.6671	0.1747	0.1847	-0.4681	0.9684	-0.3063	0.4659	1.0000	0.5336	0	0
-0.0296	0.1677	0.6130	-0.7608	0.4629	-0.4527	0.9866	0.5336	1.0000	0	0
0	0	0	0	0	0	0	0	0	1.0000	0
0	0	0	0	0	0	0	0	0	0	1.0000

LH on Te – For EACH INDIVIDUAL - based on the parameter est for that INDIVIDUAL’S parameter - Est of Asymptotic Covariance Matrix (based on Observed Information Matrix)

Te-Fast -slow basal Pot Sens Eff sd RE sd Error

jj = 1

theta =

0.7645	0.2276	0.0000	-3.1201	1.3393	4.6159	0.6774	76.9945
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SE =

0.1361	0.0333	0.5560	0.9647	0.2928	1.0995	1.6185	0.1518
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CORR =

1.0000	0.7660	0.2241	-0.2780	0.2671	0.8057	0	0
0.7660	1.0000	0.3216	-0.4483	0.4382	0.8096	0	0
0.2241	0.3216	1.0000	-0.9633	0.9349	0.7304	0	0
-0.2780	-0.4483	-0.9633	1.0000	-0.9913	-0.7742	0	0
0.2671	0.4382	0.9349	-0.9913	1.0000	0.7562	0	0
0.8057	0.8096	0.7304	-0.7742	0.7562	1.0000	0	0
0	0	0	0	0	0	1.0000	0
0	0	0	0	0	0	0	1.0000

jj = 2

theta =

1.0133	0.2756	0.0000	-1.4960	1.6114	4.3099	1.3694	43.9822
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SE =

0.1272	0.0291	0.5359	0.4934	0.3740	1.0194	1.2232	0.2158
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CORR =

1.0000	0.1752	0.0674	0.0845	-0.1477	0.4488	0	0
0.1752	1.0000	0.4326	-0.4193	0.4642	0.7062	0	0
0.0674	0.4326	1.0000	-0.9726	0.8979	0.8507	0	0
0.0845	-0.4193	-0.9726	1.0000	-0.9505	-0.7797	0	0
-0.1477	0.4642	0.8979	-0.9505	1.0000	0.7622	0	0

0.4488	0.7062	0.8507	-0.7797	0.7622	1.0000	0	0
0	0	0	0	0	0	1.0000	0
0	0	0	0	0	0	0	1.0000

jj=3

theta =

0.9504	0.1980	0.6519	-6.5170	2.9635	2.9628	1.0182	80.9020
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SE =

0.0960	0.0179	0.4540	2.2020	0.8301	0.5632	1.6590	0.1861
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CORR =

1.0000	0.2056	0.0611	-0.0751	0.0883	0.5081	0	0
0.2056	1.0000	-0.0406	-0.0321	-0.0364	0.3243	0	0
0.0611	-0.0406	1.0000	-0.8806	0.8390	0.8410	0	0
-0.0751	-0.0321	-0.8806	1.0000	-0.9908	-0.7798	0	0
0.0883	-0.0364	0.8390	-0.9908	1.0000	0.7378	0	0
0.5081	0.3243	0.8410	-0.7798	0.7378	1.0000	0	0
0	0	0	0	0	0	1.0000	0
0	0	0	0	0	0	0	1.0000

jj=4

theta =

0.9872	0.1543	0.0000	-1.1908	1.8135	3.8262	1.6425	121.0804
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SE =

0.1116	0.0287	3.1604	2.3030	1.2014	3.2642	2.0296	0.2364
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CORR =

1.0000	0.6787	-0.1088	0.1257	-0.1588	0.0660	0	0
0.6787	1.0000	-0.2051	0.1360	-0.1052	-0.0045	0	0
-0.1088	-0.2051	1.0000	-0.9815	0.8806	0.9765	0	0
0.1257	0.1360	-0.9815	1.0000	-0.9470	-0.9730	0	0
-0.1588	-0.1052	0.8806	-0.9470	1.0000	0.8894	0	0
0.0660	-0.0045	0.9765	-0.9730	0.8894	1.0000	0	0
0	0	0	0	0	0	1.0000	0
0	0	0	0	0	0	0	1.0000

jj=5

theta =

1.1969	0.1064	0.0000	-5.5738	4.0235	2.8616	2.1428	94.3381
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SE =

0.0833	0.0112	0.2770	1.7673	1.1702	0.4887	1.7915	0.2700
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CORR =

1.0000	0.5970	0.2288	-0.2491	0.2334	0.6670	0	0
0.5970	1.0000	0.1688	-0.3866	0.3495	0.7320	0	0
0.2288	0.1688	1.0000	-0.7905	0.7428	0.7519	0	0
-0.2491	-0.3866	-0.7905	1.0000	-0.9915	-0.7549	0	0
0.2334	0.3495	0.7428	-0.9915	1.0000	0.7150	0	0
0.6670	0.7320	0.7519	-0.7549	0.7150	1.0000	0	0
0	0	0	0	0	0	1.0000	0

0 0 0 0 0 0 0 1.0000

jj=6

theta =

0.7482 0.1248 0.0000 -1.9799 1.3707 3.1637 1.1830 47.3581

SE =

0.0884 0.0103 0.3739 0.6095 0.3310 0.6297 1.2693 0.2006

CORR =

1.0000	0.6460	0.1626	-0.0838	-0.1384	0.4460	0	0
0.6460	1.0000	0.1524	-0.1906	-0.0099	0.4362	0	0
0.1626	0.1524	1.0000	-0.9691	0.9048	0.9229	0	0
-0.0838	-0.1906	-0.9691	1.0000	-0.9539	-0.8957	0	0
-0.1384	-0.0099	0.9048	-0.9539	1.0000	0.7971	0	0
0.4460	0.4362	0.9229	-0.8957	0.7971	1.0000	0	0
0	0	0	0	0	0	1.0000	0
0	0	0	0	0	0	0	1.0000

jj=7

theta =

1.0583 0.2642 0.0000 -2.2944 1.2564 6.0033 2.0189 71.7690

SE =

0.1235 0.0307 0.8014 0.7432 0.3035 1.4593 1.5626 0.2621

CORR =

1.0000	0.6479	0.3145	-0.2798	0.2870	0.7151	0	0
0.6479	1.0000	0.2468	-0.2820	0.2596	0.6501	0	0
0.3145	0.2468	1.0000	-0.9588	0.8934	0.8470	0	0
-0.2798	-0.2820	-0.9588	1.0000	-0.9739	-0.8390	0	0
0.2870	0.2596	0.8934	-0.9739	1.0000	0.8163	0	0
0.7151	0.6501	0.8470	-0.8390	0.8163	1.0000	0	0
0	0	0	0	0	0	1.0000	0
0	0	0	0	0	0	0	1.0000

jj=8

theta =

0.5710 0.0954 0.0000 -4.3118 1.8835 2.8834 1.4793 57.7664

SE =

0.0443 0.0057 0.3626 1.2160 0.4479 0.4703 1.4019 0.2243

CORR =

1.0000	0.0117	0.3956	-0.1424	0.0454	0.5601	0	0
0.0117	1.0000	0.0341	-0.1695	0.1887	0.2181	0	0
0.3956	0.0341	1.0000	-0.9004	0.8096	0.9547	0	0
-0.1424	-0.1695	-0.9004	1.0000	-0.9806	-0.8610	0	0
0.0454	0.1887	0.8096	-0.9806	1.0000	0.7803	0	0
0.5601	0.2181	0.9547	-0.8610	0.7803	1.0000	0	0
0	0	0	0	0	0	1.0000	0

0 0 0 0 0 0 0 1.0000

jj=9

theta =

0.6366 0.0809 0.0000 -4.3773 3.5564 1.5888 1.0574 29.8051

SE =

0.0403 0.0095 0.0809 0.7392 0.5871 0.1329 1.0070 0.1897

CORR =

1.0000	0.7019	-0.1612	-0.2591	0.1876	0.6887	0	0
0.7019	1.0000	-0.4882	-0.3935	0.3591	0.5847	0	0
-0.1612	-0.4882	1.0000	-0.4359	0.3918	0.3768	0	0
-0.2591	-0.3935	-0.4359	1.0000	-0.9877	-0.8060	0	0
0.1876	0.3591	0.3918	-0.9877	1.0000	0.7481	0	0
0.6887	0.5847	0.3768	-0.8060	0.7481	1.0000	0	0
0	0	0	0	0	0	1.0000	0
0	0	0	0	0	0	0	1.0000

jj=10

theta =

0.4943 0.1815 0.0171 -2.8359 1.5683 2.0354 0.4394 36.2906

SE =

0.0365 0.0221 0.4035 1.1686 0.4229 0.4157 1.1111 0.1223

CORR =

1.0000	-0.0692	-0.0861	0.1123	-0.1135	0.1068	0	0
-0.0692	1.0000	-0.1966	0.1424	-0.2271	-0.0380	0	0
-0.0861	-0.1966	1.0000	-0.9701	0.9297	0.9641	0	0
0.1123	0.1424	-0.9701	1.0000	-0.9837	-0.9438	0	0
-0.1135	-0.2271	0.9297	-0.9837	1.0000	0.8943	0	0
0.1068	-0.0380	0.9641	-0.9438	0.8943	1.0000	0	0
0	0	0	0	0	0	1.0000	0
0	0	0	0	0	0	0	1.0000

jj=11

theta =

0.7661 0.1912 0.0000 -1.4794 2.7734 1.9162 0.4192 22.9671

SE =

0.0645 0.0205 0.4239 0.8446 0.7704 0.5456 0.8839 0.1194

CORR =

1.0000	0.5971	0.2749	-0.2643	0.1915	0.4989	0	0
0.5971	1.0000	0.3201	-0.3730	0.2945	0.5363	0	0
0.2749	0.3201	1.0000	-0.9884	0.9326	0.9577	0	0
-0.2643	-0.3730	-0.9884	1.0000	-0.9655	-0.9593	0	0
0.1915	0.2945	0.9326	-0.9655	1.0000	0.9040	0	0
0.4989	0.5363	0.9577	-0.9593	0.9040	1.0000	0	0
0	0	0	0	0	0	1.0000	0

0 0 0 0 0 0 0 1.0000

jj =12

theta =

0.7317 0.0753 0.0000 -5.3952 3.9351 2.2518 0.7835 41.8905

SE =

0.0620 0.0070 0.0886 1.4150 0.9755 0.2292 1.1938 0.1633

CORR =

1.0000	0.6920	0.0090	-0.0329	0.0074	0.7436	0	0
0.6920	1.0000	0.0239	-0.2141	0.1798	0.8117	0	0
0.0090	0.0239	1.0000	-0.8511	0.8202	0.5086	0	0
-0.0329	-0.2141	-0.8511	1.0000	-0.9928	-0.5869	0	0
0.0074	0.1798	0.8202	-0.9928	1.0000	0.5591	0	0
0.7436	0.8117	0.5086	-0.5869	0.5591	1.0000	0	0
0	0	0	0	0	0	1.0000	0
0	0	0	0	0	0	0	1.0000

jj =13

theta =

0.8292 0.1436 0.1221 -5.0047 3.5786 2.4212 0.9066 63.1354

SE =

0.0827 0.0210 0.2204 1.6649 1.0405 0.3383 1.4656 0.1756

CORR =

1.0000	0.6887	-0.1126	-0.3245	0.3207	0.7174	0	0
0.6887	1.0000	-0.4075	-0.2805	0.2624	0.4972	0	0
-0.1126	-0.4075	1.0000	-0.6799	0.6656	0.5169	0	0
-0.3245	-0.2805	-0.6799	1.0000	-0.9949	-0.8401	0	0
0.3207	0.2624	0.6656	-0.9949	1.0000	0.8302	0	0
0.7174	0.4972	0.5169	-0.8401	0.8302	1.0000	0	0
0	0	0	0	0	0	1.0000	0
0	0	0	0	0	0	0	1.0000

jj =14

theta =

1.5105 0.2475 0.0000 -2.6603 1.8751 9.6483 2.0225 52.2829

SE =

0.1088 0.0172 0.4463 0.4252 0.2546 0.9005 1.3337 0.2623

CORR =

1.0000	0.7159	-0.0552	0.0263	-0.0864	0.6228	0	0
0.7159	1.0000	-0.0343	-0.0634	0.0006	0.6842	0	0
-0.0552	-0.0343	1.0000	-0.9666	0.9213	0.6450	0	0
0.0263	-0.0634	-0.9666	1.0000	-0.9728	-0.6962	0	0
-0.0864	0.0006	0.9213	-0.9728	1.0000	0.6525	0	0
0.6228	0.6842	0.6450	-0.6962	0.6525	1.0000	0	0
0	0	0	0	0	0	1.0000	0

0 0 0 0 0 0 0 1.0000

jj =15

theta =

0.8872 0.1189 0.0000 -3.9561 1.6750 3.2229 0.1594 31.1054

SE =

0.0768 0.0079 0.1022 0.4505 0.1841 0.2352 1.0287 0.0736

CORR =

1.0000	0.7736	-0.1597	0.0001	0.0487	0.7639	0	0
0.7736	1.0000	-0.2724	-0.0387	0.0931	0.6881	0	0
-0.1597	-0.2724	1.0000	-0.8632	0.7845	0.4040	0	0
0.0001	-0.0387	-0.8632	1.0000	-0.9819	-0.6018	0	0
0.0487	0.0931	0.7845	-0.9819	1.0000	0.6374	0	0
0.7639	0.6881	0.4040	-0.6018	0.6374	1.0000	0	0
0	0	0	0	0	0	1.0000	0
0	0	0	0	0	0	0	1.0000

jj =16

theta =

1.0604 0.1212 0.0000 -2.3933 2.5933 2.1968 0.6878 14.5256

SE =

0.0712 0.0052 0.0914 0.2801 0.3189 0.1725 0.7030 0.1530

CORR =

1.0000	0.4375	-0.3499	0.4307	-0.5072	-0.0014	0	0
0.4375	1.0000	-0.1349	-0.0298	0.0820	0.4571	0	0
-0.3499	-0.1349	1.0000	-0.9400	0.8397	0.7589	0	0
0.4307	-0.0298	-0.9400	1.0000	-0.9574	-0.8262	0	0
-0.5072	0.0820	0.8397	-0.9574	1.0000	0.8337	0	0
-0.0014	0.4571	0.7589	-0.8262	0.8337	1.0000	0	0
0	0	0	0	0	0	1.0000	0
0	0	0	0	0	0	0	1.0000

jj =17

theta =

0.7839 0.1593 0.0000 -2.0537 1.0497 2.1243 1.6831 34.6099

SE =

0.0440 0.0085 0.0912 0.2295 0.1362 0.2661 1.0851 0.2393

CORR =

1.0000	0.1735	0.2620	0.1988	-0.3144	0.4225	0	0
0.1735	1.0000	0.1828	-0.3441	0.1521	0.3746	0	0
0.2620	0.1828	1.0000	-0.7533	0.6646	0.8835	0	0
0.1988	-0.3441	-0.7533	1.0000	-0.9192	-0.6730	0	0
-0.3144	0.1521	0.6646	-0.9192	1.0000	0.6606	0	0
0.4225	0.3746	0.8835	-0.6730	0.6606	1.0000	0	0
0	0	0	0	0	0	1.0000	0

0 0 0 0 0 0 0 1.0000

jj =18

theta =

0.7813 0.1237 0.0000 -4.3598 2.1190 3.1183 1.1579 34.4985

SE =

0.0540 0.0088 0.1777 0.7995 0.3109 0.2893 1.0834 0.1985

CORR =

1.0000	0.7423	-0.1626	0.0907	-0.1043	0.6403	0	0
0.7423	1.0000	-0.0150	-0.1700	0.1414	0.7408	0	0
-0.1626	-0.0150	1.0000	-0.9321	0.9075	0.5882	0	0
0.0907	-0.1700	-0.9321	1.0000	-0.9920	-0.6632	0	0
-0.1043	0.1414	0.9075	-0.9920	1.0000	0.6386	0	0
0.6403	0.7408	0.5882	-0.6632	0.6386	1.0000	0	0
0	0	0	0	0	0	1.0000	0
0	0	0	0	0	0	0	1.0000

jj =19

theta =

0.5435 0.0942 0.0000 -2.4467 0.6351 2.7798 6.3977 20.8543

SE =

0.0586 0.0067 0.0511 0.0824 0.0327 0.3248 0.8423 0.4665

CORR =

1.0000	0.8269	0.0054	-0.9171	-0.3458	0.1674	0	0
0.8269	1.0000	-0.1908	-0.7641	-0.3492	0.1336	0	0
0.0054	-0.1908	1.0000	-0.2854	0.8177	0.8819	0	0
-0.9171	-0.7641	-0.2854	1.0000	0.0196	-0.4217	0	0
-0.3458	-0.3492	0.8177	0.0196	1.0000	0.8186	0	0
0.1674	0.1336	0.8819	-0.4217	0.8186	1.0000	0	0
0	0	0	0	0	0	1.0000	0
0	0	0	0	0	0	0	1.0000

jj =20

theta =

0.7654 0.3125 0.0000 -2.2174 1.8973 3.9343 1.7362 27.9210

SE =

0.0631 0.0360 0.1370 0.2343 0.1972 0.3526 0.9746 0.2430

CORR =

1.0000	-0.5432	0.4178	-0.1812	0.0199	0.5288	0	0
-0.5432	1.0000	0.0837	-0.3169	0.4315	0.3115	0	0
0.4178	0.0837	1.0000	-0.9071	0.7841	0.8433	0	0
-0.1812	-0.3169	-0.9071	1.0000	-0.9597	-0.8001	0	0
0.0199	0.4315	0.7841	-0.9597	1.0000	0.7278	0	0
0.5288	0.3115	0.8433	-0.8001	0.7278	1.0000	0	0
0	0	0	0	0	0	1.0000	0

0 0 0 0 0 0 0 1.0000

jj =21

theta =

0.3954 0.1037 0.0000 -3.6570 0.8454 7.8345 1.8745 24.3684

SE =

0.0337 0.0102 0.0885 0.3250 0.0950 0.5471 0.9105 0.2525

CORR =

1.0000	0.7264	0.5404	-0.8015	0.6632	0.6989	0	0
0.7264	1.0000	0.1423	-0.5551	0.3951	0.4264	0	0
0.5404	0.1423	1.0000	-0.8881	0.9379	0.8619	0	0
-0.8015	-0.5551	-0.8881	1.0000	-0.9634	-0.8949	0	0
0.6632	0.3951	0.9379	-0.9634	1.0000	0.9483	0	0
0.6989	0.4264	0.8619	-0.8949	0.9483	1.0000	0	0
0	0	0	0	0	0	1.0000	0
0	0	0	0	0	0	0	1.0000

jj =22

theta =

0.6683 0.2900 0.0000 -1.3838 0.8750 4.2515 1.5084 61.1344

SE =

0.0977 0.0351 0.4869 0.3633 0.1414 0.8397 1.4422 0.2265

CORR =

1.0000	-0.5547	0.4198	-0.2178	0.0556	0.6987	0	0
-0.5547	1.0000	-0.1768	0.0161	-0.1203	-0.2298	0	0
0.4198	-0.1768	1.0000	-0.9477	0.8256	0.9140	0	0
-0.2178	0.0161	-0.9477	1.0000	-0.9117	-0.8087	0	0
0.0556	-0.1203	0.8256	-0.9117	1.0000	0.6664	0	0
0.6987	-0.2298	0.9140	-0.8087	0.6664	1.0000	0	0
0	0	0	0	0	0	1.0000	0
0	0	0	0	0	0	0	1.0000

jj =23

theta =

0.6362 0.4140 0.0000 -1.4989 1.3308 4.8206 4.5540 95.8391

SE =

0.0938 0.0888 0.5366 0.2755 0.2059 1.0878 1.8057 0.3936

CORR =

1.0000	-0.7079	0.4477	-0.1647	0.0441	0.7511	0	0
-0.7079	1.0000	-0.5552	0.3293	-0.3672	-0.5296	0	0
0.4477	-0.5552	1.0000	-0.9006	0.7921	0.8436	0	0
-0.1647	0.3293	-0.9006	1.0000	-0.9091	-0.6699	0	0
0.0441	-0.3672	0.7921	-0.9091	1.0000	0.5739	0	0
0.7511	-0.5296	0.8436	-0.6699	0.5739	1.0000	0	0
0	0	0	0	0	0	1.0000	0

0 0 0 0 0 0 0 1.0000

jj =24

theta =

0.8284 0.2915 0.0000 -2.6765 2.1797 7.4840 2.6486 82.0063

SE =

0.0868 0.0283 0.6074 0.7551 0.4971 1.0705 1.6703 0.3002

CORR =

1.0000 0.2211 -0.0043 0.1100 -0.1861 0.5292 0 0

0.2211 1.0000 0.1284 -0.1569 0.0199 0.4181 0 0

-0.0043 0.1284 1.0000 -0.9798 0.9376 0.7929 0 0

0.1100 -0.1569 -0.9798 1.0000 -0.9675 -0.7363 0 0

-0.1861 0.0199 0.9376 -0.9675 1.0000 0.6778 0 0

0.5292 0.4181 0.7929 -0.7363 0.6778 1.0000 0 0

0 0 0 0 0 0 1.0000 0

0 0 0 0 0 0 0 1.0000