The MCMC Procedure

Number of Observations Read	415
Number of Observations Used	415

Parameters				
Block	**Parameter**	**Sampling Method**	**Initial Value**	**Prior Distribution**
1	**betaint**	N-Metropolis	0	normal(mean = 0, var = 1000)
2	**betaharddrug**	N-Metropolis	0	normal(mean = 0, var = 1000)
3	**sigma2**	Conjugate	1.0000	igamma(shape = 2.001, scale = 1.001)

The MCMC Procedure

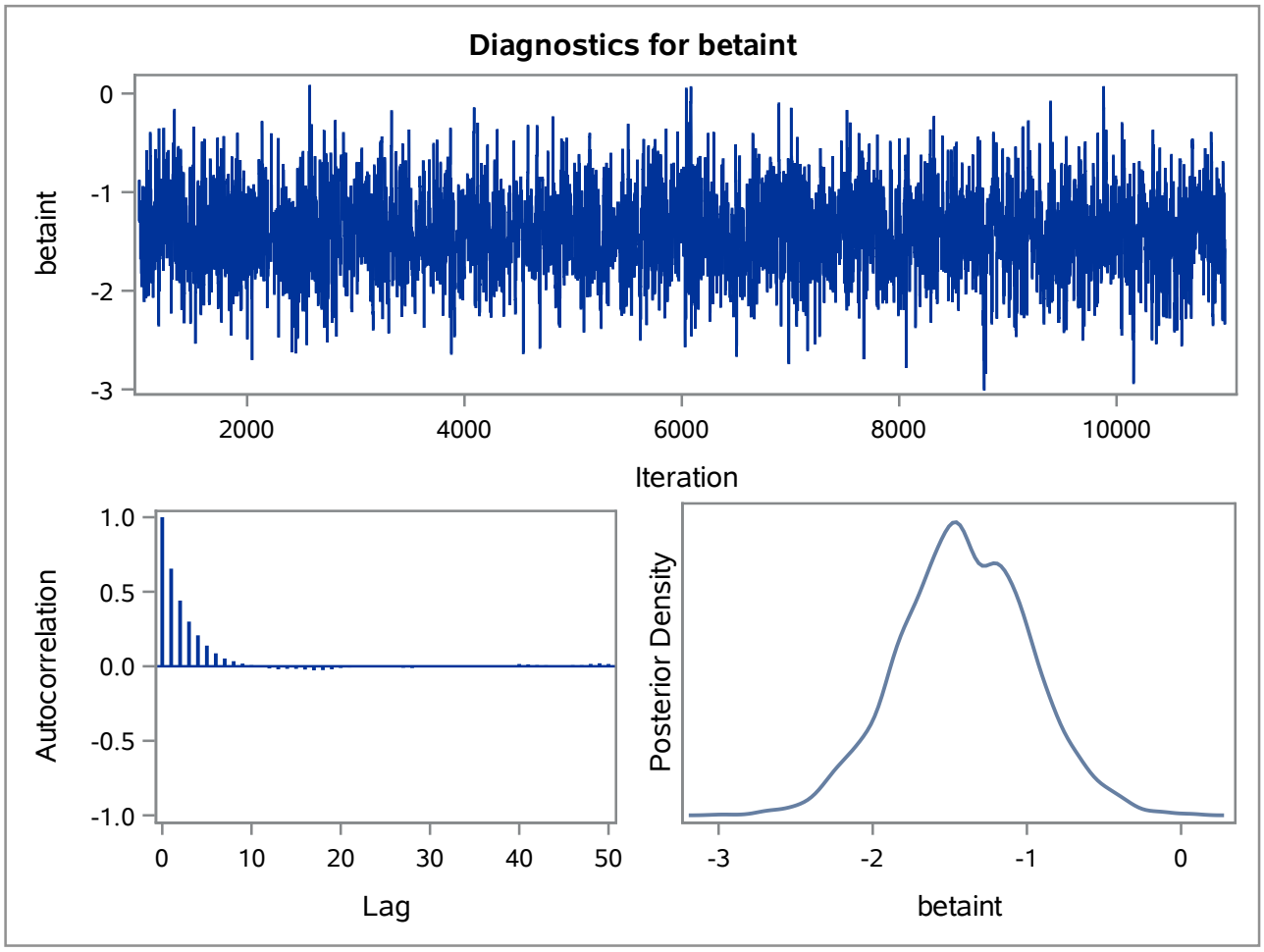
Posterior Summaries and Intervals					
Parameter	N	Mean	Standard Deviation	95% HPD Interval	
betaint	10000	-1.4052	0.4221	-2.2693	-0.6192
betaharddrug	10000	-3.7912	1.4762	-6.7189	-0.9551
sigma2	10000	66.1174	4.5846	57.4185	75.2276

The MCMC Procedure

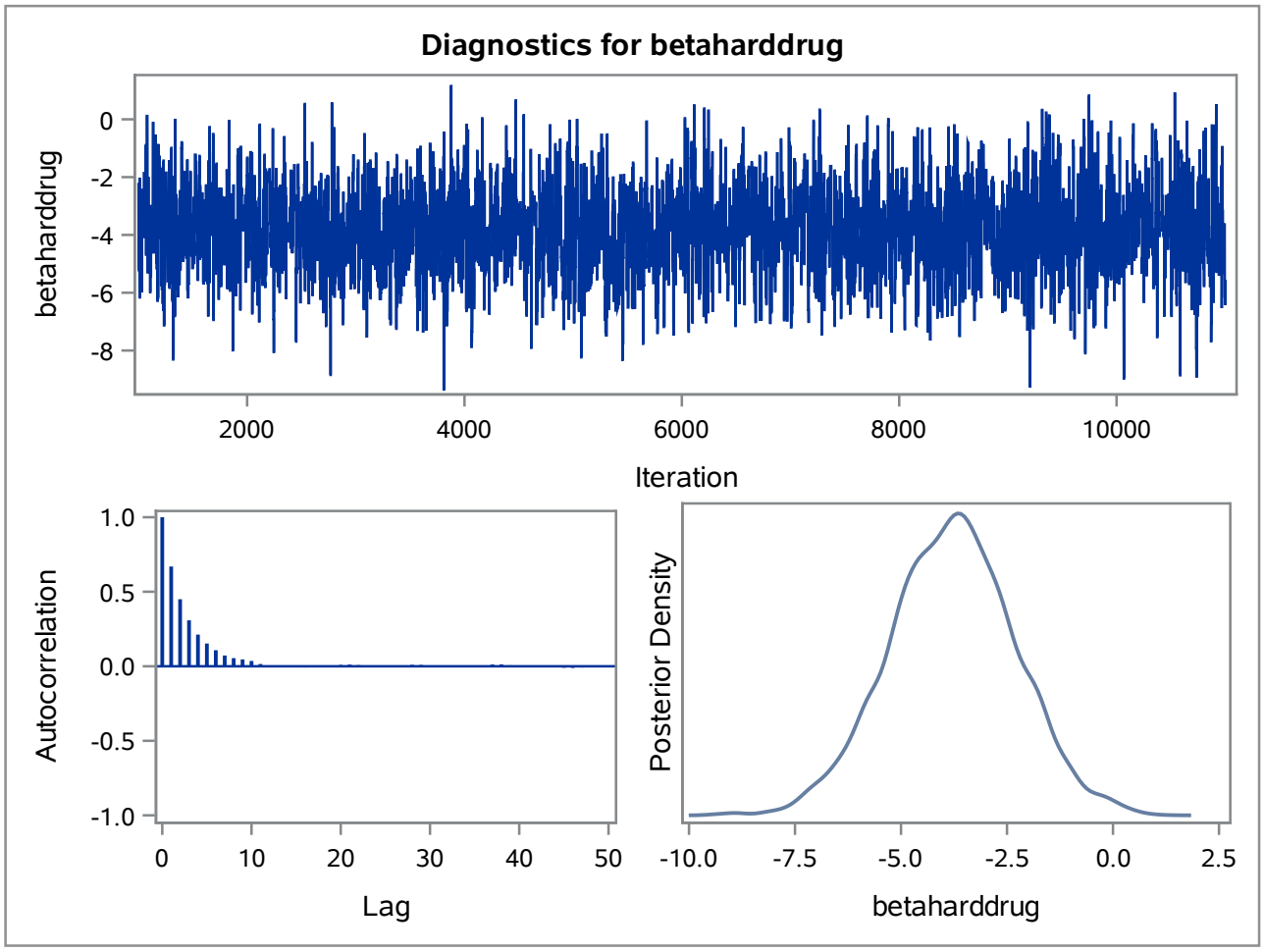
Effective Sample Sizes			
Parameter	ESS	Autocorrelation Time	Efficiency
betaint	2055.1	4.8659	0.2055
betaharddrug	1905.8	5.2470	0.1906
sigma2	10000.0	1.0000	1.0000

Deviance Information Criterion	
Dbar (posterior mean of deviance)	2920.305
Dmean (deviance evaluated at posterior mean)	2917.301
pD (effective number of parameters)	3.003
DIC (smaller is better)	2923.308

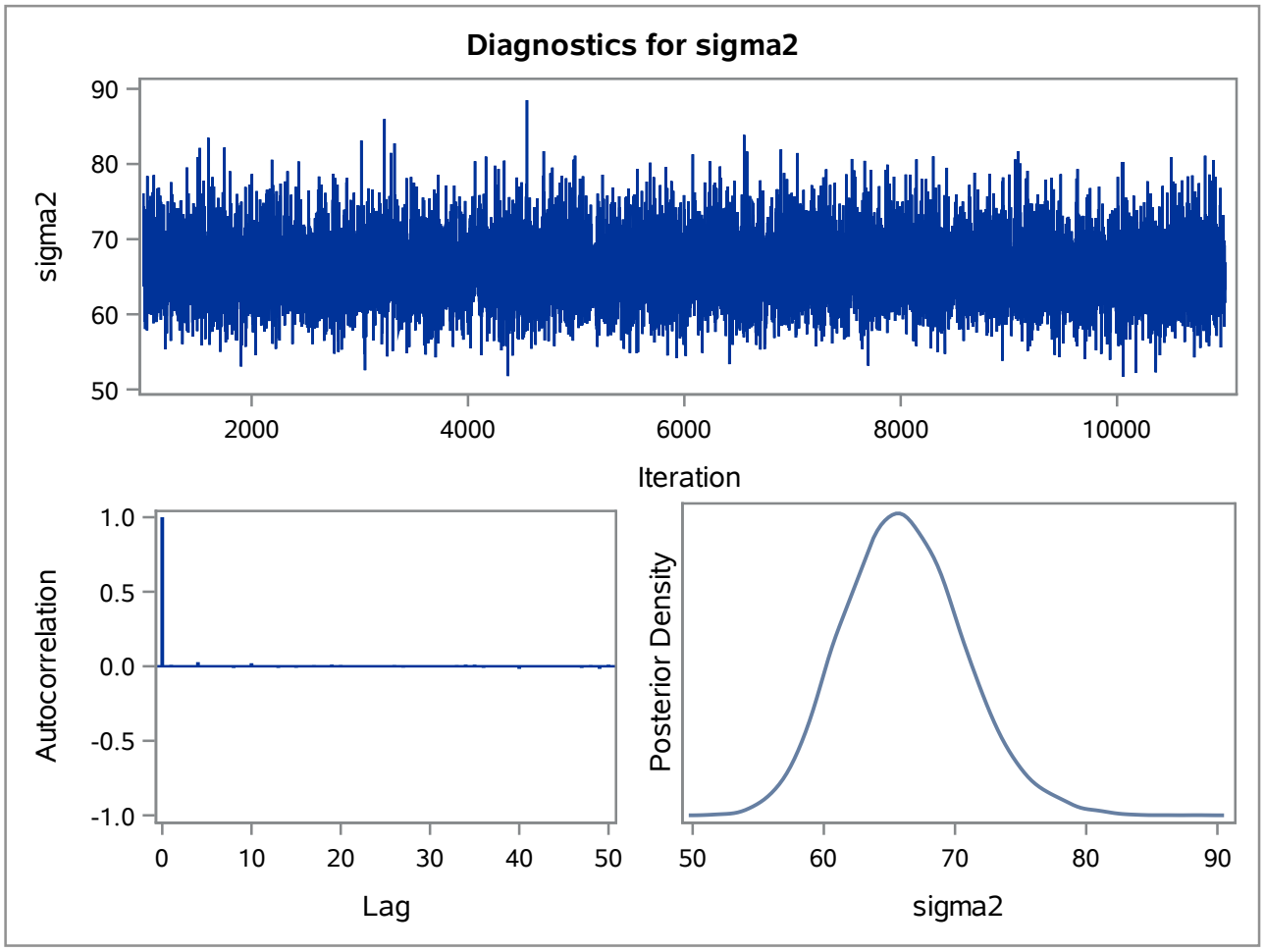
The MCMC Procedure



The MCMC Procedure



The MCMC Procedure



The MCMC Procedure

Number of Observations Read	415
Number of Observations Used	415

Parameters				
Block	Parameter	Sampling Method	Initial Value	Prior Distribution
1	betaint	N-Metropolis	0	normal(mean = 0, var = 1000)
2	betaharddrug	N-Metropolis	0	normal(mean = 0, var = 1000)
3	betabase	N-Metropolis	0	normal(mean = 0, var = 1000)
4	betahash	N-Metropolis	0	normal(mean = 0, var = 1000)
5	betabmi	N-Metropolis	0	normal(mean = 0, var = 1000)
6	betasmoke	N-Metropolis	0	normal(mean = 0, var = 1000)
7	betadrink	N-Metropolis	0	normal(mean = 0, var = 1000)
8	betarace	N-Metropolis	0	normal(mean = 0, var = 1000)
9	betaeduc	N-Metropolis	0	normal(mean = 0, var = 1000)
10	betaage	N-Metropolis	0	normal(mean = 0, var = 1000)
11	betaadh	N-Metropolis	0	normal(mean = 0, var = 1000)
12	betaincomemid	N-Metropolis	0	normal(mean = 0, var = 1000)
	betaincomehigh		0	normal(mean = 0, var = 1000)
13	sigma2	Conjugate	1.0000	igamma(shape = 2.001, scale = 1.001)

The MCMC Procedure

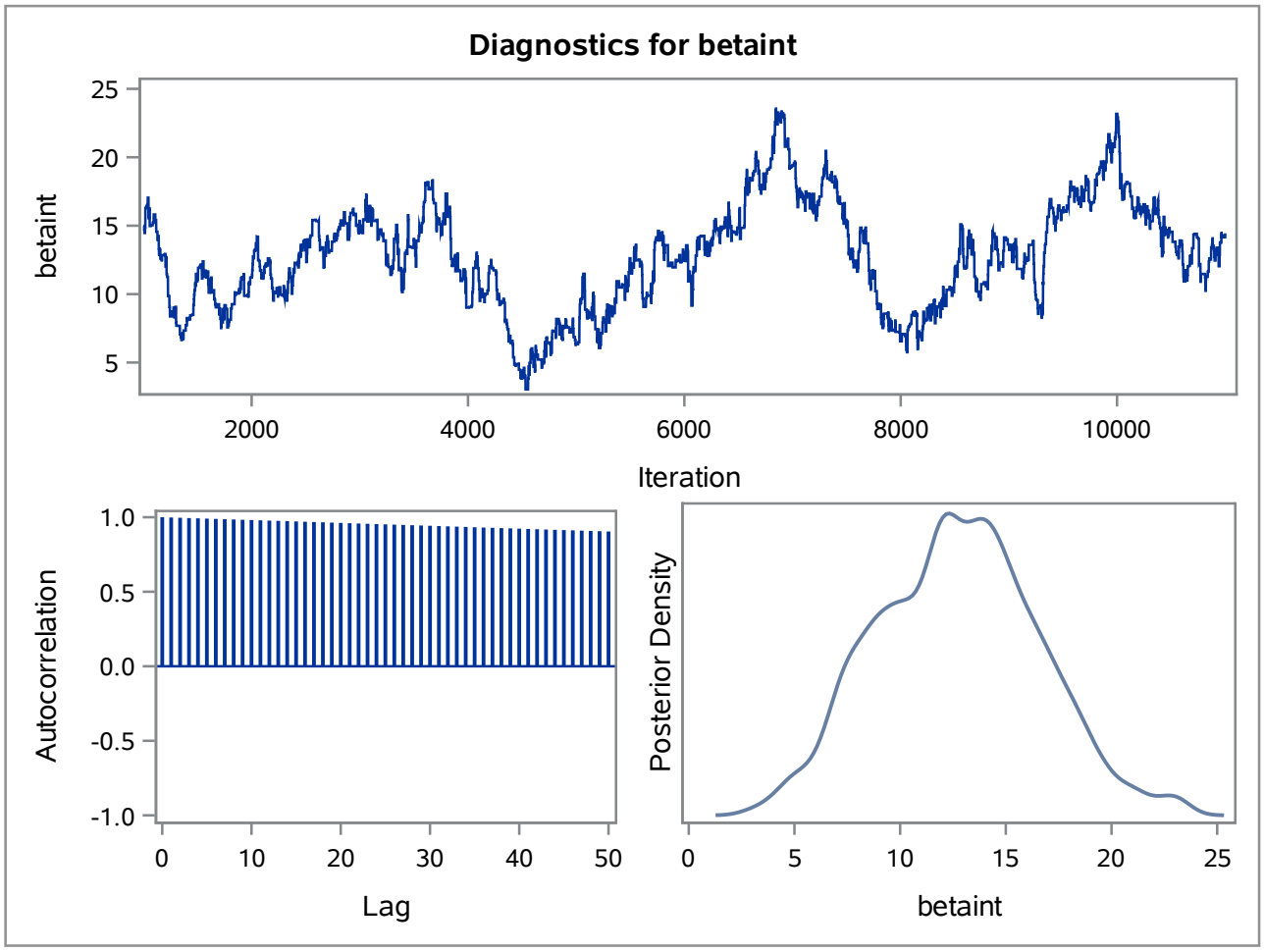
Posterior Summaries and Intervals					
Parameter	N	Mean	Standard Deviation	95% HPD Interval	
betaint	10000	12.7466	3.8129	5.1666	19.7036
betaharddrug	10000	-3.2654	1.4783	-5.9271	-0.2838
betabase	10000	-0.3308	0.0456	-0.4235	-0.2454
betahash	10000	0.7222	0.7816	-0.8248	2.1917
betabmi	10000	0.1685	0.0813	0.0242	0.3198
betasmoke	10000	-0.7219	0.8508	-2.4839	0.8504
betadrink	10000	-1.0684	1.3939	-4.1760	1.4314
betarace	10000	1.3847	0.9099	-0.3652	3.2146
betaeduc	10000	0.8624	1.1143	-1.3334	2.9374
betaage	10000	-0.1117	0.0498	-0.2150	-0.0206
betaadh	10000	-1.2879	1.2823	-3.8376	1.1714
betaincomemid	10000	2.4737	1.1373	0.1315	4.5874
betaincomehigh	10000	3.5292	1.3091	0.9772	6.0480
sigma2	10000	59.0554	4.1843	51.5165	67.6600

The MCMC Procedure

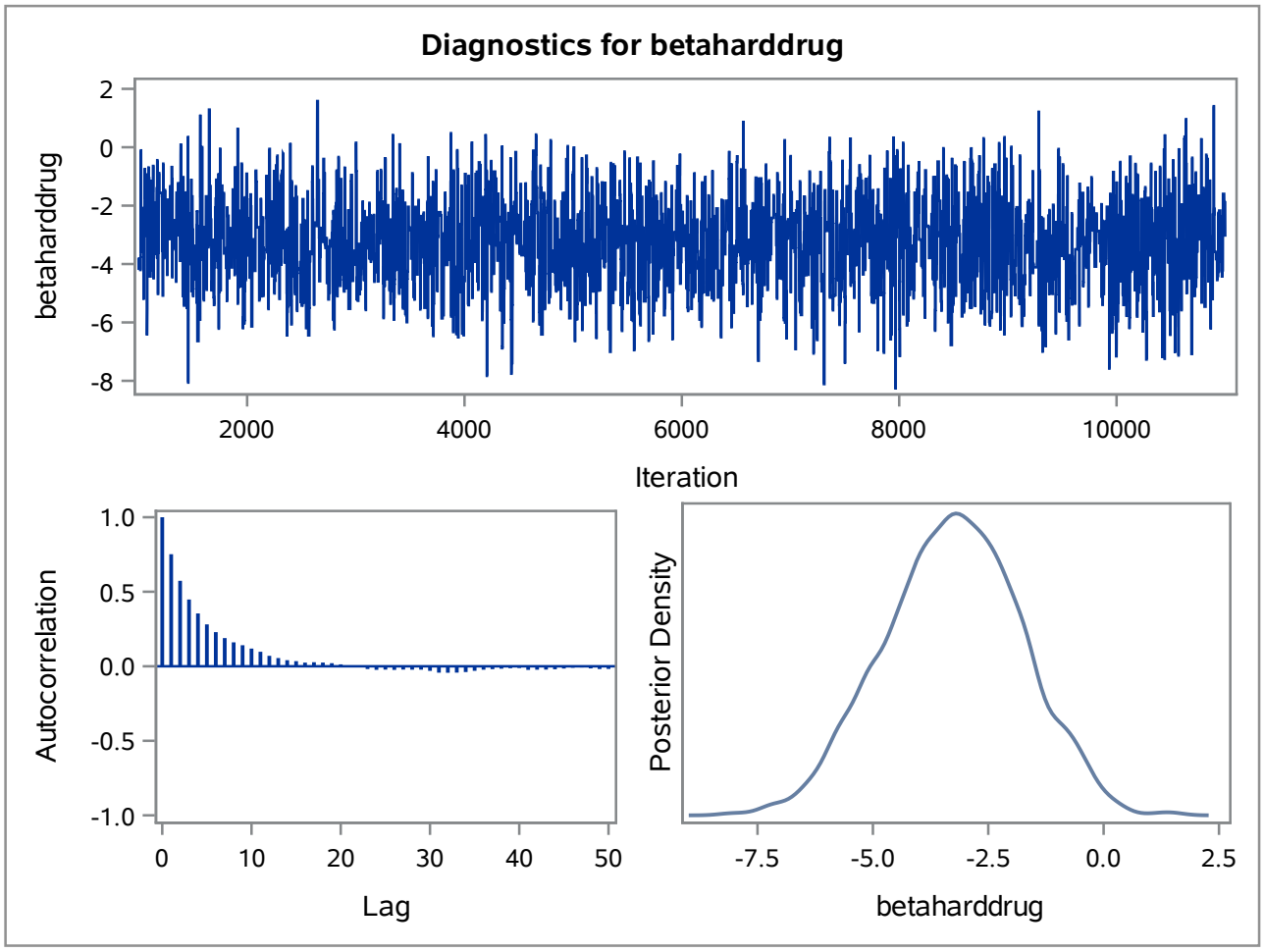
Effective Sample Sizes			
Parameter	ESS	Autocorrelation Time	Efficiency
betaint	14.8	675.8	0.0015
betaharddrug	1203.4	8.3100	0.1203
betabase	28.2	354.2	0.0028
betahash	641.3	15.5939	0.0641
betabmi	43.7	229.0	0.0044
betasmoke	174.4	57.3385	0.0174
betadrink	1324.6	7.5493	0.1325
betarace	118.5	84.3752	0.0119
betaeduc	92.3	108.3	0.0092
betaage	25.4	394.3	0.0025
betaadh	1234.2	8.1025	0.1234
betaincomemid	134.6	74.3028	0.0135
betaincomehigh	98.1	101.9	0.0098
sigma2	7989.2	1.2517	0.7989

Deviance Information Criterion	
Dbar (posterior mean of deviance)	2873.676
Dmean (deviance evaluated at posterior mean)	2859.976
pD (effective number of parameters)	13.700
DIC (smaller is better)	2887.376

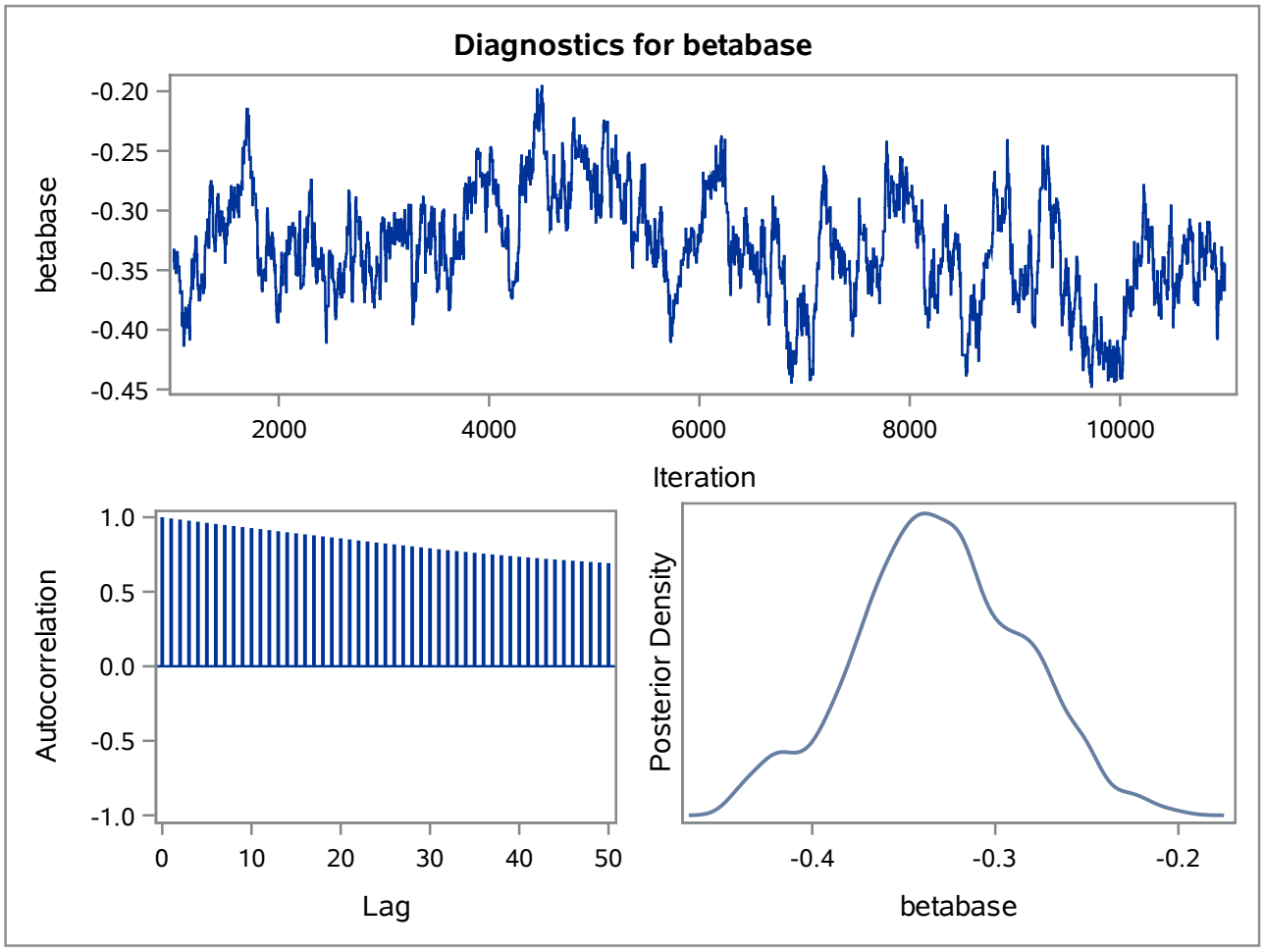
The MCMC Procedure



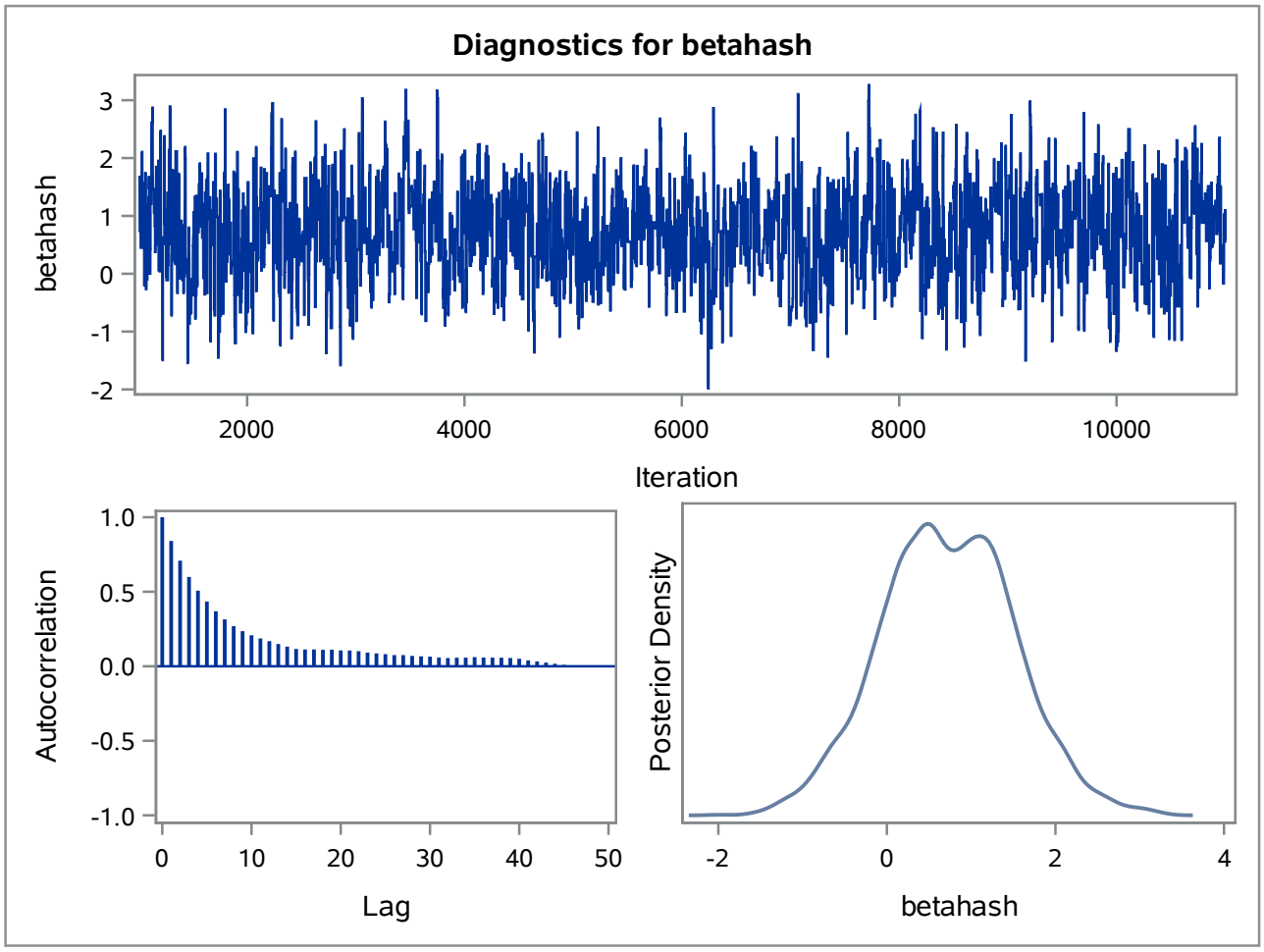
The MCMC Procedure



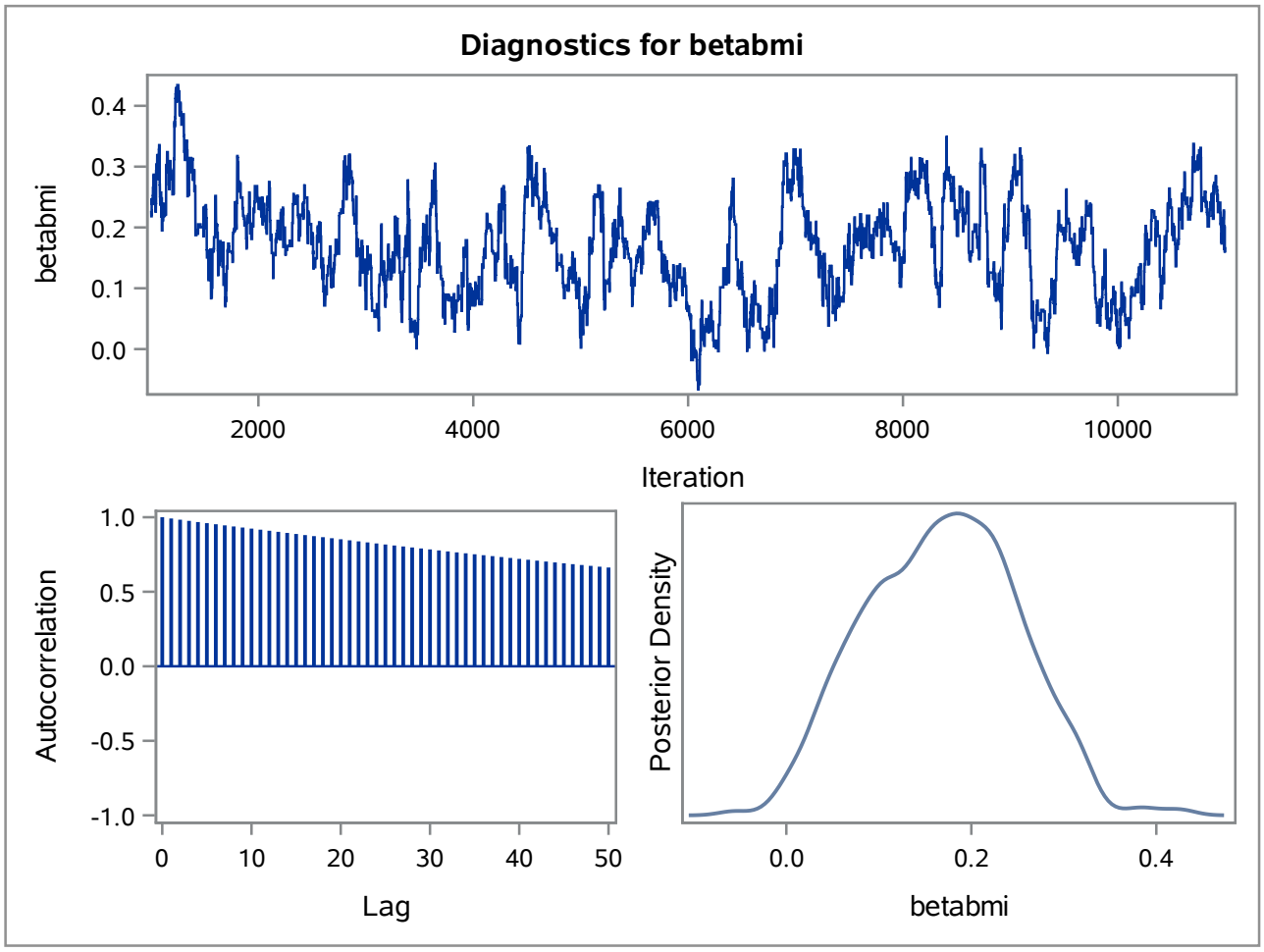
The MCMC Procedure



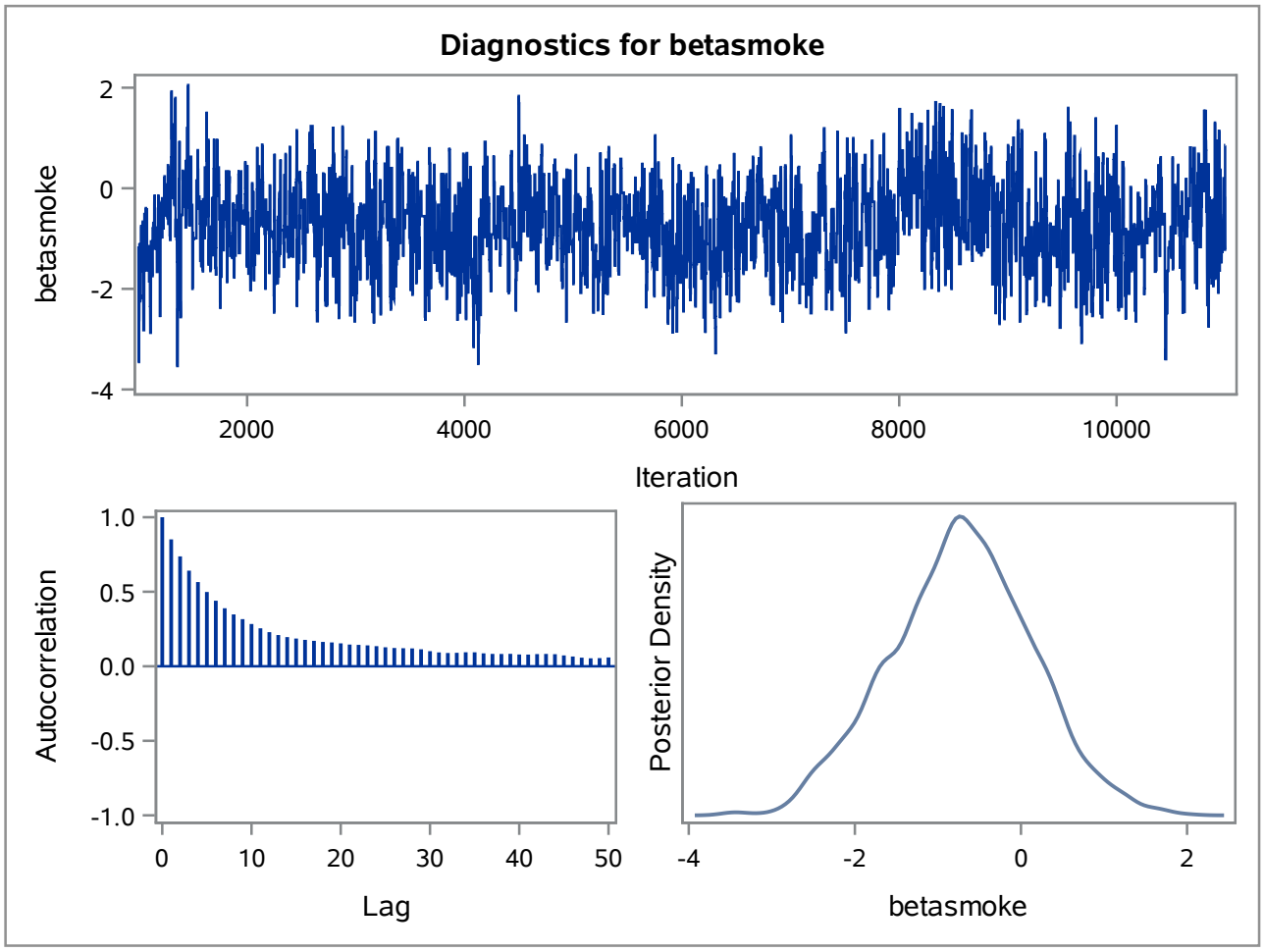
The MCMC Procedure



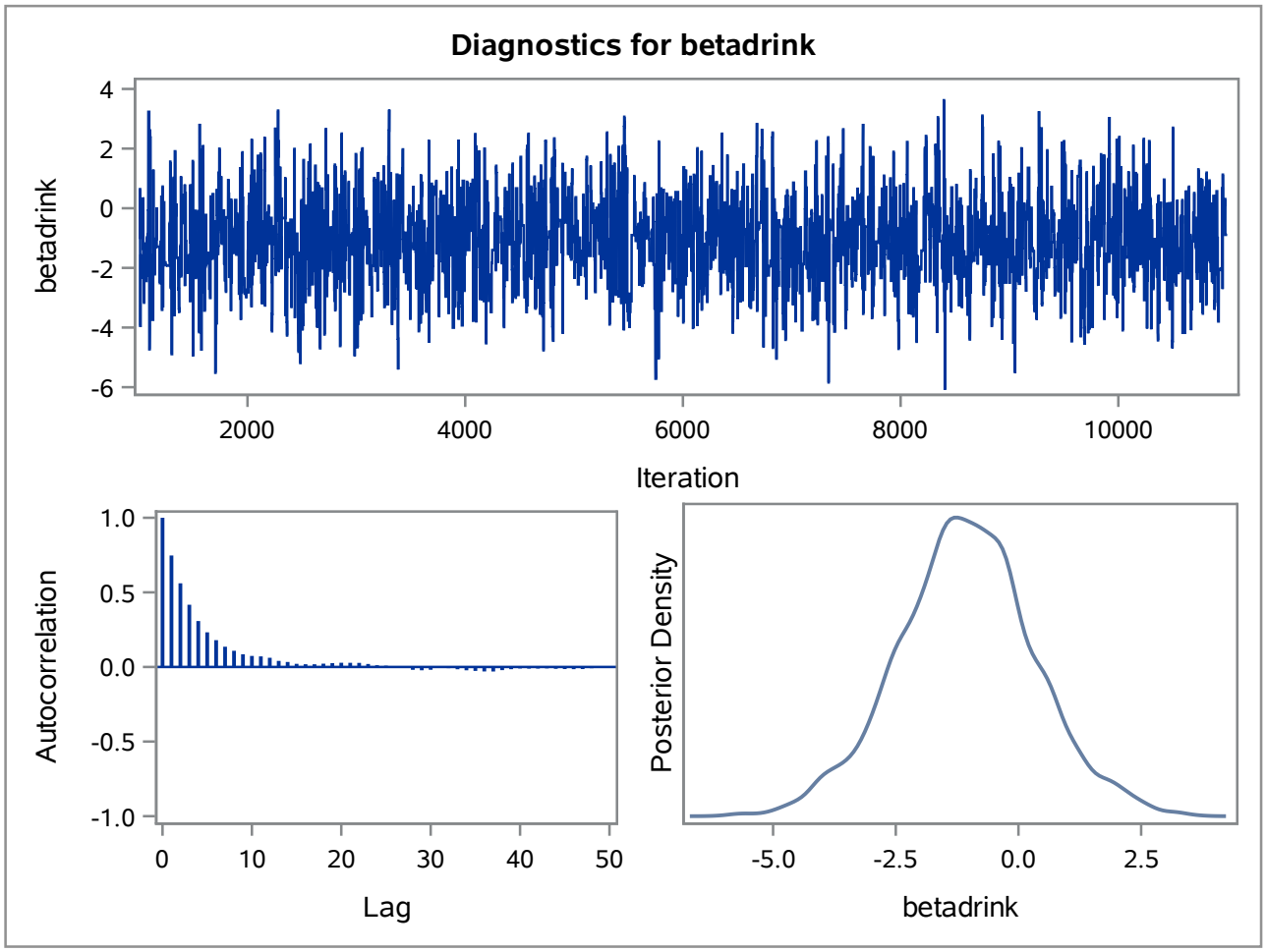
The MCMC Procedure



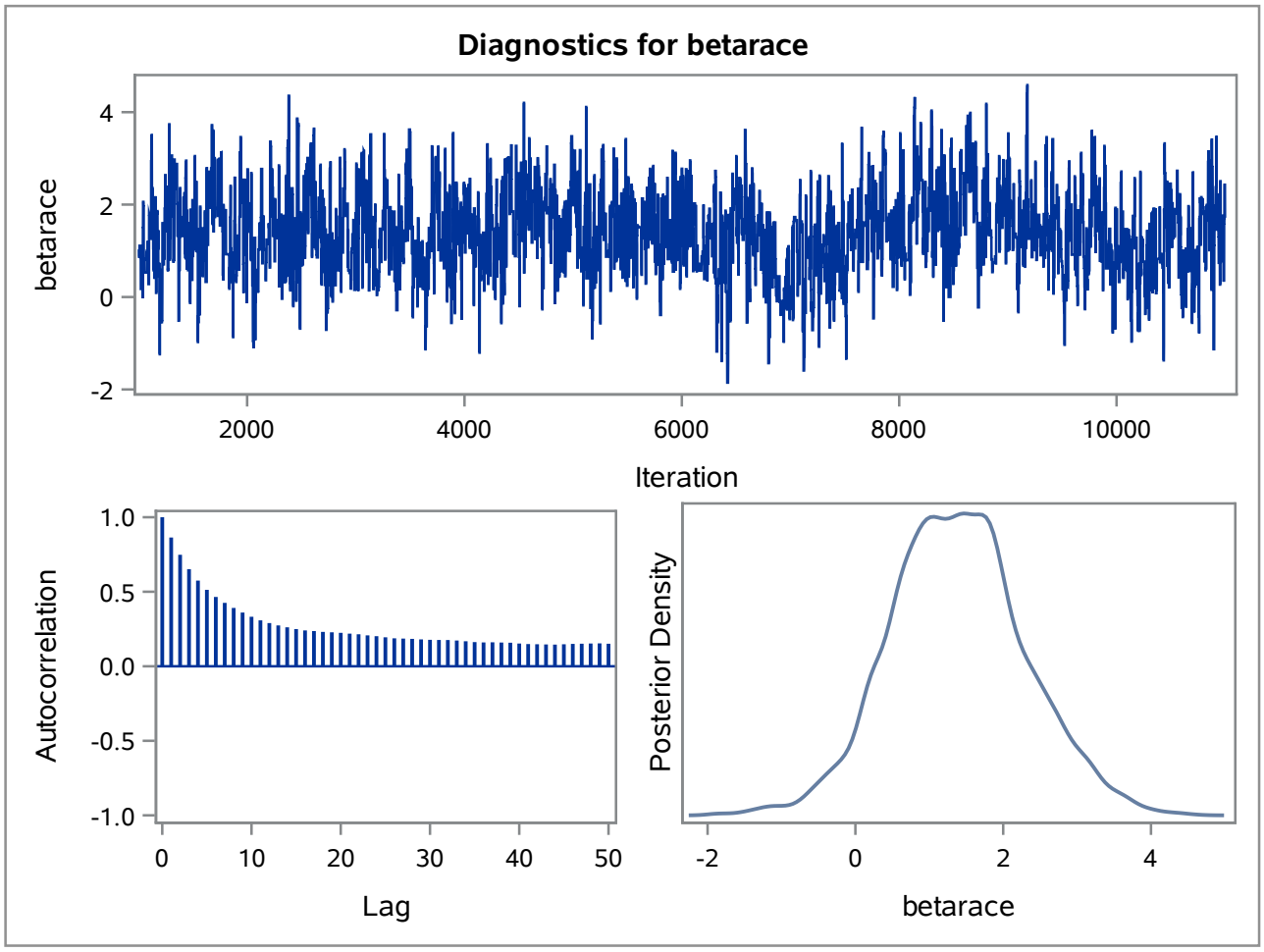
The MCMC Procedure



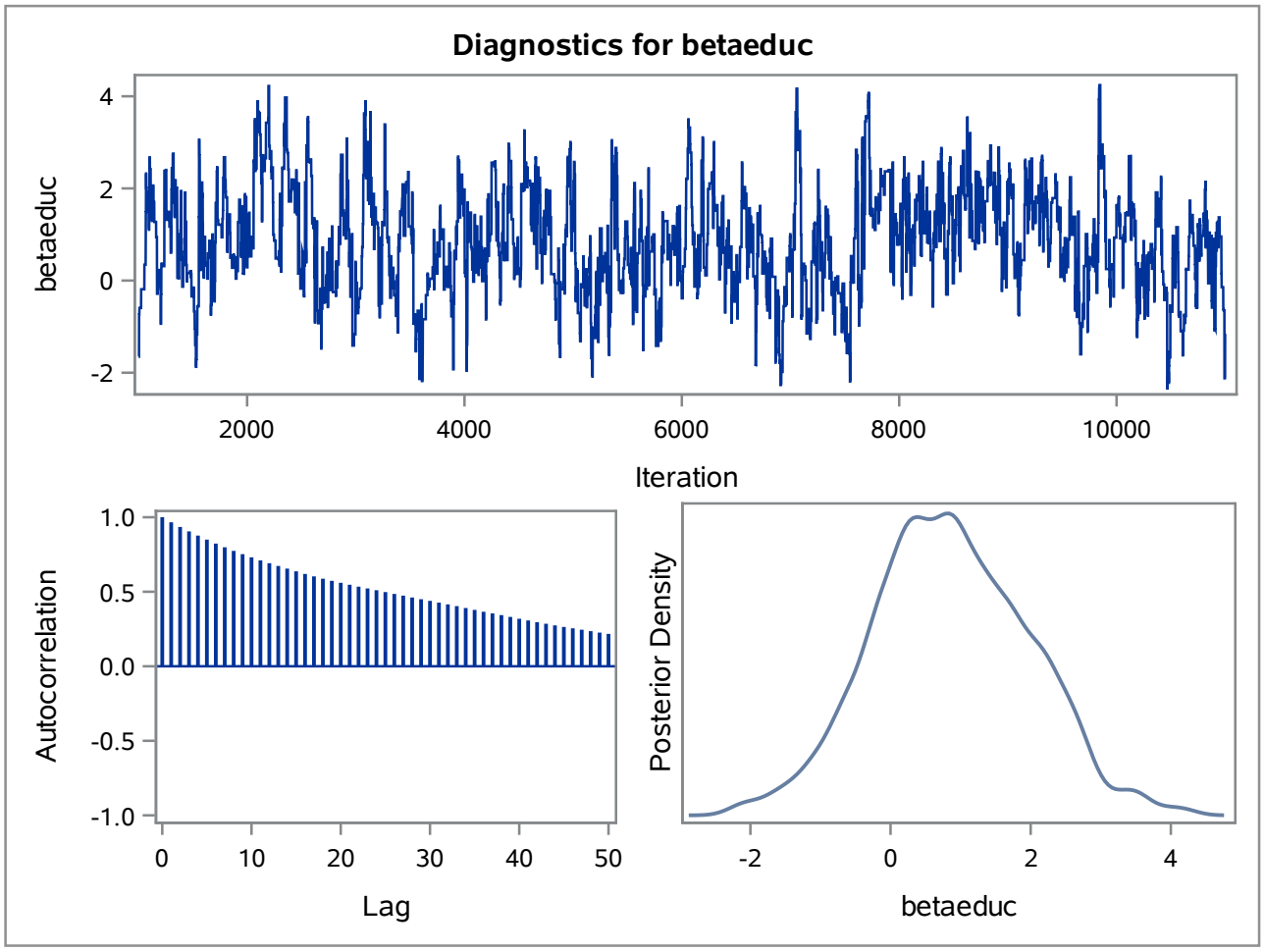
The MCMC Procedure



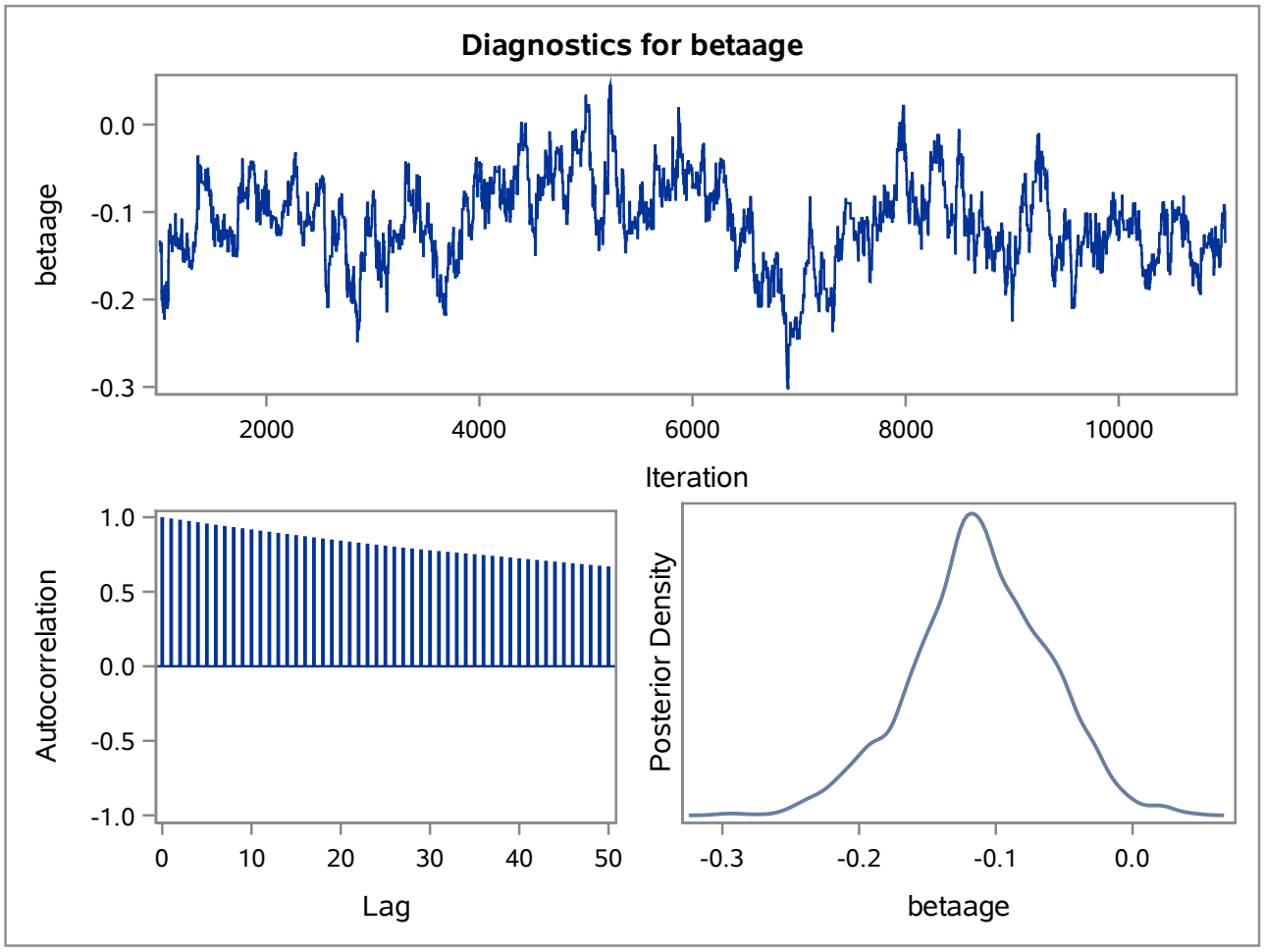
The MCMC Procedure



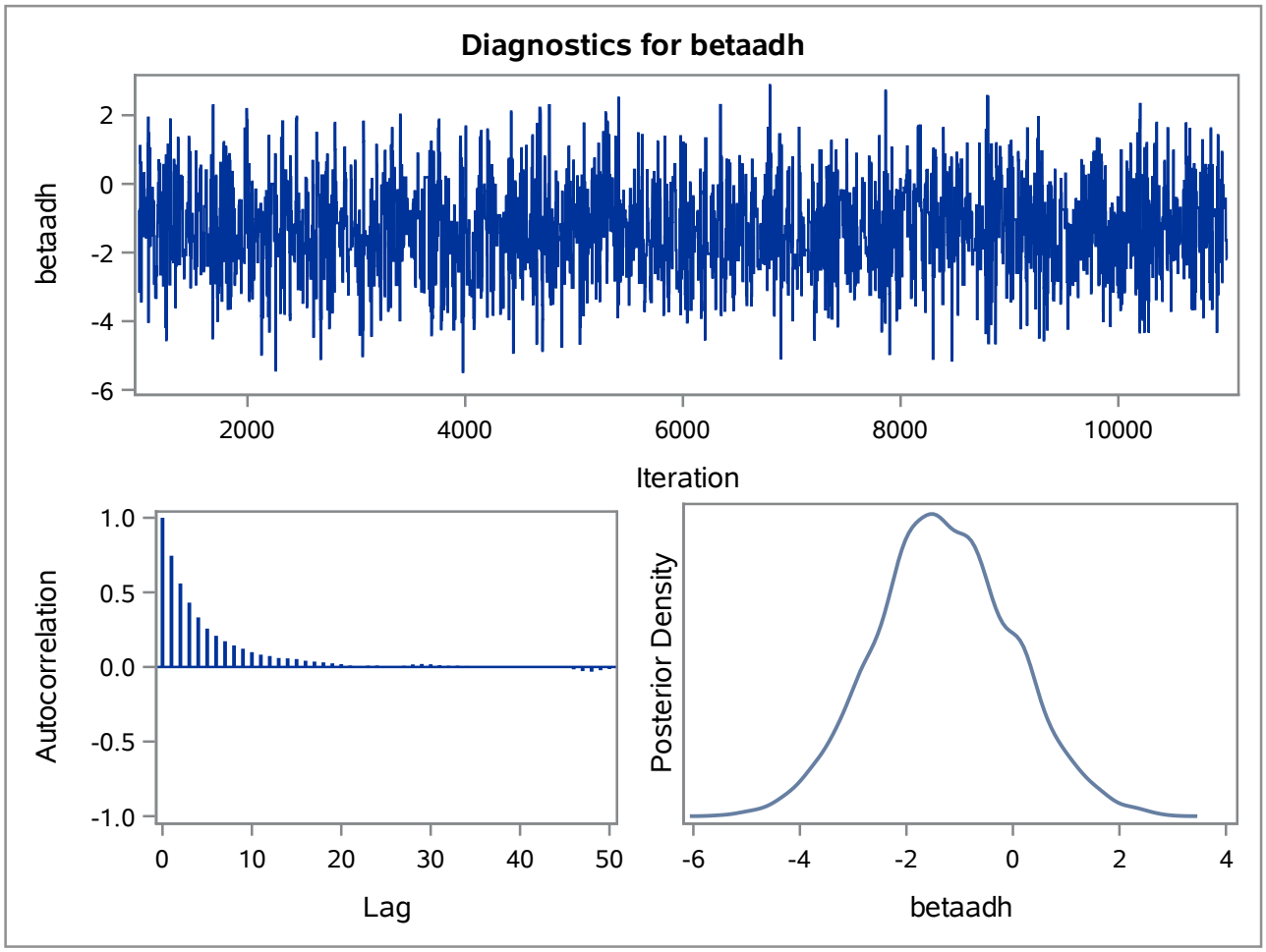
The MCMC Procedure



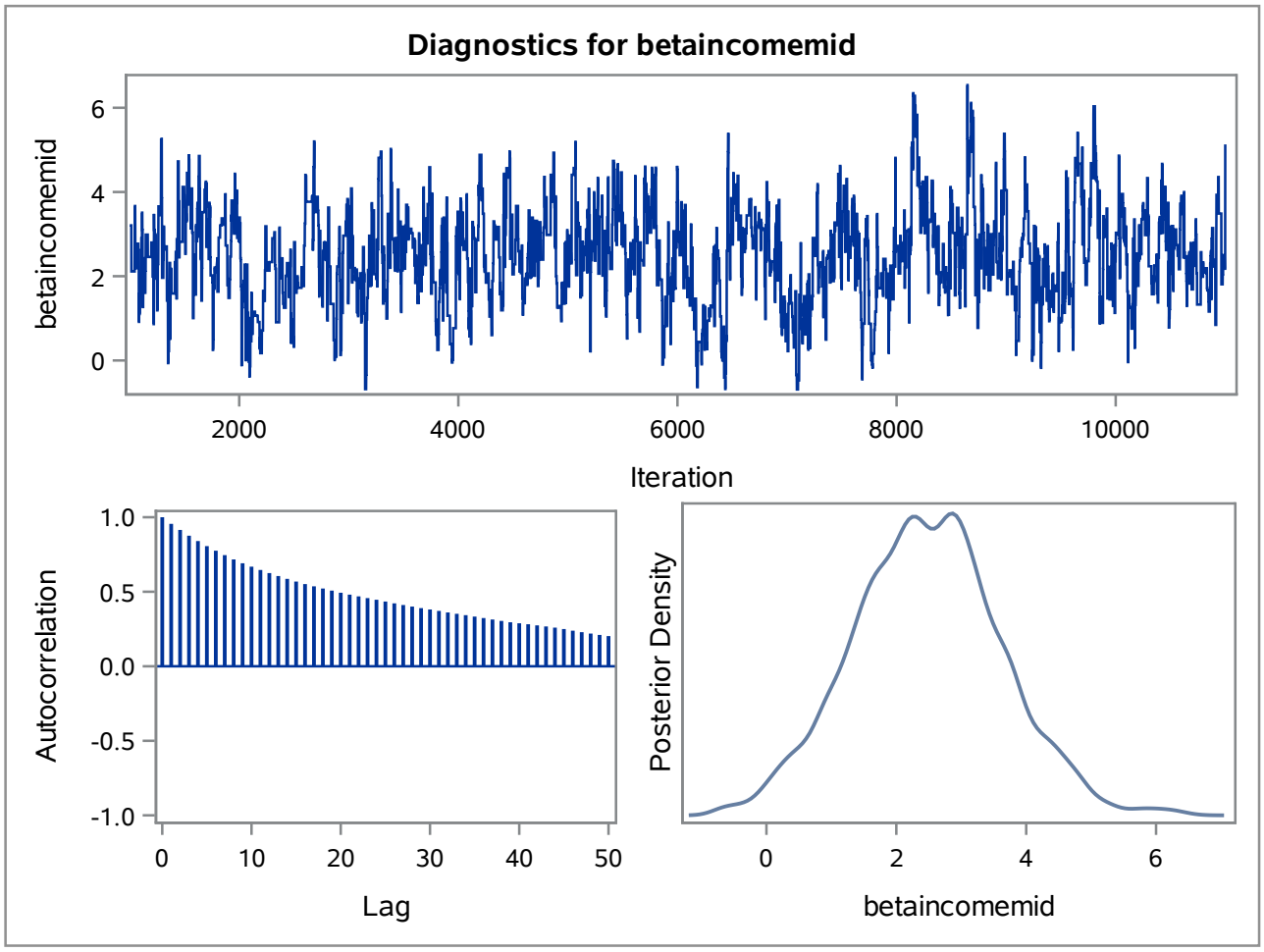
The MCMC Procedure



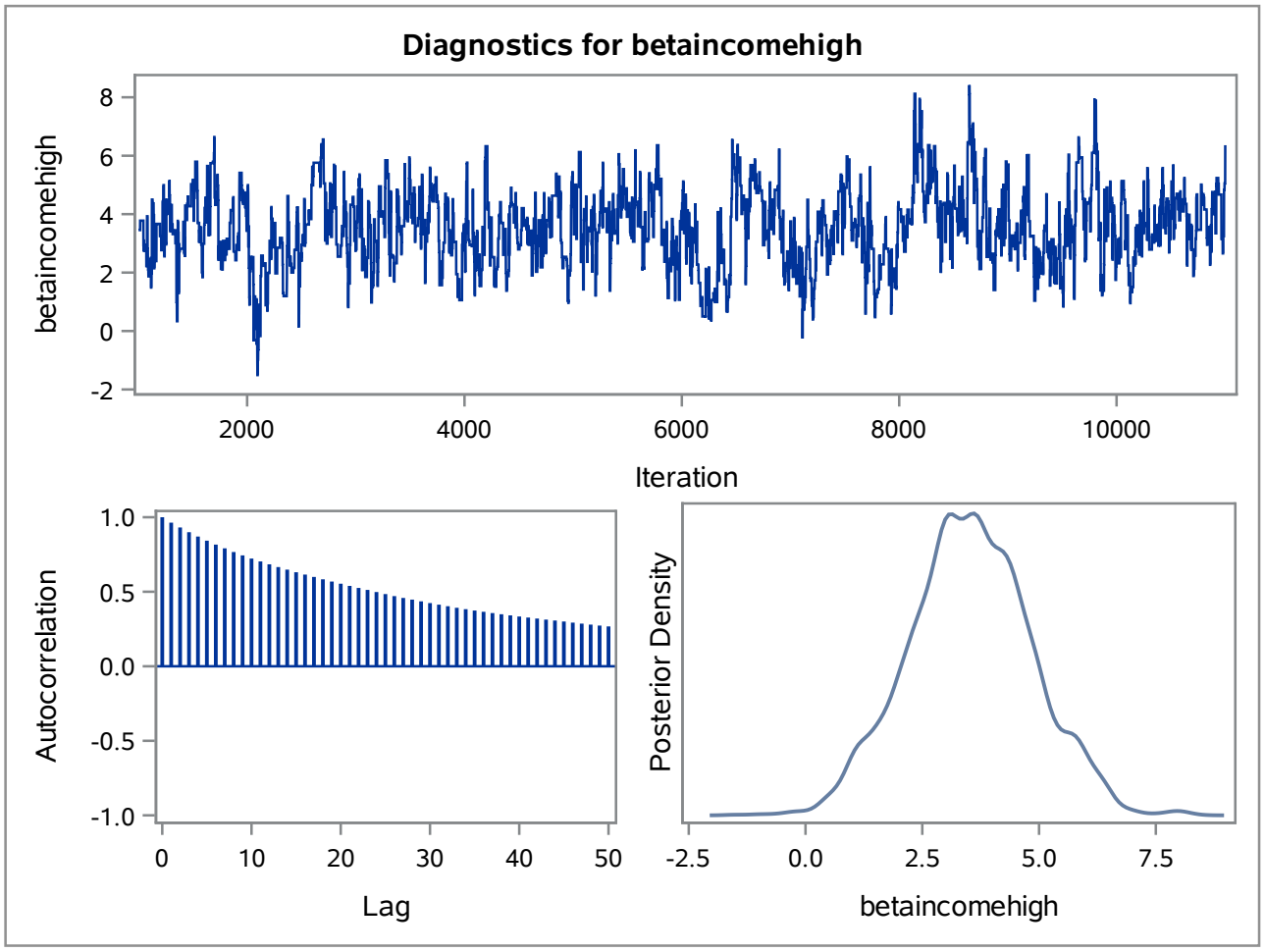
The MCMC Procedure



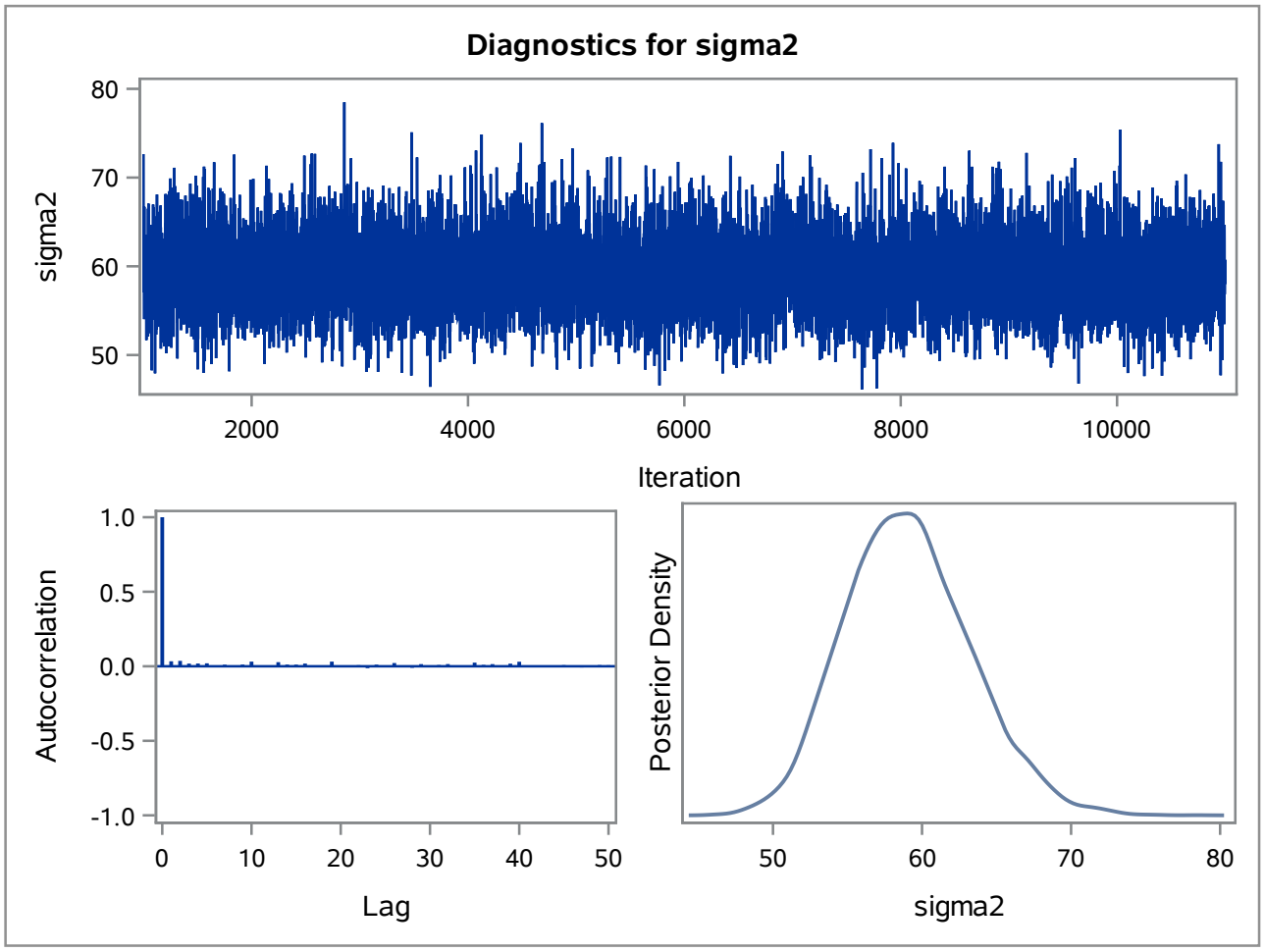
The MCMC Procedure



The MCMC Procedure



The MCMC Procedure



The MCMC Procedure

Number of Observations Read	415
Number of Observations Used	415

Parameters				
Block	**Parameter**	**Sampling Method**	**Initial Value**	**Prior Distribution**
1	**betaint**	N-Metropolis	0	normal(mean = 0, var = 1000)
2	**betaharddrug**	N-Metropolis	0	normal(mean = 0, var = 1000)
3	**sigma2**	Conjugate	1.0000	igamma(shape = 2.001, scale = 1.001)

The MCMC Procedure

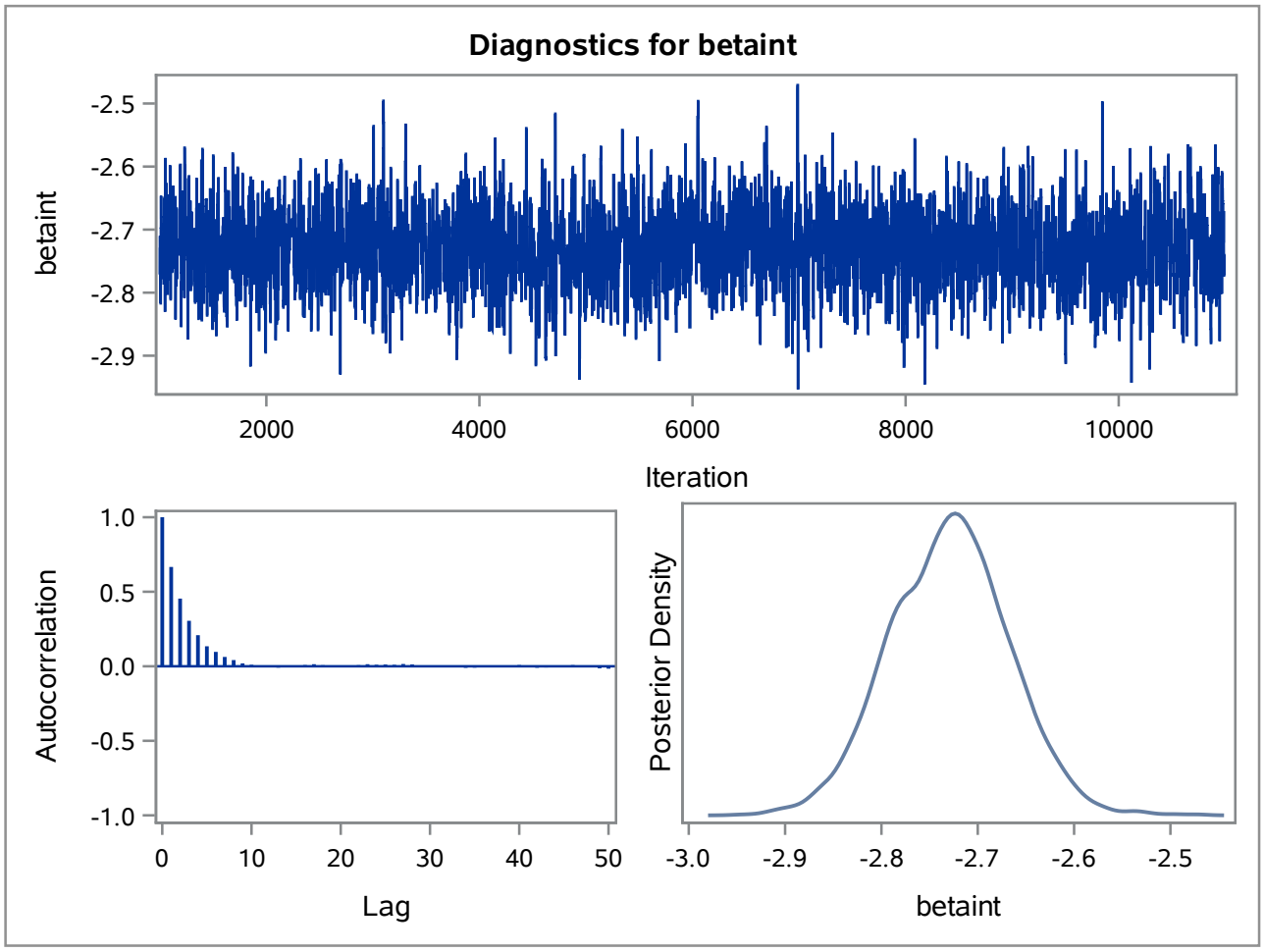
Posterior Summaries and Intervals					
Parameter	N	Mean	Standard Deviation	95% HPD Interval	
betaint	10000	-2.7296	0.0617	-2.8461	-2.6079
betaharddrug	10000	0.1208	0.2261	-0.3290	0.5610
sigma2	10000	1.4809	0.1027	1.2813	1.6793

The MCMC Procedure

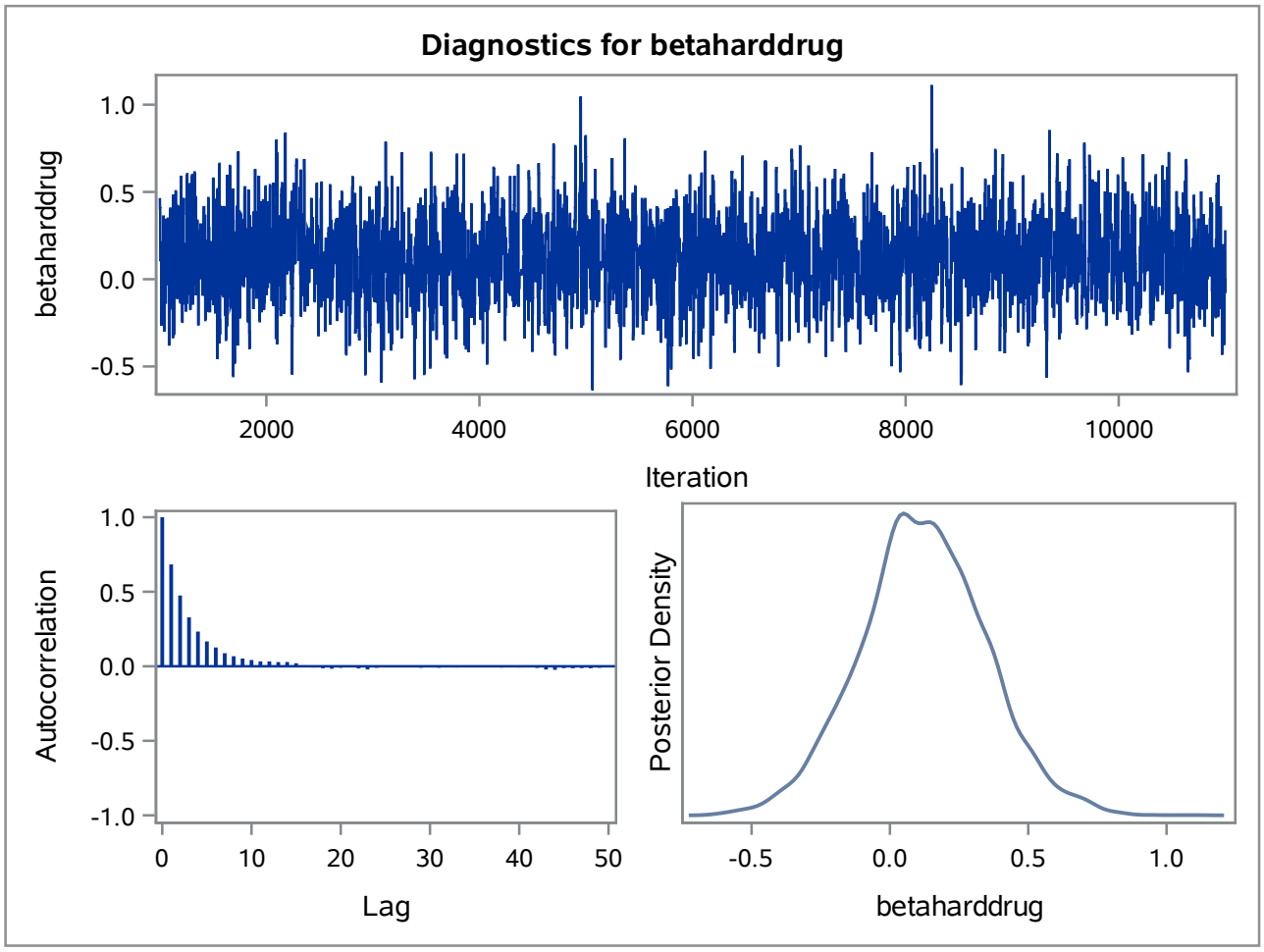
Effective Sample Sizes			
Parameter	ESS	Autocorrelation Time	Efficiency
betaint	2009.3	4.9768	0.2009
betaharddrug	1722.2	5.8065	0.1722
sigma2	10000.0	1.0000	1.0000

Deviance Information Criterion	
Dbar (posterior mean of deviance)	1342.527
Dmean (deviance evaluated at posterior mean)	1339.534
pD (effective number of parameters)	2.993
DIC (smaller is better)	1345.520

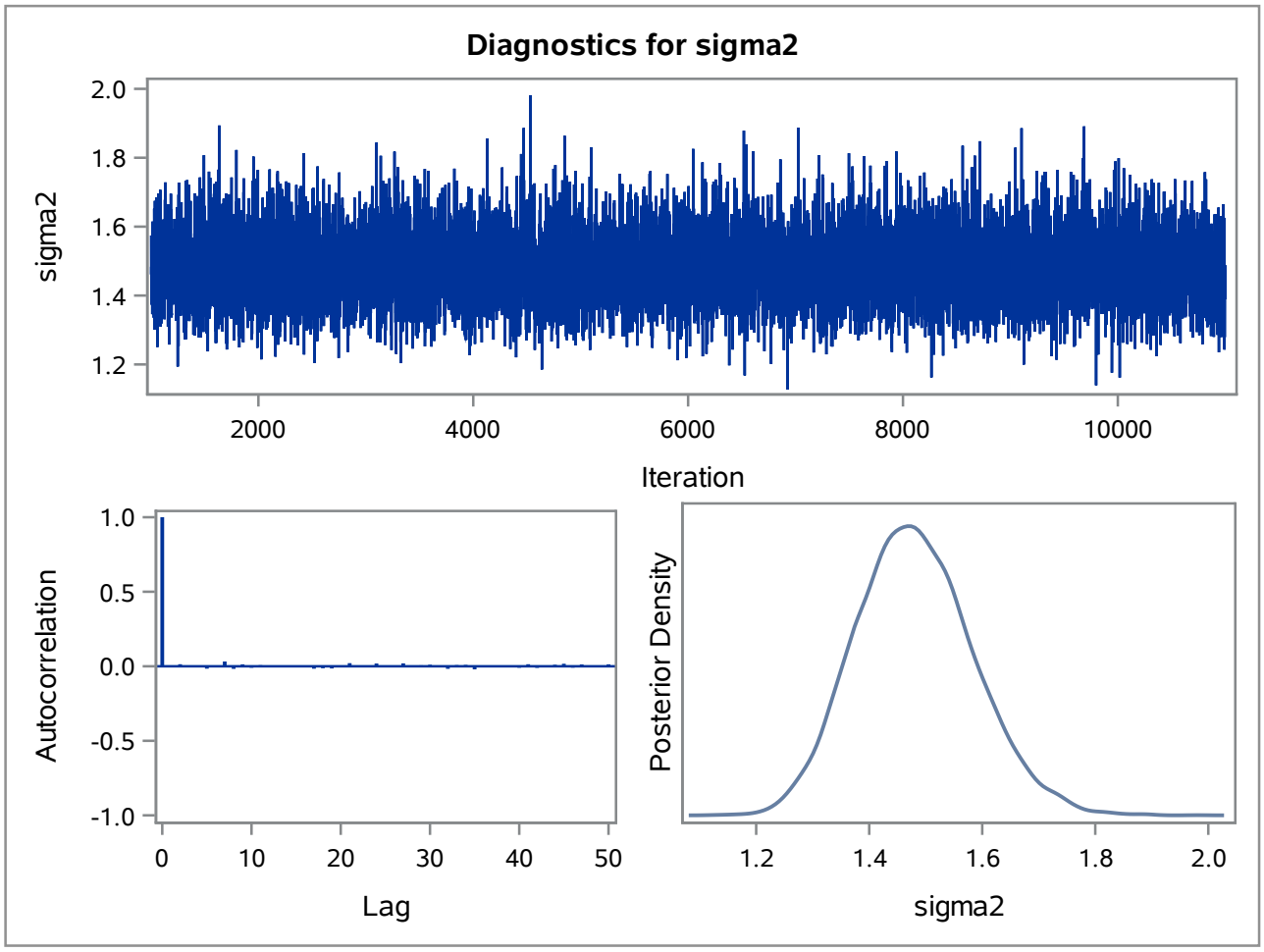
The MCMC Procedure



The MCMC Procedure



The MCMC Procedure



The MCMC Procedure

Number of Observations Read	415
Number of Observations Used	415

Parameters				
Block	Parameter	Sampling Method	Initial Value	Prior Distribution
1	betaint	N-Metropolis	0	normal(mean = 0, var = 1000)
2	betaharddrug	N-Metropolis	0	normal(mean = 0, var = 1000)
3	betabase	N-Metropolis	0	normal(mean = 0, var = 1000)
4	betahash	N-Metropolis	0	normal(mean = 0, var = 1000)
5	betabmi	N-Metropolis	0	normal(mean = 0, var = 1000)
6	betasmoke	N-Metropolis	0	normal(mean = 0, var = 1000)
7	betadrink	N-Metropolis	0	normal(mean = 0, var = 1000)
8	betarace	N-Metropolis	0	normal(mean = 0, var = 1000)
9	betaeduc	N-Metropolis	0	normal(mean = 0, var = 1000)
10	betaage	N-Metropolis	0	normal(mean = 0, var = 1000)
11	betaadh	N-Metropolis	0	normal(mean = 0, var = 1000)
12	betaincomemid	N-Metropolis	0	normal(mean = 0, var = 1000)
	betaincomehigh		0	normal(mean = 0, var = 1000)
13	sigma2	Conjugate	1.0000	igamma(shape = 2.001, scale = 1.001)

The MCMC Procedure

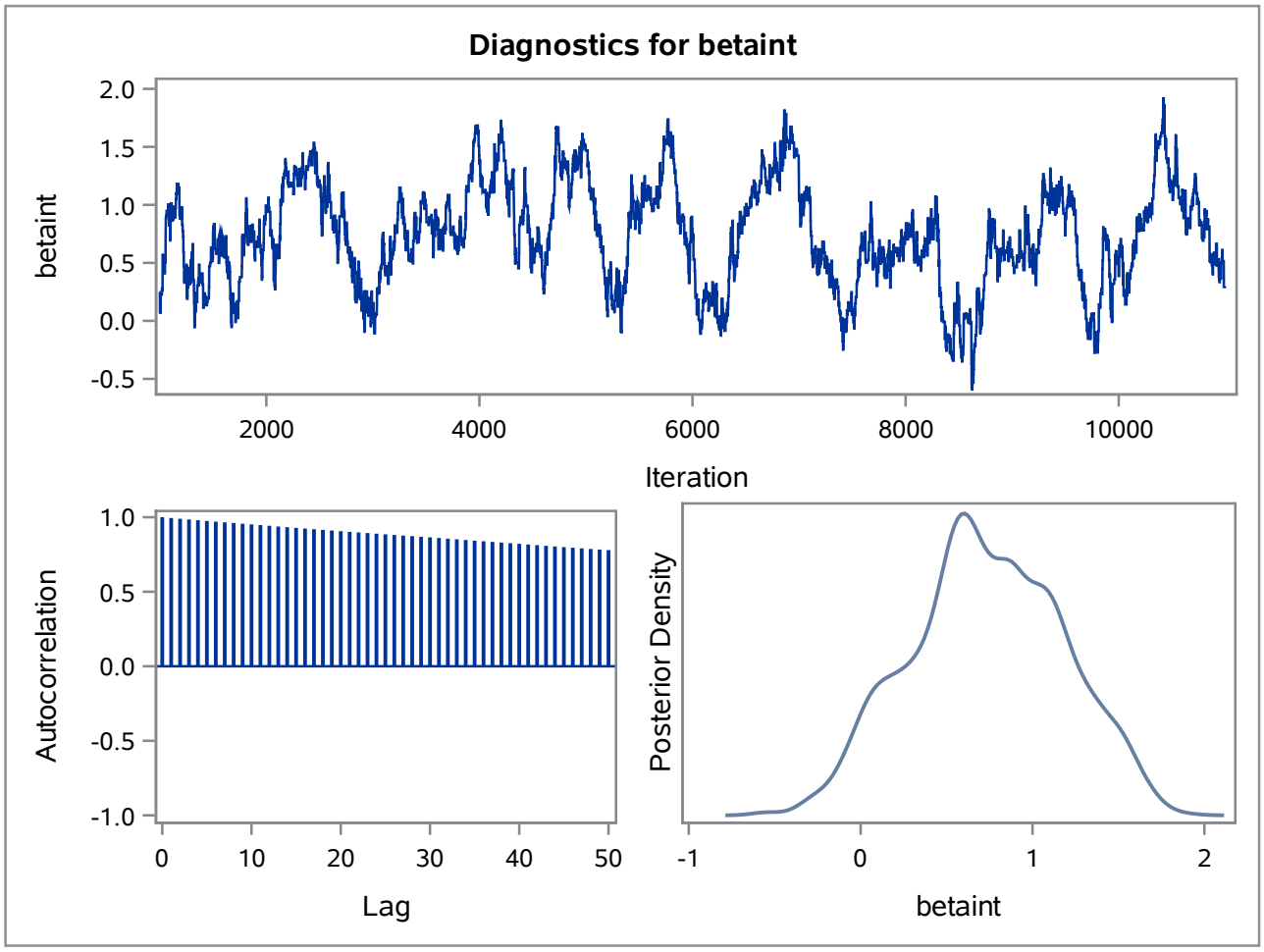
Posterior Summaries and Intervals					
Parameter	N	Mean	Standard Deviation	95% HPD Interval	
betaint	10000	0.7354	0.4392	-0.0876	1.5472
betaharddrug	10000	0.0111	0.2129	-0.3972	0.4213
betabase	10000	-0.5359	0.0535	-0.6326	-0.4208
betahash	10000	-0.2146	0.1172	-0.4598	0.00145
betabmi	10000	-0.0219	0.0123	-0.0469	0.00201
betasmoke	10000	-0.1389	0.1264	-0.3787	0.1187
betadrink	10000	0.0880	0.2136	-0.3222	0.5025
betarace	10000	0.0715	0.1292	-0.1820	0.3095
betaeduc	10000	-0.0157	0.1670	-0.3398	0.3088
betaage	10000	-0.00274	0.00612	-0.0156	0.00841
betaadh	10000	0.3320	0.1831	-0.0349	0.6951
betaincomemid	10000	-0.1790	0.1665	-0.4980	0.1531
betaincomehigh	10000	-0.4890	0.1928	-0.8774	-0.1323
sigma2	10000	1.2533	0.0882	1.0844	1.4296

The MCMC Procedure

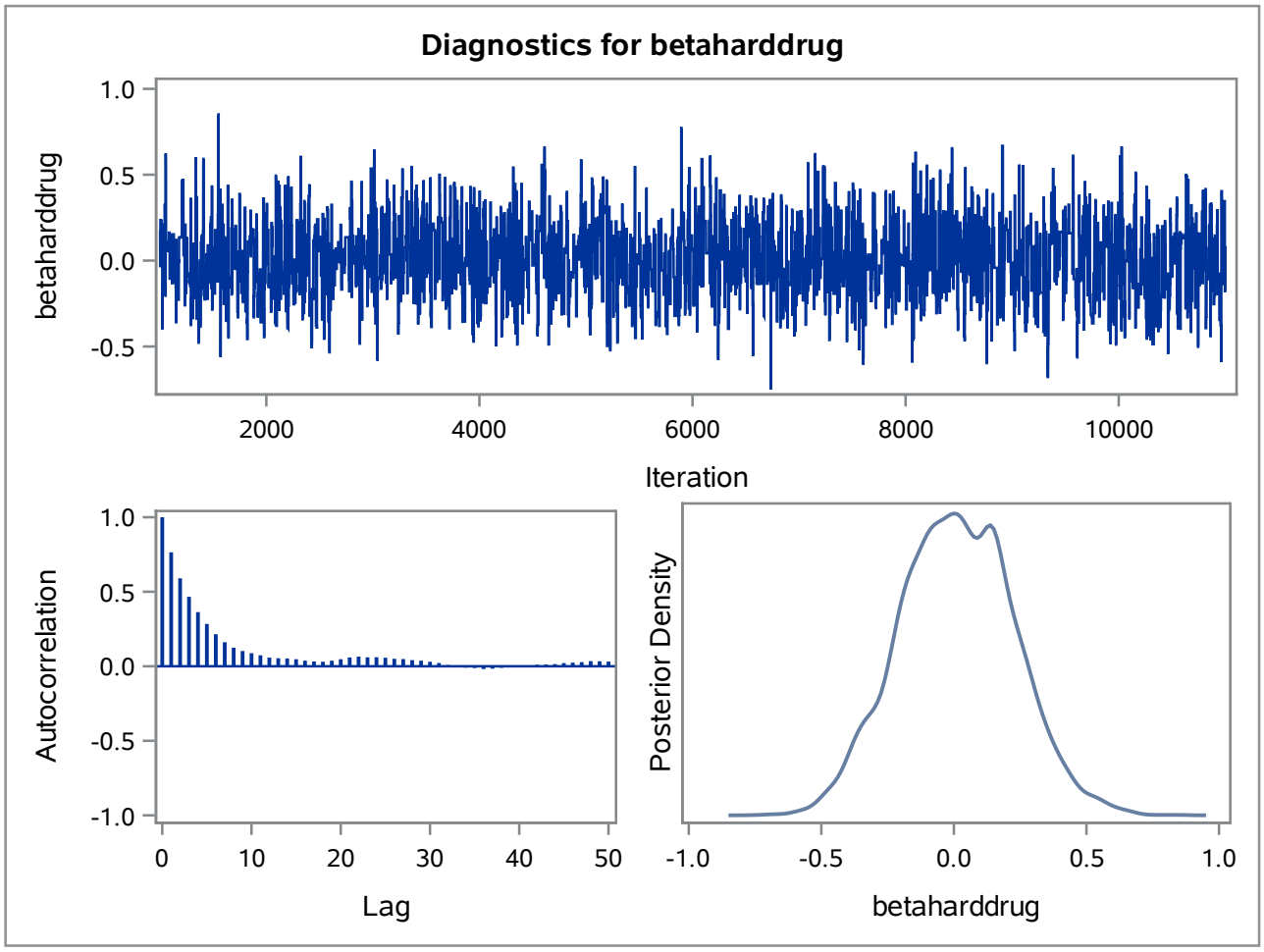
Effective Sample Sizes			
Parameter	ESS	Autocorrelation Time	Efficiency
betaint	33.6	297.7	0.0034
betaharddrug	1072.5	9.3244	0.1072
betabase	49.6	201.8	0.0050
betahash	645.1	15.5018	0.0645
betabmi	53.3	187.7	0.0053
betasmoke	475.8	21.0165	0.0476
betadrink	1681.3	5.9476	0.1681
betarace	327.1	30.5691	0.0327
betaeduc	241.1	41.4700	0.0241
betaage	52.3	191.1	0.0052
betaadh	1184.0	8.4458	0.1184
betaincomemid	161.3	61.9922	0.0161
betaincomehigh	227.0	44.0594	0.0227
sigma2	8517.9	1.1740	0.8518

Deviance Information Criterion	
Dbar (posterior mean of deviance)	1272.647
Dmean (deviance evaluated at posterior mean)	1259.084
pD (effective number of parameters)	13.563
DIC (smaller is better)	1286.211

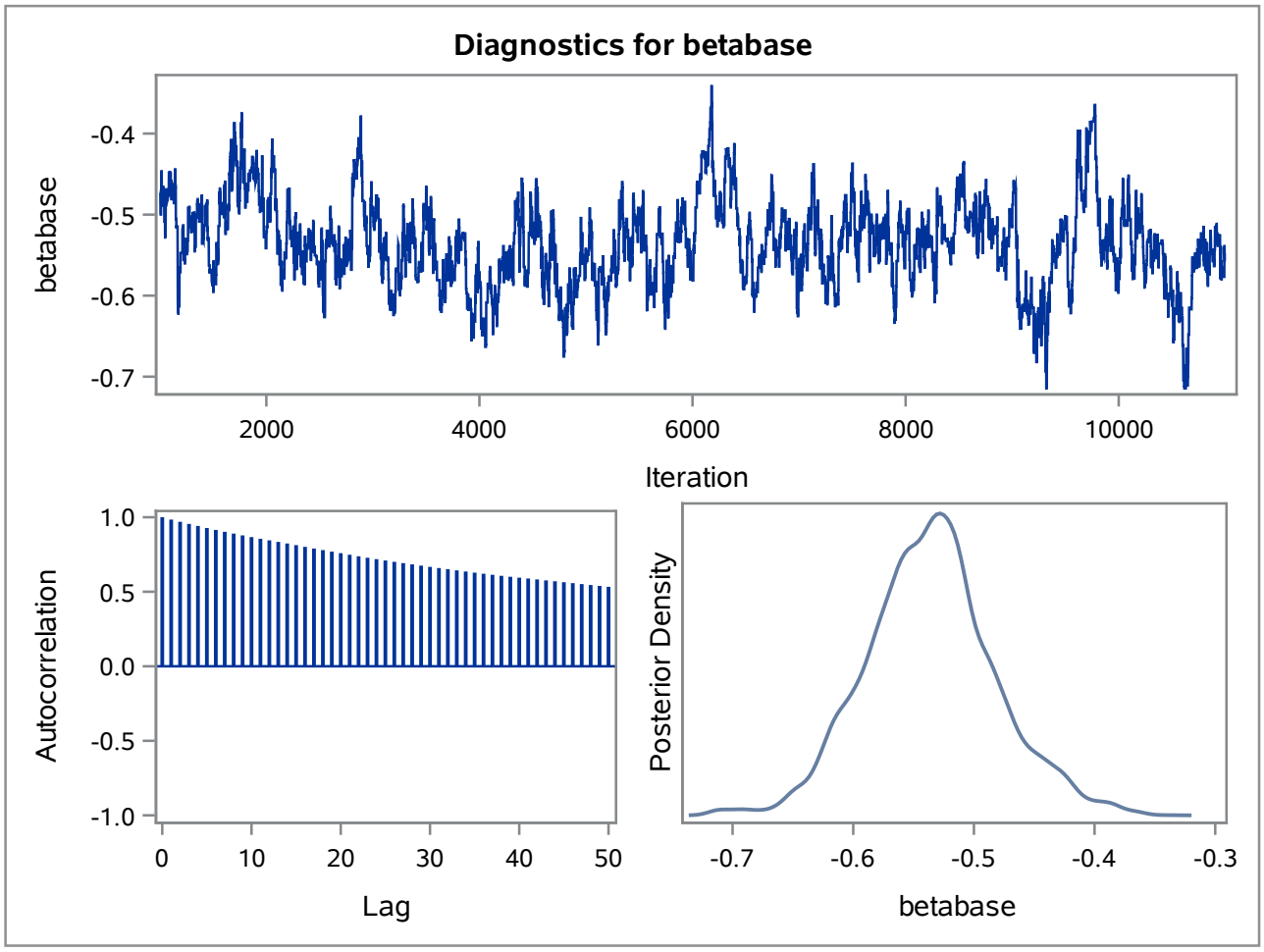
The MCMC Procedure



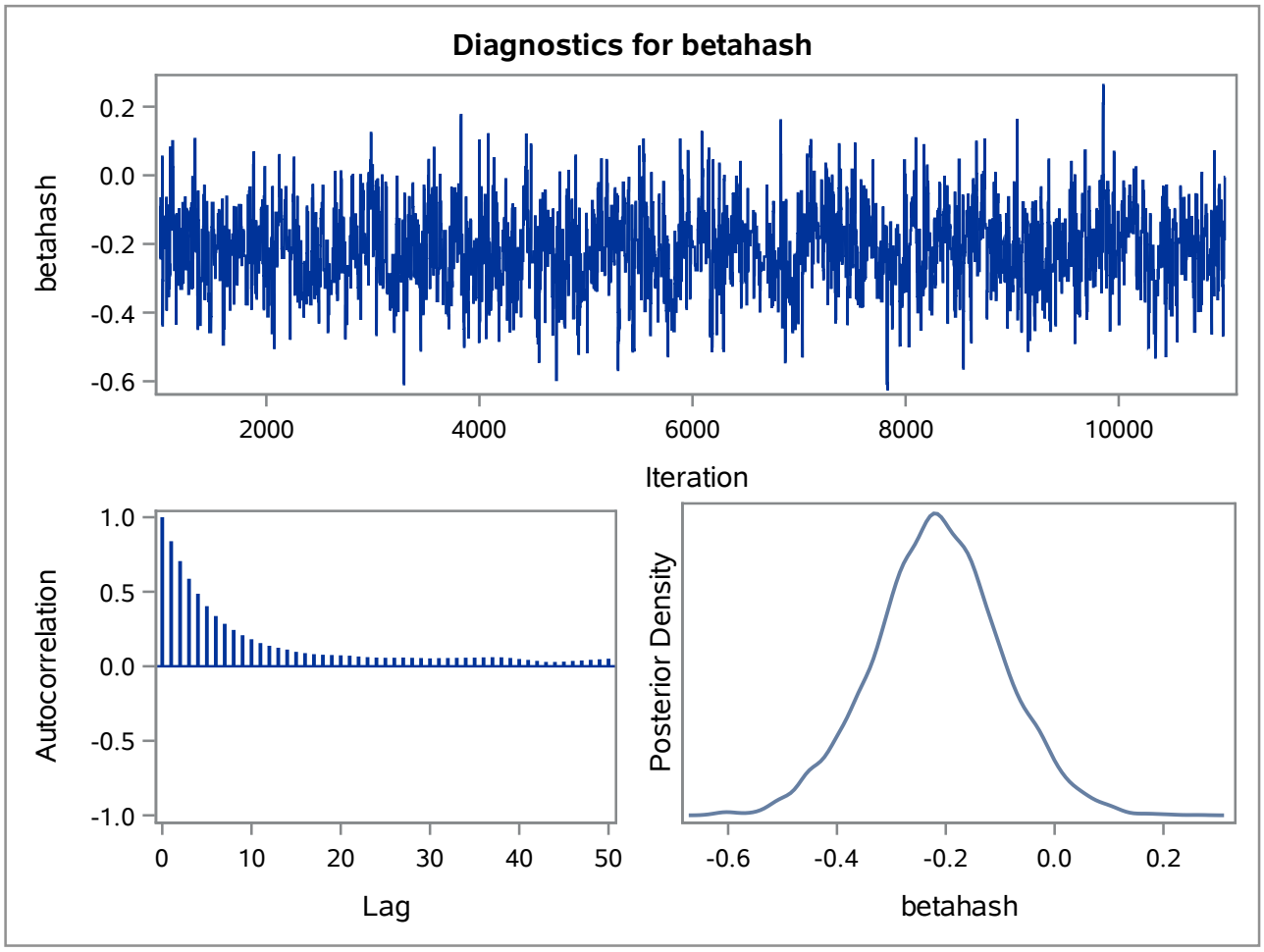
The MCMC Procedure



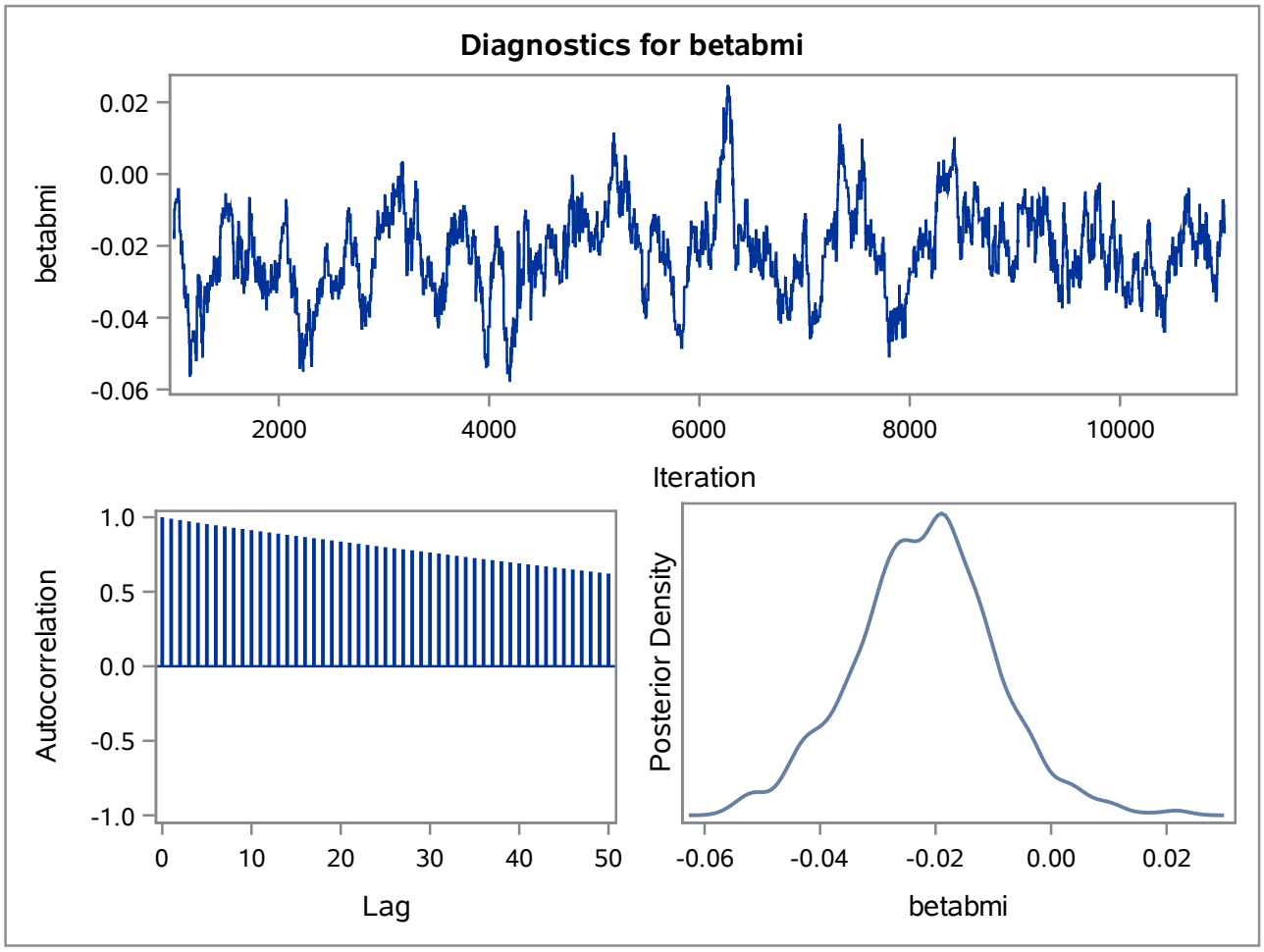
The MCMC Procedure



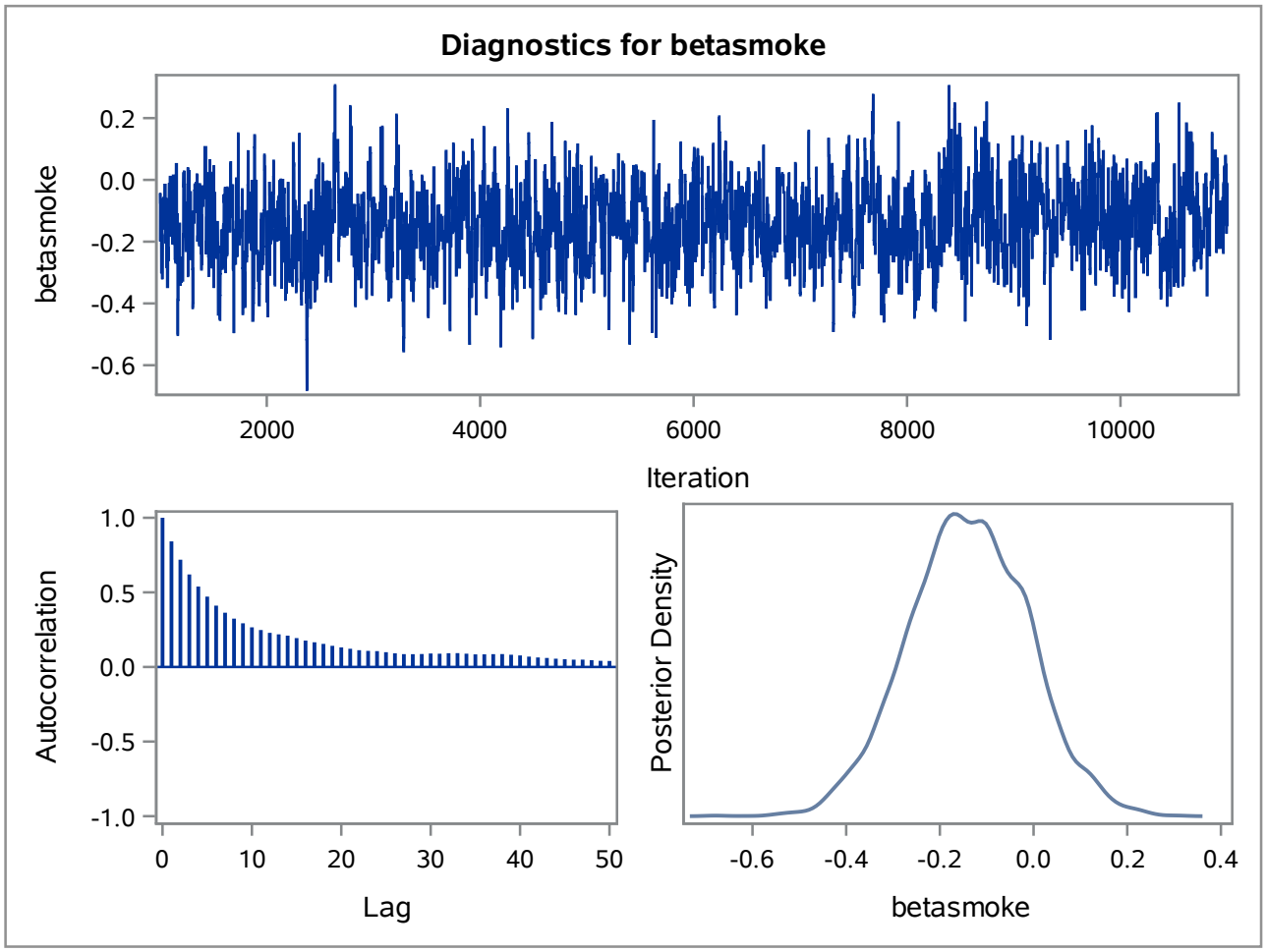
The MCMC Procedure



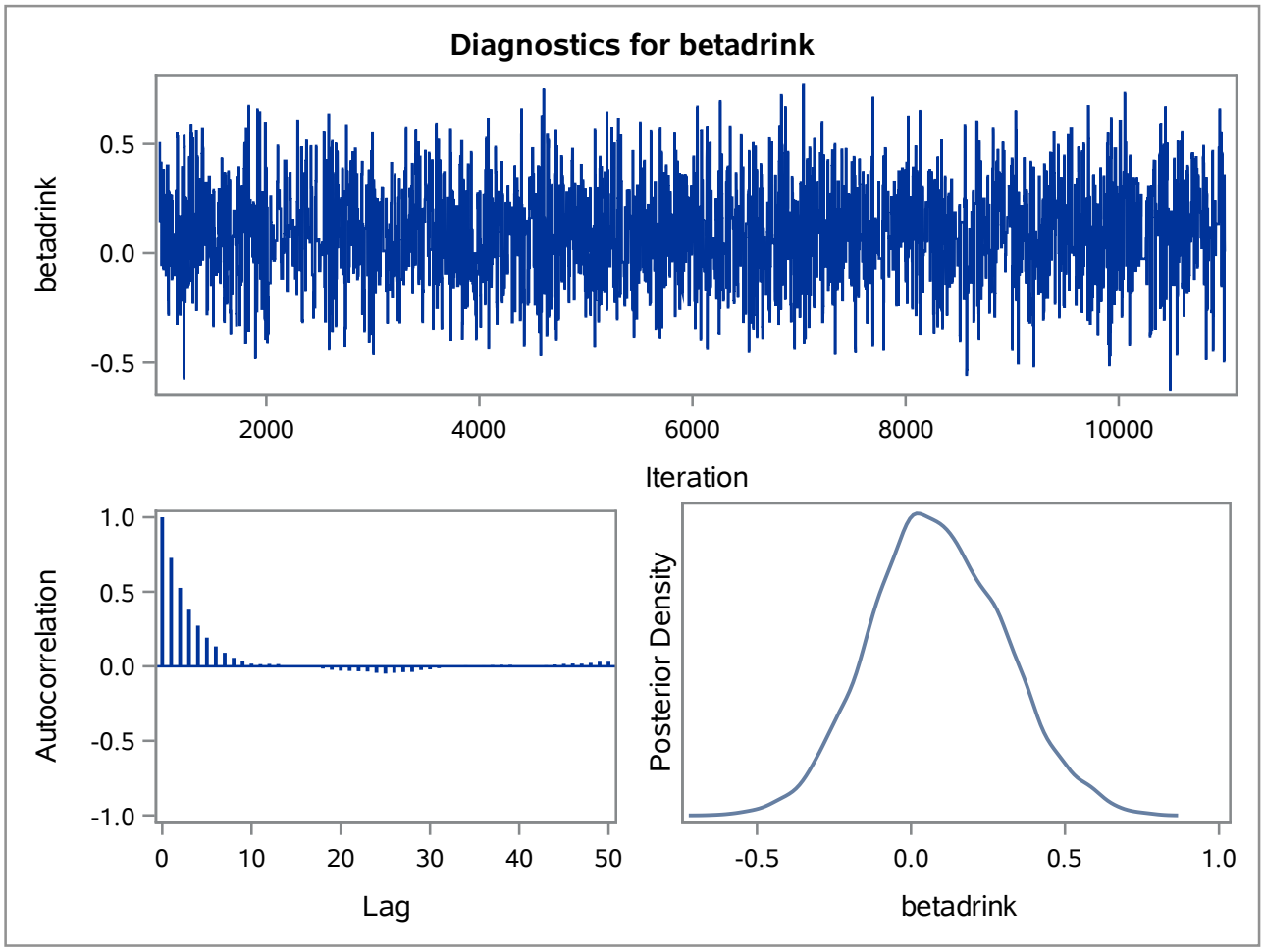
The MCMC Procedure



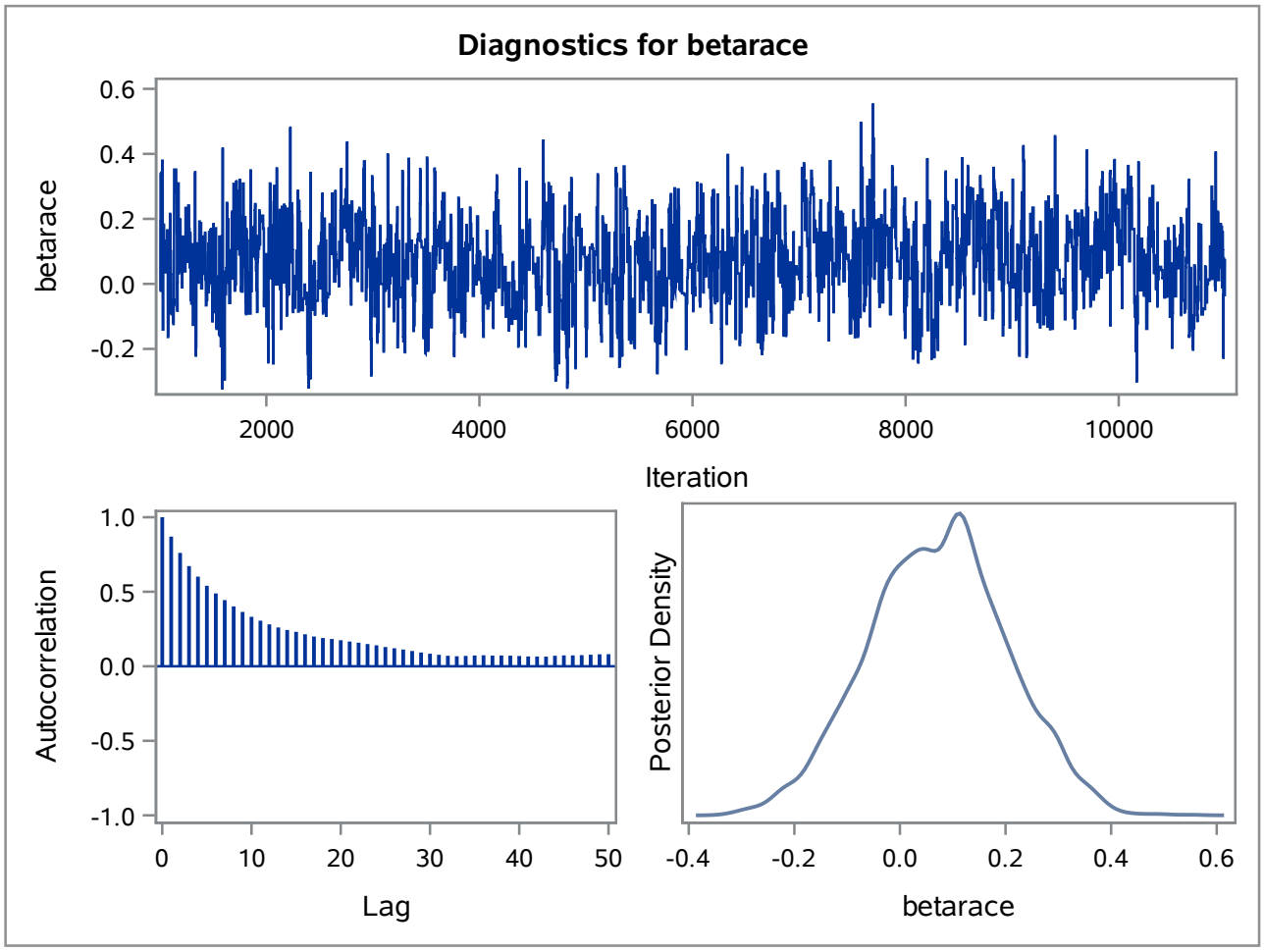
The MCMC Procedure



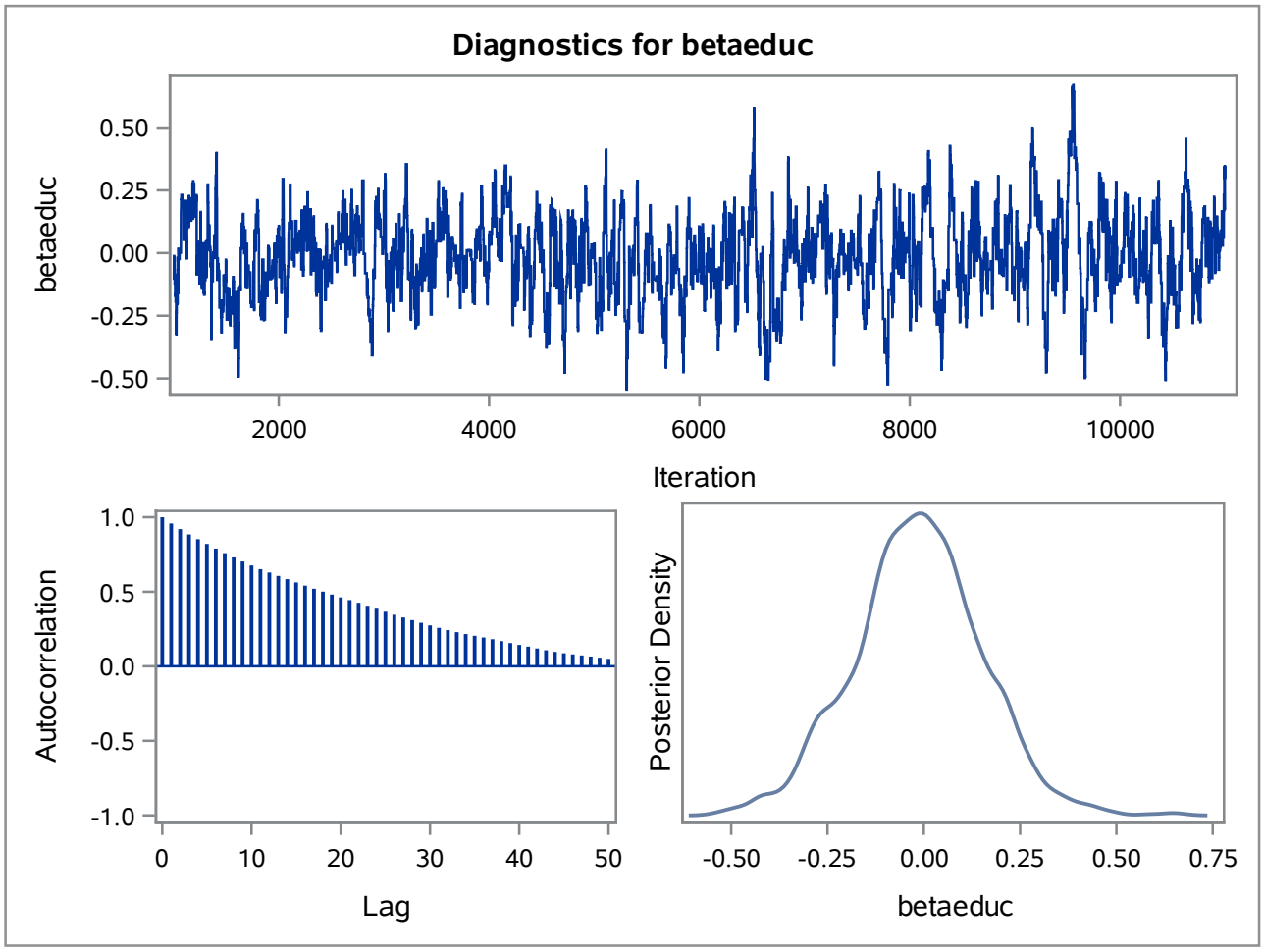
The MCMC Procedure



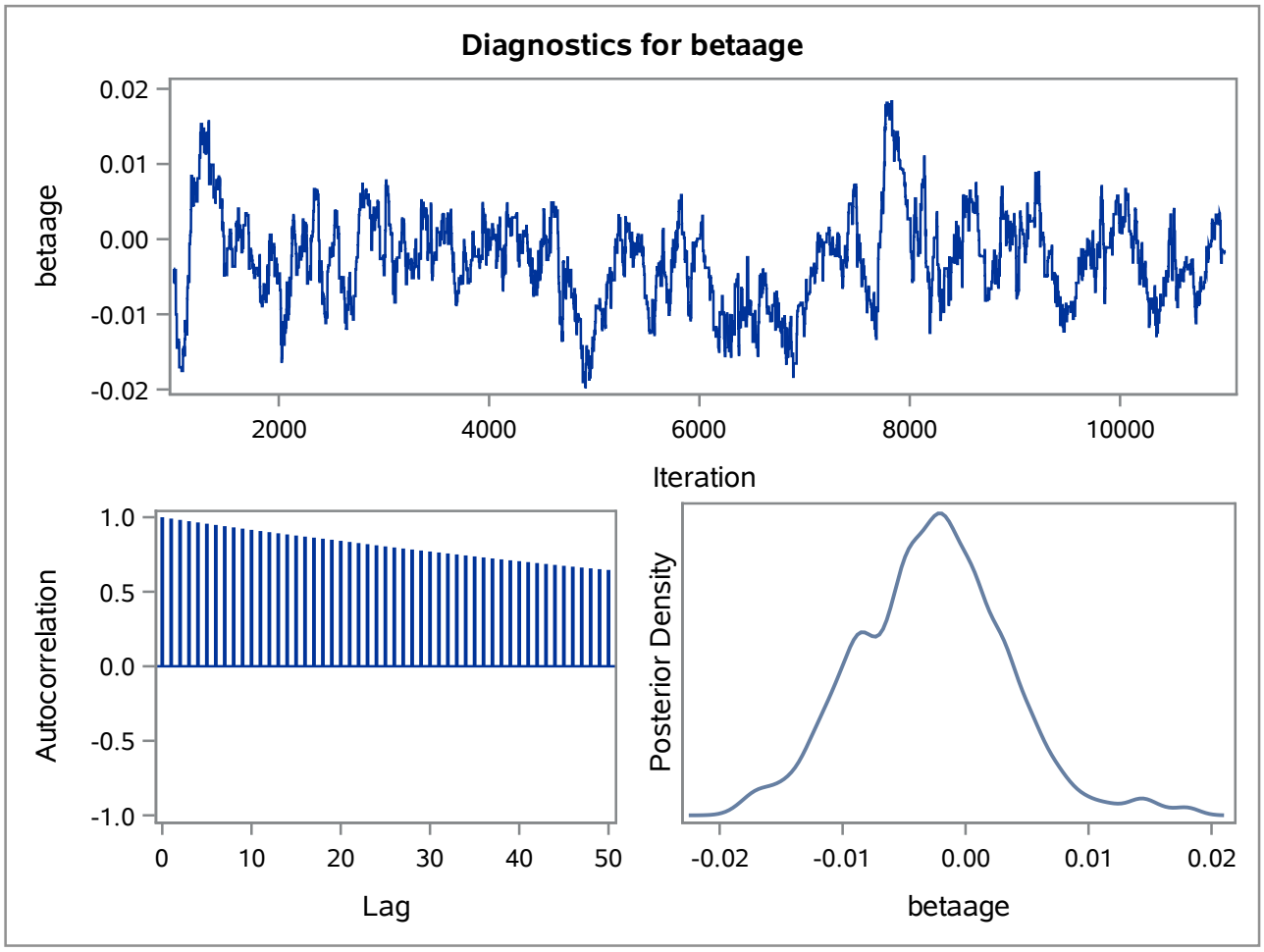
The MCMC Procedure



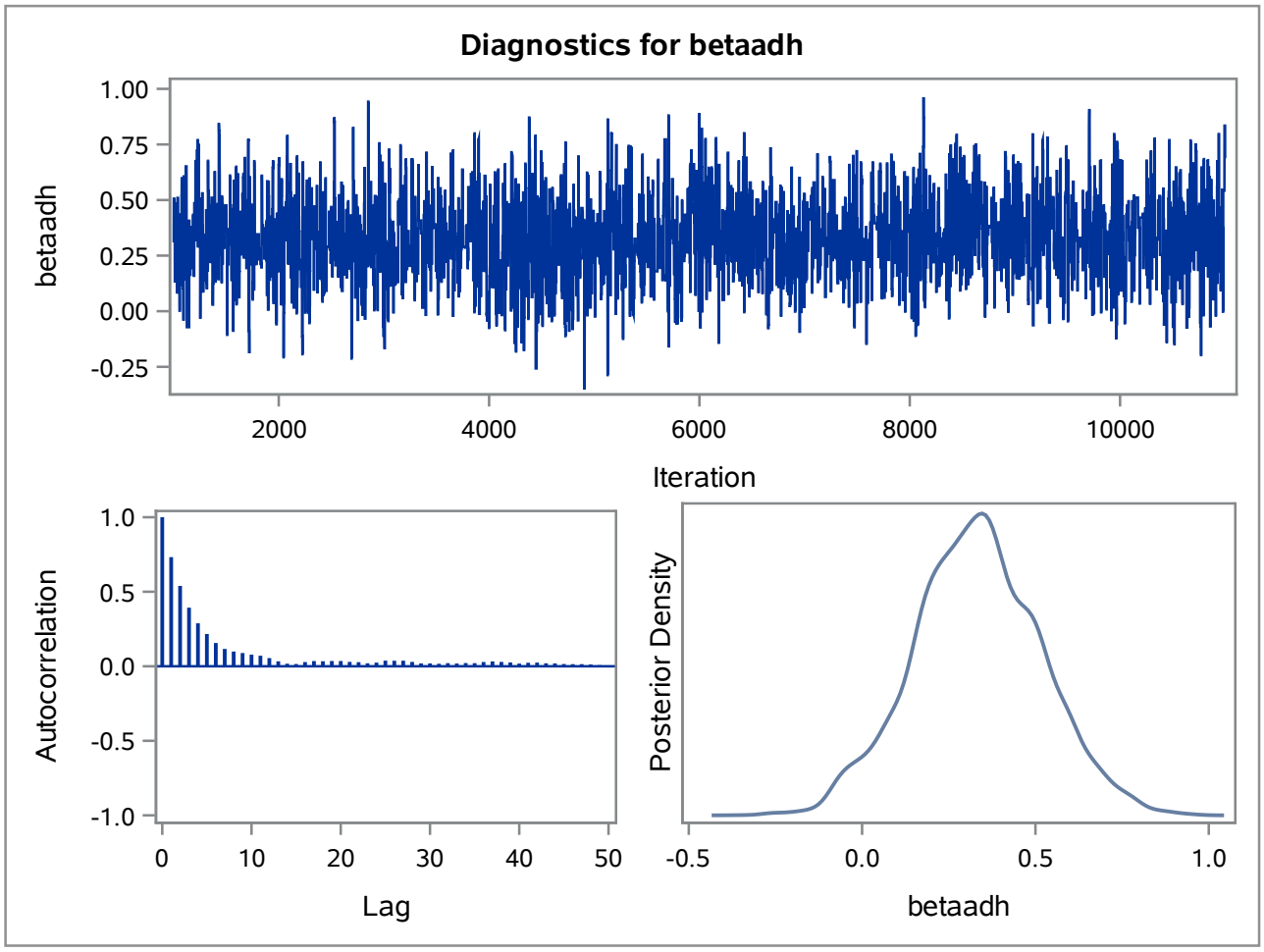
The MCMC Procedure



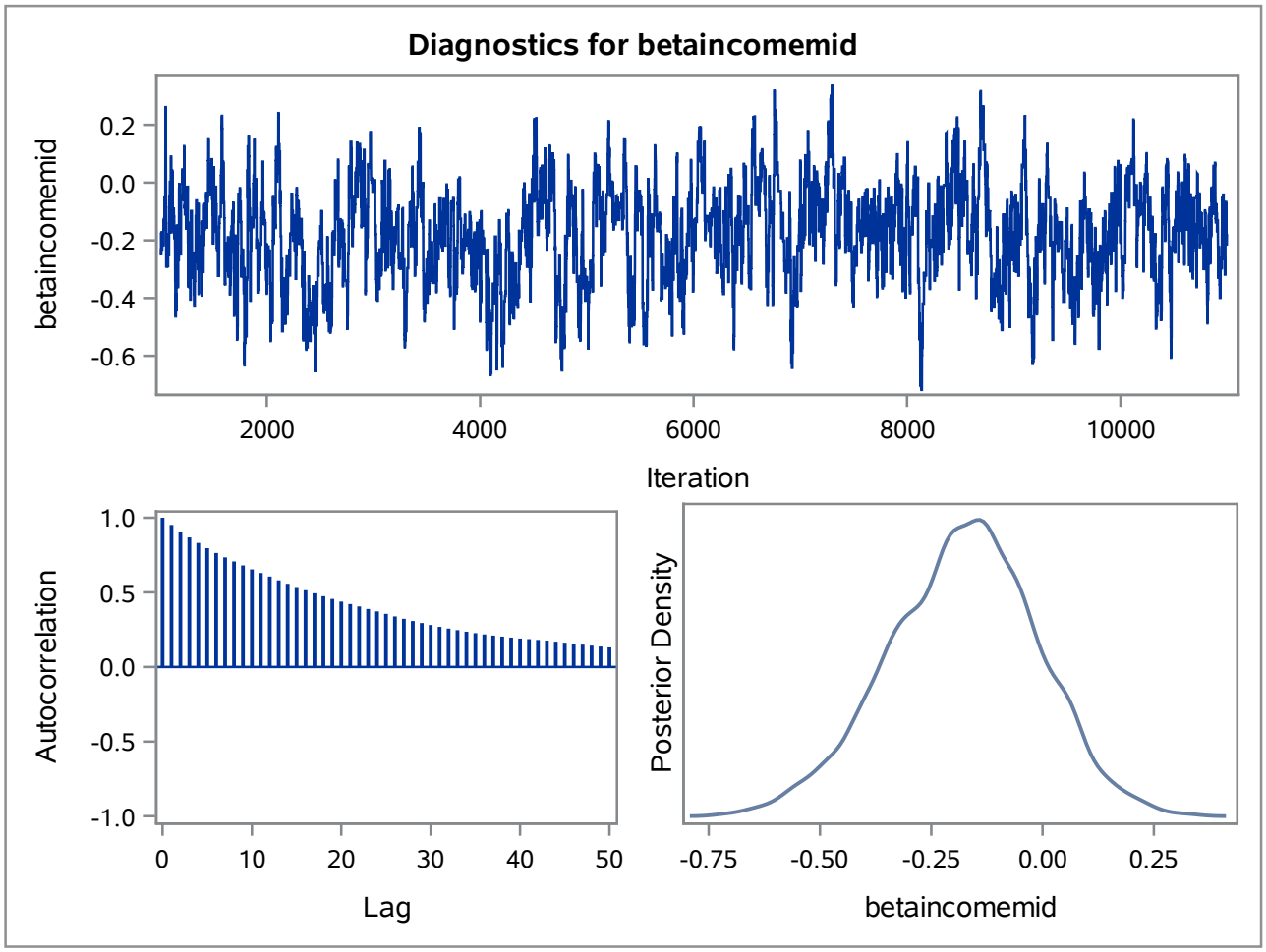
The MCMC Procedure



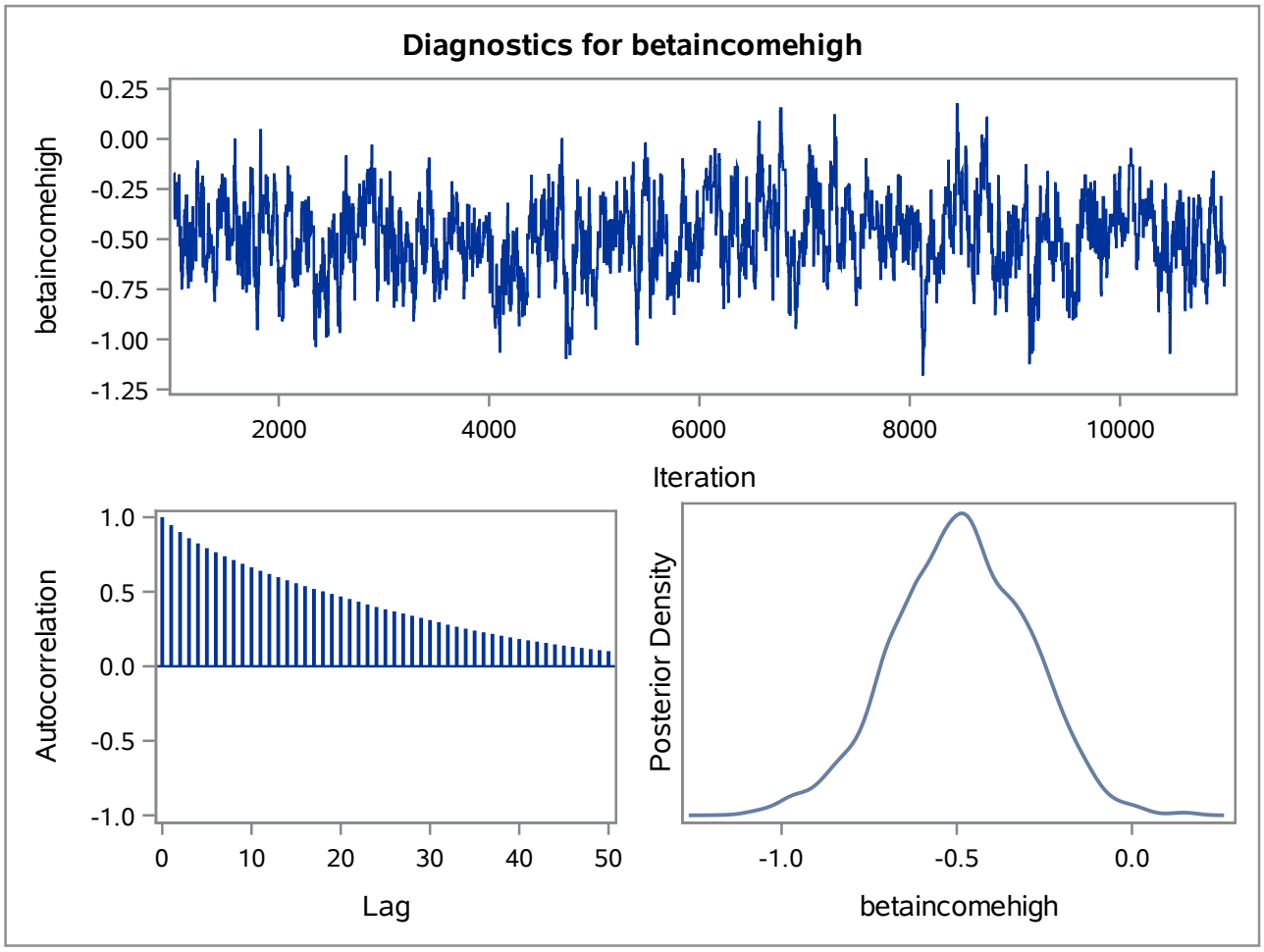
The MCMC Procedure



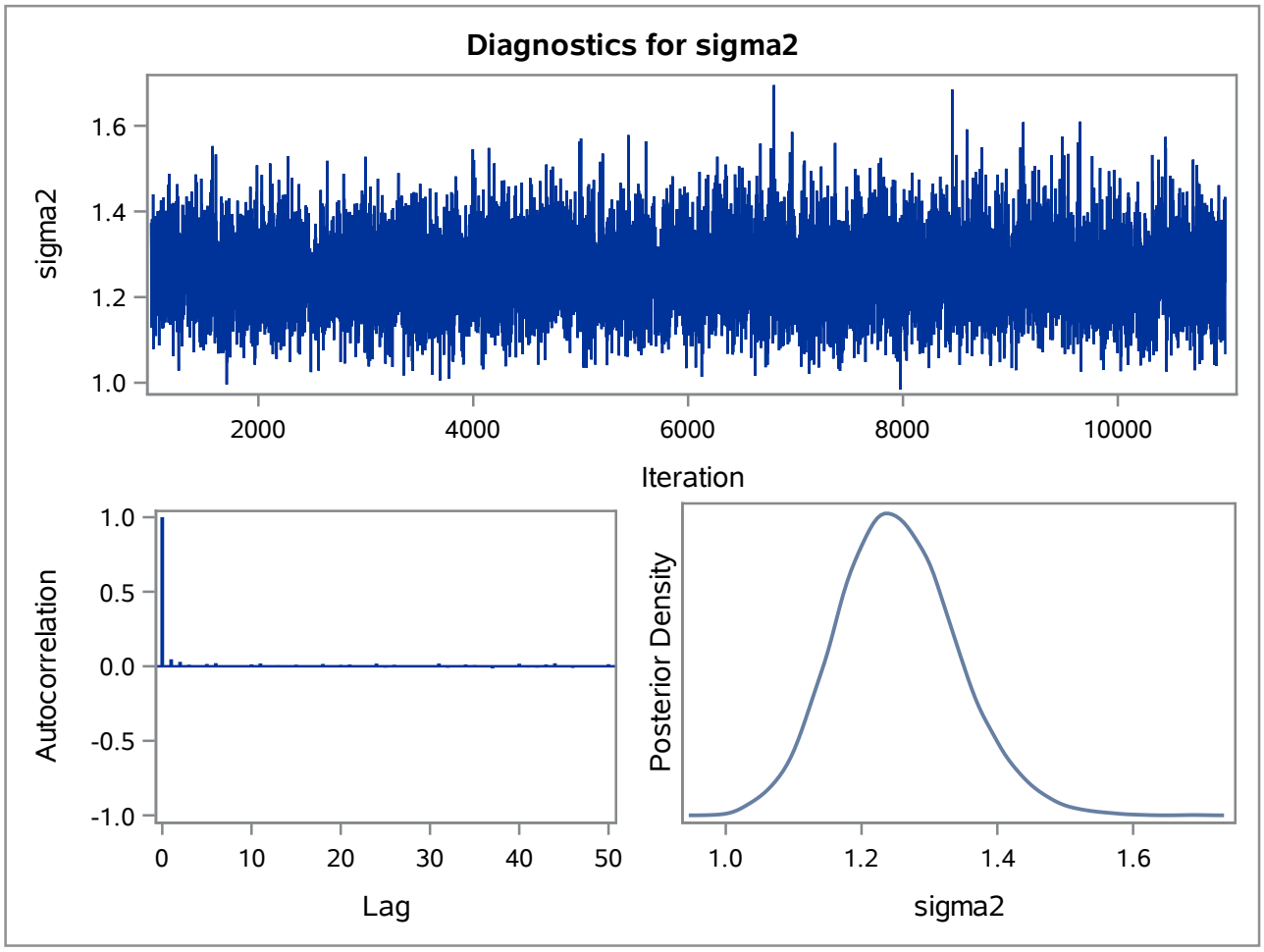
The MCMC Procedure



The MCMC Procedure



The MCMC Procedure



The MCMC Procedure

Number of Observations Read	415
Number of Observations Used	415

Parameters				
Block	**Parameter**	**Sampling Method**	**Initial Value**	**Prior Distribution**
1	**betaint**	N-Metropolis	0	normal(mean = 0, var = 1000)
2	**betaharddrug**	N-Metropolis	0	normal(mean = 0, var = 1000)
3	**sigma2**	Conjugate	1.0000	igamma(shape = 2.001, scale = 1.001)

The MCMC Procedure

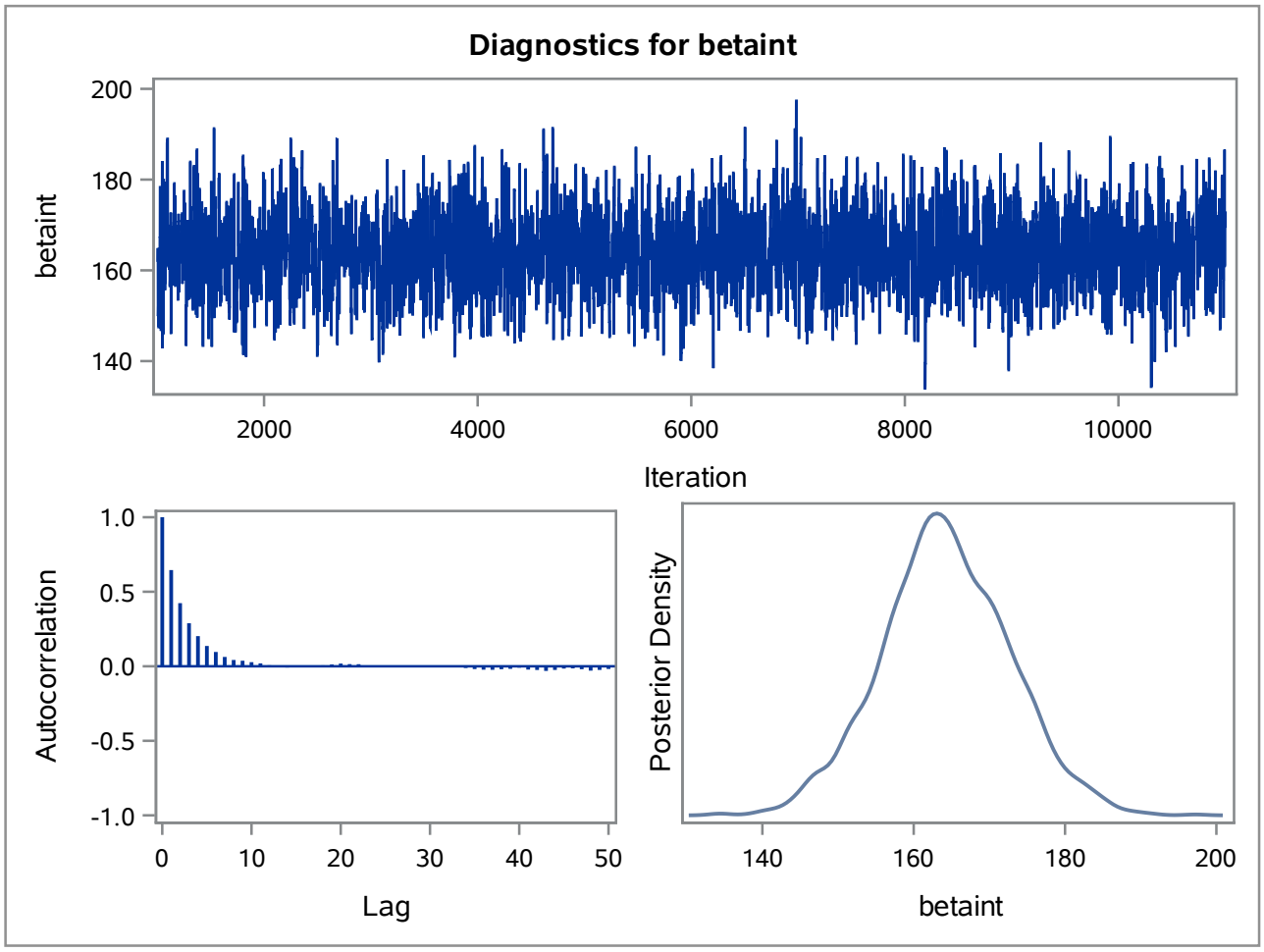
Posterior Summaries and Intervals					
Parameter	N	Mean	Standard Deviation	95% HPD Interval	
betaint	10000	164.3	8.4388	146.2	179.8
betaharddrug	10000	-91.9045	23.1532	-141.7	-50.2472
sigma2	10000	30771.5	2144.1	26779.1	35019.6

The MCMC Procedure

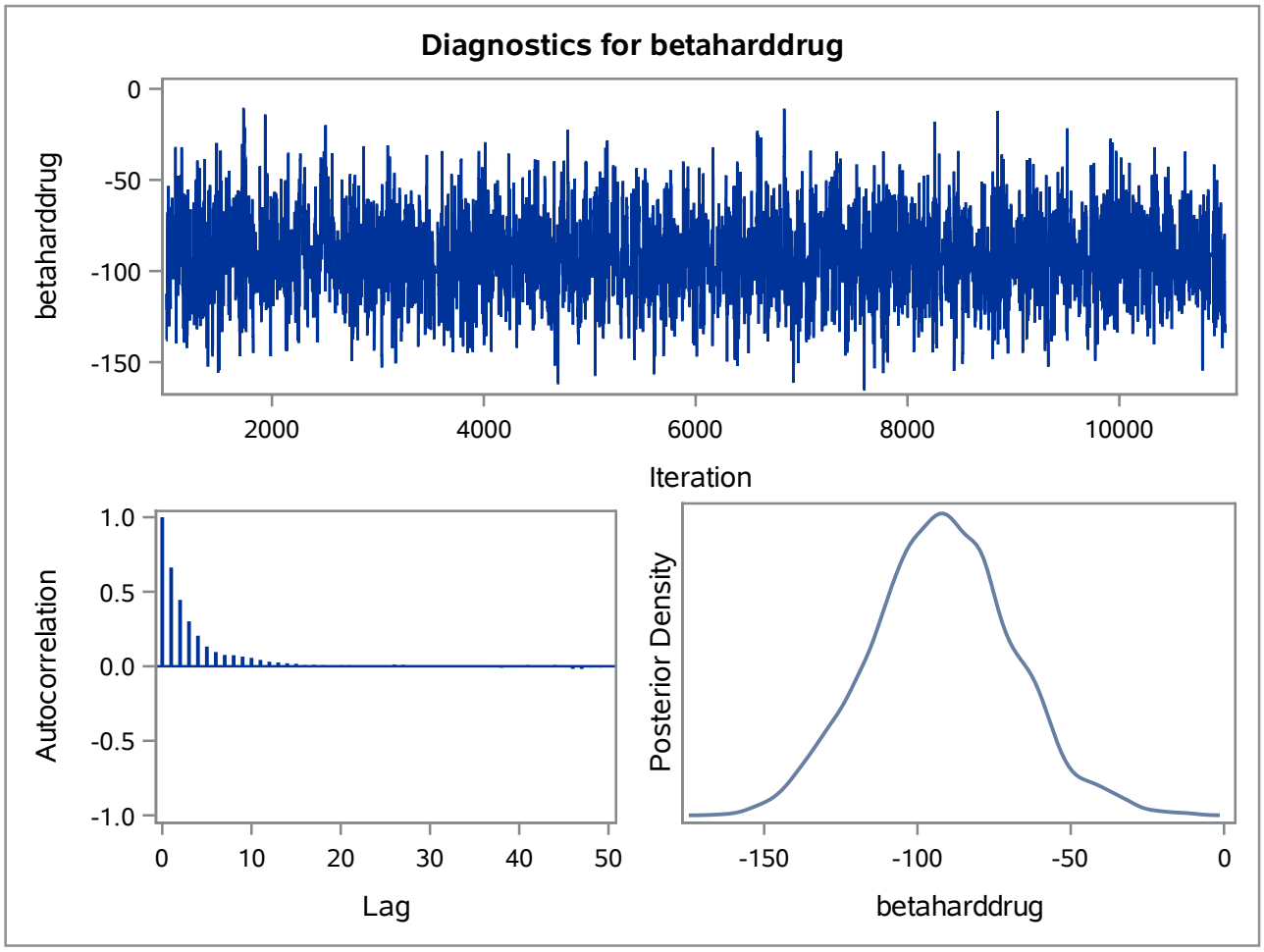
Effective Sample Sizes			
Parameter	ESS	Autocorrelation Time	Efficiency
betaint	2015.1	4.9626	0.2015
betaharddrug	1817.3	5.5026	0.1817
sigma2	7702.7	1.2983	0.7703

Deviance Information Criterion	
Dbar (posterior mean of deviance)	5469.607
Dmean (deviance evaluated at posterior mean)	5467.241
pD (effective number of parameters)	2.365
DIC (smaller is better)	5471.972

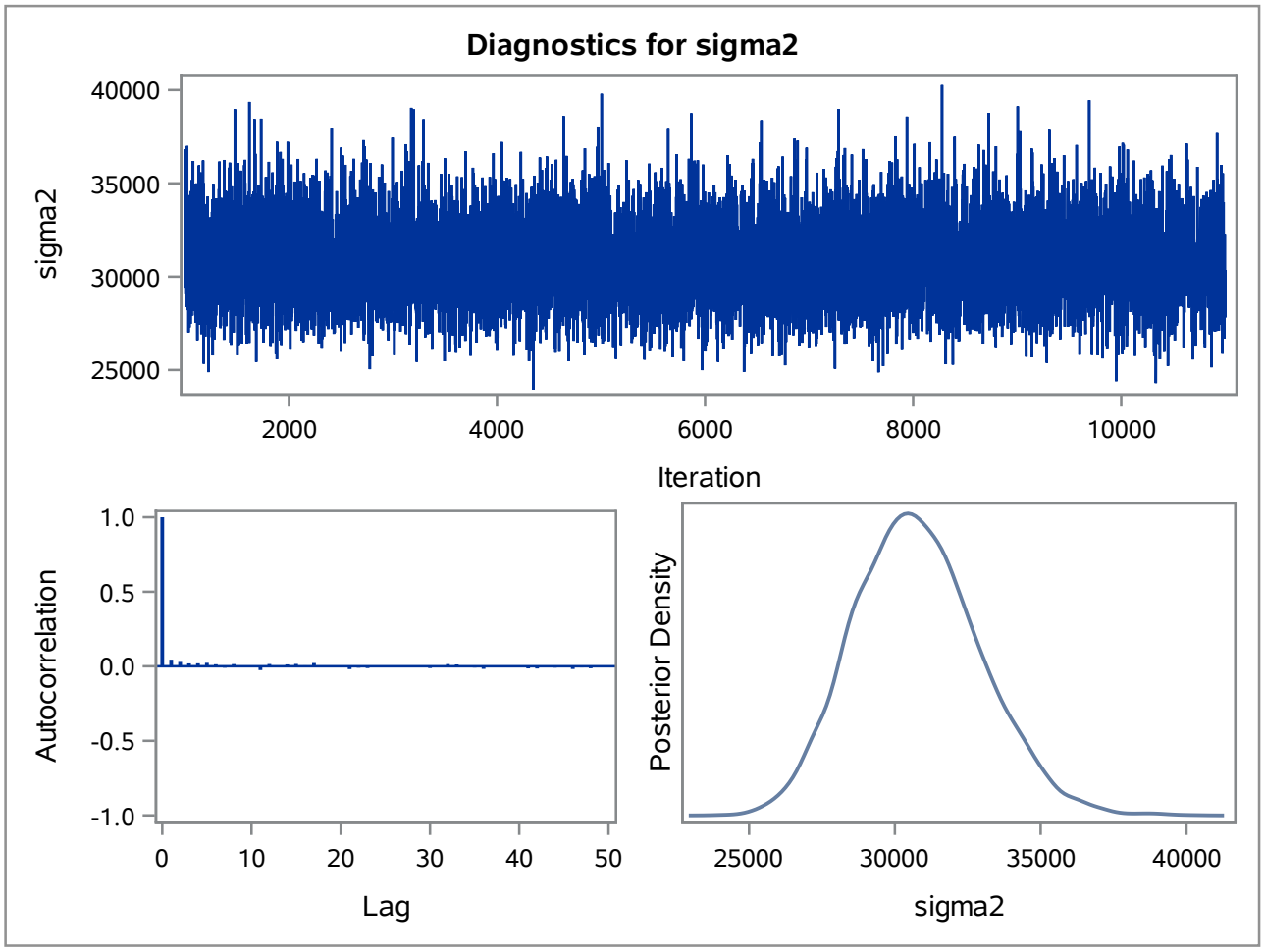
The MCMC Procedure



The MCMC Procedure



The MCMC Procedure



The MCMC Procedure

Number of Observations Read	415
Number of Observations Used	415

Parameters				
Block	Parameter	Sampling Method	Initial Value	Prior Distribution
1	betaint	N-Metropolis	0	normal(mean = 0, var = 1000)
2	betaharddrug	N-Metropolis	0	normal(mean = 0, var = 1000)
3	betabase	N-Metropolis	0	normal(mean = 0, var = 1000)
4	betahash	N-Metropolis	0	normal(mean = 0, var = 1000)
5	betabmi	N-Metropolis	0	normal(mean = 0, var = 1000)
6	betasmoke	N-Metropolis	0	normal(mean = 0, var = 1000)
7	betadrink	N-Metropolis	0	normal(mean = 0, var = 1000)
8	betarace	N-Metropolis	0	normal(mean = 0, var = 1000)
9	betaeduc	N-Metropolis	0	normal(mean = 0, var = 1000)
10	betaage	N-Metropolis	0	normal(mean = 0, var = 1000)
11	betaadh	N-Metropolis	0	normal(mean = 0, var = 1000)
12	betaincomemid	N-Metropolis	0	normal(mean = 0, var = 1000)
	betaincomehigh		0	normal(mean = 0, var = 1000)
13	sigma2	Conjugate	1.0000	igamma(shape = 2.001, scale = 1.001)

The MCMC Procedure

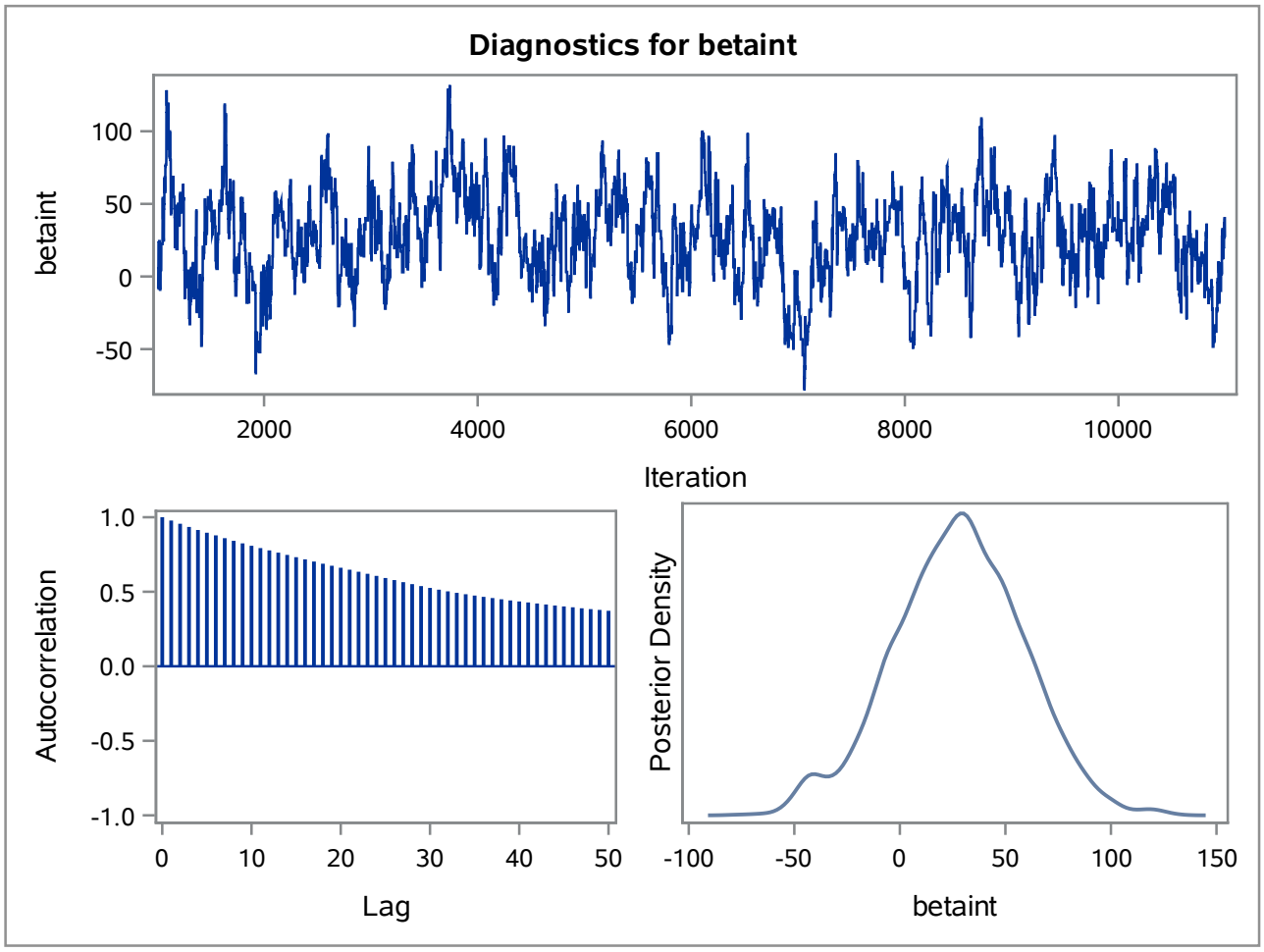
Posterior Summaries and Intervals					
Parameter	N	Mean	Standard Deviation	95% HPD Interval	
betaint	10000	27.5771	30.8174	-33.6179	89.5638
betaharddrug	10000	-88.7467	23.2120	-135.9	-45.3024
betabase	10000	-0.0387	0.0432	-0.1205	0.0485
betahash	10000	34.3123	15.1673	4.7618	63.3088
betabmi	10000	6.3715	1.6540	3.1824	9.5719
betasmoke	10000	-3.4609	15.7170	-35.0752	25.5879
betadrink	10000	-3.8100	22.6149	-48.5244	38.6367
betarace	10000	-15.4124	16.4833	-49.6907	14.8440
betaeduc	10000	21.6077	19.6047	-16.9355	58.5617
betaage	10000	-0.3830	0.7587	-1.8799	0.9804
betaadh	10000	-23.1407	21.2907	-65.4788	16.5259
betaincomemid	10000	17.4479	17.2863	-15.1948	50.5652
betaincomehigh	10000	-29.0728	19.7291	-64.7162	10.4206
sigma2	10000	29767.7	2115.2	25688.7	33970.3

The MCMC Procedure

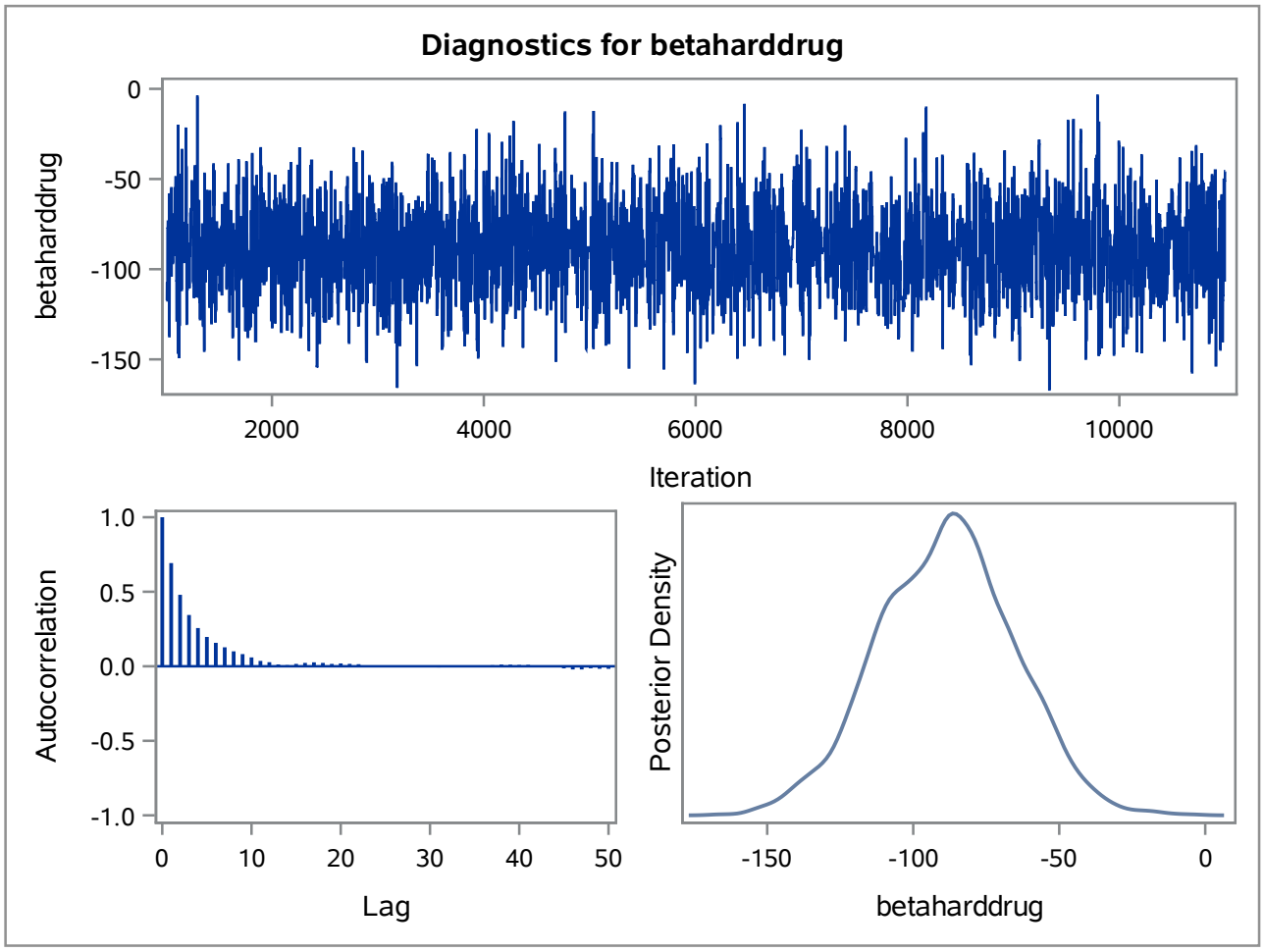
Effective Sample Sizes			
Parameter	ESS	Autocorrelation Time	Efficiency
betaint	96.5	103.6	0.0097
betaharddrug	1628.2	6.1417	0.1628
betabase	275.5	36.2941	0.0276
betahash	1006.6	9.9346	0.1007
betabmi	62.2	160.8	0.0062
betasmoke	898.6	11.1288	0.0899
betadrink	1520.7	6.5759	0.1521
betarace	608.9	16.4223	0.0609
betaeduc	271.2	36.8704	0.0271
betaage	70.2	142.4	0.0070
betaadh	1261.0	7.9304	0.1261
betaincomemid	505.1	19.7977	0.0505
betaincomehigh	347.9	28.7426	0.0348
sigma2	8134.1	1.2294	0.8134

Deviance Information Criterion	
Dbar (posterior mean of deviance)	5455.632
Dmean (deviance evaluated at posterior mean)	5445.956
pD (effective number of parameters)	9.676
DIC (smaller is better)	5465.308

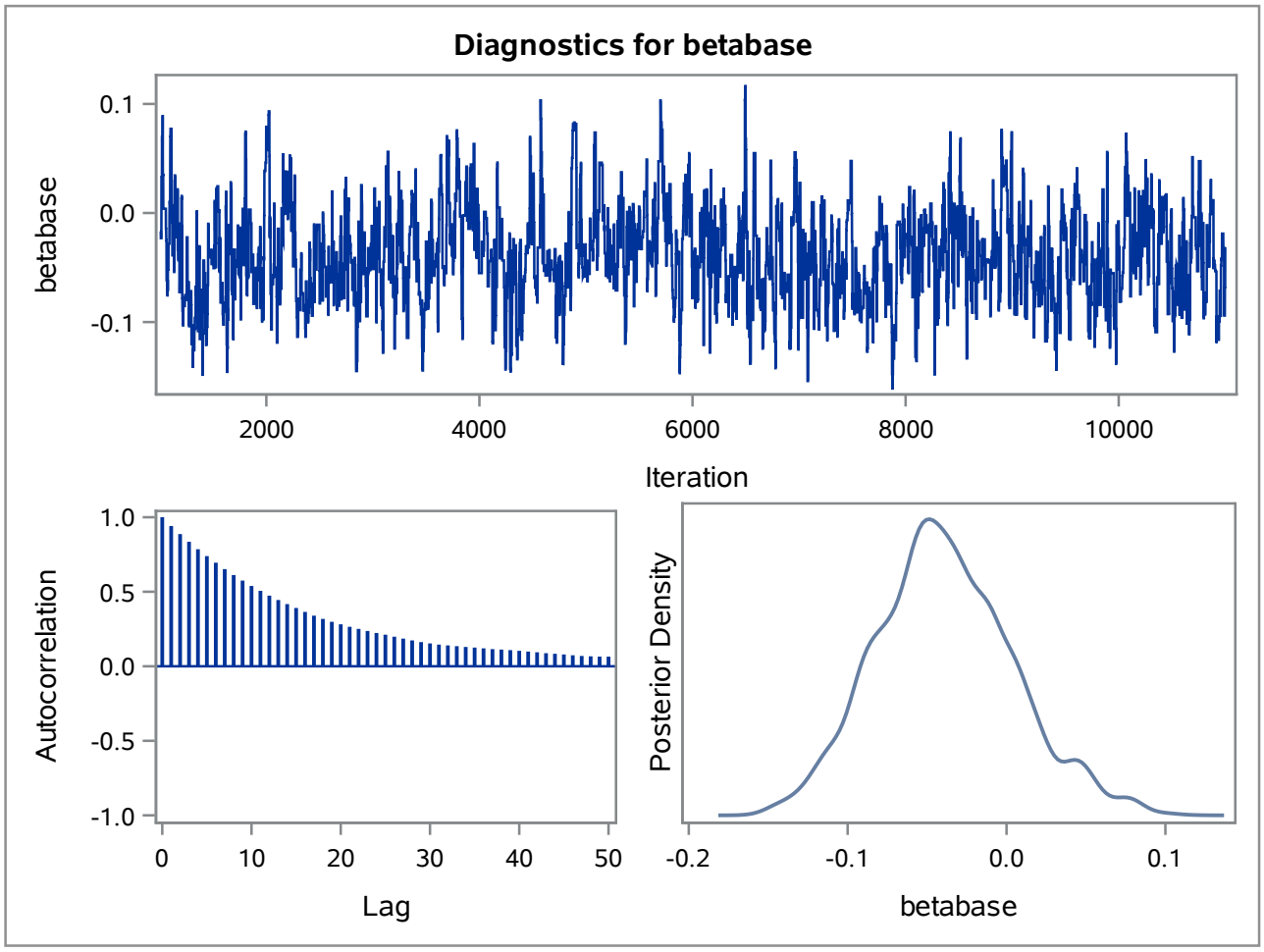
The MCMC Procedure



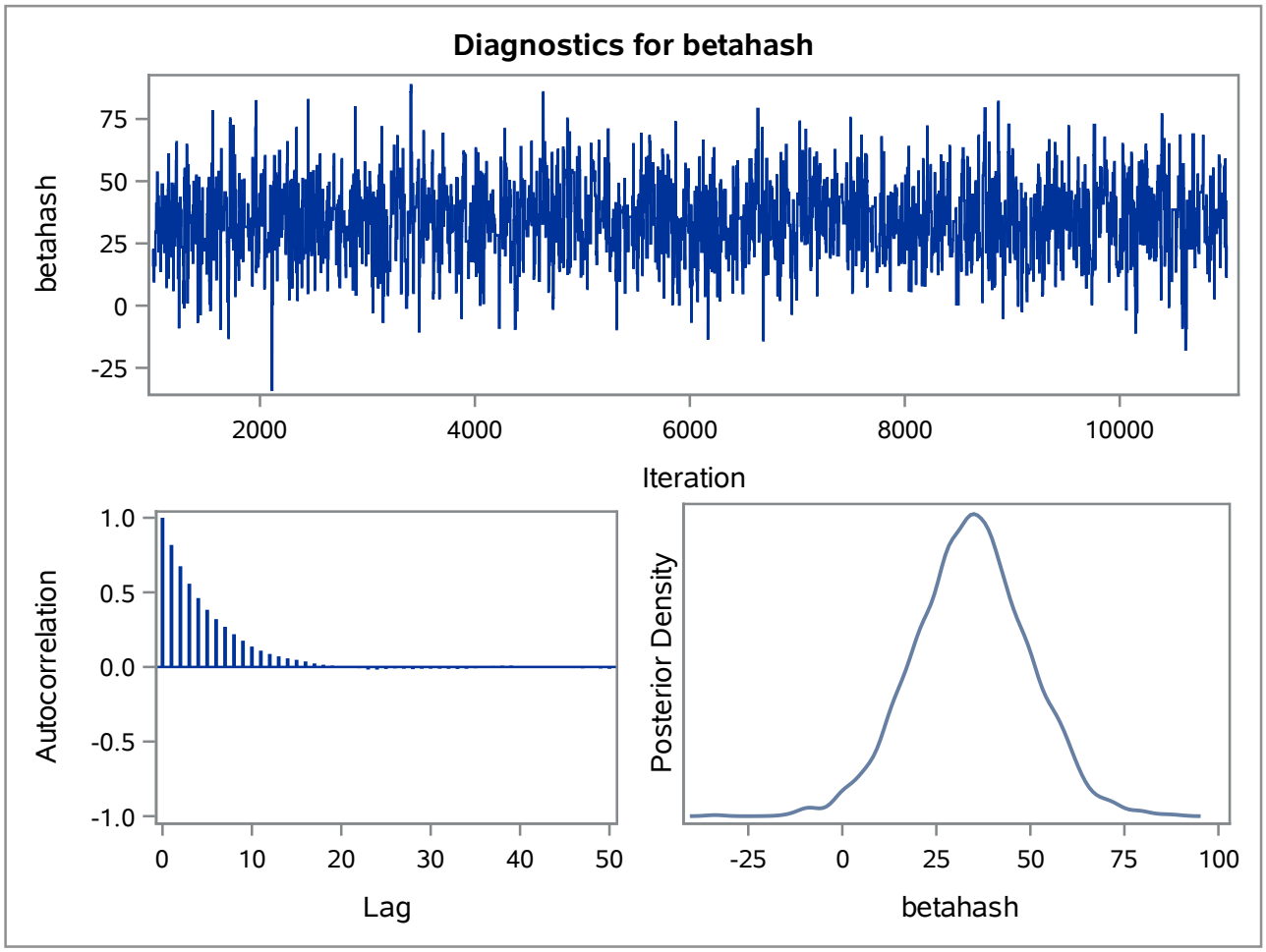
The MCMC Procedure



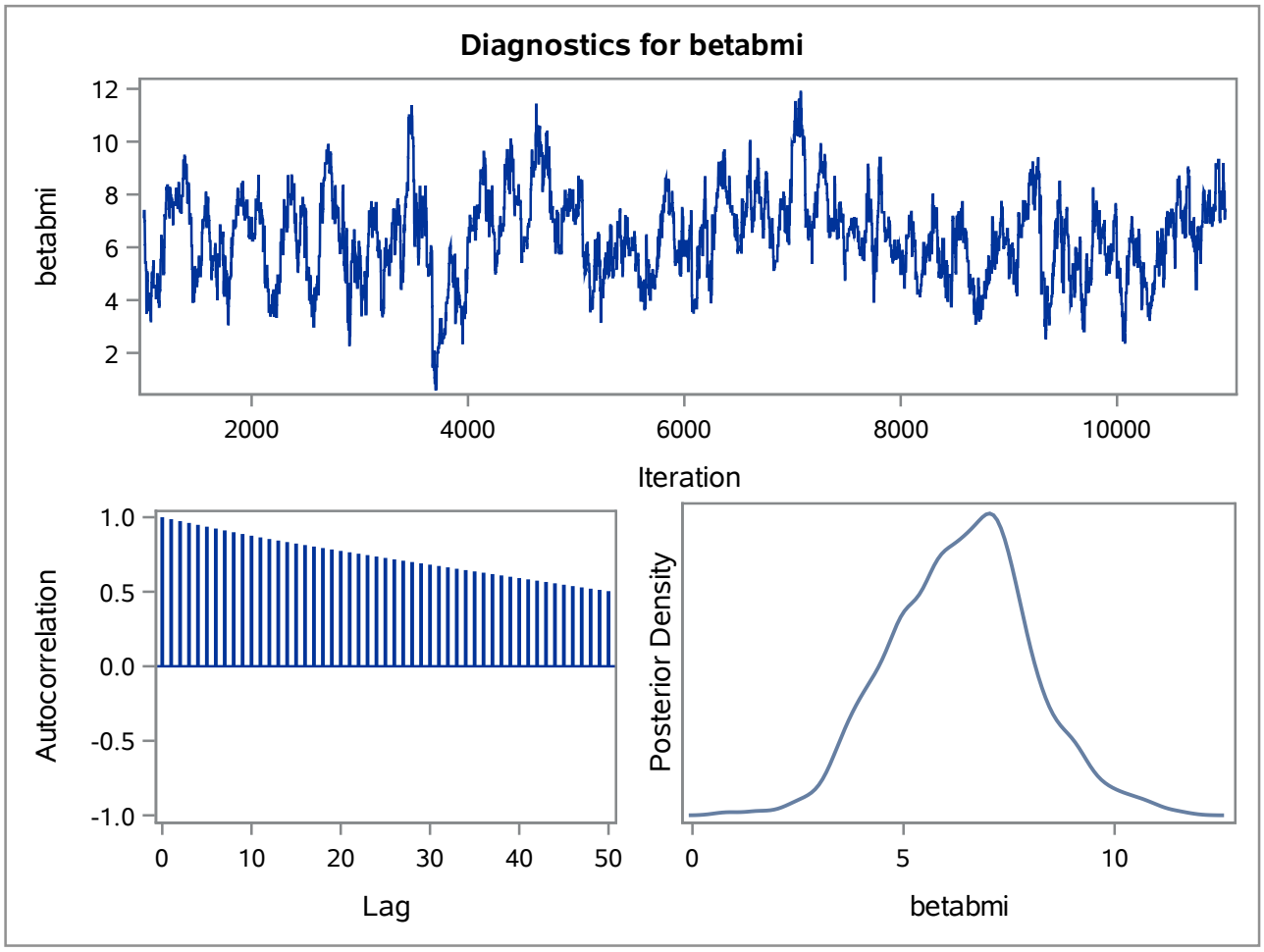
The MCMC Procedure



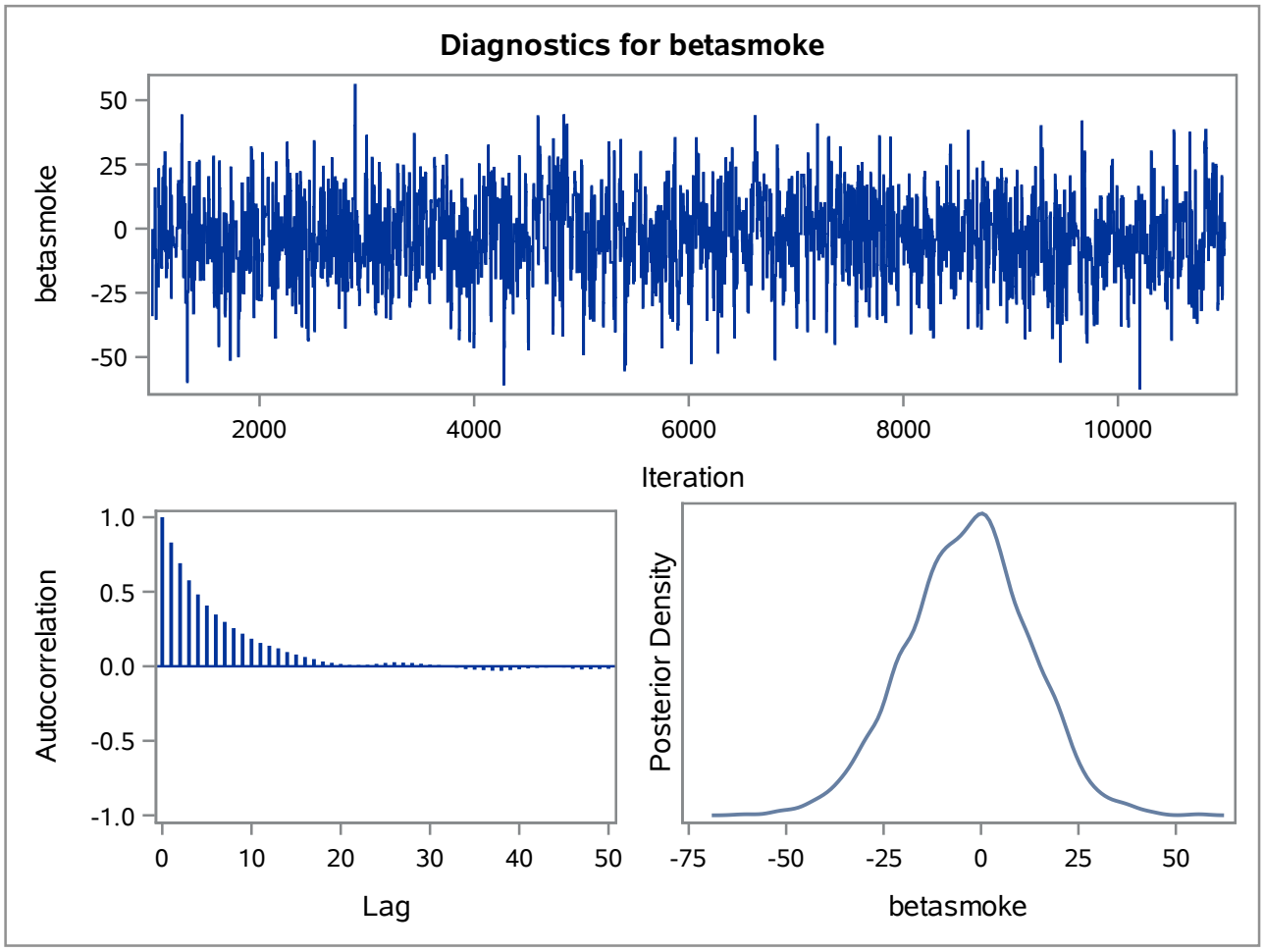
The MCMC Procedure



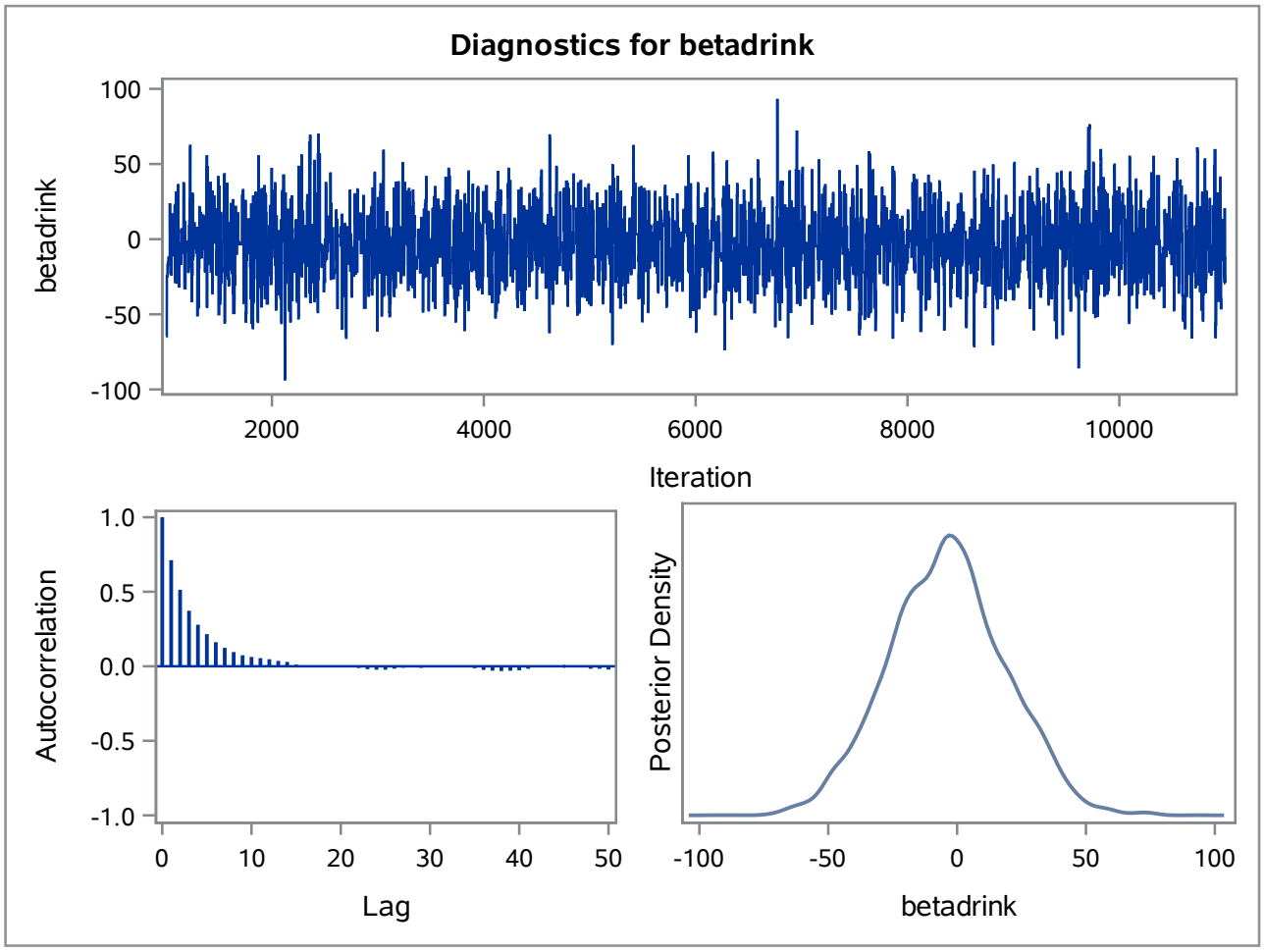
The MCMC Procedure



The MCMC Procedure



The MCMC Procedure



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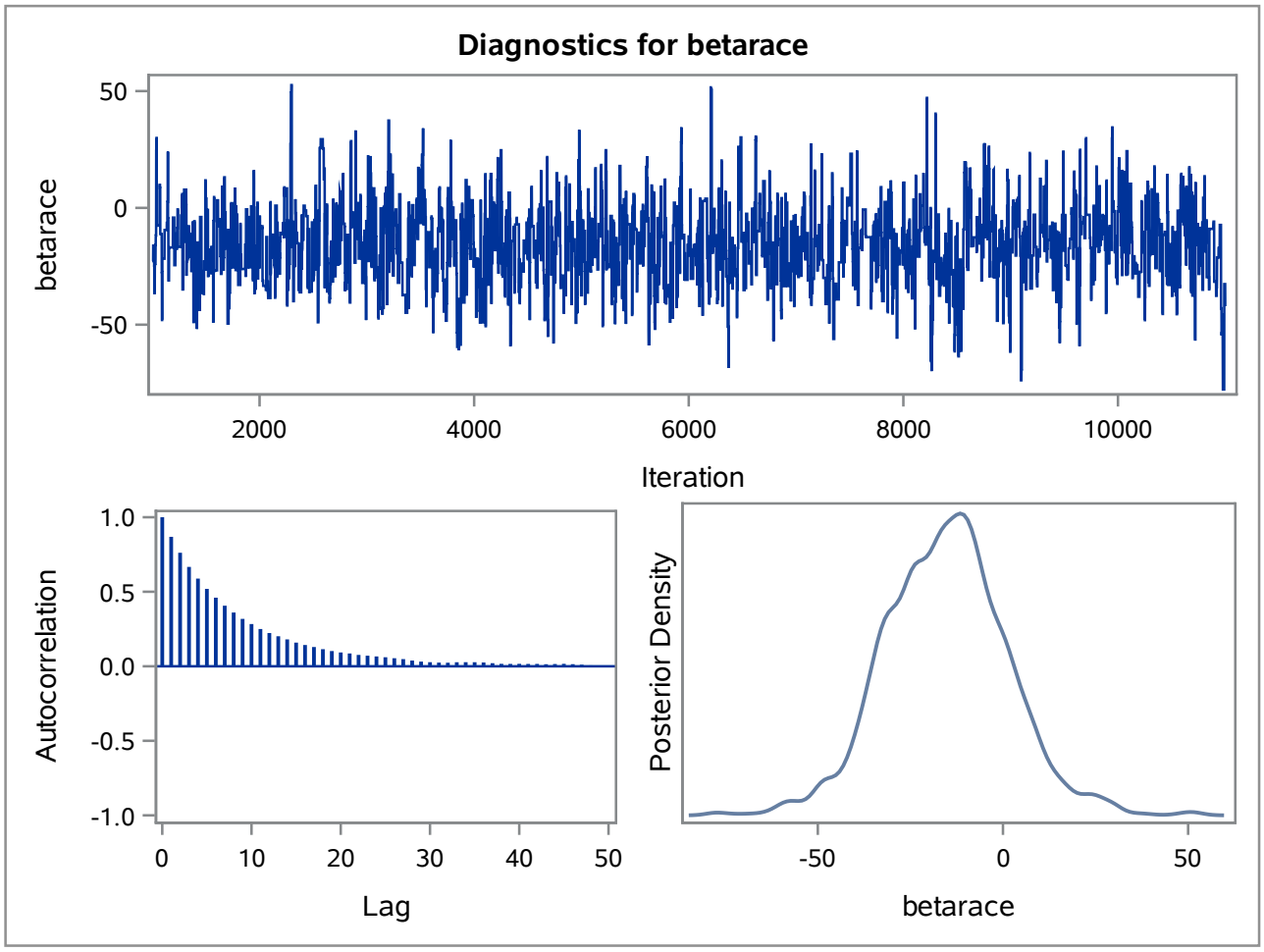

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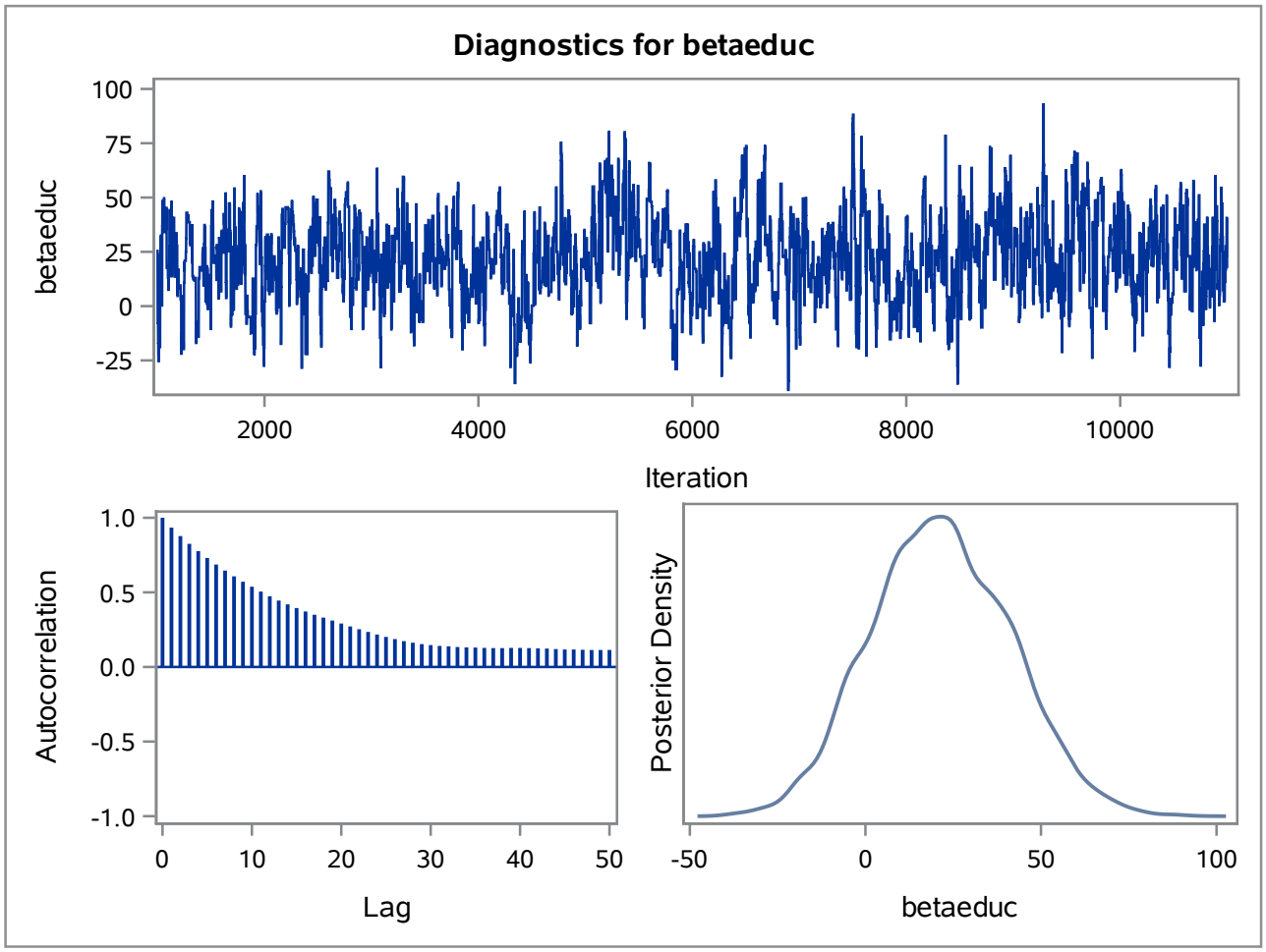
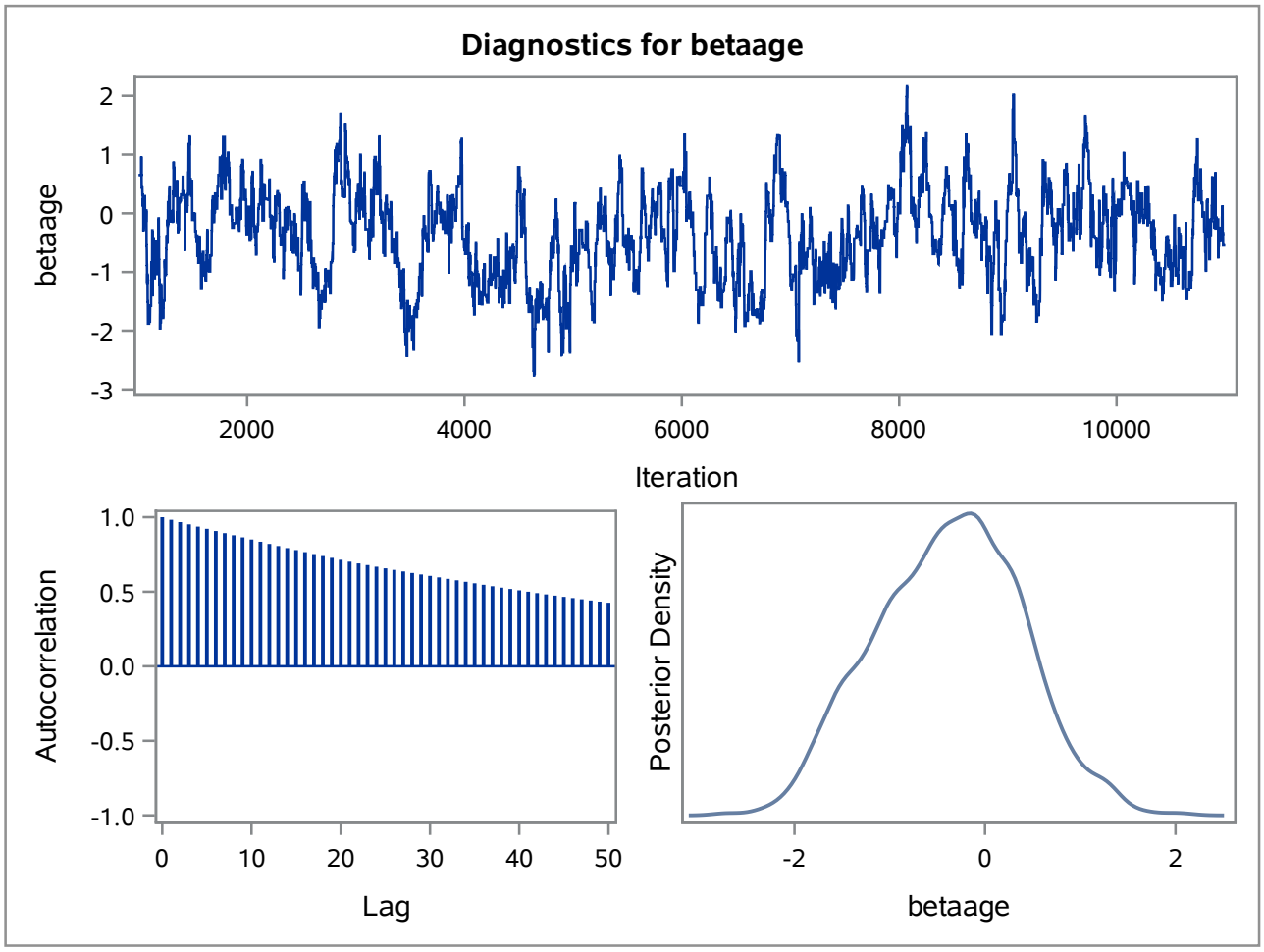
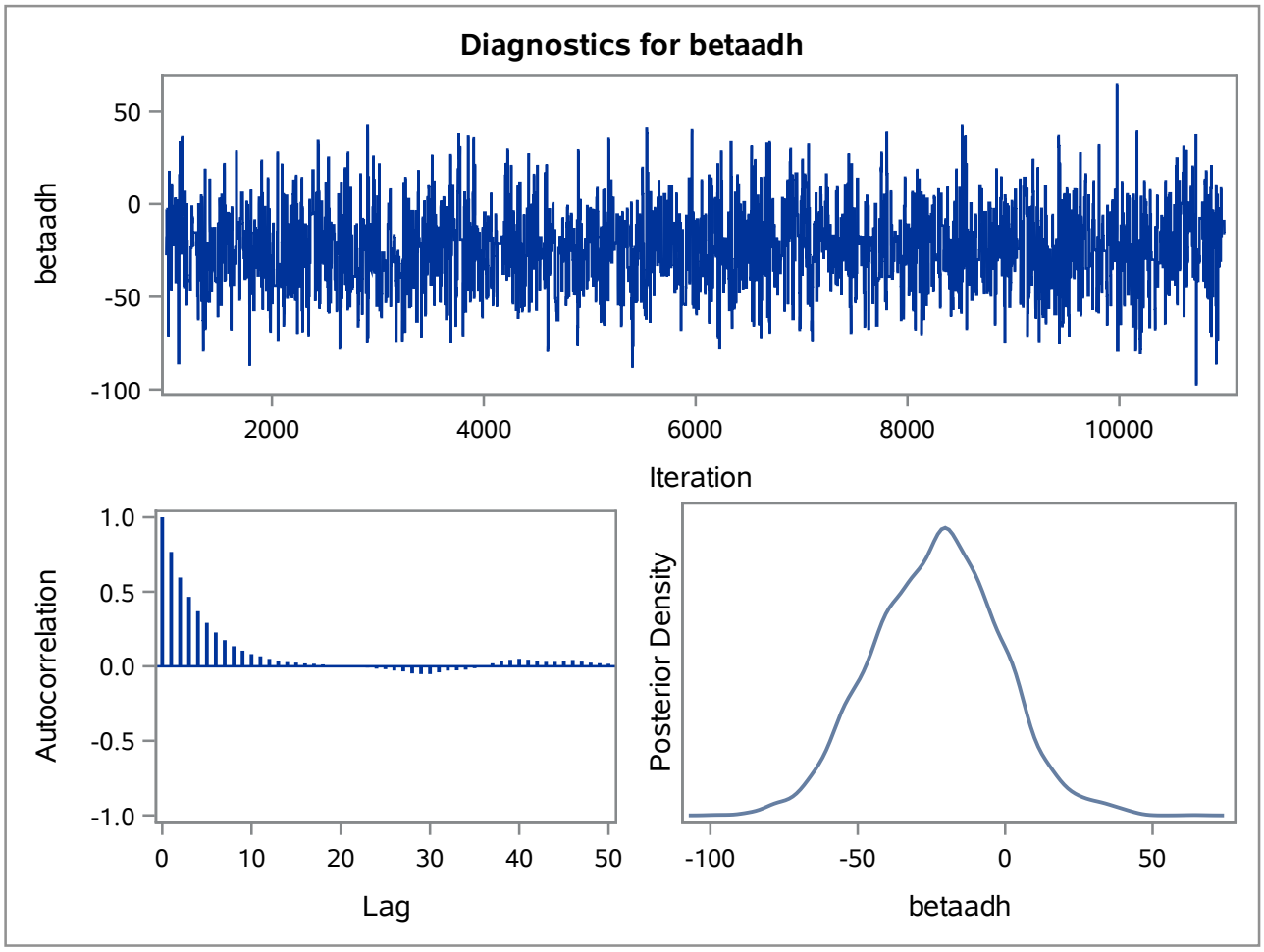


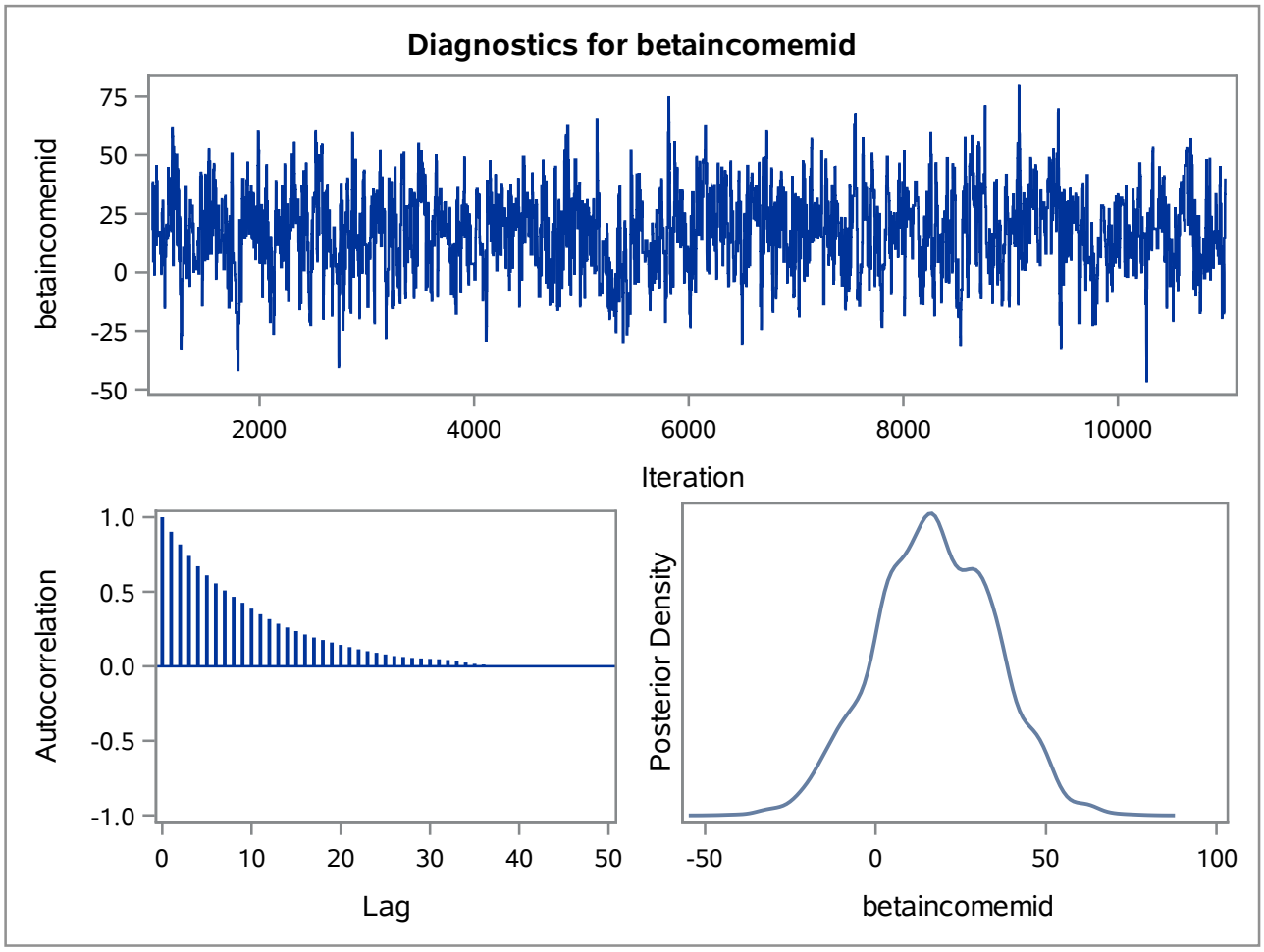
The MCMC Procedure



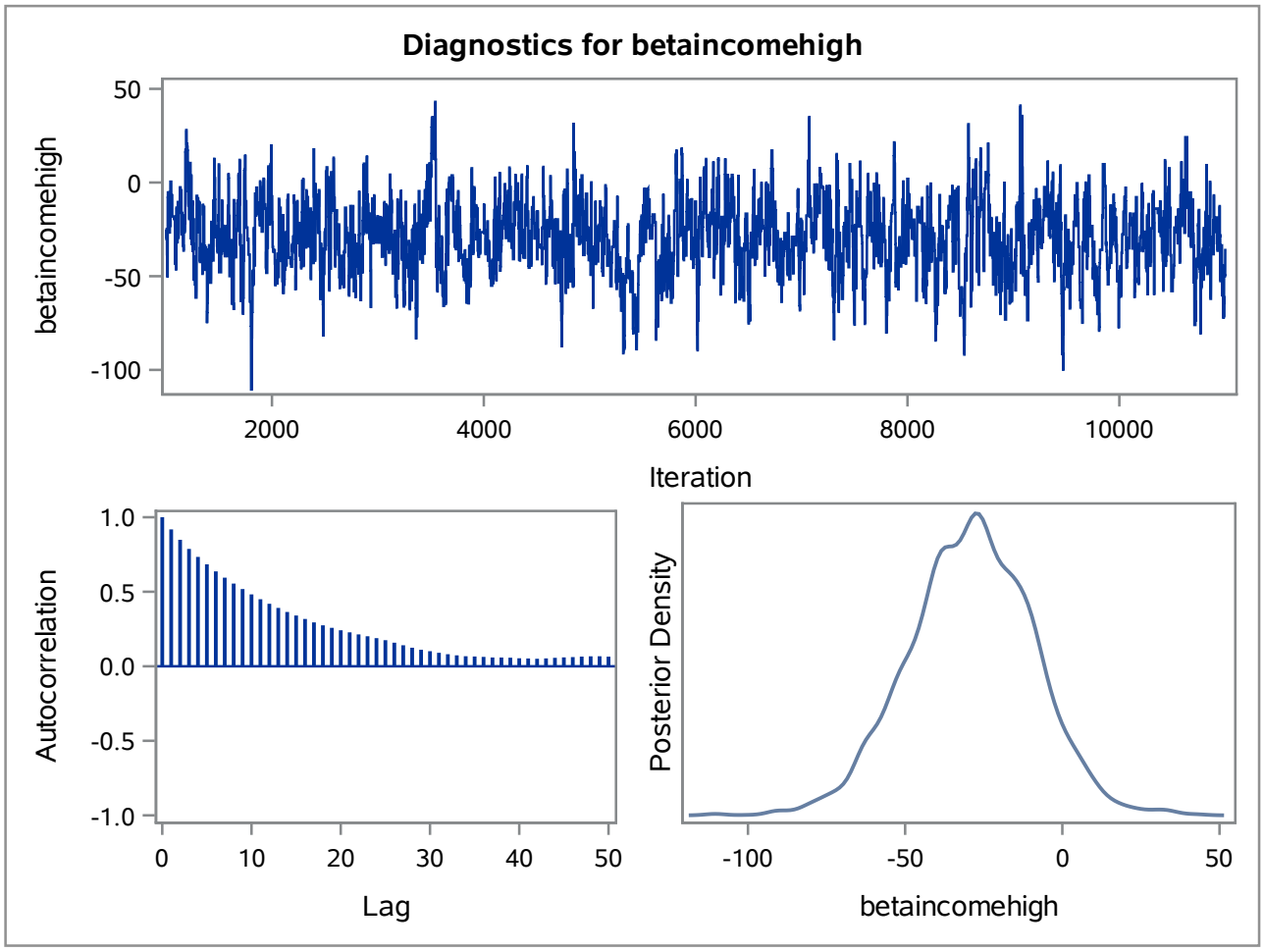
The MCMC Procedure



The MCMC Procedure



The MCMC Procedure



The MCMC Procedure