

SUPPLEMENTAL SECTION

Supplemental Table 1a. *Solutions for fixed effects for Insomnia-Model 1*

Effect	Estimate	SE	DF	t Value	Pr > |t|
Intercept	0.32	0.05	1579.0	6.64	<0.0001
Sex					
Male	-0.12	0.04	686.1	-2.77	0.006
Female	0.00	.	.	.	.
Age, centered	-0.01	0.01	725.7	-0.43	0.668
Visit year					
1	-0.03	0.06	1562.0	-0.59	0.554
3	0.06	0.06	1599.0	0.96	0.338
5	0.02	0.06	1603.0	0.31	0.759
Baseline (ref)	0.00	.	.	.	.
Diagnostic group					
AUD+	0.31	0.09	2071.0	3.64	0.000
AUD-	0.00	.	.	.	.
Alcohol symptoms	0.03	0.01	2096.0	2.21	0.027
Dx group X Visit year					
AUD+ x 1	0.05	0.10	1825.0	0.52	0.605
AUD+ x 3	-0.07	0.11	1838.0	-0.63	0.527
AUD+ x 5	0.05	0.11	1825.0	0.49	0.625
AUD+ x baseline	0.00	.	.	.	.
AUD- x 1	0.00	.	.	.	.
AUD- x 3	0.00	.	.	.	.
AUD- x 5	0.00	.	.	.	.
AUD- x baseline	0.00	.	.	.	.
Alcohol sx X Visit year					
1	-0.02	0.03	2003.0	-0.65	0.516
3	-0.01	0.03	2027.0	-0.34	0.734
5	0.01	0.03	2001.0	0.46	0.647
Baseline (ref)	0.00	.	.	.	.

Supplemental Table 1b. *Type III tests of fixed effects for Insomnia-Model 1*

Effect	Num DF	Den DF	F Value	Pr > F
Sex	1	686.1	7.65	0.01
Age, centered	1	725.7	0.18	0.67
Visit Year	3	1750	0.34	0.79
Dx group	1	839	42.04	<0.0001
Alcohol symptoms	1	2103	7.19	0.01
Dx group X Visit year	3	1728	0.67	0.57
Alcohol sx X Visit year	3	1951	0.34	0.79

Supplemental Table 1c. *Solutions for fixed effects for Insomnia-Model 2*

Effect	Estimate	SE	DF	t Value	Pr > |t|
Intercept	0.05	0.04	1388.0	1.10	0.271
Sex					
Male	-0.01	0.04	682.8	-0.19	0.850
Female	0.00	.	.	.	.
Age, centered	-0.01	0.01	701.2	-0.55	0.586
Visit year					
1	0.05	0.04	1629.0	1.29	0.197
3	0.12	0.04	1661.0	2.75	0.006
5	0.14	0.04	1657.0	3.24	0.001
Baseline (ref)	0.00	.	.	.	.
Diagnostic group					
AUD+	0.18	0.05	852.7	3.87	0.000
AUD-	0.00	.	.	.	.
Alcohol symptoms	0.00	0.01	2089.0	-0.21	0.832
Depression (BDI, no sleep)	0.04	0.00	2061.0	15.61	<0.0001

Supplemental Table 1d. *Type III tests of fixed effects for Insomnia-Model 2*

Effect	Num DF	Den DF	F Value	Pr > F
Sex	1	682.8	0.04	0.85
Age, centered	1	701.2	0.30	0.59
Visit Year	3	1633.0	4.40	0.00
Dx group	1	852.7	15.00	0.00
Alcohol symptoms	1	2089.0	0.05	0.83
Depression (BDI, no sleep)	1	2061.0	243.62	<0.0001

Supplemental Table 2a. *Solutions for fixed effects for Hypersomnia-Model 1*

Effect	Estimate	SE	DF	t Value	Pr > |t|
Intercept	-3.09	0.30	2135.0	-10.36	<0.0001
Sex					
Male	-0.79	0.17	818.6	-4.64	<0.0001
Female	0.00	.	.	.	.
Age, centered	-0.03	0.06	823.7	-0.45	0.655
Visit year					
1	0.93	0.36	2135.0	2.60	0.009
3	0.16	0.42	2135.0	0.38	0.703
5	1.08	0.36	2135.0	3.01	0.003
Baseline (ref)	0.00	.	.	.	.
Diagnostic group					
AUD+	1.89	0.40	2135.0	4.75	<0.0001
AUD-	0.00	.	.	.	.
Alcohol symptoms	0.10	0.05	2135.0	2.02	0.044
Dx group X Visit year					
AUD+ x 1	-1.17	0.49	2135.0	-2.38	0.017
AUD+ x 3	-0.55	0.54	2135.0	-1.02	0.307
AUD+ x 5	-1.76	0.50	2135.0	-3.56	0.000
AUD+ x baseline	0.00	.	.	.	.
AUD- x 1	0.00	.	.	.	.
AUD- x 3	0.00	.	.	.	.
AUD- x 5	0.00	.	.	.	.
AUD- x baseline	0.00	.	.	.	.
Alcohol sx X Visit year					
1	0.06	0.09	2135.0	0.66	0.510
3	0.12	0.09	2135.0	1.34	0.182
5	0.07	0.10	2135.0	0.78	0.437
Baseline (ref)	0.00	.	.	.	.

Supplemental Table 2b. *Type III tests of fixed effects for Hypersomnia-Model 1*

Effect	Num DF	Den DF	F Value	Pr > F
Sex	1	818.6	21.5	<0.0001
Age, centered	1	823.7	0.2	0.66
Visit Year	3	2135	1.29	0.28
Dx group	1	1160	26.6	<0.0001
Alcohol symptoms	1	2135	19.31	<0.0001
Dx group X Visit year	3	2135	4.84	0.00
Alcohol sx X Visit year	3	2135	0.66	0.58

Supplemental Table 2c. *Solutions for fixed effects for Hypersomnia (Model 2)*

Effect	Estimate	SE	DF	t Value	Pr > |t|
Intercept	-3.49	0.31	2121.0	-11.30	<0.0001
Sex					
Male	-0.60	0.17	791.1	-3.51	0.001
Female	0.00	.	.	.	.
Age, centered	-0.01	0.06	790.9	-0.26	0.798
Visit year					
1	1.06	0.36	2121.0	2.95	0.003
3	0.25	0.43	2121.0	0.59	0.558
5	1.18	0.36	2121.0	3.29	0.001
Baseline (ref)	0.00	.	.	.	.
Diagnostic group					
AUD+	1.43	0.37	2121.0	3.87	0.000
AUD-	0.00	.	.	.	.
Alcohol symptoms	0.10	0.04	2121.0	2.90	0.004
Dx group X Visit year					
AUD+ x 1	-0.92	0.44	2121.0	-2.12	0.035
AUD+ x 3	-0.10	0.50	2121.0	-0.19	0.847
AUD+ x 5	-1.48	0.46	2121.0	-3.21	0.001
AUD+ x baseline	0.00	.	.	.	.
AUD- x 1	0.00	.	.	.	.
AUD- x 3	0.00	.	.	.	.
AUD- x 5	0.00	.	.	.	.
AUD- x baseline	0.00	.	.	.	.
Depression (BDI, no sleep)	0.05	0.01	2121.0	5.84	<0.0001

Supplemental Table 2d. *Type III tests of fixed effects for Hypersomnia-Model 2*

Effect	Num DF	Den DF	F Value	Pr > F
Sex	1	791.1	12.32	0.00
Age, centered	1	790.9	0.07	0.80
Visit Year	3	2121	2.82	0.04
Dx group	1	1177	15.94	<0.0001
Alcohol symptoms	1	2121	8.4	0.00
Dx group x Visit year	3	2121	4.63	0.00
Depression (BDI, no sleep)	1	2121	34.16	<0.0001

Supplemental Table 3a. *Solutions for fixed effects for Sleep Variability-Model 1*

Effect	Estimate	SE	DF	t Value	Pr > |t|
Intercept	1.16	0.11	1619.0	10.79	<0.0001
Sex					
Male	-0.03	0.09	631.3	-0.33	0.738
Female	0.00	.	.	.	.
Age, centered	-0.03	0.03	680.6	-1.04	0.297
Visit year					
1	0.79	0.14	1381.0	5.46	<0.0001
3	0.48	0.14	1376.0	3.49	0.001
5	0.33	0.14	1407.0	2.36	0.018
Baseline (ref)	0.00	.	.	.	.
Diagnostic group					
AUD+	0.90	0.20	1752.0	4.58	<0.0001
AUD-	0.00	.	.	.	.
Alcohol symptoms	0.03	0.03	1745.0	0.81	0.420
Dx group X Visit year					
AUD+ x 1	-0.75	0.25	1523.0	-2.99	0.003
AUD+ x 3	-1.29	0.25	1551.0	-5.17	<0.0001
AUD+ x 5	-1.10	0.25	1571.0	-4.44	<0.0001
AUD+ x baseline	0.00	.	.	.	.
AUD- x 1	0.00	.	.	.	.
AUD- x 3	0.00	.	.	.	.
AUD- x 5	0.00	.	.	.	.
AUD- x baseline	0.00	.	.	.	.
Alcohol sx X Visit year					
1	-0.01	0.06	1701.0	-0.22	0.825
3	0.01	0.06	1728.0	0.25	0.800
5	-0.01	0.06	1725.0	-0.13	0.893
Baseline (ref)	0.00	.	.	.	.

Supplemental Table 3b. *Type III tests of fixed effects for Sleep Variability -Model 1*

Effect	Num DF	Den DF	F Value	Pr > F
Sex	1	631.3	0.11	0.74
Age, centered	1	680.6	1.09	0.30
Visit Year	3	1491	10.75	<0.0001
Dx group	1	767.9	1.45	0.23
Alcohol symptoms	1	1758	1.15	0.28
Dx group X Visit year	3	1467	10.02	<0.0001
Alcohol sx X Visit year	3	1687	0.06	0.98

Supplemental Table 3c. *Solutions for fixed effects for Sleep Variability (Model 2)*

Effect	Estimate	SE	DF	t Value	Pr > |t|
Intercept	1.13	0.11	1621.0	9.88	<0.0001
Sex					
Male	-0.01	0.09	646.0	-0.12	0.907
Female	0.00	.	.	.	.
Age, centered	-0.03	0.03	670.8	-1.11	0.266
Visit year					
1	0.79	0.14	1359.0	5.50	<0.0001
3	0.51	0.14	1359.0	3.69	0.000
5	0.36	0.14	1381.0	2.57	0.010
Baseline (ref)	0.00	.	.	.	.
Diagnostic group					
AUD+	0.88	0.17	1710.0	5.22	<0.0001
AUD-	0.00	.	.	.	.
Alcohol symptoms	0.02	0.02	1745.0	1.05	0.296
Dx group X Visit year					
AUD+ x 1	-0.73	0.21	1387.0	-3.54	0.000
AUD+ x 3	-1.26	0.21	1408.0	-6.12	<0.0001
AUD+ x 5	-1.11	0.22	1465.0	-5.17	<0.0001
AUD+ x baseline	0.00	.	.	.	.
AUD- x 1	0.00	.	.	.	.
AUD- x 3	0.00	.	.	.	.
AUD- x 5	0.00	.	.	.	.
AUD- x baseline	0.00	.	.	.	.
Depression (BDI, no sleep)	0.00	0.01	1679.0	0.59	0.554

Supplemental Table 3d. *Type III tests of fixed effects for Sleep Variability-Model 2*

Effect	Num DF	Den DF	F Value	Pr > F
Sex	1	646	0.01	0.91
Age, centered	1	670.8	1.24	0.27
Visit Year	3	1385	13.46	<0.0001
Dx group	1	780.7	1.07	0.30
Alcohol symptoms	1	1745	1.09	0.30
Dx group x Visit year	3	1391	14.57	<0.0001
Depression (BDI, no sleep)	1	1679	0.35	0.55