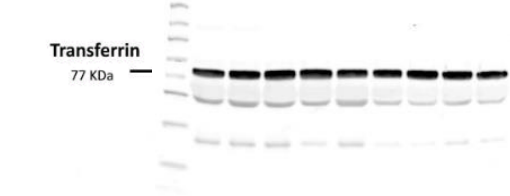
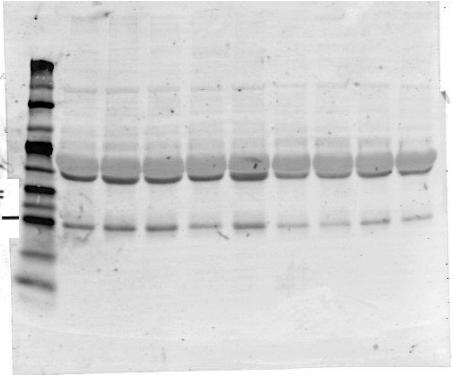
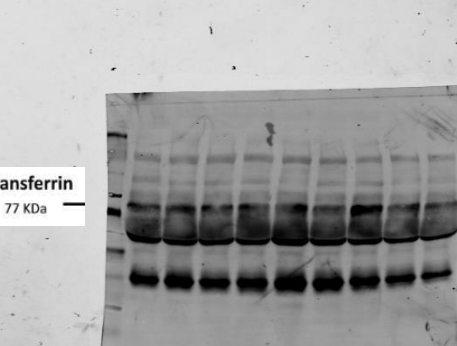
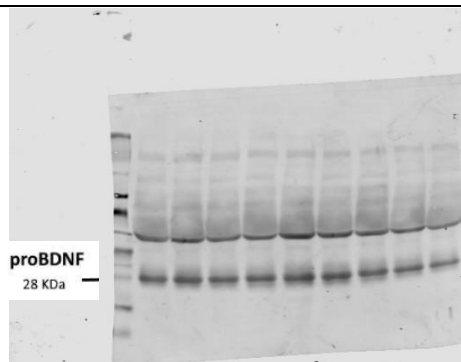
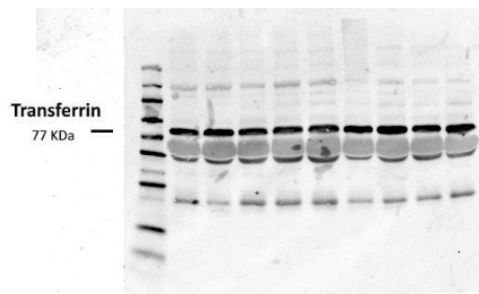


**Supplementary material Figure 1S:** Uncropped immunoblots of pro-BDNF and Transferrin corresponding to the representative images showed in Figure 1 in the main manuscript. Figure 1S and 2S correspond to the samples of Group 1) No insomnia/no cognitive decline (control group); Figures 3S and 4S correspond to samples of Group 2 (Insomnia-alone); Figures 5S and 6S correspond to samples of Group 3 (Cognitive decline alone), and Figure 7S and 8S correspond to Group 4 (Insomnia and cognitive decline).

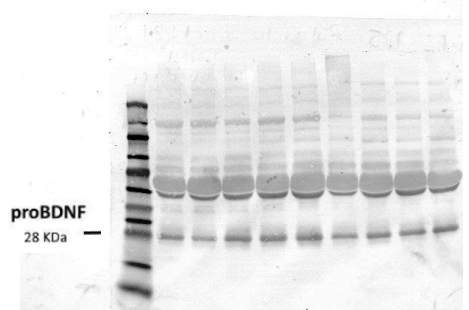
Figure	Description
	<p><b>Figure 1S.</b> Transferrin immunoblot representative of Group 1 (Control).</p>
	<p><b>Figure 2S.</b> Pro-BDNF immunoblot representative of Group 1.</p>
	<p><b>Figure 3S.</b> Transferrin immunoblot representative Group 2 (Insomnia).</p>



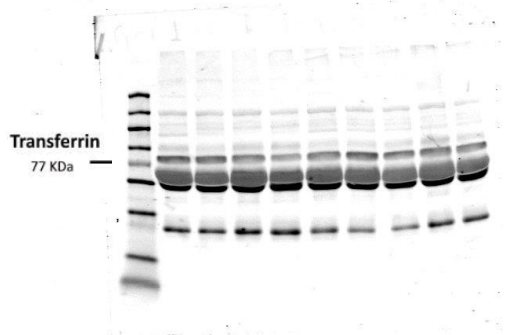
**Figure 4S.** Pro-BDNF immunoblot representative Group 2.



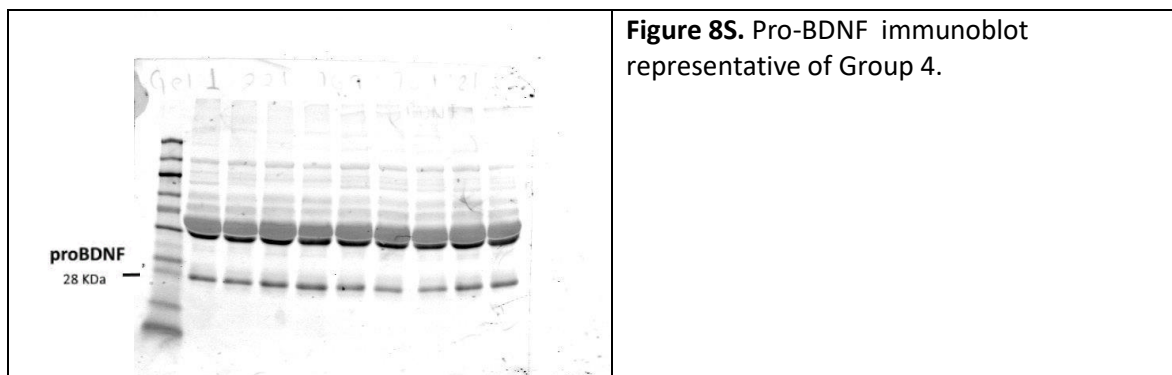
**Figure 5S.** Transferrin immunoblot representative of Group 3 (Cognitive decline).



**Figure 6S.** Pro-BDNF immunoblot Representative of Group 3.



**Figure 7S.** Transferrin immunoblot representative of Group 4 (Insomnia and Cognitive decline).



**Figure 8S.** Pro-BDNF immunoblot representative of Group 4.

**Table 1S: Adjusted linear regression model for the association between variables separately considering insomnia and cognitive decline on BDNF concentration in serum excluding individuals that consume antidepressants.**

BDNF (pg/mL)	$\beta$	S.E.	Z	p-value	95% CI
Group 2	-3925.26	1035.84	-3.79	0.000	-5955.48, -1895.05
Group 3	-1468.688	953.6808	-1.54	0.124	-3337.86, 400.49
Group 4	-2830.757	1125.707	-2.51	0.012	-5037.10, -624.41
Anxiety	123.2299	126.1338	0.98	0.329	-123.98, 370.44
Depression	32.77716	25.20955	1.30	0.194	16.63, 82.18
Sex (female)	-912.6268	809.3134	-1.13	0.259	-2498.85, 673.59
Age	-49.63	57.97761	-0.86	0.392	-163.26, 63.99
Education (years)					
<6	-1150.4	2503.48	-0.46	0.646	-6057.17, 3756.28
From 6 to 9	380.267	2442.991	0.16	0.876	-4407.90, 5168.44
From 10 to 11	-1041.0	2524.05	0.41	0.680	-5988.095, 3906.0
12 and more	186.22	2447.22	0.08	0.939	-4610.25, 4982.70
Living arrangement (accompanied)	6.86	1426.48	0.00	0.996	2788.984, 2802.71
Multimorbidity	-760.3275	996.7911	-0.76	0.446	2714.002, 1193.34
Number of Medications	161.0125	121.5344	1.32	0.185	77.19, 399.21
Anti-depressants intake				omitted	
Current smoking	-920.7924	1167.654	-0.79	0.430	3209.351, 367.76
Current alcohol consumption	469.0985	941.2218	0.50	0.618	1375.66, 2313.85
Frailty					
Pre-Frail	1570.69	840.4509	1.87	0.062	76.56317, 3217.94
Frail	2616.327	1121.223	2.33	0.020	418.7693, 4813.88

Group 1 (control)= non-insomnia and or non-cognitive decline, Group 2= Only in-somnia, Group 3= Only cognitive decline, Group 4= Both insomnia and cognitive decline.