

**Supplementary Table 3. The comparison of SF-36, PHES, and the rate correct scores in the Stroop test based on per-protocol analysis**

Variable	Baseline		Week 24		Change of values (24 weeks–baseline)		
	Value	<i>p</i> value <sup>a</sup>	Value	<i>p</i> value <sup>a</sup>	Within group difference	<i>p</i> value <sup>a</sup>	<i>p</i> value <sup>b</sup>
<b>SF-36</b>							
Physical component		0.460		0.380		0.430	
Placebo	75 (68 to 82)		77 (63 to 86)		3 (–6 to 8)		0.410
L-carnitine	71 (59 to 81)		82 (68 to 86)		5 (–1 to 13)		0.011
Mental component		0.840		0.850		0.750	
Placebo	73 (60 to 85)		76 (65 to 90)		3 (–2 to 10)		0.038
L-carnitine	76 (59 to 81)		77 (68 to 82)		7 (–3 to 12)		0.019
Total score		0.580		0.580		0.530	
Placebo	75 (63 to 82)		76 (65 to 87)		4 (–3 to 9)		0.058
L-carnitine	72 (59 to 81)		79 (67 to 86)		4 (–1 to 12)		0.004
<b>PHES</b>							
Total score		0.350 <sup>c</sup>		0.760 <sup>c</sup>		0.340 <sup>c</sup>	
Placebo	–2 (–5 to –1)		–1 (–3 to 1)		1 (–1 to 3)		0.068 <sup>d</sup>
L-carnitine	–4 (–6 to 0)		–2 (–4 to 1)		2 (–1 to 3)		< 0.001 <sup>d</sup>
MHE		0.430 <sup>e</sup>		0.780 <sup>e</sup>		0.710 <sup>f</sup>	
Placebo	9/32 (28.1)		5/32 (15.6)		5/9 (55.6)		0.096 <sup>g</sup>
L-carnitine	12/32 (37.5)		6/32 (18.8)		7/12 (58.3)		0.025 <sup>g</sup>
CHE		0.300 <sup>e</sup>		1.000 <sup>e</sup>		0.210 <sup>f</sup>	
Placebo	29/32 (90.6)		7/32 (21.9)		22/29 (75.9)		< 0.0001 <sup>g</sup>
L-carnitine	26/33 (78.8)		8/33 (24.2)		19/26 (73.1)		< 0.0001 <sup>g</sup>
<b>Stroop test (rate correct score)</b>							
Color		0.950		0.540		0.730	
Placebo	2.8 (2.2 to 3.3)		3.0 (2.2 to 3.6)		0.4 (–0.2 to 0.82)		0.046
L-carnitine	2.9 (2.0 to 3.6)		3.0 (2.1 to 3.7)		0.2 (–0.2 to 0.6)		0.100
Word		0.910		0.540		0.860	
Placebo	3.6 (3.2 to 4.0)		3.6 (3.0 to 3.8)		–0.1 (–0.5 to 0.3)		0.560
L-carnitine	3.6 (3.2 to 4.0)		3.5 (2.9 to 4.0)		–0.1 (–0.4 to 0.2)		0.230
Inhibition		0.860		0.540		0.160	
Placebo	2.4 (1.5 to 3.3)		2.4 (1.4 to 3.2)		0.2 (–0.8 to 0.6)		0.940
L-carnitine	2.2 (1.5 to 3.1)		2.6 (1.8 to 3.3)		0.3 (–0.2 to 0.5)		0.032
Inhibition/Switching		0.740		0.680		0.610	
Placebo	1.5 (1.0 to 2.1)		1.6 (1.2 to 2.5)		0.2 (–0.3 to 0.8)		0.110
L-carnitine	1.5 (1.0 to 2.1)		1.7 (1.5 to 2.1)		0.1 (–0.3 to 0.6)		0.320

Values are presented as median (interquartile range) or number (%).

SF-36, 36-Item Short Form Survey; PHES, psychometric hepatic encephalopathy score; MHE, minimal hepatic encephalopathy; CHE, covert hepatic encephalopathy.

<sup>a</sup>Comparison between the groups.

<sup>b</sup>Comparison within the groups.

<sup>c</sup>Independent *t* test or Wilcoxon rank sum test.

<sup>d</sup>Paired *t* test or Wilcoxon signed rank test.

<sup>e</sup>Chi-square test.

<sup>f</sup>Generalized Estimating Equations for the interaction effect of time × group.

<sup>g</sup>Generalized Estimating Equations for the time effect.