THE LANCET Neurology

Supplementary webappendix

Web extra material

		Treatment allocation		Total
		Control	LiCO$_3$	
Clinician guess	I strongly think he/she was prescribed active medication	1	6	7
	I think he/she was prescribed active medication	35	36	71
	I think he/she was prescribed placebo	35	22	57
	I strongly think he/she was prescribed placebo	5	0	5
Total		76	64	140

Table S1. Clinician guess of treatment allocation

		Treatment allocation		Total
		Control	LiCO$_3$	
Patient guess	I strongly think I was prescribed active medication	4	12	16
	I think I was prescribed active medication	18	17	35
	I think I was prescribed placebo	27	13	40
	I strongly think I was prescribed placebo	17	13	30
Total		66	55	121

Table S2. Patient guess of treatment allocation

Centre	Treatment allocation		Total
	Placebo	Lithium	
Birmingham	14	12	26
KCL	10	9	19
Liverpool	12	13	25
Manchester	11	11	22
NHNN	11	11	22
Newcastle	9	9	18
Oxford	13	12	25
Plymouth	9	10	19
Preston	7	9	16
Sheffield	11	11	22
	107	107	214

Table S3. Recruitment from each centre

n	Frequency	Percent
0	3	2.8
1	3	2.8
2	5	4.7
3	8	7.5
4	4	3.7
5	11	10.3
6	12	11.2
7	16	15.0
8	14	13.1
9	12	11.2
10	13	12.1
11	4	3.7
12	1	.9
13	1	.9
Total	107	100.0

Table S4. The number of measurements within the therapeutic range.
For the 104 patients achieving therapeutic range, the proportion of subsequent measurements achieving therapeutic range varied from 15% to 100% with a mean of 82.1%. Thus the majority of patients spent the majority of time in the therapeutic range. 25 patients (23.4%) had at least one measurement above the recommended upper threshold of 0.8mmol/L. Typically this was a single value that occurred while the appropriate dose for a patient was being ascertained.

Measure	Annual rate of change in health status – Separate longitudinal analysis												
	Unadjusted						Adjusted for randomisation strata					
	Control		LiCO$_3$		Difference		Control		LiCO$_3$		Difference	
		95%CI		95%CI		95%CI		95%CI		95%CI		95% CI
ALSFRS-R	-9·31	-10·05, -8·58	-9·50	-10·31, -8·70	-0·19	-1·28, 0·90	-9·31	-10·04, -8·57	-9·52	-10·32, -8·71	-0·21	-1·30, 0·88
HADS anxiety	0·12	-0·28, 0·53	0·52	0·07, 0·96	0·40	-0·21, 1·00	0·13	-0·28, 0·53	0·52	0·08, 0·97	0·40	-0·21, 1·00
HADS depression	1·27	0·92, 1·62	1·53	1·15, 1·91	0·26	-0·26, 0·78	1·27	0·92, 1·62	1·54	1·16, 1·93	0·27	-0·25, 0·79
EQ5-D	-0·26	-0·29, -0·22	-0·29	-0·32, -0·25	-0·03	-0·08, 0·02	-0·26	-0·29, -0·22	-0·29	-0·33, -0·25	-0·03	-0·08, 0·02
EuroQol	-8·88	-11·28, -6·48	-11·83	-14·44, -9·21	-2·94	-6·49, 0·60	-8·88	-11·27, -6·48	-11·97	-14·58, -9·36	-3·10	-6·64, 0·45

Table S5. Separate longitudinal analysis of rate of change in functional health status, quality of life and mental health state

Measure	Annual rate of change in health status – After joint modelling with survival data												
	Adjusted only for survival						Adjusted for survival and randomisation strata					
	Control		LiCO$_3$		Difference		Control		LiCO$_3$		Difference	
		95%CI		95%CI		95%CI		95%CI		95%CI		95% CI
ALSFRS-R	-9·47	-10·98, -8·46	-9·75	-11·62, -8·47	-0·28	-2·40, 1·67	-9·44	-10·93, -8·44	-9·74	-11·57, -8·44	-0·30	-2·43, 1·69
HADS anxiety	0·15	-0·29, 0·68	0·55	-0·11, 1·15	0·41	-0·40, 1·02	0·14	-0·30, 0·68	0·54	-0·12, 1·15	0·40	-0·40, 1·02
HADS depression	1·31	0·87, 1·79	1·58	1·08, 2·04	0·27	-0·36, 1·01	1·31	0·87, 1·81	1·60	1·09, 2·07	0·29	-0·33, 1·02
EQ5-D	-0·26	-0·33, -0·22	-0·30	-0·36, -0·24	-0·03	-0·12, 0·04	-0·26	-0·33, -0·22	-0·30	-0·36, -0·24	-0·04	-0·12, 0·04
EuroQol	-9·26	-13·54, -6·80	-12·35	-17·93, -7·86	-3·09	-9·78, 1·51	-9·21	-13·46, -6·73	-12·49	-18·20, -8·00	-3·29	-9·86, 1·30

Table S6. Joint modelling of functional health status, quality of life and mental health state with survival data