

Table DS1 Patient demographics and baseline characteristics (6-week double-blind phase)

	Olanzapine + carbamazepine (n=58)	Carbamazepine (n=60)	Total (n=118)
Age, years: mean (s.d.)	40.1 (10.7)	41.3 (11.4)	40.7 (11.0)
Gender, n (%)			
Male	22 (37.9)	28 (46.7)	50 (42.4)
Female	36 (62.1)	32 (53.3)	68 (57.6)
Current episode, n (%)			
Bipolar mixed	12 (20.7)	9 (15.0)	21 (17.8)
Bipolar manic	46 (79.3)	51 (85.0)	97 (82.2)
Current episode severity, n (%) ^a	41	43	84
Mild	2 (4.9)	0 (0)	2 (2.4)
Moderate	25 (61.0)	22 (51.2)	47 (56.0)
Severe	14 (34.2)	21 (48.8)	35 (41.7)
Individuals with severe episodes with psychotic features, n (%) ^b	31	38	69
No	14 (45.2)	21 (55.3)	35 (50.7)
Yes	17 (54.8)	17 (44.7)	34 (49.3)
Individuals with severe episodes with congruent psychotic features, n (%) ^c	17	17	34
No	0 (0.0)	2 (11.8)	2 (5.9)
Yes	17 (100.0)	15 (88.2)	32 (94.1)
YMRS total, mean (s.d.)	27.93 (6.45)	26.59 (5.64) ^d	
CGI-BP overall, mean (s.d.)	3.93 (1.71)	3.86 (1.58) ^d	
CGI-BP mania, mean (s.d.)	4.74 (0.95)	4.71 (0.93) ^d	
CGI-BP depression, mean (s.d.)	1.45 (1.05)	1.44 (0.95) ^d	
MADRS total, mean (s.d.)	7.88 (6.50)	7.47 (5.07) ^d	

CGI-BP, Clinical Global Impressions – Bipolar Version Severity of Illness; MADRS, Montgomery–Åsberg Depression Rating Scale; YMRS, Young Mania Rating Scale.
a. Includes individuals whose current episode was defined as mild, moderate and severe without psychotic features only; the percentages in the olanzapine plus carbamazepine column do not add up to 100 because of rounding.
b. Only individuals with severe episodes were included.
c. Only individuals with severe episodes with psychotic features were included.
d. Sample size n=59; only individuals with both baseline and post-baseline measures were included in these analyses.

Table DS2 Weight, laboratory parameters, and vital signs with a statistically or clinically significant change from baseline to endpoint during the 6-week double-blind phase and the 20-week open-label phase, as well as long term (26 weeks)

	Double-blind phase						Open-label phase ^b		Long term ^c	
	Olanzapine + carbamazepine		Carbamazepine		<i>P</i> ^a	<i>F</i> (d.f.)	Olanzapine + carbamazepine		Olanzapine + carbamazepine	
	<i>N</i>	Mean change (s.d.)	<i>N</i>	Mean change (s.d.)			<i>N</i>	Mean change (s.d.)	<i>N</i>	Mean change (s.d.)
Weight (kg)	57	2.96 (3.21)	59	0.36 (2.44)	<0.001	24.41 (1,101)	85	1.86 ^d (3.99)	57	3.70 ^d (5.08)
Chemistry										
Albumin (g/l)	50	-0.74 (2.88)	55	0.67 (4.17)	0.040	4.36 (1,90)	82	0.23 ^e (3.35)		
Alkaline phosphatase (U/l)	58	8.41 (14.35)	57	3.28 (17.32)	0.099	2.77 (1,100)	85	3.35 ^f (12.42)		
Urea nitrogen (mmol/l)	50	0.56 (1.18)	55	-0.04 (1.49)	0.014	6.30 (1,90)	83	0.20 ^e (1.29)		
Bilirubin, direct (µmol/l)	56	-0.50 (0.83)	56	-0.38 (0.91)	0.030	4.87 (1,97)	85	0.05 ^e (0.65)		
Bilirubin, total (µmol/l)	58	-2.64 (4.11)	57	-2.19 (4.02)	0.019	5.65 (1,100)	85	0.81 ^f (2.71)		
Prolactin (µg/l)	48	-5.86 (49.95)	51	-19.78 (31.89)	0.003	9.66 (1,84)	79	-5.12 ^e (30.24)		
Hematology										
Eosinophil (billion/l)	58	0.03 (0.18)	57	-0.04 (0.11)	0.007	7.52 (1,100)	85	-0.06 ^d (0.15)		
Hematocrit (actual count)	57	-0.01 (0.03)	57	-0.00 (0.03)	0.021	5.52 (1,99)	85	-0.00 ^e (0.03)		
Hemoglobin (mmol/l)	58	-0.07 (0.46)	57	0.07 (0.49)	0.019	5.68 (1,100)	85	0.04 ^e (0.58)		
Mean cell volume (fl)	57	-1.18 (3.19)	57	0.12 (2.95)	0.017	5.87 (1,99)	85	1.35 ^f (5.94)		
Platelet count (billion/l)	58	-12.78 (67.28)	57	-18.37 (51.22)	0.198	1.68 (1,100)	85	-15.96 ^f (49.28)		
Erythrocyte count (trillion/l)	58	-0.02 (0.27)	57	0.01 (0.30)	0.585	0.30 (1,100)	85	-0.08 ^f (0.34)		
Metabolic										
Fasting glucose (mmol/l)	56	0.08 (0.65)	52	-0.02 (1.38)	0.577	0.31 (1,93)	83	0.10 ^e (0.84)	56	0.16 ^f (0.70)
Cholesterol (mmol/l)	57	0.81 (0.88)	57	0.62 (1.02)	0.226	1.49 (1,99)	84	0.08 ^e (0.85)	57	0.84 ^d (1.11)
HDL cholesterol-dextran precipitate (mmol/l)	57	0.11 (0.22)	56	0.10 (0.23)	0.562	0.34 (1,98)	84	-0.06 ^f (0.26)	57	0.08 ^e (0.28)
LDL cholesterol (mmol/l)	57	0.46 (0.81)	56	0.58 (0.91)	0.734	0.12 (1,98)	84	0.04 ^e (0.73)	57	0.51 ^d (1.12)
Triglycerides (mmol/l)	57	0.59 (1.02)	57	0.10 (1.35)	0.008	7.23 (1,99)	84	0.17 ^e (0.94)	57	0.52 ^d (0.96)
Vital signs										
Orthostatic pulse	58	2.00 (8.55)	59	1.02 (8.02)	0.016	6.03 (1,102)	85	0.18 ^e (6.90)		
Standing pulse	58	1.76 (12.90)	59	-3.41 (9.35)	0.031	4.80 (1,102)	85	0.27 ^e (13.11)		
Temperature (°C)	57	-0.08 (0.43)	58	0.02 (0.46)	0.040	4.31 (1,100)	85	0.04 ^e (0.39)		

Note: The shaded areas in the last column mean that no analyses were done for certain parameters.
HDL, high-density lipoprotein; LDL, low-density lipoprotein.
a. Olanzapine plus carbamazepine v. carbamazepine monotherapy.
b. Changes from the end of the double-blind phase (week 6) v. the end of open-label phase (week 26).
c. Long term includes participants who were randomly assigned to olanzapine plus carbamazepine; changes from randomisation to week 26.
d. Student *t*-test *P* < 0.001.
e. Student *t*-test *P* not significant.
f. Student *t*-test *P* < 0.05.

Table DS3 incidence of treatment-emergent clinically significant changes in fasting blood glucose and lipids during the 6-week double-blind phase and the 20-week open-label phase, as well as long term (26 weeks)^a

	Double-blind phase						Open-label phase			Long term ^b		
	Olanzapine + carbamazepine			Carbamazepine			Olanzapine + carbamazepine			Olanzapine + carbamazepine		
	<i>N</i>	<i>n</i>	%	<i>N</i>	<i>n</i>	%	<i>N</i>	<i>n</i>	%	<i>N</i>	<i>n</i>	%
Fasting glucose												
Normal to high	52	4	7.7	44	1	2.3	71	7	9.9	52	7	13.5
Total cholesterol												
Normal to borderline	24	13	54.2	25	10	40.0	14	7	50	24	17	70.8
Normal to high	24	6	25.0	25	2	8.0	14	1	7.1	24	9	37.5
Borderline to high	–	–	–	–	–	–	22 ^c	9 ^d	40.9	9	9	100.0
LDL cholesterol												
Normal to borderline	26	11	42.3	30	11	36.7	19	17	89.5	26	16	61.5
Normal to high	26	7	26.9	30	6	20.0	19	1	5.3	26	9	34.6
Borderline to high	–	–	–	–	–	–	21 ^c	9 ^d	42.9	9	7	77.8
HDL cholesterol												
Normal to low	24	1	4.2	18	2	11.1	25	1	4.0	24	2	8.3
Fasting triglycerides												
Normal to borderline high	34	7	20.6	31	5	16.1	38	15	39.5	34	16	47.1
Normal to high	34	7	20.6	31	1	3.2	38	10	26.3	34	11	32.4
Normal to extreme high	34	0	0.0	31	0	0	38	1	2.6	34	1	2.9
Borderline to high	–	–	–	–	–	–	11 ^c	5 ^d	45.5	5	2	40.0

For reference values for fasting blood glucose and lipids, see e.g. Tables II.2-4, II.3-2 and VII.2-4 in <http://www.circ.ahajournals.org/cgi/reprint/106/25/3143>
HDL, high-density lipoprotein; LDL, low-density lipoprotein; *N*, total number of participants who had a normal value on all baseline measures and had at least one post-baseline measure (unless otherwise specified); *n*, total number of participants who had normal value at all baseline measures and had an abnormal post-baseline measures (unless otherwise specified); – no individuals met the criteria.
a. Criteria for clinically significant treatment-emergent changes in glucose and lipids are based on the American Diabetic Association¹⁹ and National Cholesterol Education Program¹⁸ guidelines respectively.
b. Long-term assessments included individuals who were randomly assigned to olanzapine plus carbamazepine and represent changes from randomisation to week 26.
c. *N*—total number of at-risk individuals (i.e. those with borderline value on at least one baseline measure and with all other baseline values not reaching the ‘high’ criteria) who had at least one post-baseline measure.
d. *n*—number of at-risk individuals with abnormal post-baseline measures.