

Data supplement to Bartoli et al. Allopurinol as add-on treatment for mania symptoms in bipolar disorder: systematic review and meta-analysis of randomised controlled trials. Br J Psychiatry doi: 10.1192/bjp.bp.115.180281

Table DS1. Characteristics of the studies included in the meta-analysis

Study reference	Location	Setting	Participants	N of screened / randomised / analysed / completing subjects	Allopurinol dosage (mg/day)	Standard treatment	Follow-up duration
Akhondzadeh et al., 2006	Roozbeh Psychiatric Hospital, Tehran, Iran	Inpatients	Subjects (19 to 49 yrs) with bipolar disorder and a current manic episode, according to DSM-IV criteria and a YMRS score ≥ 20	104 / 82 / 82 / 75	300	Lithium + haloperidol	8 weeks
Fan et al., 2012	Cedars-Sinai Medical Center, Los Angeles, California, USA	Outpatients	Subjects with bipolar disorder and a current manic or mixed-manic episode, according to MINI and a YMRS score ≥ 14	40 / 27 / 23* / 21	300 (first week) and 600 (following weeks)	Mood stabilizers and/or atypical antipsychotics	6 weeks
Jahangard et al., 2014	Research Center for Behavioral Disorders and Substances Abuse, Frashchian Hospital, Hamadan University of Medical Sciences, Hamadan, Iran	Inpatients	Subjects (18 to 40 yrs) with bipolar disorder and a current manic episode, according to DSM-IV criteria and a YMRS score of ≥ 28	67 / 60 / 57† / 50	600	Sodium valproate	4 weeks
Machado-Vieira et al., 2008	Espirita Hospital of Porto Alegre and Federal University of Sta Maria, RGS, Brazil	Inpatients	Subjects (18 to 65 yrs) with bipolar disorder and a current manic episode, according to SCID and a YMRS score ≥ 22	243 / 120 / 91√ / 69	600	Lithium	4 weeks
Weiser et al., 2014	25 centres in Romania	Inpatients and outpatients	Subjects (18 to 65 yrs) with bipolar disorder and a current manic or mixed episode, according to SCID	225 / 180 / 180 / 149	300	Mood stabilizers and/or antipsychotics	6 weeks

DSM = Diagnostic and Statistical Manual of Mental Disorders; MINI = Mini-International Neuropsychiatric Interview; SCID = Structured Clinical Interview for DSM; YMRS = Young Mania Rating Scale

* Four subjects (three randomized to allopurinol, one to placebo) were excluded from primary analyses, for unknown reasons.

† Three subjects (all randomized to placebo) were excluded from primary analyses, since dropped before receiving the study treatment (one left hospital, two with no reason).

√ 29 subjects (15 randomized to allopurinol, 14 to placebo) were excluded from primary analyses, since early discontinued (main reasons were lack of efficacy and non-compliance).

Table DS2. Summary of findings

Continuous outcome	Available studies	Subjects treated with allopurinol	Subjects treated with placebo	SMD (95%CI)	P	I²
Efficacy						
Overall analysis	5	218	215	-0.34 (-0.60 to -0.09)	0.007	35.5%
Manic episode	3	116	114	-0.52 (-0.78 to -0.25)	<0.001	0%
Manic or mixed episodes	2	102	101	-0.07 (-0.34 to 0.21)	0.640	0%
Dichotomous outcomes	Available studies	Event occurring among subjects treated with allopurinol	Event occurring among subjects treated with placebo	RR (95%CI)	P	I²
Remission	2	66 / 90	42 / 87	1.51 (1.20 to 1.90)	<0.001	0%
Discontinuation	5	52 / 236	53 / 233	0.91 (0.66 to 1.26)	0.575	0%
Side effects						
asthenia	2	15 / 86	14 / 87	1.10 (0.58 to 2.09)	0.777	0%
diarrhoea	3	15 / 176	17 / 177	0.90 (0.49 to 1.68)	0.748	0%
dizziness	3	25 / 176	21 / 177	1.12 (0.60 to 2.10)	0.730	21.2%
headache	3	15 / 176	21 / 177	0.69 (0.29 to 1.66)	0.411	33.2%
somnolence	3	37 / 176	37 / 177	1.27 (0.54 to 2.99)	0.587	46.3%

Fig. DS1. Review authors' judgements about each risk of bias for included studies.

	Random sequence generation (selection bias)	Allocation concealment (selection bias)	Blinding of participants and personnel (performance bias)	Blinding of outcome assessment (detection bias)	Complete outcome data (attrition bias)	Complete reporting (reporting bias)	Absence of potential conflicts of interest	Comparable treatments (indirectness bias)
Akhondzadeh et al, 2006	+	+	+	+	+	?	+	+
Fan et al, 2012	?	?	+	+	+	-	-	-
Jahangard et al, 2014	+	+	+	+	+	-	+	+
Machado-Vieira et al, 2008	?	+	+	+	-	?	+	+
Weiser et al, 2014	?	+	+	+	+	+	+	-

Fig. DS2. Review authors' judgements about each risk of bias presented as percentages across included studies.

