Bipolar Disorder: Maintenance Therapy with Mood Stabilizers in the Outpatient Setting

All patients with bipolar disorder (I or II) as well as other specified bipolar disorder should be on maintenance therapy[1] (the earlier in the course of illness the better)[2]

- Goals: symptom reduction, prevention of acute mood episodes, suicide risk and attempt reduction, psychosocial function improvement, reduced violent behavior
- Concomitant psychotherapy (individual or group) is encouraged to help prevent relapse and promote medication adherence
- First-line: maintain on regimen that successfully treated an acute mood episode[3]
- Pharmacotherapy should be chosen via a shared decision making approach between the clinician and the patient based on prior trial and/or success with specific medications, patient comorbidities, values, and preferences
    - Lithium, anticonvulsants, second generation antipsychotics (table on back of this page)
- Treatment resistant or refractory patients
    - Electroconvulsive therapy: no absolute contraindications
    - Clozapine: associated with metabolic syndrome, agranulocytosis – must do CBC every 1-4 weeks
        - Baseline testing: WBC count, absolute neutrophil count, weight, glucose, lipids, BP, prolactin, pregnancy
    - Benzodiazepines (clonazepam, lorazepam): maintenance therapy for patients with catatonia that remits with benzodiazepine use; does not have to be indefinite; can do a benzodiazepine taper over time

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[1] Goodwin GM, et al. Evidence-based guidelines for treating bipolar disorder: Revised third edition recommendations from the British Association for Psychopharmacology. J Psychopharmacol. 2016 Jun;30(6):495-553. doi: 10.1177/0269881116636545. Epub 2016 Mar 15.

[2] Kessing LV, et al. Starting lithium prophylaxis early v. late in bipolar disorder. Br J Psychiatry. 2014 Sep;205(3):214-20. doi: 10.1192/bjp.bp.113.142802. Epub 2014 Jul 10.

[3] McElroy SL, et al. Relationship of open acute mania treatment to blinded maintenance outcome in bipolar I disorder. J Affect Disord 2008; 107:127.

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	Baseline testing	Side effects	Starting dose	Target serum level	Surveillance	Associated risks	Avoid with
Lithium	Urinalysis, BUN, Cr, thyroid function, Ca, CBC, electrolytes, pregnancy, EKG	Nausea, tremor, polyuria, polydipsia, weight gain, loose stools	300 mg BID or TID	0.8-1.2 mEq/L; Measure level 5-7 days after dose change 12 hrs after last dose usually in morning	Lithium level every 6-12 mos; Urinalysis, BUN, Cr every 2-3 mos during first 6 mos and every 6-12 mos after; Thyroid function 1-2x during first 6 mos and every 6-12 mos after; Ca yearly	Arrhythmia, renal impairment, thyroid impairment, cognitive impairment	Renal disease
Valproic acid	LFTs, CBC, electrolytes, PT, pregnancy	Weight gain, nausea, vomiting, hair loss, bruising, tremor	250 mg BID or TID	50-125 mcg/mL (most effective level is 80-125 mcg/mL); Measure level 2-5 days after dose increase 8-12 hrs after last dose usually in morning	LFTs, platelets, serum valproic acid level every 6-12 mos	Suicidality, liver failure, thrombocytopenia, pancreatitis	Liver disease, pregnancy
Carbamazepine	Screen for HLA-B*1502 allele in Asians, CBC, LFTs, electrolytes, BUN, Cr, urinalysis, pregnancy, thyroid function	Nausea, vomiting, diarrhea, hyponatremia, rash, pruritus, fluid retention	100-200 mg daily or BID	4-12 mcg/mL (most effective level is 8-12 mcg/mL)	Monitor for rash in first 8 weeks, LFTs, CBC, Na, serum carbamazepine level every 6-12 mos	Suicidality, leukopenia, Stevens-Johnson syndrome, toxic epidermal necrolysis, liver enzyme induction	
Aripiprazole	Weight, waist circumference, BP, glucose, lipids, EKG, prolactin, pregnancy	Extrapyramidal signs, headache, nausea, vomiting, constipation, insomnia, akathisia	10-30 mg daily		Weight at 4, 8, 12 weeks and then quarterly; waist circumference, BP, and glucose, at 12 weeks and then annually; lipids at 12 weeks and then at least every 5 years		Extra-pyramidal sign sensitivity
Risperidone	Weight, waist circumference, BP, glucose, lipids, EKG, prolactin, pregnancy	Weight gain, glucose intolerance, diabetes, hyperlipidemia, extrapyramidal signs, prolactin elevation, akathisia, sedation, dyspepsia, nausea	1-2 mg daily or divided into 2 doses		Weight at 4, 8, 12 weeks and then quarterly; waist circumference, BP, and glucose, at 12 weeks and then annually; lipids at 12 weeks and then at least every 5 years		Extra-pyramidal sign sensitivity, obesity
Olanzapine	Weight, waist circumference, BP, glucose, lipids, EKG, prolactin, pregnancy	Weight gain, glucose intolerance, diabetes, hyperlipidemia, extrapyramidal signs, sedation, constipation, dry mouth, orthostatic hypotension	10-15 mg daily or divided into 2 doses		Weight at 4, 8, 12 weeks and then quarterly; waist circumference, BP, and glucose, at 12 weeks and then annually; lipids at 4, 12 weeks and then at least every 5 years		Obesity
Quetiapine	Weight, waist circumference, BP, glucose, lipids, EKG, prolactin, pregnancy	Weight gain, glucose intolerance, diabetes, hyperlipidemia, headache, dry mouth, constipation, sedation, dizziness, orthostatic hypotension	100-200 mg daily or divided into 2 doses		Weight at 4, 8, 12 weeks and then quarterly; waist circumference, BP, and glucose, at 12 weeks and then annually; lipids at 4, 12 weeks and then at least every 5 years		Obesity

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[4] Stovall, J. Bipolar disorder in adults: Choosing pharmacotherapy for acute mania and hypomania. UpToDate. Last updated Nov 13, 2018.
[5] Post, RM. Bipolar disorder in adults: Choosing maintenance treatment. UpToDate. Last updated Nov 02, 2017.
[6] Janicak, PG. Bipolar disorder in adults and lithium: Pharmacology, administration, and management of side effects. UpToDate. Last updated Jul 13, 2018.
[7] Stovall, J. Bipolar mania and hypomania in adults: Choosing pharmacotherapy. UpToDate. Last updated Dec 11, 2018.