



## ANTIMANIA DRUGS/MOOD STABILISERS

### Top tips for MURs

- Advise patient that full prophylactic effect may not occur for six to twelve months after initiation and that long-term treatment of bipolar affective disorder (BAD) should continue for at least two years from the last manic episode and up to five years if the patient has risk factors for relapse
- Counsel patient on why they need to take medication regularly and the importance of attending regular monitoring and blood test appointments
- Check that patients are having physical health checks at least annually to include weight, BMI, blood pressure, cholesterol, alcohol consumption and smoking status
- Check that patient has had blood glucose levels and lipid profile tests every three months (if taking antipsychotics – see antipsychotic MUR quick guide)
- Check patient has a lithium booklet / alert card and counsel on correct administration / OTC drugs to avoid e.g NSAIDs (see MUR quick guide on lithium for more detail)
- Ensure that lithium and carbamazepine preparations are prescribed by proprietary name
- Check that patients taking lithium have plasma lithium levels tested every three months to check that lithium levels are correct (usually between 0.4mmol/l and 1.0mmol/l)
- Check that patients have blood tests every six months to monitor thyroid function, renal function and calcium levels
- Check that women of child bearing age on valproate are using adequate contraception
- Counsel patient on signs and symptoms of complications that need referral (see red flags overleaf) and on common side effects (see overleaf)
- Signpost patient to local services or charities supporting patients with mental illness e.g. Mind and Hafal
- Report any relevant adverse drug reactions to the Yellow Card Scheme

### What are they used for?

Anti-manic drugs and mood-stabilisers are used to treat and to prevent the recurrence of episodes of mania, hypomania and depression associated with bipolar affective disorder. Bipolar affective disorder is characterised by fluctuations in mood, ranging from euphoria (mania) to severe depression. An antidepressant may be required for the treatment of bipolar depression, however antidepressants should only be used with caution and a mood stabiliser co-prescribed to reduce the risk of precipitating a manic episode.

### Lifestyle issues

- Counsel patient on need to avoid alcohol and recreational drugs
- Counsel patient on healthy eating, exercise & weight loss (if BMI > 25kg/m<sup>2</sup>) - reduce saturated fat and salt intake, avoid salt substitutes, increase oily fish intake, complete 30 minutes of aerobic exercise three to five times a week, reduce caffeine intake to no more than 5 cups a day and recommend 5 portions of fruit and vegetables a day as appropriate
- Advise patients who smoke of the benefits of stopping smoking and how to access enhanced smoking cessation services in community pharmacy and GP practices
- Counsel patient on the importance of good sleep hygiene and a regular lifestyle. Recommend 7 to 9 hours sleep each night
- Counsel patient on avoiding any dietary changes which reduce or increase sodium levels (do not go on a low salt diet or take sodium based antacids / urinary alkalinising agents)

### How do antimanic drugs work?

<b>Lithium</b>	May alter intracellular second messenger systems, and modulate dopaminergic and serotonergic neurotransmission, however the exact way it works is unknown.
<b>Second-generation or atypical antipsychotic drugs (asenapine, olanzapine, quetiapine, risperidone, aripiprazole)</b>	Selective dopamine, 5-HT <sub>2A/C</sub> , alpha 1, histamine and muscarinic receptor antagonists. Aripiprazole is a dopamine D <sub>2</sub> and 5-HT <sub>1A</sub> partial agonist and 5-HT <sub>2A</sub> receptor antagonist.
<b>Carbamazepine</b>	Reduces abnormal electrical activity in the brain by inhibiting voltage-dependent sodium channels. Reduces glutamate release and noradrenaline and dopamine turnover in addition to an effect on other neurotransmitters.
<b>Valproate</b>	Complex and not fully understood, inhibits the breakdown and reuptake of the inhibitory neurotransmitter gamma aminobutyric acid (GABA).
<b>Lamotrigine</b>	Membrane stabilising effect and reduced glutamate release mediated through sodium channel blockade.





## Red flags that need referral

- Any symptoms of lithium toxicity (nausea/vomiting, diarrhoea, blurred vision, coarse tremor, drowsiness, muscular weakness or ataxia)
- Any symptoms of carbamazepine toxicity (increased dizziness, diplopia, drowsiness, ataxia, nausea and headache) or symptoms of possible carbamazepine induced hyponatraemia (dizziness, drowsiness, confusion and cramps)
- Any skin rashes or reactions (can be fatal)
- Any symptoms of renal failure (tiredness, oedema, shortness of breath, itchy skin, nausea)
- Any symptoms of blood dyscrasia (fever, sore throat, stomatitis, signs of infection or unexplained bruising)
- Any symptoms of jaundice (yellowing of the skin or eyes)
- Any chest pain, confusion, vision problems or loss of contact with reality
- Any symptoms of pancreatitis (abdominal pain, nausea or vomiting)
- Pregnancy, as risk of teratogenicity in first trimester or breast feeding, as risk of toxicity to infant

## What are the common (or severe) side effects to look out for?

Common side effects	Recommendation
Drowsiness	Refer to prescriber if symptoms not tolerated.
Taste disturbance, tongue swelling, glossodynia, anxiety, speech disturbance, dysphagia ( <b>asenapine</b> )	Refer to prescriber if symptoms not tolerated.
Gastrointestinal disturbances (nausea, vomiting, diarrhoea, dyspepsia) - <b>particularly at initiation of therapy and sign of lithium toxicity</b>	Advise newly prescribed patient that side effects usually only last 3 weeks, if not tolerated refer to prescriber. If gastrointestinal disturbance are combined with other signs of lithium toxicity e.g tremor, blurred vision, drowsiness; refer urgently to A&E.
Tremor ( <b>valproate &amp; lithium</b> )	Refer to prescriber if not tolerated. Coarse tremor is a sign of lithium toxicity and requires urgent referral.
Weight gain <b>seen with some antipsychotics, valproate &amp; lithium</b>	Give dietary advice (weight gain usually associated with increased appetite). Refer to prescriber if not tolerated.
Polydipsia/polyuria <b>seen with lithium</b>	Avoid excess alcohol, drink water in moderation. Suck boiled sweets. Refer to prescriber if not tolerated.
Metallic taste in mouth ( <b>lithium</b> )	Advise patient that side effects usually only last 3 weeks, if not tolerated refer to prescriber.
Hypotension/dizziness - <b>more commonly seen with antipsychotic drugs and carbamazepine</b>	Advise patient to sit up and stand slowly first thing in the morning.
Vision disturbance <b>seen with carbamazepine and antipsychotics</b>	Anticholinergic effects usually resolve within 3 weeks. May also be a sign of carbamazepine toxicity – urgent referral.
Alopecia ( <b>valproate</b> )	Inform patient that loss is transient, but regrowth may be curly.
Akathisia (restlessness), dystonia, parkinsonism, tardive dyskinesia - <b>seen with certain antipsychotics</b>	Urgent referral to prescriber if new or no longer tolerated.
Blood disorders (unexplained bleeding, bruising, infection, rash, mouth ulcers or fever) - <b>seen with carbamazepine, lamotrigine and valproate</b>	Urgent referral to prescriber. Recommend immediate blood count.
Skin disorder / rashes - <b>seen with carbamazepine lamotrigine and valproate</b>	Potentially life threatening. Urgent referral to prescriber.
Jaundice (yellow skin or eyes)	Urgent referral to prescriber.

## Potential serious drug interactions?

Interactions involving lithium and carbamazepine may result in potentially life threatening toxicity. Drugs used to treat mania interact with many other medications such as: ACE inhibitors, antibacterials, alcohol, analgesics (especially non-steroidal anti-inflammatory drugs with lithium), anti-arrhythmics, anticoagulants, antiepileptics, antidepressants (including St John's Wort), anti-arrhythmics, antimalarials, antifungals, antivirals, theophylline, diuretics, bupropion, other antipsychotics, hormone antagonists, sympathomimetic drugs, lipid lowering drugs, thyroid hormones, anxiolytics and hypnotics - **See BNF Appendix 1: Interactions for more details**

## Where can you find more information?

- Distance learning pack "Introduction to Pharmaceutical Care in Mental Health" found on the WCPPE website (<http://www.wcppe.org.uk>)
- The National Centre for Mental Health (NCMH) website has downloadable patient information leaflets written by specialist mental health pharmacists and other information (<http://ncmh.info>)
- NICE guidance: CG38 Bipolar disorder can be found on NICE website (<http://www.nice.org.uk>)
- Clinical Knowledge Summary Bipolar disorder can be found on CKS website (<http://cks.nice.org.uk>)
- NHS choices – Bipolar disorder can be found on the NHS website ([http://www.nhs.uk/Conditions/Bipolar\\_disorder/Pages/Introduction.aspx](http://www.nhs.uk/Conditions/Bipolar_disorder/Pages/Introduction.aspx))