THE SHEFFIELD AREA PRESCRIBING GROUP

Prescribing Guideline

For

Medication for prophylactic treatment of bipolar disorder in adults

Prescribing guideline developed by:

Faith Kauseni, Specialist Pharmacist, Sheffield Health and Social Care FT
Chris Hall, Interim Chief Pharmacist, Sheffield Health and Social Care FT

Heidi Taylor, Clinical Effectiveness Pharmacist, NHS Sheffield CCG

Date approved: February 2018
Interim updates June 2018, January 2020 and June 2024

Review Date: 5 years from approval

Endorsed by the MOC at SHSC - January 2020

*Main amendments;
June 2018 – information around sodium valproate added.
January 2020 – Appendix 2 added, carbamazepine monitoring amended and information on the use of lithium in pregnancy added to appendix 1
June 2024 – valproate guidance updated; Approved at IMOC

Prescribing guideline for medication for prophylactic treatment for bipolar disorder in adults

Statement of Purpose

This prescribing guideline has been written to enable the continuation of care by primary care clinicians of patients initiated and stabilised on medication for prophylaxis treatment of bipolar disorder, by the psychiatrists within the Community Mental Health Teams (CMHT) at Sheffield Health and Social Care NHS Trust (SHSC).

Primary care clinicians will only be requested to take over prescribing medication for prophylaxis treatment for bipolar disorder within its licensed indication unless specifically detailed otherwise.

Responsibilities of Secondary Care Clinician / CMHT

- Assess and diagnosis
- To discuss benefits and side effects of treatment with the patient/carer and obtain informed consent. This is particularly important for unlicensed products.
- To prescribe as part of a treatment pathway, which will include psychological support
- To initiate treatment in appropriate patients
- Special considerations apply to valproate and lithium – see below for details

Special considerations that apply to valproate

From January 2024, valproate must not be initiated in new patients (male or female) younger than 55 years, unless two specialists* independently consider and document that there is no other effective or tolerated treatment, or there are compelling reasons that the reproductive risks do not apply. This decision must be documented, and a Risk Acknowledgement Form (female or male) completed and shared with the GP, and patient.

See below for the additional responsibilities required for women of childbearing potential.

Note: Male patients only require a Risk Acknowledgement form at initiation, NOT annually.
Male patients established on valproate prior to January 2024 should be made aware of the risk of male infertility and testicular toxicity in animals associated with valproate therapy and supplied with the Patient Guide.

*A specialist prescriber, who initiates treatment, is a consultant neurologist, psychiatrist or paediatrician who regularly manages complex epilepsy or bipolar disorder.
The second specialist signatory could include the following:

- Consultant adult or paediatric neurologists
- Consultant psychiatrists
- Speciality and associate specialist doctors in psychiatry and neurology
- Speciality doctors in psychiatry
- Paediatrician with special interest in epilepsy
- Paediatrician who regularly manages complex epilepsy or bipolar disorder
- Epilepsy Nurse Consultant
- Specialist Nurses in relevant disciplines
- Specialist Pharmacists in relevant disciplines

Women of childbearing potential

- From January 2024, at their next annual specialist review, women of childbearing potential and girls receiving valproate should be reviewed using the revised valproate Annual Risk Acknowledgement Form. A second specialist signature will be needed if the patient is to continue on valproate. Subsequent annual reviews only require one specialist signature.
- The valproate decision support tool can be used to support discussions: Bipolar disorder: is valproate the right treatment for me?
- If valproate is being used, the conditions of the Pregnancy Prevention Programme (PPP) must be fulfilled, as applicable, ensuring:
  - Pregnancy is excluded before treatment initiation.
  - The patient (or their carer) is made aware of, and understands, the risks and is supplied with the Patient Guide
  - The patient understands the need to comply with effective* contraception throughout treatment (if necessary) and undergo pregnancy testing when required.

    * Highly effective contraception is preferred, including: the copper IUD, levonorgestrel-releasing IUS and progestogen implant. See the MHRA aide-memoir table for details on contraceptive efficacy and pregnancy testing requirements.
  - All patients are reviewed at least annually to re-evaluate treatment, contraception (if necessary), discuss risks and sign an updated Annual Risk Acknowledgement Form. Copies must be forwarded to the patient's GP.
  - If the PPP is not required*, the reason is documented in Step 1 of the Annual Risk Acknowledgement Form and shared with the patient and the patients GP.
- Further details on the responsibilities of the specialist are given in the Guide for Healthcare professionals.

* **PPP not required**

If the reason is **permanent** (e.g. hysterectomy, bilateral oophorectomy, post menopause) Step 1 of the updated ARAF only needs to be completed on one occasion.

Where the **absence of risk may change** (e.g. pre-menarche, long-term monogamous relationship with a vasectomised male partner, same sex relationship and not planning pregnancy, intellectual disability), the position should be reviewed at least annually in case of changes in circumstances and at least Step 1 of the ARAF completed.

The decision around the absence of risk of pregnancy can be made by the specialist prescriber alone on consideration of the patient's individual circumstances (without the need for countersignature). [This has been confirmed by the MHRA]

Note: Female sterilisation (tubal ligation) is a highly effective form of contraception. However, locally it has been agreed as an exemption from the conditions of the PPP. GPs must inform secondary care if a reversal procedure is performed.

Special considerations that apply to lithium

- If prescribing lithium, provide patient with initial information about its side effects and toxicity: how to avoid toxicity and how to recognise it. The patient booklet, alert card and record book developed by the NPSA will be given to all

patients initiated on lithium. Where practical, details of patient, therapy and contacts should be completed on issue
- If prescribed lithium, routine monitoring until the lithium level is stable, at an acceptable level
- If prescribing lithium, inform GP of the brand being prescribed
- To prescribe the medication until the patient is stable and the GP has indicated they agree to continue to prescribe under prescribing guideline arrangements.
- If prescribed an antipsychotic, monitoring the efficacy and tolerability of antipsychotic medication for at least the first 12 months or until the person's condition has stabilised, whichever is longer
- To carry out an annual health check for patients under sole care of secondary care services and share results with patient's GP.
- To contact patient's GP to request prescribing under prescribing guidelines and send a link to or copy of the prescribing guideline.
- To advise the GP regarding continuation of treatment, including the length of treatment and monitoring requirements.
- To be available, to discuss any concerns with the GP regarding the patient's therapy. In the event of deterioration in mental state, an early appointment will be available (see Request for prescribing of prophylactic treatment for patients with bipolar disorder for more details).
- Where appropriate, counsel patient regarding advice if planning to conceive or becomes pregnant.

Responsibilities of the primary care clinician

- To refer appropriate patients to Single Point of Access for assessment
- To agree to prescribe for patients in line with the prescribing guideline agreement and communicate this to the overseeing psychiatrist.
- To report any adverse reaction to the MHRA and the referring consultant if appropriate
- To undertake prescribing and monitoring as per prescribing guideline
- To inform the consultant if the patient discontinues treatment for any reason, see above
- To seek the advice of the consultant if any concerns with the patient's therapy, details will be provided in the 'request for prescribing' letter.
- To conduct an annual face to face medication review or more frequent if required.
- To conduct an annual health check and share results with patients secondary care services if patient still under shared care.
- In the event that the GP is not able to prescribe, or where the shared care is agreed but the consultant is still prescribing certain items e.g. Hospital only product; the GP will provide the consultant with full details of existing therapy promptly on request.
- For medication supplied from another provider GPs are advised to follow recommendations for Recording Specialist Issued Drugs on Clinical Practice Systems
- Any concerns about management should be discussed / referred to psychiatrist secondary care.
- Be aware of drug interactions (see BNF for latest advice)
- Special considerations apply to valproate and lithium – see below for details

Special considerations that apply to valproate

From January 2024, **all new requests** to prescribe valproate should be accompanied by a completed Risk Acknowledgement Form (female or male), signed by two specialists. See above for the definition of appropriate specialists.
See below for the additional responsibilities required for women of childbearing potential.

Note: Male patients only require a Risk Acknowledgement form at initiation, NOT annually.
Male patients established on valproate prior to January 2024 should be made aware of the risk of male infertility and testicular toxicity in animals associated with valproate therapy and supplied with the Patient Guide.

Women of childbearing potential

- Ensure that all women and girls who are of childbearing potential have been reviewed by a specialist in the last year, and a valid Annual Risk Acknowledgement Form has been received and uploaded to the patient record. If they have not been reviewed, refer them urgently for assessment. An appropriate SNOMED code should be assigned – see Valproate Guidance for Primary Care for more information.
- Ensure all women of childbearing potential and girls receiving valproate who are reviewed by a specialist after January 2024 have been reviewed using the revised valproate Annual Risk Acknowledgement Form. A second specialist signature will be needed if the patient is to continue on valproate. Subsequent annual reviews only require one specialist signature.
- Put in place a robust mechanism to ensure that the ARAF is in date when prescriptions are issued and to ensure that patients are recalled or referred back to secondary care before the expiry date. However, a prescription for sodium valproate should not be stopped, simply due to a delay in specialist review/ ARAF completion, as this may put the patient at risk.
- Ensure women of childbearing potential who are taking sodium valproate are complying with the pregnancy prevention programme (where applicable) and:
    - Have a copy of the Patient Guide
    - Are using effective contraception* and understand the need to comply with effective contraception throughout treatment with valproate. For patients not using highly effective contraception, the risk of pregnancy should be assessed prior to issuing each valproate prescription; pregnancy testing may be required.

      * Highly effective contraception is preferred, including: the copper IUD, levonorgestrel-releasing IUS, progestogen implant. See the MHRA aide-memoir table for details on contraceptive efficacy and pregnancy testing requirements.
    - Remind the patient to contact you immediately if they suspect there has been a problem with their contraception or if they may be pregnant.
- Further details on the responsibilities of the GP are given in the Guide for Healthcare professionals. See RCGP / ABN / RCP Guidance Document on application of MHRA guidelines, in individual cases for more information. Seek specialist advice if concerned.

- Ensure appropriate PPP SNOMED codes are assigned to all patients – see Valproate Guidance for Primary Care for more information.

Specific Responsibilities for Prescribing Lithium.

- Purple record booklet developed by the NPSA should be updated by the general practitioner, (replacement booklets can be ordered from https://pcse.england.nhs.uk/services/supplies/)
- Being aware of side effects - for patients on lithium, changes in thyroid or renal function should be reported to psychiatrist. It is safe for a GP to start low dose levothyroxine in the interim, if appropriate.
- Prescribe by brand
- If there are signs of lithium toxicity, then
    - Stop lithium immediately
    - Urgent blood level and consider urgent medical review.
    - Review ongoing treatment
- Be aware that lithium can exacerbate psoriasis (or onset may occur). If such conditions are not readily resolved by conventional treatments, they should be reported to the psychiatrist.
- Remind patients of the importance of maintaining fluid and salt intake, especially in hot weather and on holiday.

Responsibilities of Patients

- To attend secondary care and GP clinic appointments and to bring monitoring booklet (if required). Failure to attend will potentially result in the medication being stopped.
- Present rapidly to the GP or specialist should their clinical condition significantly worsen.
- Report any suspected adverse effects to their specialist or GP whilst taking any medication within this guideline.
- To read the drug information given to them, including, if relevant patient guide for valproate pregnancy prevention programme.
- If women of child bearing potential prescribed valproate, attend annual review and engage in informed discussions and sign risk acknowledgment form, prior to treatment and at each annual review.
- To take medication as prescribed
- Inform the specialist, GP or community pharmacist dispensing their prescriptions of any other medication being taken – including over-the-counter medication.
- To discuss with overseeing clinician if planning to conceive or becomes pregnant.

Indication

The treatments included within this guideline are; lithium, olanzapine, quetiapine, valproate, lamotrigine and carbamazepine and other antipsychotics continued for prophylaxis after use in the initial treatment of the acute phase.

See the table in appendix 1 for details on indications, contraindications and a summary of side effects and drug interactions. This is not a complete list and the current BNF and the SPC remain authoritative. See individual SPC or the BNF for individual dosing advice.

NICE CG185 also advises non-medication interventions that are not covered in this prescribing guideline.

Monitoring

Prior to initiation

This monitoring will be done by the specialist

Table 1 – Baseline monitoring (overleaf)

Drug	Monitoring	*Special Precautions*
Lithium (prescribe by brand)	Measure weight or BMI. Arrange tests for thyroid, liver function tests, full blood count, urea and electrolytes, including Estimated Glomerular Filtrate rate and calcium ECG for known cardiac disease or risk factors.	Pregnancy will be confirmed or excluded where appropriate.
Antipsychotics	Measure weight or BMI, pulse, blood pressure, fasting glucose, HbA1c, lipid profile. ECG for known cardiac disease or history of QT prolongation.	See individual drugs.
Valproate (including *sodium valproate, semisodium valproate and *valproic acid) *Used in line with NICE but outside the SPC	Measure weight or BMI, FBC, liver function tests. Women of childbearing potential - exclude pregnancy before first prescription (by serum pregnancy test).	Special conditions apply to valproate – see above for the responsibilities of specialists and primary care.
Lamotrigine	Full blood count, urea and electrolytes and liver function tests	Slow initiation to minimise risk of serious skin reactions (slower initiation in patients already taking valproate)
Carbamazepine	Height, weight, FBC, liver function tests (U and Es in severe cardiac disease or renal disorders)	Increase dose gradually to reduce the risk of ataxia

Routine monitoring

Psychiatrist or a SHSCFT non –medical prescriber will be responsible for medication monitoring until the patient is stable (as agreed by the patient and prescriber). After that, by agreement with the GP, responsibility for medication monitoring can be transferred to the GP.

Annual Health Check NICE recommends that an annual health review is carried out which includes;

- weight or BMI, diet, nutritional status and level of physical activity
- cardiovascular status, including pulse and blood pressure
- metabolic status, including fasting blood glucose, glycosylated haemoglobin (HbA1c) and blood lipid profile
- liver function

- smoking status and alcohol use.

Both the specialist and the primary care clinician should be clear on who is responsible for this; it is generally the patient's general practitioner. A copy of the results should be sent to the care coordinator and psychiatrist (if care is being shared) and put in the secondary care notes.

Medication Monitoring

The monitoring required for each medication is detailed in the table below. The responsible clinician ordering the tests will be expected to take immediate action on receiving the results if there are abnormalities detected.

Results of routine testing should be accessible via ICE to allow monitoring of long-term trends.

Table 2 – Ongoing monitoring

Drug	Monitoring	Frequency
Lithium – **Prescribe by brand**. A change of brand requires the same monitoring as when treatment with lithium is initiated. Patients should have their results written into their *NPSA purple book. NPSA guidance recommends that prior to prescribing (re-authorising) evidence of monitoring should be seen. However, therapy should not be stopped abruptly and if necessary a supply should be made and results chased later. * Supplies of the Lithium purple book are available from Primary Care Support England Online Portal, which can be accessed on: http://pcse.england.nhs.uk/supplies/	Serum lithium concentration (**12 hours post dose)**	Weekly after initiation and after each dose change until lithium concentrations are stable (0.4 – 1 mmol/litre). See appendix 2 for advice if levels are out of range. Then every 3 months for the first year. Every 6 months after the first year or every 3 months for people in the following groups: • Older people, • People taking drugs that interact with lithium. • People at risk of impaired renal or thyroid function, raised calcium levels or other complications • People who have poor symptom control, poor adherence, last plasma lithium level was 0.8mmol/L or higher. Additional serum lithium monitoring is recommended if patient develops significant intercurrent disease or if there is change in the patient's sodium or fluid intake
	Weight or BMI, urea and electrolytes including calcium, eGFR, thyroid function	Every 6 months More often if there is evidence of any of the following; • impaired renal or thyroid function

		• raised calcium levels • an increase in mood (symptoms that might be related to impaired thyroid function). • other risk factors such as starting ACE inhibitors, NSAIDS or diuretics
	Signs of neurotoxicity including paraesthesia, ataxia, tremor and cognitive impairment	Enquire about side effects at each review **(these can occur at therapeutic levels)**
Antipsychotics	Plasma glucose or HbA1c	At 3 months after starting treatment and then annually. More frequently if evidence of elevated levels. **For Olanzapine r**epeat after first month of treatment, at month 3, then annually.
	Blood lipids	At 3 months, and then annually more often if evidence of elevated levels
	Liver function tests and full blood count	Every 12 months
	Serum electrolytes and urea including Creatinine and estimated gromerular filtration rate	Every 12 months
	Pulse and blood pressure	During dose titration and at each dose change. Then annually
	Weight or BMI	Weekly after initiation for the first 6 weeks. Then at 12 weeks and subsequently every 12 weeks for the 1st year. Thereafter annually (more frequently if rapid weight gain)
	Prolactin	6 months after starting treatment then yearly (if symptoms of raised prolactin).
	Emergence of movement disorders	Monitor and record any movement disorders during dose titration and then regularly and systematically throughout treatment
	Side effects and their impact on physical health and functioning	Enquire about side effects at each review
Valproate *(including *sodium valproate, semisodium valproate and *valproic acid)* **(Used in line with NICE but outside the SPC)*	Valproate blood levels	Routine levels **not** recommended unless there is evidence of ineffectiveness, poor adherence or toxicity
	Liver function test and Full Blood Count	Measure after 6 months of starting treatment then repeat annually

A patient guide and card should be provided to all female children, female adolescents, and women of child bearing potential or pregnant women.	Weight or BMI	After 6 months of treatment with valproate and repeat annually
	Pregnancy Prevent Programme in place for all women and girls of childbearing potential	Complete an Annual Risk Acknowledgement Form annually with the patient (Specialist). Ensure highly effective contraception is used in all women and girls of childbearing potential (GP and specialist), unless exempt.
Lamotrigine	No routine monitoring of plasma levels is required unless there is evidence of ineffectiveness, poor adherence or toxicity.	
Carbamazepine	Consider measuring blood levels if drug toxicity or non-compliance is suspected. The SPC recommends; Periodic FBC and LFTs or if side effects suspected and periodic U and E's in severe cardiovascular disease and renal disorders	

Treatments not covered by these guidelines include:

- Management of patients with bipolar disorder during an acute manic or depressive episode.
- Use of lithium as an adjunct to antidepressant or antipsychotic treatments for recurrent depressive disorder.
- Treatment with any medication covered in this guideline but not for Bipolar Disorder.

Frequency of review

Monitoring in primary or secondary care depends on the needs of the individual patient and should be done at least annually (also see tables above).

Additional information

Maintenance Treatment

Prescriptions will need to be arranged to meet the needs of the patient.
Early in the treatment, it may be appropriate to limit the quantities supplied at any one time (e.g. to 2-4 weeks supply)

Discontinuation of treatment

It would generally be useful for a patient to have a discussion with a psychiatrist before discontinuing treatment with a prophylactic treatment for bipolar disorder.
If the treatment is to be stopped the withdrawal should be gradual to reduce the risk of rebound mood disturbance.

Re-Referral guidelines

[See appendix 3 for re-referral guidelines in the request for prescribing of prophylactic treatment]
If the patient is planning to conceive or becomes pregnant.

Financial implications

This is an update of an existing guideline; no financial implications are associated with this update.

Ordering information

All medication included within this prescribing guideline are available from major wholesalers.

Support, education and information

Sheffield Health and Social Care NHS foundation Trust
Michael Carlisle Centre
Pharmacy Department
75 Osborne Road
Sheffield
Tel: 01142718633

References

1. Assessment and Management of Bipolar disorder https://www.nice.org.uk/guidance/cg185
2. Antenatal and Post natal Mental health Quality standard http://nice.org.uk/guidance/qs115
3. Valproate safety measures https://www.gov.uk/government/collections/valproate-safety-measures
4. Valproate use by women and girls https://www.gov.uk/guidance/valproate-use-by-women-and-girls
5. Valproate Patient Card https://www.medicines.org.uk/emc/rmm/1206/Document
6. Patient Safety Alert NPSA 2009/PSA005, Safer Lithium Therapy; December 2009 http://www.nrls.npsa.nhs.uk/resources/type/alerts/?entryid45=65426
7. CKS - https://cks.nice.org.uk/epilepsy#!scenario:2
8. MHRA - Antiepileptic drugs: new advice on switching between different manufacturers' products for a particular drug https://www.gov.uk/drug-safety-update/antiepileptic-drugs-updated-advice-on-switching-between-different-manufacturers-products
9. Suggestions for Therapeutic Drug Monitoring in Adults in Primary Care - https://www.sps.nhs.uk/articles/suggestions-for-therapeutic-drug-monitoring-in-adults-in-primary-care/
10. SPC carbamazepine https://www.medicines.org.uk/emc/product/5932/smpc

Appendix 1 Summary of medicines included in this guideline

The details below are not a complete list and the current BNF and the SPC remain authoritative.

Drug	Indication	Contra-indications	Side effects (This is not an exhaustive list please see online BNF/individual SPCs for up to date information)	Interactions* (This is not an exhaustive list please see online BNF for up to date information)
Lithium (see appendix 2 for advice around lithium levels out of range)	Prophylaxis against bipolar affective disorders	Hypersensitivity to lithium or excipients. Cardiac disease. Cardiac insufficiency. Severe renal impairment. Untreated hypothyroidism. Breast-feeding. Patients with low body sodium levels, including for example dehydrated patients or those on low sodium diets. Addison's disease. Brugada syndrome or family history of Brugada syndrome. Lithium therapy should not be used during pregnancy, especially during the first trimester, unless considered essential.	Weight gain, metallic taste in the mouth, gastro intestinal disturbances Signs and symptoms of toxicity • Vomiting, diarrhoea, ataxia, weakness, muscle twitching, • Severe poisoning (lithium concentrations in excess of 2 mmol/litre are usually associated with convulsions, coma, renal failure,	• Lithium toxicity made worse by sodium depletion. Avoid concurrent use of diuretics (particularly thiazide diuretics) • Excretion of lithium reduced by ACE inhibitors, aminophyline, angiotensin II receptor antagonists (increased plasma concentration) • Excretion of lithium reduced by aldosterone antagonists, potassium sparing diuretics, thiazide and related diuretics, NSAIDs,(increased plasma concentration and risk of toxicity). • Risk of ventricular arrhythmias with amiodarone (Avoidance of lithium advised by manufacturer of amiodarone • Increased risk of CNS effects when lithium given with SSRIs • Increased risk of QT interval prolongation with concomitant medication known to prolong the QT interval

Carbamazepine	Prophylaxis of manic-depressive psychosis in patients unresponsive to lithium therapy	Hypersensitivity to carbamazepine or structurally related drugs (e.g. tricyclic antidepressants) or excipients. Patients with atrioventricular block, a history of bone marrow depression or a history of hepatic porphyrias (e.g. acute intermittent porphyria, variegate porphyria, porphyria cutanea tarda). In combination with monoamine oxidase inhibitors (MAOIs), voriconazole and St John's wort	Drowsiness, headache, dry mouth, nausea, vomiting Allergic skin reactions, blood dyscrasia, leucopenia, thrombocytopenia, urticaria, Withdraw carbamazepine immediately if blood, hepatic or skin disorders occur.	• Carbamazepine reduces plasma concentration of Aripiprazole (avoid concomitant use) • Plasma concentration of carbamazepine increased by clarithromycin (consider reducing dose of carbamazepine) • Carbamazepine accelerates metabolism of tricyclics (reduced plasma concentration and reduced effect) • Carbamazepine often reduces plasma concentration of Clonazepam, • Carbamazepine accelerates metabolism of coumarins (reduced anticoagulant effects)
Olanzapine	In patients whose manic episode has responded to olanzapine treatment. For the prevention of recurrence in patients	Hypersensitivity to the active substance or to any of the excipients. Patients with known risk for narrow-angle glaucoma.	Hypercholesterolemia, Malaise, oedema, weight gain, extra pyramidal symptoms, photosensitization, purplish pigmentation of cornea, retina, conjunctiva, and skin. Tarditive dyskinesia Neurolpetic malignant syndrome – discontinue potentially fatal	• Increased risk of hypotension, bardykinesia, respiratory depression when IM olanzapine given with parenteral benzodiazepine • Increased risk of side effects including neutropenia when olanzapine given with sodium valproate or valproic acid • Plasma concentration of olanzapine reduced by Ritonavir (consider increasing dose of olanzapine)

	with bipolar disorder			
Quetiapine	In patients whose manic episode has responded to quetiapine treatment. For the prevention of recurrence of manic or depressed episodes in patients with bipolar disorder who have previously responded to treatment	Hypersensitivity to the active substance. Concomitant administration of cytochrome p450 inhibitors eg clarithromycin, erythromycin, HIV-protease inhibitors, azole-antifungal agents	Decreased Haemoglobin, leucopenia, hyperprolactinaemia, weight gain, increases in TSH	• Concurrent use of quetiapine with amisulpride can increase risk of CNS depressive effects • Atazanir increases exposure of quetiapine manufacturer advices avoid • Grapefruit juice increases exposure of quetiapine, manufacturer advises avoid. • Quetiapine potentially increases the risk of neurotoxicity when given with lithium • Rotigotine effects decreased by quetiapine
Semisodium valproate Note - sodium valproate / valproic acid is used in line with NICE but outside the	Treatment of Manic episode in bipolar disorder when lithium is contraindica	Active liver disease Personal or family history of severe hepatic dysfunction, drug related Patients with known urea cycle disorders Hypersensitivity to	Diarrhoea, Confusion, convulsion, headache, Hyponatraemia, nausea, weight gain, Hyponatraemia, Gastric irritation, anaemia,	• Plasma concentration of sodium valproate reduced by carbapenems – avoid concomitant use • Metabolism of sodium valproate inhibited by cimetidine (increased plasma concentration) • Increased risk of side effects including neutropenia when sodium valproate given with olanzapine • Increased risk of toxicity with nephrotoxic and myelosuppressive drugs – for further details consult product literature

SPC/product licence	ted or not as effective The continuation of treatment after manic episode could be considered in patients who have responded to Depakote for acute mania	valproate semisodium or any excipients Porphyria Mitochondrial disorders caused by mutations in the nuclear gene encoding the mitochondrial enzyme polymerase γ (POLG), e.g. Alpers-Huttenlocher Syndrome. In pregnancy (if for Bipolar)		• Hyperammonaemia and CNS toxicity reported when sodium valproate given with topiramate • Metabolism of sodium valproate possibly inhibited by erythromycin (increased plasma concentration).
Lamotrigine	Prevention of depressive episodes in patients with bipolar disorder who experience predominantly depressive episodes	Hypersensitivity to the active substance or to any of the excipients	Blurred vision, aggression, dizziness, rash, diarrhea, diplopia, headache, insomnia, nausea, drowsiness, rash Serious skin reactions including Stevenson - Johnson's syndrome and toxic epidermal necrolysis. Consider withdrawal if rash or signs of skin sensitivity	• Plasma concentration reduced by rifampicin • Plasma concentration of lamotrigine • Increased risk of toxicity with myelosuppressive drugs

*Drug Interactions with oral contraception (**See BNF for further interactions)**

Carbamazepine and lamotrigine do affect the efficacy of both combined and progesterone only oral contraceptives - other methods may be preferable, see contraception chapter in BNF.

Valproate appears not to reduce the efficacy of both combined and progesterone only oral contraceptives. (See warning above about using valproate in female children, female adolescents, and women of child bearing potential).

Lamotrigine levels can be affected by stopping or starting oral contraceptives and the dose may need to be altered - please consult specialist literature or seek further advice.

See the Faculty of Sexual and Reproductive Sexual Health - CEU Clinical Guidance: Drug Interactions with Hormonal Contraception - November 2017 for full details.

Appendix 2 - Lithium levels

When checking lithium levels please clarify with the initiating consultant the level the patient is aiming for. Higher levels are sometimes aimed for to help protect against manic symptoms. The target levels should also be recorded in the patients purple lithium book, along with each reading. Prescribers and pharmacists should check blood levels are monitored regularly and that it is safe to issue a repeat prescription and/or dispense the prescribed item.

Blood samples for plasma lithium levels should be taken 10-14 hours (ideally 12 hours) post dose for once daily dosing. If on twice a day dosing the level should be taken prior to the morning dose. Please note that twice daily dosing usually gets lower peak lithium plasma levels.

Levels should be taken 5-7days after a dose change or an initiation of a medication that interacts with lithium and affects the level.

Prior to change of any dosing ensure that the level was taken at the appropriate time and patient is adherent with medication. Check for interacting medications and co-existing illness. Also compare to previous levels taken.

Below is guidance only: please use professional judgment at all times. The specialist overseeing the patient can also be contacted for advice.

Lithium Plasma level	Action
<0.4mmol/L	Increase dose by 200mg, recheck after 1 week
0.4-0.6mmol/L	A partial response maybe seen at this level, increase dose by 200mg/day. Recheck after 1 week.
0.6-0.8mmol/L	Maintain dose, no change.
0.8-1.0mmol/L	Check if aiming for higher level (previous relapse whilst on lithium/subthreshold symptoms).

	If not aiming for higher plasma levels, reduce dose by 200mg/day if aiming for lower level.
1.0-1.5mmol/L	Clarify if any toxic symptoms (noted in Appendix 1) and severity. Symptomatic Severe: Refer to A &E Moderate: Hold lithium for 48 hours, restart once symptoms resolved. Reduce dose by 200mg/400mg/day and recheck level after 1 week. Asymptomatic Reduce dose by 200mg/400mg /day and recheck level after 1 week.
>1.5mmol/L	Check if toxic symptoms (noted in Appendix 1). Symptomatic – Severe: Refer to A & E. Moderate: Hold lithium until symptoms resolve. Check for causes of high level. Once resolved restart at 50% of original dose and recheck level after 1 week. Asymptomatic –Reduce dose by 400mg/day and recheck after 1 week. Ensure counsel for toxic symptoms.

Note: Dose changes based on lithium carbonate. Lithium carbonate 200mg equates to 509mg/520mg lithium citrate (dependent on brand used)

Reference

CKS – Bipolar - https://cks.nice.org.uk/bipolar-disorder#!prescribingInfoSub:16
SPS - Suggestions for Drug Monitoring in Adults in Primary Care

Author - Shrewti Moerman, Deputy Director of Pharmacy Services, Sheffield Health and Social Care FT

Appendix 3
Request for prescribing of prophylactic treatment for patient with bipolar disorder (Lithium)

Consultant Psychiatrist	Community MH team	GP
Name	Name	Name
Address	Address	Address
Phone number	Phone number	Phone number
Fax number	Fax number	Fax number

Patient Name: Patient Address:
Patient DOB:
Patient NHS Number: Patient Insight Number:

I am treating this patient for bipolar disorder and have stabilised the patient on prophylactic treatment (lithium) and issued a purple book. Under the prescribing guideline please will you now take over the prescribing and monitoring of this patient as detailed below?

Follow up appointment at…… (clinic) on ……. (date)
If mental health deteriorates (warning signs……..), circumstances change or patient considers stopping treatment then an earlier appointment will be made available (contact consultant as above).
If acute deterioration occurs (e.g. manic episode) contact named psychiatrist or out of hours contact SHSC switchboard on telephone 0114 271 6310.

Please contact the psychiatrist named above if you have concerns about this patient or the prescribing guideline arrangements. Please can you confirm the receipt and activation of the request for prescribing by faxing back this form.

Lithium

Brand / Form (prescribing must be by brand)	
Dose / Frequency	
Monitoring Frequency (lithium levels)	3 months/ 6months (frequency may need to be increased to 3 monthly see prescribing guidelines for more details), (delete as appropriate / see details in prescribing guideline)
Target lithium level	
Most recent lithium level	
Date of last lithium levels	
Lithium levels next due	
Monitoring Frequency (thyroid and renal function)	6 months/ 3 months for patient groups listed above
Date of last thyroid and renal function tests	
Date next tests due	

If neurotoxicity effects suspected ……(see table 2 in prescribing guideline)
The patient has a NPSA record book

Psychiatrist signature …….. Name (print) …….. Date ……
To be completed by the GP practice;
The above patient has been accepted into our monitoring service
Signed

Post stamp | Date | Practice

Request for prescribing of prophylactic treatment for patient with bipolar disorder (olanzapine / quetiapine – delete as appropriate)

Consultant	Community MH team	GP
Name	Name	Name
Address	Address	Address
Phone number	Phone number	Phone number
Fax number	Fax number	Fax number

Patient Name: Patient Address:
Patient DOB:
Patient NHS Number: Patient Insight Number:

I am treating this patient for bipolar disorder and have stabilised the patient on prophylactic treatment (olanzapine/quetiapine – delete as appropriate). Under the prescribing guideline please will you now take over the prescribing and monitoring of this patient as detailed below

Follow up appointment at……(clinic) on …….(date)
If mental health deteriorates (warning signs……..), circumstances change or patient considers stopping treatment then an earlier appointment will be made available (contact consultant as above).
If acute deterioration occurs (e.g. manic episode) contact named psychiatrist or out of hours contact SHSC switchboard on telephone 0114 271 6310.

Please contact the psychiatrist named above if you have concerns about this patient or the prescribing guidelines arrangements. The GP will confirm the receipt and activation of the request for prescribing by faxing back this form.

Olanzapine/quetiapine – delete as appropriate

Form	
Dose / Frequency	
Monitoring Frequency (weight)	
Most recent weight (or BMI)	
Date of last weight	
Weight next due	
Monitoring Frequency (plasma glucose and lipids)	
Date of last plasma glucose and lipid tests	
Monitoring frequency BP and pulse, LFTs, FBC and U and E's	
At review check for signs of movement disorder and raised prolactin levels	
Date next tests due	

Other monitoring requirements……

Psychiatrist signature …….. Name (print) …….. Date ……
To be completed by the GP practice;
The above patient has been accepted into our monitoring service
Signed

Post Stamp | Date | Practice

Request for prescribing of prophylactic treatment for patient with bipolar disorder (Valproate)

Consultant	Community MH team	GP
Name	Name	Name
Address	Address	Address
Phone number	Phone number	Phone number
Fax number	Fax number	Fax number

Patient Name: Patient Address:
Patient DOB:
Patient NHS Number: Patient Insight Number:

I am treating this patient for bipolar disorder and have stabilised the patient on prophylactic treatment (Valproate). Under the prescribing guideline please will you now take over the prescribing and monitoring of this patient as detailed below.

Follow up appointment at…… (clinic) on …….(date)
If mental health deteriorates (warning signs……..), circumstances change or patient considers stopping treatment then an earlier appointment will be made available (contact consultant as above).
If acute deterioration occurs (e.g. manic episode) contact named psychiatrist or out of hours contact SHSC switchboard on telephone 0114 271 6310.

Please contact the psychiatrist named above if you have concerns about this patient or the prescribing guideline arrangements. The GP will confirm the receipt and activation of the request for prescribing by faxing back this form.

This patient is on the PREVENT programme and will be seen annually by a specialist. If they wish to try to conceive between appointments please refer them back to us to manage any change in medication, valproate for bipolar is contraindicated in pregnancy.

Valproate

Form	
Dose / Frequency	
Monitoring Frequency (weight)	
Most recent weight (or BMI)	
Monitoring Frequency for LFTs and FBC	
Date of last weight	
Weight next due	
Date next tests due	

Other monitoring requirements……

Psychiatrist signature …….. Name (print) …….. Date ……

To be completed by the GP practice;
The above patient has been accepted into our monitoring service
Signed

Post stamp Date Practice

Request for prescribing of prophylactic treatment for patient with bipolar disorder (Lamotrigine)

Consultant	Community MH team	GP
Name	Name	Name
Address	Address	Address
Phone number	Phone number	Phone number
Fax number	Fax number	Fax number

Patient Name: Patient Address:
Patient DOB:
Patient NHS Number: Patient Insight Number:

I am treating this patient for bipolar disorder and have stabilised the patient on prophylactic treatment (Lamotrigine). Under the prescribing guideline please will you now take over the prescribing and monitoring of this patient as detailed below.

Follow up appointment at…… (Clinic) on ……..(date)
If mental health deteriorates (warning signs……..), circumstances change or patient considers stopping treatment then an earlier appointment will be made available (contact consultant as above).

If acute deterioration occurs (e.g. manic episode) contact named psychiatrist or out of hours contact SHSC switchboard on telephone 0114 271 6310.

Please contact the psychiatrist named above if you have concerns about this patient or the prescribing guideline arrangements. The GP will confirm the receipt and activation of the request for prescribing by faxing back this form.

Lamotrigine

Form	
Dose / Frequency	

Other monitoring requirements……

Psychiatrist signature …….. Name (print) …….. Date ……

To be completed by the GP practice;
The above patient has been accepted into our monitoring service
Signed
Post stamp Date Practice

Request for prescribing of prophylactic treatment for patient with bipolar disorder (Carbamazepine) The Sheffield Formulary recommendation on brand is Tegretol Prolonged Release.

Consultant	Community MH team	GP
Name	Name	Name
Address	Address	Address
Phone number	Phone number	Phone number
Fax number	Fax number	Fax number

Patient Name: Patient Address:
Patient DOB:
Patient NHS Number: Patient Insight Number:

I am treating this patient for bipolar disorder and have stabilised the patient on prophylactic treatment (Carbamazepine). Under the prescribing guideline please will you now take over the prescribing and monitoring of this patient as detailed below.

Follow up appointment at……(clinic) on …….(date)
If mental health deteriorates (warning signs……..), circumstances change or patient considers stopping treatment then an earlier appointment will be made available (contact consultant as above).
If acute deterioration occurs (e.g. manic episode) contact named psychiatrist or out of hours contact SHSC switchboard on telephone 0114 271 6310.

Please contact the psychiatrist named above if you have concerns about this patient or the prescribing guideline arrangements. The GP will confirm the receipt and activation of the request for prescribing by faxing back this form.

Carbamazepine The Sheffield Formulary recommendation on brand is Tegretol Prolonged Release.

Brand / Form	
Dose / Frequency	
Monitoring Frequency (Plasma levels)	
Most recent plasma level	
Date of last test	

Other monitoring requirements……
Psychiatrist signature …….. Name (print) …….. Date ……

To be completed by the GP practice;
The above patient has been accepted into our monitoring service
Signed
Post Date Practice