

Prescribing tip for information

Lithium monitoring

Following initiation and stabilisation of the drug, patients will be maintained on lithium **for a minimum period of three months** to establish response and tolerability. During this period, **the medication will be prescribed by secondary care**. After this period, the patient will be reassessed in secondary care and if appropriate a [shared prescribing agreement form](#) between primary and secondary care can be progressed. If shared care is agreed, **primary care monitoring responsibilities** are summarised in the following table:

Lithium									Comment
	Serum lithium levels	U + E	Calcium	TFT	Blood glucose	BP	Lipid profile	Weight	Share results with secondary care. *Lithium level monitoring may extend to 6 monthly for selected stable patients
After 3 months	3 monthly*	6 monthly	6 monthly	6 monthly (annually once stable)	annually	annually	annually (in those over 40yr)	annually	



Target lithium plasma levels (to be identified by secondary care prescriber): New starters between 0.6 -0.8 mmol/L. Patients previously on lithium that have relapsed or with sub threshold symptoms plus functional impairment between 0.8 -1.0 mmol/L for at least 6 months.

- **Lithium** - Check serum lithium levels (12 hours post dose) at three monthly intervals and after any dose changes, change of preparation, during an acute UTI, or changes in other medication which may affect lithium levels. After the first year, if the patient remains stable the monitoring frequency can extend to every six months, **unless they fulfil criteria for more frequent monitoring** as outlined below

Maintain more frequent (three monthly serum lithium monitoring) for the following patient groups:

- older people (over the age of sixty)
- people taking drugs that interact with lithium (e.g. diuretics, NSAIDs, ACEI)
- people at risk of impaired renal or thyroid function, raised calcium levels or other complications
- people who have poor symptom control
- people with poor adherence
- people whose last plasma lithium level was 0.8 mmol per litre or higher

- **Calcium** – The most recent version of the lithium shared care guidelines includes a new requirement to monitor calcium levels. The BAP guidelines¹ for treating bipolar advise that, for patients taking lithium, “Given the consistent finding of frequent hyperparathyroidism, calcium concentrations should be checked before and during treatment.” LSCMMG guidance advises that this is done 6 monthly.



“Purple book” - Within LSCFT all new patients initiated on lithium will be provided with a Lithium Therapy record book (purple book) and alert card. The purple book allows clinicians and patients to keep a record of lithium blood levels and relevant health checks. Patients in primary care who require a new purple book or alert card can obtain these from their local pharmacy.

Advice for prescribers:

1. Ensure lithium levels are monitored every **3 months** if patients are in one of the groups above
2. Ensure patients **calcium levels** are being monitored every 6 months
3. Ensure lithium levels are recorded in the patient’s **“purple book”** and that they have an alert card

References:

1. Goodwin GM, Haddad PM, Ferrier IN, Aronson JK, Barnes T, Cipriani A, et al. Evidence-based guidelines for treating bipolar disorder: Revised third edition recommendations from the British Association for Psychopharmacology. J Psychopharmacol. 2016;30(6):495-553.

To contact the Medicines Optimisation Team please phone 01772 214302