Monitor all patients prescribed lithium in accordance with NICE guidance.

Prescribers and Pharmacists to check that blood tests are monitored regularly and that it is safe to issue a repeat prescription and/or dispense the prescribed lithium.

To avoid duplication, check ICE for the latest results before ordering new tests.

The following tests/measures to be completed before initiating lithium treatment:

- advise patient that poor adherence or rapid discontinuation may increase the risk of relapse
- measure weight or BMI, U&E including calcium, estimated glomerular filtration rate (eGFR), thyroid function and a full blood count.
- arrange an ECG for people with cardiovascular disease or risk factors for it
- ensure the person is given appropriate national information (or a locally available equivalent) on taking lithium safe
- where applicable establish a shared care arrangement with the patient’s GP for prescribing lithium and monitoring adverse effects

Starting lithium

Measure plasma lithium levels 1 week after starting lithium and 1 week after every dose change, and weekly until the levels are stable.

Aim to maintain plasma lithium level between 0.6 and 0.8 mmol per litre in people being prescribed lithium for the first time.

Consider maintaining plasma lithium levels at 0.8–1.0 mmol per litre for a trial period of at least 6 months for people who:

- have had a relapse while taking lithium in the past
- are taking lithium and have subthreshold symptoms with functional impairment.
Advise people taking lithium to:

- seek medical attention if they develop diarrhoea or vomiting or become acutely ill for any reason
- ensure they maintain their fluid intake, particularly after sweating (for example, after exercise, in hot climates or if they have a fever), if they are immobile for long periods or if they develop a chest infection or pneumonia
- talk to their GP as soon as possible if they become pregnant or are planning a pregnancy.

The following tests/measures to be conducted during maintenance treatment:

Measure plasma lithium level every 3 months for the first year.

After the first year, measure plasma lithium levels every 6 months, or every 3 months for people in any of the following groups:

- older people
- people taking drugs that interact with lithium
- people who are 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.

Monitor lithium dose and plasma lithium levels more frequently if urea levels and creatinine levels become elevated, or eGFR falls over 2 or more tests, and assess the rate of deterioration of renal function.

Other 6 monthly measures

Measure weight or BMI, U&Es including calcium, estimated glomerular filtration rate (eGFR) and thyroid function.

Repeat more often if there is evidence of impaired renal or thyroid function, raised calcium levels or an increase in mood symptoms that might be related to impaired thyroid function.
**General Comments**

Bloods to be taken 12 hours post dose.

Local targets for serum Lithium concentrations for maintenance treatment are 0.5-0.8mmol/L and for acute mania 0.8-1.0 mmol/L

Treatment to be stopped for up to 48 hours and advice sought from the responsible specialist if levels reach 1.2mmol/L and/or the patient shows signs of toxicity

At every appointment monitor for symptoms of neurotoxicity, including paraesthesia, ataxia, tremor and cognitive impairment, which can occur at therapeutic levels of lithium

When discussing whether to continue lithium, take into account clinical efficacy, other risk factors for renal impairment and cardiovascular disease, and degree of renal impairment. Seek advice from a renal specialist and a psychiatrist if required

Lithium to be prescribed by brand name (due to differences in bioavailability between brands)

Warn not to take over the counter NSAIDs and avoid prescribing these drugs if possible; if they are prescribed, this should be on a regular (not p.r.n.) basis and the person should be monitored monthly until a stable lithium level is reached and then every 3 months

All patients on lithium therapy to be issued with the purple NPSA Lithium Therapy pack containing an information booklet, alert card and record book

**Stopping lithium**

If stopping lithium, reduce the dose gradually over at least 4 weeks, and preferably up to 3 months.

During dose reduction and for 3 months after lithium treatment is stopped, monitor closely for early signs of mania and depression.

Electronic copies of the purple booklet are available at [www.nrls.npsa.nhs.uk](http://www.nrls.npsa.nhs.uk/).
Supplies of these are available from current NHS Non-Secure Contract held by 3M.
Orders should be sent to Telephone: 0845 610 1112 Email: nhsforms@spsl.uk.com


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