## HOSPITAL GUIDANCE

## **Linezolid - Prescriber Information**



This information is provided to facilitate the prescribing, supply and monitoring of linezolid in NHS Lanarkshire.

## Monitoring of patients receiving linezolid is the responsibility of the hospital prescriber.

Category	Linezolid is categorised as a Hospital Only medication with the following exception:  Linezolid may be supplied in Primary Care for a maximum of 7 days only on the advice of an Infection Specialist
ALERT antibiotic	Linezolid is an ALERT second line antibiotic and has one permitted indication of ventilator associated pneumonia caused by MRSA. In the absence of a positive culture and sensitivity report relevant to the current infection episode, any other indication should be discussed with an Infection Specialist. An e-ALERT form must be completed by the prescribe to give authority to hospital inpatient pharmacies to supply. ALERT policy
Dosing advice	Oral: 600mg every 12 hours usually for 10-14 days (max duration of treatment 28 days).  Please note: Oral bioavailability of linezolid is 100%
	Intravenous Infusion: 600mg every 12 hours Renal/Hepatic impairment - No adjustment required, however, use with caution due to limited clinical data.
	NHS indicative price = £328.44 for 10 x 600mg tablets (Sandoz Ltd) or £445 for 10 x $600mg/300ml$ infusion bags
Contra-indications/ Cautions *	See BNF/SPC
Side Effects and Monitoring	For full list of side effects see BNF/SPC. If your patient shows any of the signs below please consult an Infection Specialist urgently.
	Myelosuppression (including anaemia, leucopenia, pancytopenia and thrombocytopenia) has been reported in patients receiving linezolid.  Monitor full blood count at baseline, then weekly.
	Close monitoring is recommended in patients who: <ul> <li>require longer than 10-14 days of treatment,</li> <li>have pre-existing myelosuppression,</li> <li>are receiving concomitant medicines that might affect their blood counts,</li> <li>have severe renal insufficiency.</li> </ul>
	<b>Peripheral neuropathy and optic neuropathy</b> have been reported particularly in patients receiving linezolid for more than the maximum recommended duration of 28 days. All patients should be advised to report any numbness or tingling felt in the extremities or any symptoms of visual impairment. These include changes in visual acuity, changes in colour vision, blurred vision or visual field defects. Patients experiencing new visual symptoms should be evaluated promptly and referred to an ophthalmologist if necessary. Visual function should be monitored regularly if treatment is required for longer than 28 days.
	<b>Metabolic acidosis</b> has been reported with the use of linezolid. Patients who develop signs and symptoms of metabolic acidosis including recurrent nausea or vomiting, abdominal pain, a low bicarbonate level, or hyperventilation while receiving linezolid should receive immediate medical attention.
	<b>Increased blood pressure</b> (when linezolid combined with tyramine). See interactions
	'Serotonin syndrome' See interactions
	This medicine is monitored intensively by the MHRA and any side effect should be reported via the yellow card scheme.

The prescribing team discharging the patient or reviewing the patient in clinic are completely responsible for the ongoing monitoring requirements associated with linezolid therapy.

\*It is the responsibility of all prescribers to check for possible contra-indications to linezolid therapy and all pharmacists to check for interactions with other prescribed medications.

## Interactions\* Linezolid is a reversible, non-selective monoamine oxidase inhibitor (MAOI) and interacts with certain food/drinks and other medications. Food/Drink Interactions Linezolid can cause increased blood pressure when taken with food/drinks that have a high tyramine content (more than 100mg per meal). Patients should be advised to avoid certain types of food/drinks e.g. Mature or aged cheese, liver, kidney, pickled herring, broad beans, game • Fermented or air-dried meats such as salami • Yeast extracts such as Bovril, Oxo, Marmite • Fermented soya bean products such as soy sauce • More than 500g dark chocolate Protein diet supplements Sour cream and yoghurt • Beer and wine Peanuts and some fruits such as figs, grapes, oranges, pineapples, plums, prunes, raisins, avocados and tomatoes Interactions with other medicines Linezolid has the potential to interact with many medicines. See BNF/SPC for more information about interactions and the stopping/starting of interacting drugs. Linezolid can interact with the SSRI, tricyclic and serotonin 5-HT1 receptor agonist classes of antidepressants. Patients should be observed closely for signs of 'serotonin syndrome' which include confusion, delirium, restlessness, tremor or blushing. Linezolid should not be taken with other MAOIs or within 14 days of stopping the MAOI. Supply On starting treatment with linezolid the prescriber should: • Discuss prescription with an Infection Specialist if required + complete e-ALERT form Check for contra-indications/interactions Ensure baseline monitoring completed • Provide patient education and patient information leaflet (Prescriber or Pharmacist) Actions for discharge/follow-up: Hospital prescriber to arrange weekly follow-up monitoring Hospital prescriber to inform GP of linezolid prescription via discharge or outpatient prescription. It should be made clear that all follow-up and further supplies relating to linezolid will be co-ordinated by the hospital team NOT the GP. Supply from Hospital Pharmacy Pharmacy must clinically screen prescription, ensure e-ALERT form completed and ongoing monitoring plan in place • If all above met dispense discharge prescription in normal manner Supply will be for a maximum of 1 week at a time (up to a maximum of 4 weeks) References 1. Royal Pharmaceutical Society, British Medical Association. British National Formulary No 81 (March – September 2021). Accessed via www.medicinescomplete.com. 2. Pfizer Ltd. Summary of Product Characteristics for Linezolid 2mg/mL Solution for Infusion. Last updated 26/02/18. Accessed via www.medicines.org.uk. 3. Pfizer Ltd. Summary of Product Characteristics for Linezolid 600mg Film Coated Tablets. Last updated 29/09/20. Accessed via www.medicines.org.uk. 4. Imperial College Healthcare NHS Trust. Linezolid Information Pack. **Further information** Contact Microbiology/Pharmacy Department