


Linezolid(oral): supporting information for prescribing in primary care

This supporting information is intended for GPs where a course of oral linezolid has been recommended following consultation with a microbiologist for patients in primary care. The information below is provided to inform and support prescribing decisions, for detailed prescribing information please refer to the [BNF](#) and the [Summary of Product Characteristics](#) for Zyvox®. For a summary of abbreviations used please refer to page 2.

Drug/Therapeutic Class	Linezolid (Zyvox® ▼): Oxazolidinone antibacterial
Initiation	BNF recommends that linezolid should only be initiated under expert supervision. The manufacturer of Zyvox® ▼ recommends that linezolid should only be initiated in a hospital environment and after consultation with a relevant specialist such as a microbiologist or infectious disease specialist.
Licensed Indications/dose & length of treatment	Pneumonia, complicated SSTIs caused by G+ve bacteria. In NHS Surrey linezolid is considered a RED drug for complicated pneumonia and complicated SSTIs at all Acute Trusts (also refer to 'Exclusions for primary care' below). Dose (adults): Oral: 600mg every 12 hours usually for 10-14 days (max. 28 days). For primary care the HPA recommends linezolid (3 rd line) for SSTIs if PVL is likely to be MRSA (on advice of microbiologist/hospital)- see 'Supporting Guidance for Primary Care' below. Dose: 600mg twice daily for 5-7 days.
Spectrum of activity	Active against G+ve including MRSA & VRE Not active against G-ve's.
Formulations & Cost (£)	Tablets (600mg). Cost £ 445/10 tablets; Suspension (100mg/5ml); Intravenous (IV) infusion (2mg/ml)
Supporting Guidance for Primary Care HPA QRG 2009 	HPA: Diagnosis and Management of PVL- <i>Staphylococcus aureus</i> Infections; Quick Reference Guide (QRG) for Primary Care (2009), recommends linezolid (3 rd line) for SSTIs if PVL is likely to be MRSA (on advice of microbiologist/ hospital). Susceptibility testing: Sensitivity to linezolid should be confirmed by susceptibility testing.
Exclusions for primary care	Linezolid is Not recommended in primary care for the following indications/circumstances: <ul style="list-style-type: none"> • Pneumonia • Severe SSTI with systemic symptoms • Share-cared • IV courses • Treatment courses exceeding 28 days (as there is a higher incidence of optic neuropathy reported)
Monitoring	Full blood count (including platelet count) in those patients requiring more than 7 days treatment. Total duration of treatment <u>not</u> to exceed 28 days.
Drug & food interactions	Linezolid is a reversible non-selective monoamine oxidase inhibitor (MAOI): patients should avoid large quantities of tyramine-rich food including certain alcoholic beverages. Drug interactions: linezolid should not be given with another MAOI or within 2 weeks of stopping another MAOI. Unless close observation & blood pressure monitoring is possible, avoid with SSRI's, triptans, TCA's, sympathomimetics, dopaminergics, buspirone, pethidine and possibly other opioid analgesics. For further info refer to BNF/SPC
Patient information	Patient should be advised to ensure they read the Patient Information Leaflet (PIL) provided with Zyvox® ▼, particularly with regard to the information on taking the product with other medicines, food and drink.

For detailed information on linezolid, including prescribing in pregnancy, liver and renal impairment refer to BNF/SPC. For a summary of CHM (Committee of Human Medicines) advice on optic neuropathy and information on blood disorders and the requirements for close monitoring refer to BNF.

Secondary/primary care interface: It was agreed at the NHS Surrey Medicines Commissioning Group (MCG) in February 2012 that where the drug is initiated by a secondary care clinician, GPs should not be requested to prescribe the remainder of the course (which is likely to be over the 28 max. period advised by the manufacturer).

Key for abbreviations/symbols used:

▼: The black triangle symbol identifies products which are monitored intensively by the MHRA (Medicines and Healthcare Products Regulatory Agency)

G+ve: Gram positive [bacteria]

G-ve: Gram-negative[bacteria]

MRSA: Meticillin-resistant *Staphylococcus aureus*

PVL: Panton-Valentine Leukocidin (PVL) is a toxin produced by less than 2% of *S. Aureus* (SA), including MRSA. PVL-SA causes recurrent skin and soft tissue infections, but can also cause invasive infections, including necrotising haemorrhagic pneumonia in otherwise healthy young people in the community.

SSTI: Soft tissue and skin Infection(s)

VRE: Vancomycin resistant enterococci

References and additional sources of information:

- 1) BNF (British National Formulary) 62, September 2011
- 2) Zyvox®▼ Summary of Product Characteristics (SPC); Date of revision of the text:9/7/2011 Ref: ZY 15_0 UK.
<http://www.medicines.org.uk/EMC/medicine/9857/SPC/Zyvox+600+mg+Film-Coated+Tablets%2c+100+mg+5+ml+Granules+for+Oral+Suspension%2c+2+mg+ml+Solution+for+Infusion/> Accessed 8/3/2012
- 3) Patient Information Leaflet (PIL): Zyvox®▼ film-coated tablets:
<http://www.medicines.org.uk/EMC/medicine/7921/PIL/Zyvox+600+mg+Film-Coated+Tablets/> Accessed 13/3/2012
- 4) Health Protection Agency (HPA) guidance Diagnosis and management of PVL-SA Infections Quick Reference Guide; Produced 18th May 2009, For review December 2010: 
- 5) Drug Safety Update: Vol 1, Issue 1, August 2007: Linezolid: restriction of indication.:
<http://www.mhra.gov.uk/Publications/Safetyguidance/DrugSafetyUpdate/CON2031802> Accessed 14/3/2012
- 6) Healthcare Professional letter (Pfeizer) Important Safety Information [Linezolid] 28th February 2007 <http://www.mhra.gov.uk/home/groups/pl-p/documents/websitesresources/con2030646.pdf> Accessed 14/3/2012