**Package leaflet: Information for the user**

# Linezolid Clonmel 2mg/ml Solution for Infusion

For adults

Linezolid

**Read all of this leaflet carefully before this medicine is given to you because it contains important information for you.**
- Keep this leaflet. You may need to read it again.
- If you have any further questions, ask your doctor or pharmacist.
- This medicine has been prescribed for you only. Do not pass it on to others. It may harm them, even if their signs of illness are the same as yours.
- If you get any side effects, talk to your doctor or pharmacist. This includes any possible side effects not listed in this leaflet. See section 4.

**What is in this leaflet**


## 1. What Linezolid Clonmel is and what it is used for

Linezolid Clonmel contains the active substance linezolid and is an antibiotic of the oxazolidinones group that works by stopping the growth of certain bacteria (germs) that cause infections. It is used to treat pneumonia and some infections in the skin or under the skin. Your doctor will have decided if Linezolid Clonmel is suitable to treat your infection.

## 2. What you need to know before you are treated with Linezolid Clonmel

**DO NOT use Linezolid Clonmel if you are**:
- allergic to linezolid or any of the other ingredients of this medicine (listed in section 6.).
- taking or have taken within the last 2 weeks any medicines known as monoamine oxidase inhibitors (MAOIs for example phenelzine, isocarboxazid, selegiline, moclobemide). These may be used to treat depression or Parkinson's disease.
- you are breast-feeding. This is because it passes into breast milk and could affect the baby.

Linezolid Clonmel may not be suitable for you if you answer **yes** to any of the following questions. In this case tell your doctor as he/she will need to check your general health and your blood pressure before and during your treatment or may decide that another treatment is better for you.

Ask your doctor if you are not sure whether these categories apply to you.
- Do you have high blood pressure, whether or not you are taking medicines for this?
- Have you been diagnosed with an overactive thyroid?
- Do you have a tumour of the adrenal glands (phaeochromocytoma) or carcinoid syndrome (caused by tumours of the hormone system with symptoms of diarrhoea, flushing of the skin, wheezing)?
- Do you suffer from manic depression, schizoaffective disorder, mental confusion or other mental problems?
- Are you taking any of the following medicines?
  - decongestant, cold or flu remedies containing pseudoephedrine or phenylpropanolamine
  - medicines used to treat asthma such as salbutamol, terbutaline, fenoterol
  - antidepressants known as tricyclics or SSRIs (selective serotonin reuptake inhibitors) for example amitriptyline, citalopram, clomipramine, dosulepin, doxepin, fluoxetine, fluvoxamine,

imipramine, lofepramine, paroxetine, sertraline
- medicines used to treat migraine such as sumatriptan and zolmitriptan
- medicines used to treat sudden, severe allergic reactions such as adrenaline (epinephrine)
- medicines which increase your blood pressure, such as noradrenaline (norepinephrine), dopamine and dobutamine
- used to treat moderate to severe pain, such as pethidine
- medicines used to treat anxiety disorders, such as buspirone
- an antibiotic called rifampicin

**Warnings and precautions**
Talk to your doctor before you are treated with this medicine if you
- bruise and bleed easily
- are anaemic (have low red blood cells)
- are prone to getting infections
- have a history of seizures
- have liver problems or kidney problems particularly if you have dialysis
- have diarrhoea

Tell your doctor immediately if during treatment you suffer from
- problems with your vision such as blurred vision, changes in colour vision, difficulty in seeing detail or if your field of vision becomes restricted.
- loss of sensitivity in your arms or legs or a sensation of tingling or pricking in your arms or legs
- you may develop diarrhoea while taking or after taking antibiotics, including Linezolid Clonmel. If this becomes severe or persistent or you notice that your stool contains blood or mucus, you should stop taking Linezolid Clonmel immediately and consult your doctor. In this situation, you should not take medicines that stop or slow bowel movement.
- recurrent nausea or vomiting, abdominal pain or over breathing.

**Children and adolescents**
The use of this medicine in children and adolescents (< 18 years old) is not recommended.

**Other medicines and Linezolid Clonmel**
Tell your doctor or pharmacist if you are taking, have recently taken or might take any other medicines.

There is a risk that Linezolid Clonmel may sometimes interact with certain other medicines to cause side effects such as changes in blood pressure, temperature or heart rate.

Tell your doctor if you are taking or have taken within the last 2 weeks the following medicines as Linezolid Clonmel must not be taken if you are already taking these medicines or have taken them recently. (See also Section 2 above 'DO NOT use Linezolid Clonmel if you are').

- monoamine oxidase inhibitors (MAOIs for example phenelzine, isocarboxazid, selegiline, moclobemide). These may be used to treat depression or Parkinson's disease.

Also tell your doctor if you are taking the following medicines. Your doctor may still decide to give you Linezolid Clonmel, but will need to check your general health and your blood pressure before and during your treatment. In other cases, your doctor may decide that another treatment is better for you.

- Decongestant cold or flu remedies containing pseudoephedrine or phenylpropanolamine.
- Some medicines used to treat asthma such as salbutamol, terbutaline, fenoterol.
- Certain antidepressants known as tricyclics or SSRIs (selective serotonin reuptake inhibitors). There are many of these, including amitriptyline, citalopram, clomipramine, dosulepin, doxepin, fluoxetine, fluvoxamine, imipramine, lofepramine, paroxetine, sertraline.
- Medicines used to treat migraine such as sumatriptan and zolmitriptan.

- Medicines used to treat sudden, severe allergic reactions such as adrenaline (epinephrine).
- Medicines which increase your blood pressure, such as noradrenaline (norepinephrine), dopamine and dobutamine.
- Medicines used to treat moderate to severe pain, such as pethidine.
- Medicines used to treat anxiety disorders, such as buspirone.
- Medicines that stop blood clotting, such as warfarin.

**Linezolid Clonmel with food and drink**
- You can take Linezolid Clonmel either before, during or after a meal.
- Avoid eating large amounts of mature cheese, yeast extracts, or soya bean extracts e.g. soy sauce and drinking alcohol, especially draught beers and wine. This is because this medicine may react with a substance called tyramine which is naturally present in some foods to cause an increase in your blood pressure.
- If you develop a throbbing headache after eating or drinking, tell your doctor or pharmacist immediately.

**Pregnancy and breast-feeding**
If you are pregnant or breast-feeding, think you may be pregnant or are planning to have a baby, ask your doctor for advice before taking this medicine.

The effect of linezolid in pregnant women is not known. Therefore it should not be taken in pregnancy unless advised by your doctor.
You should not breast-feed when taking Linezolid Clonmel because it passes into breast milk and could affect the baby.

**Driving and using machines**
Linezolid Clonmel may make you feel dizzy or experience problems with your vision. If this happens, do not drive or operate any machinery. Remember that if you are unwell your ability to drive or operate machinery may be affected.

**Linezolid Clonmel contains glucose and sodium**
This medicinal product contains 13.7 g glucose per 300 ml solution for infusion. This should be taken into account in patients with diabetes mellitus.

This medicine contains 119.29 mg sodium (main component of cooking/table salt) in each 300 ml solution for infusion. This is equivalent to 6 % of the recommended maximum daily dietary intake of sodium for an adult.

## 3. How Linezolid Clonmel is given

**Adults**
This medicine will be given to you through a drip (by infusion into a vein) by a doctor or healthcare professional. The usual dose for adults (18 years and older) is 300 ml (600 mg linezolid) twice daily which is given directly into the blood stream (intravenously) by a drip over a period of 30 to 120 minutes.

If you are on kidney dialysis, you should be given Linezolid Clonmel after dialysis.

A course of treatment usually lasts 10 to 14 days, but can last up to 28 days. The safety and effectiveness of this medicine have not been established for treatment periods longer than 28 days. Your doctor will decide how long you should be treated.

While you are taking Linezolid Clonmel, your doctor should perform regular blood tests to monitor your blood count.

Your doctor should monitor your eyesight if you take Linezolid Clonmel for more than 28 days.

**Use in children**

Linezolid Clonmel is not normally used to treat children and adolescents (under 18 years old).

**If you receive more Linezolid Clonmel than you should**

If you are concerned that you may have been given too much Linezolid Clonmel, tell your doctor or a nurse at once.

**If you miss a dose of Linezolid Clonmel**

As you will be given this medicine under close supervision, it is very unlikely that you will miss a dose. If you think that you have missed a dose of treatment, tell a doctor or nurse at once.

If you have any further questions on the use of this medicine, ask your doctor or pharmacist.

## 4. Possible side effects

Like all medicines, this medicine can cause side effects although not everybody gets them.

**Tell your doctor, nurse or pharmacist immediately** if you notice any of these side effects during your treatment with Linezolid Clonmel:

- skin reactions such as red sore skin and flaking (dermatitis), rash, itching, or swelling, particularly around the face and neck. This may be the sign of an allergic reaction and it may be necessary for you to stop taking Linezolid Clonmel.
- problems with your vision such as blurred vision, changes in colour vision, difficulty in seeing detail or if your field of vision becomes restricted.
- severe diarrhoea containing blood and/or mucus (antibiotic associated colitis including pseudomembranous colitis), which in very rare circumstances may develop into complications that are life-threatening.
- recurrent nausea or vomiting, abdominal pain or over breathing.
- fits or seizures have been reported with linezolid. You should let your doctor know if you experience agitation, confusion, delirium, rigidity, tremor, incoordination and seizure while also taking antidepressants known as SSRIs (see section 2).

Numbness, tingling or blurred vision have been reported by patients who have been given linezolid for more than 28 days. If you experience difficulties with your vision you should consult your doctor as soon as possible.

**Other side effects include:**

**Common side effects (may affect up to 1 in 10 people):**

- Fungal infections especially vaginal or oral “thrush”
- Headache
- Metallic taste in the mouth
- Diarrhoea, nausea or vomiting
- Changes in some blood test results including those measuring your kidney or liver function or blood sugar levels
- Unexplained bleeding or bruising, which may be due to changes in the numbers of certain cells in the blood which may affect blood clotting or lead to anaemia
- Difficulty in sleeping
- Increased blood pressure
- Anaemia (low red blood cell)
- Changes in numbers of certain cells in the blood which may affect your ability to fight infection
- Skin rash
- Itching skin
- Dizziness
- Localised or general abdominal pain
- Constipation
- Indigestion
- Localised pain
- Fever

**Uncommon side effects (may affect up to 1 in 100 people):**
- Inflammation of the vagina or genital area in women
- Sensations such as tingling or feeling numb
- Blurred vision
- "Ringing" in the ears (tinnitus)
- Dry or sore mouth, swollen, sore, or discoloured tongue
- Pain at and around the place where the infusion (drip) was given
- Inflammation of the veins (including where the infusion (drip) was given)
- A need to urinate more often
- Chills
- Feeling tired or thirsty
- Inflammation of the pancreas
- Increased sweating
- Changes in proteins, salts or enzymes in the blood which measure kidney or liver function
- Convulsions
- Hyponatraemia (low blood sodium levels)
- Kidney failure
- Reduction in platelets
- Abdominal bloating
- Transient ischaemic attacks (temporary disturbance of blood flow to the brain causing short term symptoms such as loss of vision, leg and arm weakness, slurring of speech and loss of consciousness).
- Inflammation of the skin
- Increase in creatinine
- Stomach pain
- Changes in heart rate (e.g. increase rate)

**Rare side effects (may affect up to 1 in 1,000 people):**
- Restricted field of vision
- Superficial tooth discolouration, removable with professional dental cleaning (manual descaling)

**The following side effects have also been reported (frequency not known):**
- Serotonin syndrome (symptoms include fast heart rate, confusion, abnormal sweating, hallucinations, involuntary movements chills and shivering)
- Lactic acidosis (symptoms include recurrent nausea and vomiting, abdominal pain, over breathing)
- Severe skin disorders
- Sideroblastic anaemia (a type of anaemia (low red blood cells))
- Alopecia (hair loss)
- Changes in colour vision or difficulty in seeing detail
- Decrease of the blood cell count
- Weakness and/or sensory changes

**Reporting of side effects**
If you get any side effects, talk to your doctor, pharmacist or nurse. This includes any possible side effects not listed in this leaflet. You can also report side effects directly via HPRA Pharmacovigilance, Earlsfort Terrace, IRL - Dublin 2; Tel: +353 1 6764971; Fax: +353 1 6762517. Website: www.hpra.ie; E-mail: medsafety@hpra.ie. By reporting side effects you can help provide more information on the safety of this medicine.

## 5. How to store Linezolid Clonmel
- Keep this medicine out of the sight and reach of children.
- Do not use this medicine after the expiry date which is stated on the label after EXP. The expiry date refers to the last day of the month.

- Keep the bags in the protective overwrap, in order to protect from light.
  Do not freeze.
  Do not store above 30°C.
- For information regarding shelf life after first opening and warnings against certain visible signs of deterioration, see information for healthcare professionals at the end of this leaflet.
- Do not throw away any medicines via wastewater or household waste. Ask your pharmacist how to throw away medicines you no longer use. These measures will help protect the environment.

## 6. Contents of the pack and other information

**What Linezolid Clonmel contains**
The active substance is linezolid. Each 1 ml of solution contains 2 mg linezolid. Each bag with 300 ml solution for infusion contains 600 mg linezolid.

The other ingredients are glucose monohydrate, sodium citrate, citric acid, anhydrous, sodium hydroxide 1M solution (for pH adjustment), hydrochloric acid 1M solution (for pH adjustment) and water for injections.

**What Linezolid Clonmel looks like and contents of the pack**
Linezolid Clonmel 2 mg/ml solution for infusion is a clear, colourless to yellow solution. Each bag contains 300 ml solution for infusion.

The bags are supplied in boxes of 1 and 10 bags.

Not all pack sizes may be marketed.

**Marketing Authorisation Holder**
Clonmel Healthcare Ltd, Waterford Road, Clonmel, Co. Tipperary, Ireland

**Manufacturer**
STADA Arzneimittel AG, Stadastrasse 2-18, D-61118 Bad Vilbel, Germany

**This medicinal product is authorised in the Member States of the EEA under the following names:**

| | |
|---|---|
| France: | LINEZOLIDE EG 2 mg/ml, solution pour perfusion |
| Germany: | Linezolid STADA 2 mg/ml Infusionslösung |
| Ireland: | Linezolid Clonmel 2 mg/ml solution for infusion |
| Luxembourg: | Linezolid EG 2mg/ml solution pour perfusion |

**This leaflet was last revised in August 2018.**

The following information is intended for healthcare professionals only:

**Linezolid Clonmel 2 mg/ml Solution for Infusion**
**Linezolid**

For further information, consult the Summary of Product Characteristics (SmPC).

**Dosage and method of administration**
Linezolid should only be initiated in a hospital environment and after consultation with a relevant specialist such as a microbiologist or an infectious diseases specialist.

Patients who commence treatment on the parenteral formulation may be switched to either oral presentation when clinically indicated. In such circumstances, no dose adjustment is required as linezolid has an oral bioavailability of approximately 100 %.

The solution for infusion should be administered over a period of 30 to 120 minutes. The recommended linezolid dosage should be administered IV or orally twice daily.

**Recommended dosage and duration for adults:**
The duration of treatment is dependent on the pathogen, the site of infection and its severity, and on the patient's clinical response.

The following recommendations for duration of therapy reflect those used in the clinical trials. Shorter treatment regimens may be suitable for some types of infection but have not been evaluated in clinical trials.

The maximum treatment duration is 28 days. The safety and effectiveness of linezolid have not yet been established for treatment periods longer than 28 days.

No increase in the recommended dosage or duration of treatment is required for infections associated with concurrent bacteraemia. The dose recommendation for the solution for infusion and the tablets/granules for oral suspension are identical and are as follows:

| **Infections** | **Dosage and route for twice daily administration** | **Duration of treatment** |
|---|---|---|
| Nosocomial pneumonia | 600 mg twice daily | 10-14 Consecutive Days |
| Community acquired pneumonia | | |
| Complicated skin and soft tissue infections | 600 mg twice daily | |

**Paediatric population:**
There are insufficient data on the pharmacokinetics, safety and efficacy of linezolid in children and adolescents (< 18 years old) to establish dosage recommendations. Therefore, until further data are available, use of linezolid in this age group is not recommended.

**Older people:**
No dose adjustment is required.

**Patients with renal insufficiency:**
No dose adjustment is required.

Patients with severe renal insufficiency (i.e. CLCR < 30 ml/min):
No dose adjustment is required. Due to the unknown clinical significance of higher exposure (up to 10-fold) to the two primary metabolites of linezolid in patients with severe renal insufficiency, linezolid should be used with special caution in these patients and only when the anticipated benefit is considered to outweigh the theoretical risk.

As approximately 30 % of a linezolid dose is removed during 3 hours of haemodialysis, Linezolid Clonmel should be given after dialysis in patients receiving such treatment. The primary metabolites of linezolid are removed to some extent by haemodialysis, but the concentrations of these metabolites are still very considerably higher following dialysis than those observed in patients with normal renal function or mild to moderate renal insufficiency. Therefore, linezolid should be used with special caution in patients with severe renal insufficiency who are undergoing dialysis, and only when the anticipated benefit is considered to outweigh the theoretical risk.

To date, there is no experience of linezolid administration to patients undergoing continuous ambulatory peritoneal dialysis (CAPD) or alternative treatments for renal failure (other than haemodialysis).

**Patients with hepatic insufficiency:** Patients with mild to moderate hepatic insufficiency (Child-Pugh class A or B): No dose adjustment is required.

Patients with severe hepatic insufficiency (Child-Pugh class C): As linezolid is metabolised by a non-enzymatic process, impairment of hepatic function would not be expected to significantly alter its metabolism and, therefore, no dose adjustment is recommended. However, there are no pharmacokinetic data and limited clinical experience of Linezolid Clonmel in patients with severe hepatic insufficiency. Linezolid should be used with special caution in patients with severe hepatic insufficiency and only when the anticipated benefit is considered to outweigh the theoretical risk.

**Instructions for use and handling**
For single use only. Remove overwrap only when ready to use, then check for minute leaks by squeezing the bag firmly. If the bag leaks, do not use as sterility may be impaired. The solution should be visually inspected prior to use and only clear solutions, without particles should be used. Do not use these bags in series connections. Any unused solution must be discarded. Do not reconnect partially used bags.

Linezolid Clonmel Solution for Infusion is compatible with the following solutions: 5 % glucose intravenous infusion, 0.9 % sodium chloride intravenous infusion, Ringer-lactate solution for injection (Hartmann's solution for injection).

**Incompatibilities**
Additives should not be introduced into this solution. If linezolid is to be given concomitantly with other drugs, each drug should be given separately in accordance with its own directions for use. Similarly, if the same intravenous line is to be used for sequential infusion of several drugs, the line should be flushed prior to and following linezolid administration with a compatible infusion solution.

Linezolid Clonmel Solution for Infusion is known to be physically incompatible with the following compounds: amphotericin B, chlorpromazine hydrochloride, diazepam, pentamidine isethionate, erythromycin lactobionate, phenytoin sodium and sulphamethoxazole / trimethoprim. Additionally, it is chemically incompatible with ceftriaxone sodium.

**Shelf life after opening:**
From a microbiological point of view, unless the method of opening precludes the risk of microbial contamination, the product should be used immediately. If not used immediately, in-use storage times and conditions are the responsibility of the user.