SUMMARY OF PRODUCT CHARACTERISTICS

1. NAME OF THE MEDICINAL PRODUCT

Clonamox 125mg/5ml and 250mg/5ml Powder for Oral Suspension

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Clonamox 125 mg/5 ml:
Each 5ml of reconstituted suspension contains amoxicillin trihydrate equivalent to 125 mg of amoxicillin.
Excipients: contains 2.59g of sucrose and 7.26 mg of sodium per 5ml dose.

Clonamox 250 mg/5 ml:
Each 5ml of reconstituted suspension contains amoxicillin trihydrate equivalent to 250 mg of amoxicillin.
Excipients: contains 2.3g of sucrose and 7.65 mg of sodium per 5ml dose.

For a full list of excipients, see section 6.1.

3. PHARMACEUTICAL FORM

Powder for oral suspension.

Off-white powder which on reconstitution with water forms a pale yellow suspension with a lemon flavour.

4. CLINICAL PARTICULARS

4.1 Therapeutic indications

i) Infections due to organisms sensitive to amoxicillin.
ii) Oral prophylaxis of endocarditis.
iii) Acute uncomplicated gonorrhoea.

4.2 Posology and method of administration

Route of administration: oral

The absorption of Clonamox is virtually unimpaired by the presence of food.

Adults:The usual total daily dosage is 750 mg in divided doses. Children weighing more than 40 kg should be given the usual adult dose.

Dosage may be doubled in cases of severe infections.

Children weighing < 40 kg

The daily dosage for children is 40 - 90 mg/kg/day in two to three divided doses* (not exceeding 3 g/day) depending on the indication, severity of the disease and the susceptibility of the pathogen (see special dosage recommendations below and sections 4.4, 5.1 and 5.2).

*PK/PD data indicate that dosing three times daily is associated with enhanced efficacy, thus twice daily dosing is only recommended when the dose is in the upper range.

Special dosage recommendation

Tonsillitis: 50 mg/kg/day in two divided doses.
Acute otitis media: In areas with high prevalence of pneumococci with reduced susceptibility to penicillins, dosage regimens should be guided by national/local recommendations.

Early Lyme disease (isolated erythema migrans): 50 mg/kg/day in three divided doses, over 14 – 21 days.

Oral prophylaxis of endocarditis:

For dental procedures where an oral dose is appropriate.

Adults and children weighing over 40kg:

The usual dosage is 3 g approximately 1 hour prior to the procedure which may result in bacteraemia. A second dose may be given 6 hours later, if considered necessary.

Children weighing less than 40kg:
Prophylaxis for endocarditis: 50 mg amoxicillin/kg body weight given as a single dose one hour preceding the surgical procedure.

Gonorrhoea:

Adults: The usual dose is 3g as a single dose.

Dosage in impaired renal function

The dose should be reduced in patients with severe renal function impairment. In patients with a creatinine clearance of less than 30 ml/min an increase in the dosage interval and a reduction in the total daily dose is recommended (see section 4.4 and 5.2).

Adults:

Glomerular filtration rate	**Oral treatment**
> 30 ml/min	No adjustment necessary
10-30 ml/min	Maximum 500 mg b.d.
< 10 ml/min	Maximum 500 mg/day

Renal impairment in children under 40 kg:

Creatinine clearance ml/min	*Dose*	*Interval between administration*
> 30	*Usual dose*	*No adjustment necessary*
10 – 30	*Usual dose*	*12 h (corresponding to 2/3 of the dose)*
< 10	*Usual dose*	*24 h (corresponding to 1/3 of the dose)*

4.3 Contraindications

Use in patients with hypersensitivity to penicillins including ampicillin or cephalosporins or to any of the excipients (see section 6.1).

4.4 Special warnings and precautions for use

i) Before initiating therapy with amoxicillin, careful enquiry should be made concerning previous hypersensitivity reactions to penicillins, cephalosporins.

Cross-sensitivity between penicillins and cephalosporins is well documented.

ii) Serious and occasionally fatal hypersensitivity reactions (anaphylaxis) have been reported in patients receiving beta-lactam antibiotics. If an allergic reaction occurs, amoxicillin should be discontinued and appropriate alternative therapy instituted.
iii) Amoxicillin should be avoided if infectious mononucleosis (glandular fever) is suspected since the occurrence of a morbilliform rash has been associated with the condition following the use of amoxicillin.
iv) Prolonged use of an anti-infective may occasionally result in overgrowth of non-susceptible organisms.
v) Prolongation of prothrombin time has been reported rarely in patients receiving amoxicillin. Appropriate monitoring should be undertaken when anticoagulants are prescribed concurrently.
vi) Clonamox Oral Suspension contains sodium benzoate. Sodium benzoate is a derivative of benzoic acid that may irritate skin, eyes and mucous membranes.
vii) This product contains sucrose. Patients with rare hereditary problems of fructose intolerance, glucose-galactose malabsorption or sucrase-isomaltase insufficiency should not take this medicine.
viii) This medicinal product contains approximately 7.65 mg of sodium per 5ml dose. To be taken into consideration by patients on a controlled sodium diet.
ix) Dosage should be adjusted in patients with renal impairment.
x) In patients with reduced urine output, crystalluria has been observed very rarely, predominately with parenteral therapy. During the administration of high doses of amoxicillin, it is advisable to maintain adequate fluid intake and urinary output in order to reduce the possibility of amoxicillin crystalluria.
xi) Precaution should be taken in premature children and during the neonatal period: renal, hepatic and haematological functions should be monitored.

4.5 Interaction with other medicinal products and other forms of interaction

Probenecid decreases the renal tubular excretion of amoxicillin. Concurrent use with amoxicillin may result in increased and prolonged levels of amoxicillin.

Concurrent administration of allopurinol during treatment with amoxicillin can increase the likelihood of allergic skin reactions.

In common with other broad spectrum antibiotics, amoxicillin may affect the gut flora, leading to lower oestrogen reabsorption and reduced efficacy of combined oral contraceptives.

4.6 Fertility, pregnancy and lactation

Use in pregnancy:
Animal studies with amoxicillin have shown no teratogenic effects. The product has been in extensive clinical use since 1972 and its suitability in human pregnancy has been well documented in clinical studies. Amoxicillin may be used in pregnancy when the potential benefits outweigh the potential risks associated with treatment.

Use in lactation:
Amoxicillin may be administered during the period of lactation. With the exception of the risk of sensitisation associated with the excretion of trace quantities of amoxicillin in breast milk, there are no known detrimental effects for the infant.

4.7 Effects on ability to drive and use machines

Adverse effects on the ability to drive or operate machinery have not been observed.

4.8 Undesirable effects

The following convention has been utilised for the classification of undesirable effects:- Very common (>1/10), common (>1/100, <1/10), uncommon (>1/1000, <1/100), rare (>1/10,000, <1/1000), very rare (<1/10,000).

The majority of the side-effects listed below are not unique to amoxicillin and may occur when using other penicillins.

Blood and lymphatic system disorders	
Very rare:	Reversible leucopenia (including severe neutropenia or agranulocytosis), reversible thrombocytopenia and haemolytic anaemia.
	Prolongation of bleeding time and prothrombin time *(See Warnings and Precautions).*
Immune system disorders	
Very rare:	As with other antibiotics, severe allergic reactions, including angioneurotic oedema, anaphylaxis *(see Warnings and Precautions),* serum sickness and hypersensitivity vasculitis.
If a hypersensitivity reaction is reported, the treatment must be discontinued. (*See also Skin and subcutaneous tissue disorders*).	
Nervous system disorders	
Very rare:	Hyperkinesia, dizziness and convulsions. Convulsions may occur in patients with impaired renal function or in those receiving high doses.
Infections and Infestations	
Very rare:	Mucocutaneous candidiasis
Gastrointestinal disorders	
Common:	Diarrhoea and nausea.
Uncommon:	Vomiting.
Very rare:	Antibiotic associated colitis (including pseudomembranous colitis and haemorrhagic colitis). Black hairy tongue
	Superficial tooth discolouration has been reported in children. Good oral hygiene may help to prevent tooth discolouration as it can usually be removed by brushing.
Hepato-biliary disorders	
Very rare:	Hepatitis and cholestatic jaundice. A moderate rise in AST and/or ALT.
The significance of a rise in AST and/or ALT is unclear.	
Skin and subcutaneous tissue disorders	
Common:	Skin rash.
Uncommon:	Urticaria and pruritus.
Very rare:	Skin reactions such as erythema multiforme, Stevens-Johnson syndrome, toxic epidermal necrolysis, bullous and exfoliative dermatitis and acute generalised exanthematous pustulosis (AGEP).
	(*See also Immune system disorders*).

Renal and Urinary tract disorders	
Very rare:	Interstitial nephritis, crystalluria (*see Overdosage)*

4.9 Overdose

Gross overdosage will produce very high urinary concentrations, more so after parenteral administration. Symptoms of water/electrolyte imbalance should be treated symptomatically. Problems are unlikely to occur if adequate fluid intake and urinary output are maintained; however, amoxicillin crystalluria in some cases leading to renal failure has been observed. (See section 4.4, Special warnings and precautions for use). More specific measures may be necessary in patients with impaired renal function: the antibiotic is removed by haemodialysis.

5 PHARMACOLOGICAL PROPERTIES

5.1 Pharmacodynamic properties

Pharmacotherapeutic group: Penicillins with extended spectrum

ATC code: J01CA04

Amoxicillin, is a broad spectrum antibiotic which possesses the safety profile of the penicillins and is rapidly bactericidal against a wide range of Gram-negative and Gram-positive organisms.

5.2 Pharmacokinetic properties

Amoxicillin is well absorbed by the oral and parenteral routes, peak levels are achieved one to two hours after administration. Oral administration produces high serum levels independent of the time at which the food is taken. Amoxicillin gives good penetration into the bronchial secretions and the high urinary concentrations of unchanged antibiotic. The average serum half life is 60 minutes. Elimination is mainly via the urine.

In preterm infants with gestational age 26-33 weeks, the total body clearance after intravenous dosing of amoxicillin, day 3 of life, ranged between 0.75 – 2 ml/min, very similar to the inulin clearance (GFR) in this population. Following oral administration, the absorption pattern and the bioavailability of amoxicillin in small children may be different to that of adults. Consequently, due to the decreased CL, the exposure is expected to be elevated in this group of patients, although this increase in exposure may in part be diminished by decreased bioavailability when given orally.

5.3 Preclinical safety data

No information submitted.

6 PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Saccharin sodium
Sodium benzoate (E211)
Sodium citrate anhydrous
Silica, Colloidal Anhydrous
Microcrystalline cellulose (E460)
Carboxymethyl cellulose sodium (E466)
Lemon flavour 84260-51
Quinoline Yellow 14031(E104)
Sucrose

6.2 Incompatibilities

Not applicable.

6.3 Shelf life

Dry powder: 3 years.
Reconstituted suspension according to directions: 14 days.

6.4 Special precautions for storage

Dry powder: Do not store above 25°C.
Reconstituted suspension according to directions: Do not store above 25°C.

6.5 Nature and contents of container

HDPE bottle with child resistant closure (polypropylene with white colorant and aluminium, foil and vinyl liner with light wax).

Pack size:100ml

6.6 Special precautions for disposal of a used medicinal product or waste materials derived from such medicinal product and other handling of the product.

At the time of dispensing, the dry off-white powder should be reconstituted to form a pale yellow oral suspension as detailed below:

To the Pharmacist: *Clonamox 125mg/5ml*: Add 62 mls of water to reconstitute.
Clonamox 250mg/5ml: Add 66 mls of water to reconstitute.

To dispense: Loosen powder, add approximately half the water, invert bottle and shake well. Add the remaining water. Shake to complete the suspension.

7 MARKETING AUTHORISATION HOLDER

Clonmel Healthcare Limited,
Waterford Road,
Clonmel,
Co. Tipperary.

8 MARKETING AUTHORISATION NUMBER(S)

Clonamox 125mg/5ml: PA126/31/3
Clonamox 250mg/5ml: PA126/31/4

9 DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION

Date of first authorisation: *Clonamox 125mg/5ml*: 23rd June 1983
Clonamox 250mg/5ml: 14th May 1985

Date of last renewal: 23rd June 2008

10 DATE OF REVISION OF THE TEXT

June 2012