SUMMARY OF PRODUCT CHARACTERISTICS

1. NAME OF THE MEDICINAL PRODUCT

Calvepen 250 mg/5 ml Powder for Oral Suspension.

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

When reconstituted each 5 ml contains 250 mg Phenoxymethylpenicillin Calcium.

Excipients: Each 5 ml contains 5 mg methyl parahydroxybenzoate (E218), 2.5 g of sucrose and 15 mg of sodium.

For the full list of excipients, see section 6.1.

3. PHARMACEUTICAL FORM

Powder for oral suspension.

A white to off-white powder which on reconstitution with water forms a homogenous suspension.

4. CLINICAL PARTICULARS

4.1 Therapeutic indications

In the treatment of infection due to micro-organisms sensitive to this anti-infective.

In the prophylactic management of patients with rheumatic fever.

4.2 Posology and method of administration

Oral penicillin should ideally be given in divided doses (3-4 times daily).

Adults:
The usual total daily dose is 1000 to 2000 mg in divided doses.

Children:

Aged over 6 years:
The usual total daily dosage is 500 to 1000 mg in divided doses.

Aged 1 to 6 years:
The usual total daily dosage is 250 to 500 mg in divided doses.

Aged under 1 year:
The usual total daily dosage is 125 to 250 mg in divided doses.

Rheumatic Fever Prophylaxis
The usual total daily dose is 250 to 500 mg.

4.3 Contraindications

Hypersensitivity to the active substance, penicillins, including ampicillin or to any of the excipients listed in section 6.1.

4.4 Special warnings and precautions for use

The effectiveness of oral contraceptives may be reduced in patients on concurrent penicillin V therapy. The additional use of a non-hormonal contraceptive method is therefore recommended.

Patients suffering from severe gastrointestinal impairments accompanied by vomiting and diarrhoea should not be treated with penicillin V, because sufficient absorption is not ensured. (In those cases a parenteral administration is recommended, e.g. with benzyl penicillin or another adequate antibiotic).

Prolonged use of an anti-infective may result in the development of superinfection due to organisms resistant to that anti-infective.

This product contains methyl hydroxybenzoate (E218) which may cause allergic reactions (possibly delayed).

This medicinal product contains approximately 15 mg of sodium per 5ml dose. To be taken into consideration by patients on a controlled sodium diet.

This product contains 2.5 g of sucrose per 5ml dose. This should be taken into account in patients with diabetes mellitus. Patients with rare hereditary problems of fructose intolerance, glucose-galactose malabsorption or sucrase-isomaltase insufficiency should not take this medicine.

4.5 Interactions with other medicinal products and other forms of interaction

Penicillin V should not be combined with bacteriostatic chemotherapeutic agents/antibiotics (e.g. tetracyclines, sulphonamides or chloramphenicol), because these may have an antagonistic effect.

The absorption of oral penicillins may be reduced if a non-absorbable aminoglycoside (e.g. neomycin) was used immediately before oral penicillin therapy or is still being used for bowel antisepsis.

The excretion of phenoxymethylpenicillin in urine is retarded by probenecid, as is the case for all penicillins.

Interference with laboratory tests:
Non-enzymatic methods of testing for glucose in urine may give false positive results during penicillin V therapy. Penicillin V may also interfere with urobilinogen tests.

4.6 Fertility, pregnancy and lactation

The product should not be used during pregnancy unless considered essential by the physician. The product is excreted in breast milk, presenting the risk of candidiasis and also of central nervous system toxicity due to prematurity of the blood brain barrier. There is a theoretical possibility of later sensitisation.

4.7 Effects on ability to drive and use machines

Presumed to be safe or unlikely to produce an effect.

4.8 Undesirable effects

Gastrointestinal tract
Penicillin V commonly (≥ 1/100, < 1/10) produces gastrointestinal side effects, including nausea, vomiting, loss of appetite, gastric discomfort, abdominal pain, flatulence and diarrhoea. These disorders are usually light and abate during or at the latest after discontinuing treatment.

Very rarely (< 1/10000) a pseudomembranous enterocolitis may occur during penicillin V therapy, mostly caused by *Clostridium difficile*.

Skin and tissue (Hypersensitivity reactions)

There have been common reports (≥ 1/100, < 1/10) of exanthema and of inflammation of mucous membranes, especially in the mouth (glossitis, stomatitis). There have been rare reports (≥ 1/10,000 to < 1/1,000) of black hairy tongue. Following penicillin V use, transiently dry mouth and taste alterations may occur. Toxic epidermal necrolysis (frequency not known).

Hypersensitivity phenomena
Allergic reactions may commonly (≥ 1/100, < 1/10) occur and typically manifest as skin reactions (e.g. rash, itching, urticaria). An immediate-type urticarial hypersensitivity reaction is usually indicative of true penicillin allergy and necessitates discontinuation of therapy. There have been very rare (< 1/10000) reports of serious allergic reactions due to sensitisation to the 6-aminopenicillanic acid group, including drug fever, arthralgia, eosinophilia, angineurotic oedema, laryngeal oedema, bronchospasm, tachycardia, dyspnoea, serum sickness, allergic vasculitis and dropping of blood pressure up to life threatening shock.

Hypersensitivity reactions of all intensities - to the point of anaphylactic shock- have also been observed after oral penicillin use. Severe anaphylactoid reactions, which occur significantly less often after oral administration of penicillin than after intravenous or intramuscular administration, may necessitate appropriate emergency management.

Blood and blood cells
There have been very rare (<1/10000) reports of changes in blood counts, including granulocytopenia, agranulocytosis, thrombocytopenia, pancytopenia, haemolytic anaemia and eosinophilia. These changes are reversible.

Kidneys, urogenital tract
In very rare (<1/10000) cases interstitial nephritis may occur.

Hepato-biliary
Transiently raised liver enzymes occur rarely.

Reporting of suspected adverse reactions
Reporting suspected adverse reactions after authorisation of the medicinal product is important. It allows continued monitoring of the benefit/risk balance of the medicinal product. Healthcare professionals are asked to report any suspected adverse reactions 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.

4.9 Overdose

There has been no experience of overdose associated with the use of Calvepen.

5. PHARMACOLOGICAL PROPERITIES

5.1 Pharmacodynamic properties

Therapeutic blood levels are usually achieved within half an hour and sustained for approximately four hours.

5.2 Pharmacokinetic properties

Phenoxymethylpenicillin is rapidly excreted by the kidneys with a T ½ of 0.5 to 1 hour.

5.3 Preclinical safety data

There are no preclinical data of relevance to the prescriber which are additional to that already included in other sections of the SPC.

6. PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Caramel custard dry aroma
Sucrose
Hypromellose
Golden syrup flavour permaseal
Methyl parahydroxybenzoate (E218)
Sodium carraghenate
Sodium chloride
Sodium citrate

6.2 Incompatibilities

Not applicable.

6.3 Shelf life

18 months

The product, after reconstitution, should not be kept for more than seven days if stored at room temperature or for more than fourteen days if stored under refrigeration at a temperature between 2^{o}C and 8^{o}C.

6.4 Special precautions for storage

None.

6.5 Nature and contents of container

White, high density polyethylene bottles with foil lined, low density polyethylene, screw on child resistant caps, containing powder for reconstitution with water to make 100 ml.

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

To reconstitute: Loosen powder, add 66 ml water and shake well.

7. MARKETING AUTHORISATION HOLDER

Clonmel Healthcare Limited
Waterford Road
Clonmel
Co. Tipperary

8. MARKETING AUTHORISATION NUMBER

PA 126/137/3

9. DATE OF FIRST AUTHORISATION/RENEWAL OF AUTHORISATION

Date of first authorisation: 20th January 1986
Date of last renewal: 20th January 2006

10. DATE OF REVISION OF THE TEXT

December 2014