

Can only be prescribed under supervision of an infection specialist

Pristinamycin is a combination of two streptogramin antibiotics (one of these is structurally related to macrolides) which act synergistically against Gram positive organisms including staphylococci and streptococci. It is only available for oral administration and is not licensed in the UK, (but has been available in Europe for over 30 years) thus its use is restricted and should only be prescribed following discussion with an infection specialist. The main indication is an oral step down following intravenous therapy and its use should only be considered when all other therapeutic options have been discussed and deemed unsuitable. It should not be used as empirical therapy.

Indications

Bone and joint infection (particularly prosthetic joint infection) where one of the following organisms have been isolated:

- 1) Coagulase-negative staphylococci
- 2) *Staphylococcus aureus*, particularly MRSA
- 3) Enterococcus

AND

Oral options are limited to other more toxic antimicrobials (such as linezolid and chloramphenicol). Where therapy with pristinamycin is being considered, sensitivity testing for **Synercid** (quinupristin-dalfopristin) on the organisms isolated should be requested - this should be discussed with the microbiologist on-call.

When used for staphylococcal **prosthetic joint infection**, the addition of rifampicin should be considered in all patients, according to sensitivities. Remember to consider drug interactions.

Dose

Dose of pristinamycin for deep-seated infections should be **2g 12 hourly orally**, which is generally well tolerated. This is the maximum dose listed in the information for the unlicensed product used (see references below) and is used in some other centres.

Supply

Please discuss with a pharmacist to arrange supply. There may be a delay in supply because it is unlicensed and the product has to be imported. Community and Hospital pharmacy can obtain supplies from the medicine importer IDIS. Patients receiving a course of treatment will generally be under hospital care and supply will be made from the hospital pharmacy. The exceptions to this are patients who get their medicines in a monitored dosage system weekly or who are on long term suppression therapy. In these cases GPs can prescribe and should be advised of any monitoring required.

Adverse effects

The most common adverse effects reported are gastrointestinal disturbance and rash, including exfoliative dermatitis. Dose reduction may be used to manage GI adverse effects. There are also reports of liver function and haematological adverse effects (2).

Duration

The duration is usually to complete the course for a bone or joint infection as per the local guidance document. In **exceptional circumstances** pristinamycin may be used on a longer term basis to suppress infection where all other interventions, including surgery, are not an option. The JAC review (2) includes some patients where therapy was given for > 12 months. It is the responsibility of the clinical team (not ID/Micro) to arrange prescribing, monitoring and review for patients on suppressive therapy.

Interactions

There is some information on interactions in the SPC (1) for the unlicensed product below, including a significant interaction with colchicine. However in addition to this it is thought that pristinamycin is a CYP 3A4 inhibitor and P-gp inhibitor and there are documented cases of interactions with anticoagulants, ciclosporin, tacrolimus and methotrexate.

References



Pystocine SPC

1. Summary of Product Characteristics: Pyostacine 500mg tablets
2. Pristinamycin: old drug, new tricks? . Cooper, Eden C et al; J Antimicrob Chemother 2014; 69: 2319-2325 Accessed at: <http://jac.oxfordjournals.org/content/69/9/2319.full.pdf>

Further Information on clinical use, pharmacokinetics, toxicity and interactions can be found on Medicines Complete (Athens login required) at the link below:

[Medicines Complete pristinamycin](#)

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