

**Questions and answers on the referral for
Meropenem and associated names
meropenem powder for solution for injection or infusion 500 mg and 1 g**

The European Medicines Agency has completed a review of Meropenem and associated names. The Agency's Committee for Medicinal Products for Human Use (CHMP) has concluded that there is a need to harmonise the prescribing information for Meropenem and associated names in the European Union (EU).

The review was carried out under an 'Article 30' referral¹.

What is Meropenem?

Meropenem is a powder that is made up into a solution for injection or infusion. It contains the active substance meropenem.

Meropenem is used to treat various bacterial infections including infections of the lungs, urinary tract (structures that carry urine), the abdomen, skin, the female reproductive system and brain.

The active substance in Meropenem, meropenem, is an antibiotic that belongs to the group 'carbapenems'. It works by attaching to certain types of protein on the surface of the bacteria cells. This prevents the bacteria from building the walls that surround their cells, which kills the bacteria. It is also available in the EU under the trade names Optinem and Merrem. The company that markets Meropenem is AstraZeneca.

Why was Meropenem reviewed?

Meropenem and associated names are authorised in the EU via national procedures. This has led to divergences across member states in the way the medicine can be used, as seen in the differences in the Summaries of Product Characteristics (SPCs), labelling and package leaflets in the countries where the product is marketed. Meropenem has been identified as needing harmonisation by the Co-ordination Group on the Mutual and Decentralised Procedures – Human (CMD(h)).

On 1 October 2008, the European Commission referred the matter to the CHMP in order to harmonise the marketing authorisations for Meropenem and associated names in the EU.

What are the conclusions of the CHMP?

The CHMP, in the light of the data submitted and the scientific discussion within the Committee, was of the opinion that the SPCs, labelling and package leaflets should be harmonised across the EU.

4.1 Therapeutic indications

At the start of the referral, some of the indications such as skin and skin tissue infections and urinary tract infections or infections of the female reproductive system were not approved in all Member States. Also, not all Member States had authorised the medicine for use in children.

The CHMP agreed on the following diseases for which the medicine may be used:

¹ Article 30 of Directive 2001/83/EC as amended, referral on the grounds of divergent decisions adopted by member States

- pneumonia (infection of the lungs);
- broncho-pulmonary infections in patients with cystic fibrosis;
- complicated urinary tract infections;
- complicated infections in the abdomen;
- intra- and post-partum infections (infections during and after childbirth);
- complicated skin and soft tissue infections;
- acute bacterial meningitis (inflammation of the membranes that surround the brain and spine).

The Committee noted that for most indications Meronem should be used for children above three months of age, but that doctors should retain the option of treating younger children.

Meronem may also be used in patients with neutropenic fever (fever associated with low levels of neutrophils, a type of white blood cell) that is suspected to be caused by bacterial infection.

4.2 Posology and method of administration

Because the recommended dose for both adults and children differed among Member States, the CHMP recommended harmonised dosage schedules:

- for pneumonia, complicated urinary tract infections, complicated intra-abdominal infections, intra- and post-partum infections and complicated skin and soft tissue infections, the recommended dose in adults and children weighing more than 50 kg should be 500 mg or 1 g every eight hours, while children aged from three months to 11 years and those weighing less than 50 kg should be given 10 or 20 mg/kg every eight hours.
- for broncho-pulmonary infections in cystic fibrosis and acute bacterial meningitis, the CHMP recommended a dose of 2 g every eight hours in adults and children weighing over 50 kg, and 40 mg/kg every eight hours in children aged from three months to 11 years and those weighing less than 50 kg.

4.3 Contra-indications

At the start of the referral, some Member States did not include hypersensitivity (allergy) to carbapenems, penicillins or other beta-lactam antibiotics as contra-indications (situations where the medicine must not be used) and some Member States included hypersensitivity to excipients (other ingredients in the medicine).

The CHMP agreed on a harmonised list of contra-indications. The Committee recommended that Meronem should not be used in patients who are hypersensitive to any carbapenem medicine or in patients who have severe hypersensitivity to any type of beta-lactam anti-bacterial medicines such as penicillins or cephalosporins.

Other changes

The CHMP harmonised the SPC section on special warnings and retained warnings about convulsions and hepatic reactions.

The Committee also harmonised the SPC section on interactions with other medicines. The new wording mentions that medicines containing valproic acid should be avoided when taking Meronem.

The amended information to doctors and patients is available [here](#).

The European Commission issued a decision on 15 October 2009.

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