Questions and answers on Methylphenidate Hexal (methylphenidate hydrochloride, prolonged-release tablet 18, 36 and 54 mg)

Outcome of a procedure under Article 29 of Directive 2001/83/EC

On 25 July 2013, the European Medicines Agency completed an arbitration procedure following a disagreement among Member States of the European Union (EU) regarding the authorisation of the medicine Methylphenidate Hexal. The Agency’s Committee for Medicinal Products for Human Use (CHMP) concluded that the benefits of Methylphenidate Hexal outweigh its risks, and the marketing authorisation granted in Denmark can be recognised in other Member States of the EU.

What is Methylphenidate Hexal?

Methylphenidate is a medicine that is used to treat children aged between 6 and 18 years of age who have ADHD (attention deficit/hyperactivity disorder), a condition in which children show a persistent inability to concentrate, hyperactivity and impulsive behaviour. Methylphenidate belongs to a group of medicines called ‘psychostimulants’ and is thought to work by enhancing the activity of areas of the brain that control attention and concentration. It has been available since the 1950s as both immediate-release tablets and capsules, which release methylphenidate straight away, and as modified-release tablets that release some or all of the active substance more slowly over several hours.

Methylphenidate Hexal is a generic medicine based on a ‘reference medicine’, Concerta, which is authorised in all the EU Member States. It is available as a modified-release tablet, which releases some of the active substance immediately (the ‘immediate-release phase’) and the rest over several hours.

Why was Methylphenidate Hexal reviewed?

Hexal A/S submitted Methylphenidate Hexal for mutual recognition on the basis of the initial authorisation granted by Denmark on 29 March 2012 and also valid through a decentralised procedure in Ireland. The company wanted the authorisation to be recognised in Germany (the ‘concerned Member State’).
However, the Member States were not able to reach an agreement and the Danish medicines regulatory agency referred the matter to the CHMP for arbitration on 21 December 2012.

The grounds for the referral were objections raised by Germany and the Netherlands who considered that the bioequivalence study carried out under fed conditions did not show that Methylphenidate Hexal was bioequivalent for the immediate-release phase to its reference product. As the product information states that the tablet can be taken with or without food, a bioequivalence study in fed conditions was required to grant the marketing authorisation. Two medicines are bioequivalent if they produce the same levels of the active substance in the body.

**What are the conclusions of the CHMP?**

Based on evaluation of the currently available data and the scientific discussion within the Committee, the CHMP concluded that the failure to show bioequivalence between Methylphenidate Hexal and its reference medicine in the immediate-release phase under fed conditions were due to differences between patients in the effects of a high-fat meal on the way medicines are handled by the body, and not to differences between the formulations of the two medicinal products, and that bioequivalence to the reference medicinal product has been shown. The Committee also noted that the studies were performed by the applicant before the publication of recent updated guidance\(^1\) for products of this type. The CHMP therefore concluded that the benefits of Methylphenidate Hexal outweigh its risks and recommended that the marketing authorisation be granted in the concerned Member States.

The European Commission issued a decision on this opinion on 09 October 2013.

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\(^1\) Committee for Human Medicinal Products. Questions & Answers: Positions on specific questions addressed to the pharmacokinetics working party. 11. Requirements for demonstration of bioequivalence for generics of biphasic modified release formulations for oral use. EMA/618604/2008 Rev. 7.