16 February 2012
EMA/CHMP/95965/2012
Committee for Medicinal Products for Human Use (CHMP)

Summary of opinion[1]

Pyramax

pyronaridine tetraphosphate / artesunate

On 16 February 2012, the Committee for Medicinal Products for Human Use (CHMP) adopted a positive scientific opinion in accordance with Article 58 of (EC) No Regulation 726/2004, for the medicinal product Pyramax 180mg/60mg film-coated tablets intended for the treatment of acute, uncomplicated malaria infection caused by *Plasmodium falciparum* or by *Plasmodium vivax* in adults and children weighing 20 kg or more, in areas of low transmission with evidence of artemisinin resistance as a single treatment course in any given patient.

The scientific opinion holder for this medicinal product is Shin Poong Pharmaceutical Co., Ltd. They may request a re-examination of any CHMP opinion, provided they notify the European Medicines Agency in writing of their intention within 15 days of receipt of the opinion.

The active substances of Pyramax are pyronaridine tetraphosphate /artesunate (ATC Code P01BF06), a fixed combination of a known blood schizonticide (artemisinin derivative) and pyronaridine. Pyronaridine inhibits the formation of β-haematin thus, preventing the malarial parasite from neutralising haem, which is toxic to the parasite.

The benefits of Pyramax are its ability to be active against major malaria species, *P. falciparum* and *P. vivax*. As shown in the pivotal studies conducted in acute, uncomplicated *P. falciparum* and *P. vivax* malaria in adults and in children weighing 20 kg or more, Pyramax proved to have comparable efficacy to established standard-of-care comparator drugs. The most common side effects are headache, vomiting, eosinophilia and liver transaminases increased.

As Pyramax can have liver toxicity with increases in liver transaminases and as Pyramax is contra-indicated in case of underlying hepatic injury or significant liver function test abnormalities, liver function tests should be performed both before and after Pyramax treatment course.

1 Scientific opinion in accordance with Article 58 of (EC) No Regulation 726/2004 in the context of cooperation with the WORLD HEALTH ORGANISATION (WHO)

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There is no data are available on repeated treatment of Pyramax. Therefore, pending further information from ongoing trials, only one single treatment course of Pyramax should be used in clinical practice and Pyramax should never be re-administered.

A pharmacovigilance plan for Pyramax will be implemented as part of the post-opinion commitments.

The approved indication is:

“Pyramax tablets are indicated in the treatment of acute, uncomplicated malaria infection caused by *Plasmodium falciparum* or by *Plasmodium vivax* in adults and children weighing 20 kg or more, in areas of low transmission with evidence of artemisinin resistance.

Pyramax is to be used only as a single treatment course in any given patient (see section 4.2 and 4.4.).

Consideration should be given to official guidance on the appropriate use of antimalarial agents (see section 4.4)”

It is proposed that Pyramax be dispensed at facilities equipped to undertake the required liver function monitoring and only in areas with low malaria transmission and with evidence of resistance to artemisinin combination treatments (ACTs), consistent with World Health Organisation’s (WHO) recommendations for artemisinin resistance.

Detailed recommendations for the use of this product will be described in the summary of product characteristics (SmPC), which will be published in the European public assessment report (EPAR).

The CHMP, on the basis of quality, safety and efficacy data submitted, considers there to be a favourable benefit-to-risk balance for Pyramax 180mg/60mg film-coated tablets.

This medicinal product Pyramax 180mg/60mg film-coated tablets is exclusively intended for markets outside the European Union.