18 December 2014
EMA/CHMP/737422/2014
Committee for Medicinal Products for Human Use (CHMP)

Summary of opinion[1] (initial authorisation)

Holoclar

Ex vivo expanded autologous human corneal epithelial cells containing stem cells

On 18 December 2014, the Committee for Medicinal Products for Human Use (CHMP) adopted a positive opinion, recommending a conditional marketing authorisation for the medicinal product Holoclar, a living tissue equivalent intended for the treatment of adult patients with moderate to severe limbal stem-cell deficiency due to ocular burns.

Holoclar was designated an orphan medicinal product on 7 November 2008. The applicant for this medicinal product is Chiesi Farmaceutici S.p.A.

The active substance of Holoclar is 'ex vivo expanded autologous human corneal epithelial cells containing stem cells', an ophthalmological product (ATC Code: S01XA19) that acts by replacing damaged corneal cells, including limbal stem cells responsible for continuous regeneration and maintenance of the corneal epithelium. By re-establishing a reservoir of stem cells in the eye, Holoclar initiates normal corneal cell growth and maintenance.

The benefits with Holoclar are its ability to repair the damaged ocular surface, to improve or resolve symptoms of pain, photophobia and burning and to improve the patient's visual acuity. The most common side effects are eye-related and include problems with cornea (epithelial defects) consistent with treatment failure, and inflammation of the eyelids (blepharitis). The most commonly observed side effect related to surgery is bleeding around the site of the operation where Holoclar is inserted (conjunctival haemorrhage), while the most common side effect related to concomitant corticosteroid treatment is increased pressure in the eye (glaucoma).

A pharmacovigilance plan for Holoclar will be implemented as part of the marketing authorisation.

The approved indication is: "Treatment of adult patients with moderate to severe limbal stem cell deficiency (defined by the presence of superficial corneal neovascularisation in at least two corneal quadrants, with central corneal involvement, and severely impaired visual acuity), unilateral or

[1] Summaries of positive opinion are published without prejudice to the Commission decision, which will normally be issued 67 days from adoption of the opinion.

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bilateral, due to physical or chemical ocular burns. A minimum of 1-2 mm^2 of undamaged limbus is required for biopsy".

Holoclar must be administered by an appropriately trained and qualified surgeon and is restricted to hospital use only.

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) and made available in all official European Union languages after the marketing authorisation has been granted by the European Commission.

The CHMP, on the basis of quality, safety and efficacy data submitted, considers there to be a favourable benefit-to-risk balance for Holoclar and therefore recommends the granting of the marketing authorisation. The marketing authorisation is conditional[2].

[2] A conditional marketing authorisation is granted to a medicinal product that fulfils an unmet medical need when the benefit to public health of immediate availability outweighs the risk inherent in the fact that additional data are still required. The marketing authorisation holder is likely to provide comprehensive clinical data at a later stage.