Idoxuridine

NOT RECOMMENDED AS AN ESSENTIAL MEDICINE

Section: 21. Ophthalmological preparations > 21.1. Ophthalmological preparations > Anti-infective agents

ATC codes: S01AD01

Indication	Herpes simplex keratitis ICD11 code: 1F00.10
INN	Idoxuridine
Medicine type	Chemical agent
List type	Core
Formulations	**Local > Ophthalmological > Solution (eye drops):** 0.1% **Local > Ophthalmological > Ointment:** 0.2%
EML status history	First added in 1987 (TRS 770) Removed in 2007 (TRS 946)
Sex	All
Age	Adolescents and adults
Therapeutic alternatives	Medicines within the same pharmacological class can be used
Patent information	Patents have expired in most jurisdictions Read more about patents.
Wikipedia	Idoxuridine
DrugBank	Idoxuridine

Summary of evidence and Expert Committee recommendations

In 2005 the Expert Committee requested a review of Section 21 of the WHO Model List of Essential Medicines Ophthalmological preparations. As part of the review, undertaken by Sight Savers International and the VISION 2020 Technology Working Group, an application for inclusion of a new formulation of aciclovir (ophthalmological preparation) and a proposal to delete the listed antiviral ophthalmological medicine idoxuridine was submitted. The proposal was to list aciclovir ointment 3% W/W as a new formulation replacing idoxuridine solution (eye drops), 0.1% and eye ointment, 0.2%. The Committee noted that the application provided a review of the existing evidence for the comparative effectiveness of ophthalmological aciclovir compared to idoxuridine and other topical antivirals for treating epithelial keratitis caused by herpes simplex virus. The public health need for inclusion of a new formulation of aciclovir on the Model List was fully demonstrated. As noted by the expert reviewers, the clinical evidence, based on systematic reviews (1), shows that aciclovir ointment is superior to idoxuridine in both adult and child populations, based on improved healing at 7 days (RR 2.10, 95% CI, 1.27–3.47) and healing at 14 days (RR 1.21, 95% CI, 1.05–1.40). The Cochrane review found that aciclovir appeared to be equivalent to other nucleoside antiviral agents (trifluridine). The Committee noted that aciclovir was well tolerated. The Committee noted that aciclovir ointment has been approved by several stringent regulatory authorities and is available as a generic preparation, while idoxuridine has largely been removed from the market. The current cost of aciclovir ointment is variable (from US$ 0.25 to US$ 23.00 per tube) and its inclusion on the Model List may lead to further reductions in price. As the evidence provided in the application supports the public health need, effectiveness and safety of aciclovir ophthalmological formulation, the Committee recommended that

aciclovir ointment 3% W/W be added to the core Model List for treatment of ocular surface disease caused by herpes simplex virus. References: 1. Wilhelmus KR. Interventions for herpes simplex virus epithelial keratitis. Cochrane Database of Systematic Reviews, 2003, Issue 2. Art. No.: CD002898. DOI: 10.1002/14651858.CD002898.

