### Summary of evidence and Expert Committee recommendations

Trachoma, a chronic keratoconjunctivitis caused by recurrent infection from Chlamydia trachomatis, is the leading cause of infectious blindness worldwide (1). The current WHO guidelines recommend a single oral dose of azithromycin as the treatment. It was noted that oral azithromycin is not included in Section 21.1 of the EML. Two studies were submitted in support of the application. A randomized, controlled, double-masked, double-dummy, noninferiority study including 670 children from Guinea and Pakistan was conducted. Three groups received one of three treatments: azithromycin 1.5% eye drops twice daily for two days, azithromycin 1.5% eye drops twice daily for three days, or azithromycin single 20 mg/kg oral dose. The cure rate at day 60 in the per protocol analysis was 93.0%, 96.3% and 96.6% in the two-day group, three-day group, and oral treatment group, respectively. The azithromycin 1.5% eye drops groups were non-inferior to oral azithromycin. There were no significant differences between the groups with respect to re-emergence of trachoma (P > 0.545).

The second study was a mass treatment programme with no comparator. In February 2008, a programme was undertaken to treat the entire population of the Kolofata Health District in Cameroon (115 274 residents) with azithromycin 1.5% eye drops twice daily for three days. A total of 51 659 adults and 59 681 children over 15 years of age were treated. It was reported that: “One year after two rounds of topical treatment, prevalence dropped to 3.1% (95% CI 2.0–4.9) (P < 0.0001), a decrease of 90%. The prevalence of trachomatous inflammation decreased significantly (P = 0.0001) to 3.1% one year after the second round of treatment. The prevalence of intense trachomatous inflammation disappeared after two annual treatments (0% after second treatment (P = 0.0005))” (3,4).

The first trial showed similar efficacy of azithromycin eye drops compared with single-dose oral treatment. In the second study, the cure rates in the mass treatment were similar to what would have been achieved with single dose oral treatment. The WHO Prevention of Blindness and Deafness unit supported the application and mentioned future activities – including revision of WHO’s trachoma control manual – that would support azithromycin eye drops. In summary,
Azithromycin eye drops produced similar results to the single-dose oral treatment but required three days of topical application. There appeared to be better safety with azithromycin eye drops. It was noted that donation programmes with suitable presentations of the ophthalmic solution were planned. The oral preparation is not recommended for pregnant women or children under 1 year of age; for these patient groups the ophthalmic solution offers an important option. The use of oral azithromycin and its limitations are given in the WHO guidelines (5). The only alternative for such patients is topical tetracycline, which requires a protracted course (six weeks or six months, depending on the dose regimen used). The Expert Committee recognized the need for topical azithromycin in particular patient groups, and acknowledged the superiority of this option compared with topical tetracycline. The Committee therefore recommended the addition of azithromycin 1.5% ophthalmic solution to Section 21.1 of both the EML and EMLc.

References: