Section: 6. Anti-infective medicines

| | | ATC codes: J01MB02 |
|--------------------------|-----------------------------------------------------------------------------------------|--------------------|
| Indication | Shigella resistant to unspecified antibiotic ICD11 code: MG50.AZ | |
| INN | Nalidixic acid | |
| Medicine type | Chemical agent | |
| List type | Core | |
| Formulations | Oral > Solid: 250 mg ; 500 mg | |
| EML status history | First added in 1993 (TRS 850) Changed in 1995 (TRS 867) Removed in 2005 (TRS 933) | |
| Sex | All | |
| Age | Adolescents and adults | |
| Therapeutic alternatives | The recommendation is for this specific medicine | |
| Patent information | Patents have expired in most jurisdictions Read more about patents. | |
| Wikipedia | Nalidixic acid 🗹 | |
| DrugBank | Nalidixic acid 🗹 | |

Summary of evidence and Expert Committee recommendations

During its meeting in 2003, the Committee recommended that nalidixic acid be reviewed for possible fast-track deletion at the meeting in 2005. Reviews were received from the ISDB and Medicines Sans Frontieres, and a comment was received from the WHO Department of Child and Adolescent Health and Development, all supporting the deletion of this item from the Model List. The Committee noted that there was no strong evidence on the efficacy of nalidixic acid in the treatment of urinary tract infections. Both ISDB and MSF indicated that antibacterial resistance to nalidixic acid developed quickly, and this may induce resistance to other quinolone such as ciprofloxacin (1). The WHO Department of Child and Adolescent Health and Development stated that ciprofloxacin is now the recommended first-line antibiotic for treating shigellosis, and that the use of nalidixic acid should be discontinued even in areas where it is still effective against Shigella (2). The Committee also. noted that the cost/DDD of nalidixic acid is higher than that of ciprofloxacin (MSP US\$ 0.3488 and MAP US\$ 0.4488 for nalidixic acid versus MSP US\$ 0.0618 and MAP US\$ 9,0890 for ciprofloxacin) (3). The Committee recommended that nalidixic acid be deleted from the Model List because of lack of evidence of efficacy in current practice and the availability of better alternatives. References: 1. Sack et al. Antimicrobial resistance in shigellosis, cholera, and campylobacteriosis. Geneva, World Health Organization, 2001. 2. Antibiotics in the management of shigellosis. WHO Weekly Epidemiological Record, 2004, 79:355–356. 3. MSH. International drug price indicator guide, 2003 (http://erc.msh.org/ dmpguide/, accessed 30 January 2005).

