



# BSAC

british society for antimicrobial chemotherapy

## Amendments to the recommendations for cefpodoxime susceptibility testing by the BSAC standardized disc diffusion method

The emergence and spread of extended-spectrum b-lactamases (ESBLs) in Enterobacteriaceae, and proposals to use cefpodoxime disc diffusion tests to screen for ESBLs, have prompted re-evaluation of cefpodoxime testing for Enterobacteriaceae.

Currently the therapeutic guidelines for testing cefpodoxime susceptibility by disc diffusion are based on combined data from a wide range of bacterial genera tested with a 5 µg disc. However, breakpoints specific to Enterobacteriaceae, and primarily designed for ESBL detection, are now needed. Moreover, 5 µg discs are not readily available and the validated combination disc methods for confirmation of ESBL production employ discs containing 10 or 30 mg cefpodoxime.

Most data currently available for the BSAC standardized technique, including data specifically related to detection of ESBLs, are based on 10 µg discs. These data have been reviewed for Enterobacteriaceae, particularly *E. coli* and *Klebsiella* spp., and the following tentative zone diameter breakpoints are proposed for susceptibility testing with a 10 µg cefpodoxime disc:

Antibiotic	MIC breakpoint (mg/L)			Disc content (µg)	Interpretation of zone diameters (mm)		
	R>	I	S≤		R≤	I	S≥
Cefpodoxime	1	-	1	10	25	-	26

Enterobacteriaceae found resistant to cefpodoxime should have an ESBL test done, e.g. by testing for cefpodoxime/clavulanate synergy with combination discs. If the zone diameter for a cefpodoxime + clavulanate 10 + 1 µg disc is ≥5 mm larger than that with a cefpodoxime 10 µg disc, ESBL production is inferred.