

## Objective

- The BSAC Bacteraemia Resistance Surveillance Programme<sup>1</sup> has monitored the prevalence of resistance in the agents of bacteraemia in the UK and Ireland since 2001.
- Ceftobiprole was first tested against all isolates in 2004

## Methods

- Up to 250 isolates from each organism group are collected from 25 centres in the UK and Ireland each year and tested centrally by BSAC agar dilution methodology.
- ESBL production and K1- and AmpC-hyperproduction are inferred from phenotypes.

## Results

- Tables show trends in key resistances 2001-2004.
- Text and charts show results for 2004.

## Conclusions

- The prevalence of methicillin resistance is high but not rising in staphylococci, while ESBL production and ciprofloxacin resistance are increasing in Enterobacteriaceae.
- Ceftobiprole had good activity against most organisms from bacteraemia in 2004, including MRSA, *S. pneumoniae*, *E. faecalis* and most Enterobacteriaceae, but not *E. faecium*, *S. maltophilia* nor ESBL-, K1- or many AmpC-producers.
- Ceftobiprole may also have potential against *P. aeruginosa*.

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**Collecting Laboratories:** *England:* William Harvey, Ashford; City, Birmingham; Bristol Royal Infirmary; West Suffolk, Bury St. Edmunds; Addenbrooke's, Cambridge; Countess of Chester; Coventry & Warwickshire; Leicester Royal; St Mary's, London; UCH, London; Wythenshawe, Manchester; Freeman, Newcastle; Northern General, Sheffield; Royal Shrewsbury; Southampton General; Sunderland Royal; Treliske, Truro. *Ireland:* Cork University; Beaumont, Dublin. *N. Ireland:* Belfast City.; Altnagelvin, Londonderry. *Scotland:* Glasgow Royal; Victoria, Kirkcaldy. *Wales:* Ysbytu Gwynedd, Bangor; UHW, Cardiff.

**Central Laboratory:** Centre for Infections, HPA, London.  
**Sponsors:** Basilea, Cubist, MSD, Pfizer, Wyeth. **Support:** BSAC.

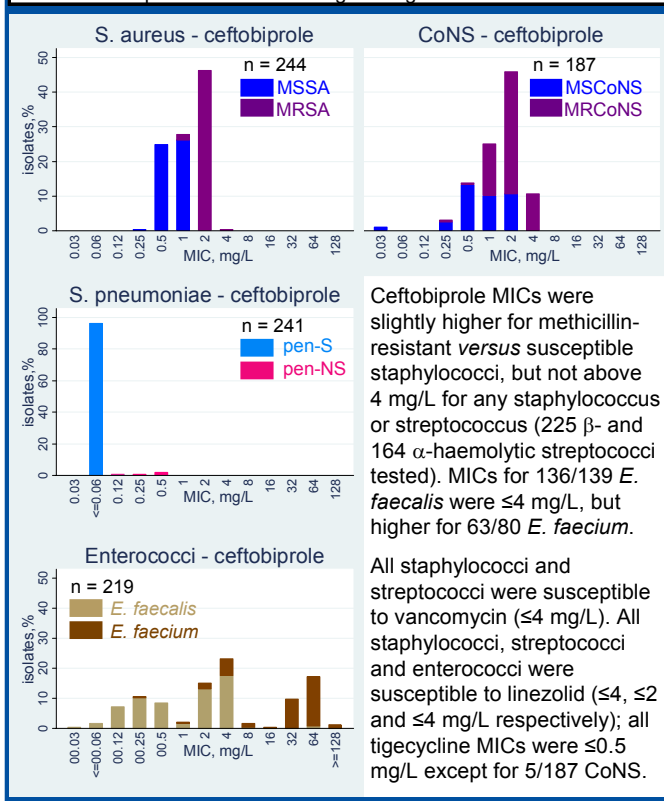
## Abbreviations

cip	ciprofloxacin	oxa	oxacillin	R	resistant
lzd	linezolid	pen	penicillin	S	non-susceptible
M	methicillin	van	vancomycin	NS	non-susceptible
CoNS	coagulase-negative staphylococci	+	positive (producer)		

## Gram-positive

% & trend	<i>S. aureus</i> n = 962		CoNS n = 808		<i>E. faecium</i> n = 292	<i>S. pneumoniae</i> n = 927
	oxa-R	cip-R	oxa-R	cip-R	van-R	pen-NS
2001	43.3	43.7	79.9	47.8	20.6	8.8
2002	40.8	41.6	72.0	51.0	18.6	8.2
2003	40.4	51.1	57.5	50.0	24.3	7.9
2004	48.4	53.3	62.0	52.9	22.5	3.3
trend?	NS	0.008	<0.001	NS	NS	0.026

trend? shows p-value for trend in logistic regression



## Gram-negative

% & trend	<i>E. coli</i> n = 927		<i>Klebsiella</i> n = 991		<i>Enterobacter</i> n = 809	
	ESBL+	cip-R	ESBL+	cip-R	ESBL+	cip-R
2001	0.0	8.2	5.6	5.6	6.1	10.6
2002	3.2	6.4	5.0	9.1	8.7	11.2
2003	2.4	10.5	8.2	7.3	5.5	9.2
2004	6.0	16.1	18.3	15.4	8.7	9.2
trend?	0.001	0.001	<0.001	0.001	NS	NS

trend? shows p-value for trend in logistic regression

