
Article:
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Table 1.Description of the E. coli bacteraemia sentinel study participants

Patient and specimen characteristics			**N**	**%**
		Total study participants	1,688	
Patient and specimen details	Age group (years)	0-<1	26	1.5
		1-14	14	0.8
		15-44	161	9.5
		45-64	312	18.5
		65-74	342	20.3
		75-84	478	28.3
		85+	355	21.0
	Gender	Female	901	53.4
		Male	753	44.6
		Unknown	34	2.0
	Timing of E. coli bacteraemia onset	0-1 after admission	1,153	68.3
		2-6 days	129	7.6
		>=7 days	294	17.4
		Not admitted	110	6.5
		Not reported	2	0.1
	Specialty	Medical	1,162	68.8
		General	236	14.0
		Surgical	60	3.6
		Not known	59	3.5
		Not reported	171	10.1
	Underlying focus of infection	Bone and joint infection	7	0.4
		Central nervous system	1	0.1
		Contaminant	5	0.3
		Febrile neutropenia	54	3.2
		Gastrointestinal tract	118	7.0
		Hepatobiliary	264	15.6
		Indwelling intravascular device	19	1.1
		Other	29	1.7
		Pneumonia	54	3.2
		Skin/soft tissue infection	18	1.1
		Unknown	252	14.9
		Urogenital tract	865	51.2
		Not reported	2	0.1
Healthcare exposure	Any exposure in the week prior to bacteraemia	Yes	584	34.6
		No	949	56.2
		Not known	155	9.2
	Any exposure in the month prior to bacteraemia	Yes	930	55.1
		No	458	27.1
		Not known	300	17.8

	Antibiotics in the 4 weeks prior to the bacteraemia	Yes	546	32.4
		No	681	40.3
		Not known	459	27.2
		Not reported	2	0.1
	Urinary catheter in situ, inserted, removed, manipulated in the 7 days prior to the bacteraemia	Yes	354	21.0
		No	1,206	71.5
		Not known	128	7.6
	Indwelling vascular access device in situ, or removed in the 3 days prior to the bacteraemia	Yes	373	22.1
		No	1,190	70.5
		Not known	125	7.4
	Other devices in situ or removed in the 4 weeks prior to the bacteraemia	Yes	123	7.3
		No	1,332	78.9
		Not known	233	13.8
	Other procedures in the 4 weeks prior to the bacteraemia	Yes	209	12.4
		No	1,213	71.9
		Not known	265	15.7
		Not reported	1	0.1

Table 2. Crude and adjusted1 odds ratios for risk factors for genito-urinary focus of E. coli bacteraemia

Variable		Crude OR	95% Confidence interval		P value	Adjusted OR	95% confidence interval		P value
Gender	Female	1							
	Male	0.7	0.6	0.9	0.0018	0.7	0.5	0.9	0.001
Age group (years)	1-44	1							
	0<1	0.7	0.3	1.5	0.3201	1.2	0.5	2.9	0.748
	45-84	0.7	0.5	1.0	0.0603	0.8	0.6	1.2	0.358
	>=85	1.0	0.7	1.4	0.9594	1.0	0.6	1.5	0.948
UTI in the month prior to bacteraemia	None	1							
	>=1	4.1	2.9	5.7	<0.001	5.4	3.6	8.1	<0.001
Urinary catheterisation in the 7 days prior to the bacteraemia	No	1							
	Yes	2.2	1.7	2.9	<0.001	1.8	0.9	3.8	0.108
	Not known	0.5	0.4	0.8	0.0015	0.4	0.3	0.7	0.001
Duration of catheterisation	No catheters	1							
	Short term	1.6	1.1	2.2	0.0062				
	Long term	5.0	3.2	7.7	<0.001				
	Not known	1.3	0.7	2.3	0.4867	Omitted due to collinearity with "Urinary catheterisation in the 7 days prior to the bacteraemia"			
Insertion method of urinary catheter	No catheter	1							
	Suprapubic	5.6	1.2	25.8	0.0123				
	Urethral	2.6	2.0	3.4	<0.001				
	Don't know	1.1	0.4	3.2	0.8282				Not included
Reason for urinary catheterisation	Not reported	1							
	Other	2.0	1.5	2.7	<0.001	2.0	0.9	4.4	0.09
	Incontinence	7.0	2.7	18.2	<0.001	5.2	1.5	18.1	0.009
	Not known	3.9	2.1	7.2	<0.001	2.6	1.0	7.1	0.061
Treatment for a UTI in the month prior to the E. coli bacteraemia	No	1							
	Yes	7.7	4.7	12.5	<0.001	10.7	6.3	18.1	<0.001
Specialty	Medical	1							
	General	0.5	0.4	0.7	<0.001	0.6	0.4	0.9	0.016
	Surgical	4.1	2.1	8.0	<0.001	4.3	2.0	9.3	<0.001
	Not known	1.3	0.8	2.3	0.2821	1.8	0.9	3.4	0.074
	Not reported	1.0	0.7	1.4	0.9066	1.2	0.7	1.9	0.578
Timing of E. coli bacteraemia onset	0-1 day after admission	1							
	2-6 days	0.6	0.4	0.8	0.0023	0.4	0.2	0.6	<0.001
	>=7 days	0.5	0.4	0.6	<0.001	0.3	0.2	0.4	<0.001
	not admitted	0.8	0.6	1.3	0.4059	1.0	0.6	1.8	0.987
	Not reported	0.8	0.0	12.6	0.8658	0.5	0.0	9.6	0.639

1. Final model includes risk factors identified from the literature and age and gender as a priori risk factors. Other variables were only included if they changed the effect of the main risk factors and were associated in the crude analysis. Adjusted ORs are adjusted for all other risk factors in the final model.

Table 3.Antibiotic susceptibilities of the E.coli blood culture by timing of bacteraemia onset in relation to hospital admission

		Timing of E. coli bacteraemia onset in relation to hospital admission								
		0-1 day after admission		2-6 days		>=7 days		Not admitted		
Antibiotic name	**Susceptibility result**	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**	**P-value**
Ciprofloxacin	NS	124	16.6	13	16.9	36	19.7	14	15.4	
	S	623	83.4	64	83.1	147	80.3	77	84.6	
	Total	747	100	77	100	183	100	91	100	0.758
Trimethoprim	NS	210	40.3	22	40.0	55	45.1	28	33.7	
	S	311	59.7	33	60.0	67	54.9	55	66.3	
	Total	521	100	55	100	122	100	83	100	0.449
Co-amoxiclav	NS	326	40.5	48	54.6	96	48.2	41	44.1	
	S	480	59.6	40	45.5	103	51.8	52	55.9	
	Total	806	100	88	100	199	100	93	100	0.027
Third generation cephalosporins	NS	59	8.8	9	12.3	21	12.7	6	7.2	
	S	614	91.2	64	87.7	144	87.3	77	92.8	
	Total	673	100	73	100	165	100	83	100	0.311
Carbapenems	NS	1	0.1	0	0	1	0.5	0	0	
	S	706	99.9	80	100	183	99.5	88	100	
	Total	707	100	80	100	184	100	88	100	0.653
Gentamicin	NS	74	9.0	5	5.6	26	12.8	5	5.4	
	S	746	91.0	84	94.4	178	87.3	88	94.6	
	Total	820	100	89	100	204	100	93	100	0.105
Piperacillin/tazobactam	NS	77	9.9	15	18.1	34	17.3	13	14.1	
	S	704	90.1	68	81.9	163	82.7	79	85.9	
	Total	781	100	83	100	197	100	92	100	0.008
Nitrofurantoin	NS	5	4.6	0	0	0	0	0	0	
	S	103	95.4	9	100	22	100	5	100	
	Total	108	100	9	100	22	100	5	100	0.631

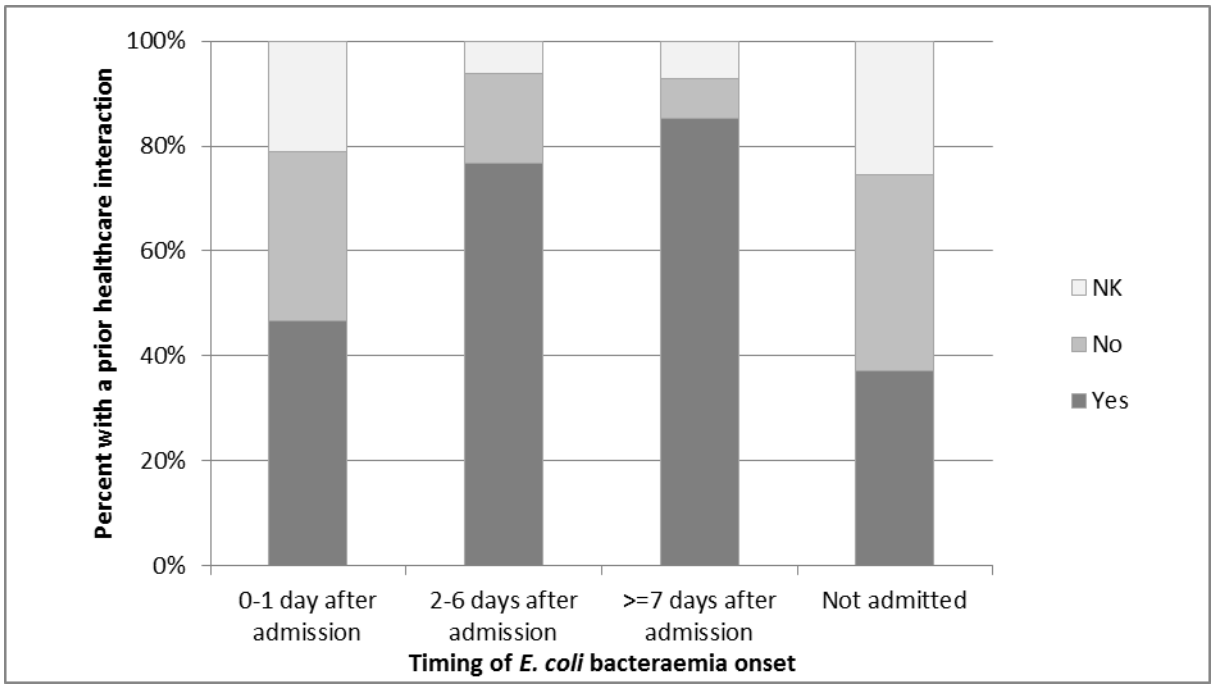
S, susceptible; NS, non-susceptible

Table 4. Antibiotic susceptibilities of the E.coli blood culture by underling focus of the E. coli bacteraemia

		Underlying focus of the E. coli bacteraemia								
		Urogenital tract		Pneumonia		Other		Not known		
Antibiotic name	**Susceptibility result**	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**	**P-value**
Ciprofloxacin	NS	108	18.5	9	23.7	55	17.6	15	9.0	
	S	475	81.5	29	76.3	257	82.4	152	91.0	
	Total	583	100	38	100	312	100	167	100	0.02
Trimethoprim	NS	198	48.1	3	13.6	79	38.0	37	26.2	
	S	214	51.9	19	86.4	129	62.0	104	73.8	
	Total	412	100	22	100	208	100	141	100	<0.001
Co-amoxiclav	NS	283	45.4	14	35.9	145	43.8	69	35.6	
	S	340	54.6	25	64.1	186	56.2	125	64.4	
	Total	623	100	39	100	331	100	194	100	0.08
Cephalosporins	NS	55	10.8	2	6.7	25	9.0	13	7.4	
	S	455	89.2	28	93.3	254	91.0	163	92.6	
	Total	510	100	30	100	279	100	176	100	0.521
Carbapenems	NS	1	0.2	0	0	1	0.3	0	0	
	S	542	99.8	38	100	304	99.7	174	100	
	Total	543	100	38	100	305	100	174	100	0.87
Gentamicin	NS	62	9.8	3	7.7	36	10.5	9	4.6	
	S	569	90.2	36	92.3	306	89.5	186	95.4	
	Total	631	100	39	100	342	100	195	100	0.108
Piperacillin/tazobactam	NS	83	14.0	5	13.2	37	11.3	14	7.3	
	S	512	86.1	33	86.8	292	88.8	178	92.7	
	Total	595	100	38	100	329	100	192	100	0.095
Nitrofurantoin	NS	2	2.2	0	0	3	8.3	0	0	
	S	89	97.8	2	100	33	91.7	15	100	
	Total	91	100	2	100	36	100	15	100	0.309

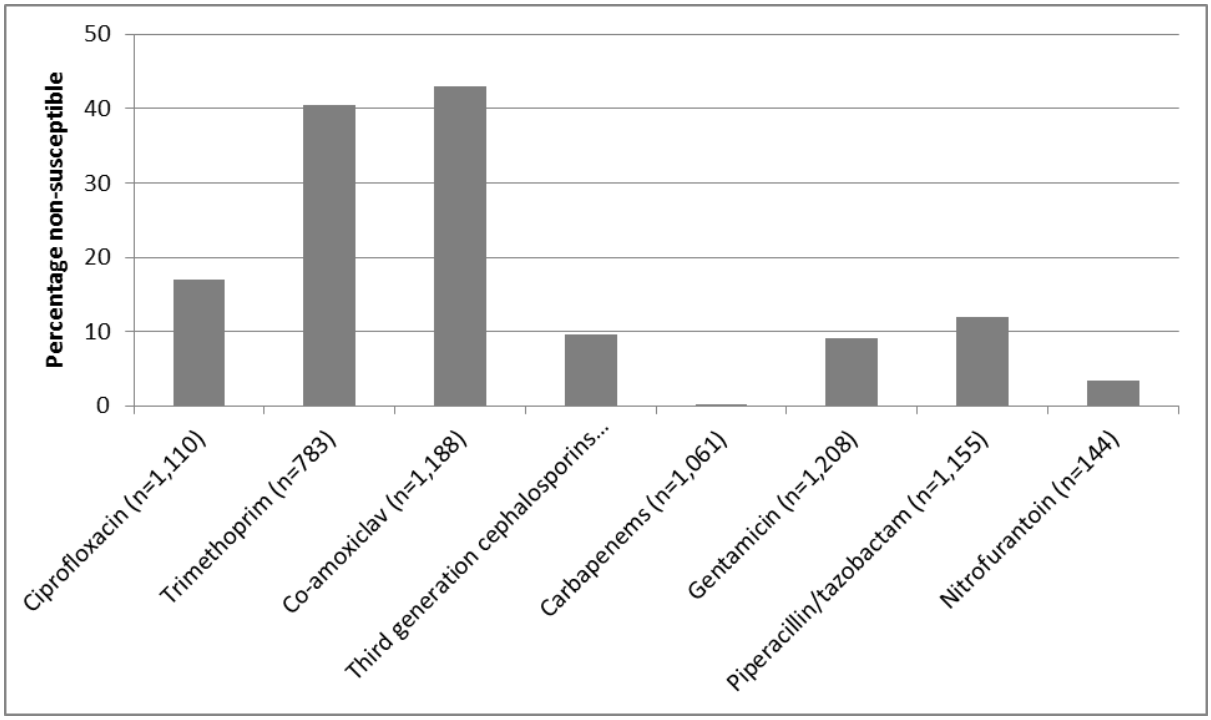
S, susceptible; NS, non-susceptible

Figure 1. Timing of E. coli bacteraemia onset and history of healthcare interaction in the month prior to the bacteraemia



Excludes 2 patients where admission status could not be ascertained

Figure 2. Antibiotic susceptibilities of the E.coli blood culture



Numbers in parentheses indicate the total number of isolates tested