

Supplementary Table S1: Infectious disease related ICD10 codes

DA39: Infections with meningococci

DA40: Sepsis caused by streptococci

DA41: Sepsis, other

DA49: Bacterial infection, without specification of location

DB35: Skin fungus

DB36: Other superficial fungi infection

DB37: Infection caused by candida albicans

DB38: Coccidioidomycosis

DB39: Histoplasmosis

DB40: Blastomycosis

DB42: Sporotrichosis

DB44: Aspergillosis

DB45: Kryptococcosis

DB46: Zygomycosis

DB48: Mycosis, other

DB49: non-specified mycosis

DG00: Bacterial meningitis

DG01: Meningitis in bacterial infections classified otherwise

DG06: Intra cranial and intra spinal abscesses and granulomas

DH65: Otitis media, non-purulent
DH66: Otitis media, purulent
DH67: Otitis media, classified otherwise
DJ00: Common cold
DJ01: Sinuitis
DJ02: Pharyngitis
DJ03: Sore throat
DJ04: Acute laryngitis
DJ05: Pseudocroup and acute epiglottitis
DJ06: acute laryngo-pharyngitis
DJ09: Influenza
DJ10: Influenza
DJ11: Influenza
DJ12: Pneumonia, viral
DJ13: Pneumonia, pneumococcus
DJ14: Pneumonia, Haemophilus
DJ15: Pneumonia, other bacterial
DJ16: Pneumonia, other infectious agent
DJ17: Pneumonia, classified otherwise
DJ18: Influenza
DJ36: Abscess, thorax

DJ40: Bronchitis

DJ41: Bronchitis, chronic

DJ42: Bronchitis, chronic otherwise classified

DJ44: Chronic obstructive pulmonary disease

DL00: Dermatitis, caused by staphylococcus

DL01: Impetigo

DL02: Abscess, skin

DL03: Phlegmone

DL04: Acute lymphadenitis

DL05: Pilonidal cyst

DL08: Infection located to the skin and subcutaneous tissue

DN30: Cystitis

DN34: Urinary tract infection

DN42: Other disease relation to the prostate

DN45: Epididymitis

DN49: Other infections related to male reproductive organs

DN70: Infection in uterine tube and ovaries

DN71: Uterine infections, except cervicitis

DN72: Cervicitis

DN73: Other form of infection related to female reproductive organs

DN75: Disease in Bartholin's gland

DN76: Infections in vagina and the outer female reproductive organs

DN77: Wounds and infections the outer female reproductive organs

Supplementary Table S2: Unadjusted analyses results

	Mecillinam		Trimethoprim		Nitrofurantoin		Multiresistance	
Exposure	c_OR*	CI95%**	c_OR	CI95%	C_OR	CI95%	c_OR	CI95%
Number of prescriptions								
0								
1	1.37	(1.19;1.58)	1.41	(1.32;1.51)	1.29	(1.01;1.66)	1.40	(0.62;3.19)
2	1.91	(1.68;2.18)	1.67	(1.57;1.78)	2.16	(1.74;2.69)	2.93	(1.50;5.72)
≥3	2.73	(2.42;3.08)	3.12	(2.93;3.32)	4.73	(3.93;5.69)	12.08	(6.93;21.06)
Number of DDD								
0								
>0-33.3 percentile***	1.62	(1.44;1.82)	1.55	(1.47;1.63)	1.88	(1.55;2.29)	1.78	(0.91;3.50)
33.3-66.6 percentile	2.02	(1.75;2.33)	2.04	(1.91;2.19)	2.69	(2.15;3.37)	5.91	(3.1;11.29)
>66.6 percentile	2.91	(2.54;3.33)	3.24	(3.02;3.48)	4.70	(3.83;5.78)	14.37	(7.96;25.95)
Time since last prescription								
No exposure	Ref		Ref				Ref	
8–30 days	2.29	(2.06;2.55)	2.23	(2.12;2.35)	2.95	(2.48;3.5)	6.23	(3.65;10.64)
31–60 days	1.64	(1.42;1.90)	1.73	(1.62;1.86)	2.61	(2.08;3.27)	4.04	(2.10;7.77)
61–90 days	1.60	(1.35;1.89)	1.51	(1.39;1.63)	1.87	(1.40;2.48)	2.32	(0.92;5.86)
Exposure to specific drugs within 90 days (Ref: no exposure)								
Phenoxymethylpenicillin or dicloxacillin	2.14	(1.86;2.45)	1.21	(1.11;1.31)	1.30	(1.02;1.65)	1.12	(0.49;2.57)
Pivmecillinam	1.75	(1.58;1.94)	1.39	(1.32;1.47)	1.46	(1.23;1.74)	3.55	(2.30;5.48)
Amoxicillin	2.05	(1.64;2.57)	1.32	(1.16;1.50)	0.85	(0.50;1.45)	-****	-
Amoxicillin + β lactamase inhibitor	2.01	(1.43;2.80)	1.35	(1.12;1.64)	1.54	(0.88;2.69)	10.24	(4.51;23.24)
Trimethoprim	1.50	(1.26;1.80)	6.52	(5.97;7.13)	1.10	(0.73;1.66)	9.99	(5.48;18.18)

Sulfamethizole	1.27	(1.08;1.48)	1.42	(1.32;1.54)	1.06	(0.80;1.4)	1.44	(0.72;2.90)
Nitrofurantoin	1.65	(1.40;1.95)	1.88	(1.73;2.05)	8.80	(7.35;10.52)	9.92	(6.07;16.22)
Macrolides	0.89	(0.66;1.21)	1.20	(1.05;1.37)	1.05	(0.69;1.6)	-	-
Quinolones	1.07	(0.81;1.42)	2.22	(1.98;2.48)	1.81	(1.23;2.65)	3.26	(1.23;8.58)
Others	1.95	(1.65;2.30)	1.59	(1.45;1.74)	1.26	(0.89;1.78)	3.34	(1.76;6.36)

* c_OR= crude odds ratio

** CI95%= 95% Confidence interval

*** For the different resistance patterns, the 33,3/66,6 percentiles were as following: mecillinam 10/21.88, trimethoprim 10/21.88, nitrofurantoin 10.5/22.00, multiresistance 10/18

**** no analysis due to low numbers

Supplementary Table S3: Sensitivity analyses results, adjusted.

		MECILLINAM			TRIMETHOPRIM			NITROFURANTOIN			MULTIRESISTANCE		
		OR	CI95%		OR	CI95%		OR	CI95%		OR	CI95%	
NUMBER OF PRESCRIPTIONS													
	0	Ref			Ref			Ref			Ref		
	1	1.35	1.13	1.61	1.50	1.39	1.63	1.30	0.94	1.79	1.73	0.54	5.59
	2	1.90	1.61	2.24	1.63	1.50	1.78	1.83	1.36	2.46	3.66	1.36	9.82
	3+	2.34	2.01	2.73	3.57	3.31	3.85	5.98	4.81	7.43	12.12	5.22	28.11
NUMBER OF DDD													
	0	Ref			Ref			Ref			Ref		
	>0-33.3 percentile	1.61	1.39	1.86	1.63	1.52	1.75	1.94	1.52	2.49	2.07	0.77	5.58
	>33.3-66.6 percentile	1.83	1.53	2.20	2.21	2.03	2.41	3.02	2.31	3.95	6.29	2.45	16.12
	>66.6 percentile	2.54	2.14	3.01	3.68	3.36	4.03	5.84	4.59	7.43	14.33	6.02	34.12
TIME SINCE LAST PRESCRIPTION													
	No exposure*	Ref			Ref			Ref			Ref		
	8 days–30 days	2.10	1.83	2.40	2.39	2.24	2.55	3.42	2.76	4.23	6.62	3.02	14.49
	>30 days–60 days	1.60	1.33	1.92	1.86	1.71	2.03	2.82	2.15	3.70	3.05	1.01	9.22

	>60 days–90 days	1.44	1.14	1.81	1.59	1.43	1.77	1.93	1.34	2.76	3.56	1.08	11.73
PHENOXYMETHYLPENICILLIN OR DICLOXACILLIN													
	No	Ref			Ref			Ref			Ref		
	Yes	2.16	1.83	2.54	1.20	1.09	1.32	1.29	0.96	1.73	1.36	0.49	3.78
PIVMECILLINAM													
	No	Ref			Ref			Ref			Ref		
	Yes	1.58	1.39	1.80	1.53	1.43	1.63	1.69	1.40	2.05	4.22	2.23	7.96
AMOXICILLIN													
	No	Ref			Ref			Ref					
	Yes	1.74	1.32	2.30	1.29	1.10	1.52	0.56	0.28	1.14			
AMOXICILLIN + B LACTAMASE INHIBITOR													
	No	Ref			Ref			Ref			Ref		
	Yes	1.77	1.18	2.65	1.45	1.15	1.84	1.07	0.51	2.26	5.19	1.20	22.40
TRIMETHOPRIM													
	No	Ref			Ref			Ref			Ref		
	Yes	1.43	1.13	1.80	7.19	6.38	8.11	1.81	1.34	2.46	6.17	2.36	16.16
SULFAMETHIZOLE													
	No	Ref			Ref			Ref			Ref		
	Yes	1.15	0.94	1.42	1.46	1.32	1.61	1.19	0.88	1.61	1.44	0.51	4.07
NITROFURANTOIN													
	No	Ref			Ref			Ref			Ref		
	Yes	1.65	1.35	2.03	2.48	2.23	2.76	11.77	9.70	14.29	13.44	6.75	26.75
MACROLIDES													
	No	Ref			Ref			Ref					
	Yes	0.80	0.55	1.17	1.21	1.03	1.42	0.75	0.40	1.42			
QUINOLONES													
	No	Ref			Ref			Ref			Ref		
	Yes	1.00	0.72	1.38	3.13	2.71	3.62	2.51	1.79	3.51	2.29	0.55	9.52
OTHERS													
	No	Ref			Ref			Ref			Ref		
	Yes	1.66	1.35	2.05	1.68	1.50	1.88	1.35	0.96	1.89	3.75	1.56	9.04