

## Erratum to: Antibiotic use varies substantially among adults: a cross-national study from five European Countries in the ARITMO project

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Appendix Table 5 in the original version of this article unfortunately contained a mistake. The overall age- and sex standardized annual prevalence of antibiotic use as shown in Table 5 was inadvertently based on partial data. We would like to correct the erroneous numbers. All changes are reflected in the revised table presented here.

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**Table 5** Age- and sex-standardized annual prevalence of antibiotic use per 1000 person-years according to antibiotic chemical substances

	Denmark (AUH)	Italy (ERD)	Italy (HSD)	Germany (GePaRD)	The Netherlands (PHARMO)	The United Kingdom (THIN)
Overall	396.2	442.0	398.8	401.9	232.8	162.4
J01GB06 Amikacin	–	0.2	0.2	<0.1	<0.1	<0.1
J01CA04 Amoxicillin	20.2	48.9	47.8	47.8	35.2	–
J01CR02 Amoxicillin and enzyme inhibitor	1.2	94.4	75.9	7.3	27.1	21.6
J01CA01 Ampicillin	0.1	1.4	3.2	0.6	<0.1	0.7
J01CR01 Ampicillin and enzyme inhibitor	–	0.2	1.4	<0.1	–	–
J01CA51 Ampicillin, combinations	–	–	–	–	–	2.8
J01CE04 Azidocillin	–	–	–	<0.1	–	–
J01FA10 Azithromycin	22.6	35.1	25.7	21.3	12.8	1.3
J01DF01 Aztreonam	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
J01CA06 Bacampicillin	<0.1	1.8	4.6	–	–	<0.1
J01CE08 Benzathine benzylpenicillin	–	0.3	0.3	0.1	0.4	–
J01CE10 Benzathine phenoxymethylpenicillin	–	–	–	<0.1	–	–
J01CE01 Benzylpenicillin	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
J01EA02 Brodimoprim	–	–	<0.1	–	–	–
J01CA03 Carbenicillin	–	–	<0.1	–	–	<0.1
J01DC04 Cefaclor	–	1.5	1.4	7.5	0.1	5.2
J01DB05 Cefadroxil	–	0.1	<0.1	1.6	–	1.0
J01DB01 Cefalexin	<0.1	1.1	1.4	1.0	0.1	19.6
J01DB03 Cefalotin	–	–	<0.1	–	<0.1	–
J01DC03 Cefamandole	–	<0.1	<0.1	–	<0.1	–
J01DB07 Cefatrizine	–	–	<0.1	–	–	–
J01DB04 Cefazolin	–	0.4	0.4	<0.1	<0.1	<0.1
J01DD16 Cefditoren	–	0.9	1.0	–	–	–
J01DE01 Cefepime	–	0.1	0.3	<0.1	–	–
J01DD10 Cefetamet	–	<0.1	<0.1	–	–	–
J01DD08 Cefixime	–	20.1	11.8	6.5	–	0.2
J01DC09 Cefmetazole	–	–	<0.1	–	–	–
J01DD09 Cefodizime	–	0.2	0.6	–	–	–
J01DC06 Cefonicide	–	0.8	1.8	–	–	–
J01DD12 Cefoperazone	–	<0.1	<0.1	–	–	–
J01DD01 Cefotaxime	–	0.3	0.5	<0.1	<0.1	<0.1
J01DC07 Cefotiam	–	–	–	<0.1	–	–
J01DC01 Cefoxitin	–	<0.1	–	<0.1	–	–
J01DD13 Cefpodoxime	–	4.3	2.2	4.1	<0.1	<0.1
J01DC10 Cefprozil	–	1.8	1.9	–	–	<0.1
J01DB09 Cefradine	–	–	<0.1	–	<0.1	3.1
J01DD02 Ceftazidime	<0.1	0.6	1.3	<0.1	<0.1	<0.1
J01DB12 Ceftazole	–	<0.1	<0.1	–	–	–
J01DD14 Ceftibuten	–	6.3	3.9	2.6	0.1	<0.1
J01DD07 Ceftizoxime	–	<0.1	0.1	–	–	–
J01DD04 Ceftriaxone	<0.1	10.4	8.8	0.3	<0.1	<0.1
J01DC02 Cefuroxime	<0.1	3.1	2.5	14.8	0.2	0.5
G01AA05 Chloramphenicol	–	<0.1	0.1	–	–	–
J01BA01 Chloramphenicol	–	–	0.1	<0.1	<0.1	<0.1
J01AA03 Chlortetracycline	–	–	<0.1	–	–	<0.1

**Table 5** continued

		Denmark (AUH)	Italy (ERD)	Italy (HSD)	Germany (GePaRD)	The Netherlands (PHARMO)	The United Kingdom (THIN)
J01MB06	Cinoxacin	–	0.3	0.5	<0.1	–	<0.1
J01MA02	Ciprofloxacin	0.4	33.8	25.3	35.9	9.0	12.0
J01FA09	Clarithromycin	9.6	41.7	32.2	23.5	12.9	11.5
G01AA10	Clindamicin	<0.1	<0.1	0.2	0.8	<0.1	0.5
J01FF01	Clindamycin	<0.1	0.1	0.1	27.4	1.4	0.2
J01XX03	Clofoctol	–	–	<0.1	–	–	–
J01AA11	Clomocycline	–	–	–	–	–	<0.1
J01CF02	Cloxacillin	–	–	–	–	<0.1	<0.1
A07AA10	Colistin	–	–	<0.1	<0.1	<0.1	<0.1
J01XB01	Colistin	<0.1	<0.1	<0.1	<0.1	<0.1	0.1
J01CA20	Combinations	–	–	–	–	–	<0.1
J01CE30	Combinations	–	–	<0.1	0.1	0.1	<0.1
J01CR50	Combinations of penicillins	–	–	<0.1	0.5	–	–
J01AA20	Combinations of tetracyclines	–	–	–	–	–	0.3
J04AB01	Cycloserine	–	–	–	–	–	<0.1
J01XX09	Daptomycin	–	–	–	<0.1	<0.1	<0.1
J01AA01	Demeclocycline	–	–	<0.1	–	<0.1	<0.1
J01CF01	Dicloxacillin	30.1	–	–	<0.1	<0.1	–
J01AA02	Doxycycline	0.1	2.3	2.4	38.7	49.3	12.5
J01MA04	Enoxacin	–	<0.1	0.1	1.4	–	–
J01DH03	Ertapenem	–	–	<0.1	<0.1	<0.1	<0.1
J01FA01	Erythromycin	16.8	0.9	1.4	3.6	2.4	–
J04AK02	Ethambutol	<0.1	<0.1	<0.1	0.1	0.1	<0.1
J04AM03	Ethambutol and isoniazid	–	<0.1	<0.1	–	–	–
J01MA08	Fleroxacin	–	–	–	<0.1	–	–
J01CF05	Flucloxacillin	0.2	<0.1	0.2	0.6	9.1	34.2
J01FA14	Flurithromycin	–	0.1	0.3	–	–	–
J01XX01	Fosfomycin	–	20.8	18.6	1.5	0.3	<0.1
R02AB03	Fusafungine	–	<0.1	2.3	<0.1	–	–
J01XC01	Fusidic acid	0.3	–	–	–	<0.1	0.1
J01MA16	Gatifloxacin	–	–	–	<0.1	–	–
J01GB03	Gentamicin	<0.1	0.3	0.7	0.2	<0.1	<0.1
R02AB30	Gramicidin	–	–	–	–	<0.1	–
J01MA11	Grepafloxacin	–	–	–	–	<0.1	–
J01DH51	Imipenem and enzyme inhibitor	–	<0.1	0.1	<0.1	<0.1	<0.1
J04AC01	Isoniazid	<0.1	0.1	0.1	<0.1	0.2	<0.1
J04AC51	Isoniazid, combinations	–	–	–	0.1	–	<0.1
J01FA07	Josamycin	–	0.4	0.7	<0.1	–	–
J01GB04	Kanamycin	–	–	–	–	<0.1	–
A02BD07	Lansoprazole amoxicillin and clarithromycin	–	–	–	–	–	1.0
J01MA12	Levofloxacin	–	32.5	27.3	12.4	1.6	0.5
J01FF02	Lincomycin	–	0.4	4.5	<0.1	<0.1	–
J01XX08	Linezolid	<0.1	–	<0.1	<0.1	<0.1	<0.1
J01MA07	Lomefloxacin	–	2.5	2.8	–	–	–
J01DC08	Loracarbef	–	–	–	0.7	<0.1	–
J01AA04	Lymecycline	0.1	0.8	0.3	–	–	1.8
J01XX06	Mandelic acid	–	–	–	–	<0.1	–

Table 5 continued

		Denmark (AUH)	Italy (ERD)	Italy (HSD)	Germany (GePaRD)	The Netherlands (PHARMO)	The United Kingdom (THIN)
J01CA11	Mecillinam	<0.1	–	–	–	–	–
G01AA09	Mepartricin	–	–	<0.1	–	–	–
J01DH02	Meropenem	<0.1	–	<0.1	<0.1	<0.1	<0.1
J01AA05	Metacycline	–	<0.1	<0.1	–	–	–
J01XX05	Methenamine	0.1	–	–	<0.1	0.1	<0.1
J01XD01	Metronidazole	<0.1	<0.1	<0.1	<0.1	0.1	9.6
J01CA10	Mezlocillin	–	<0.1	<0.1	<0.1	–	–
J01FA03	Midecamycin	–	<0.1	<0.1	–	–	–
J01AA08	Minocycline	–	1.8	2.1	3.7	3.0	3.0
J01FA11	Miocamycin	–	0.8	1.0	–	–	–
J01MA14	Moxifloxacin	0.1	7.0	6.7	11.2	1.4	0.2
J01MB02	Nalidixic acid	–	–	0.1	–	–	0.1
G01AA02	Natamycin	–	–	–	–	–	<0.1
A07AA01	Neomycin	–	–	–	–	<0.1	<0.1
J01GB05	Neomycin	–	–	–	–	<0.1	<0.1
A07AA51	Neomycin, combinations	–	<0.1	0.8	–	–	–
J01GB07	Netilmicin	<0.1	0.1	0.3	<0.1	<0.1	<0.1
J01XE01	Nitrofurantoin	7.0	0.1	1.1	3.7	21.7	4.6
J01XX07	Nitroxoline	–	–	–	0.9	–	–
J01MA06	Norfloxacin	<0.1	4.9	6.5	7.6	7.2	0.7
A07AA02	Nystatin	4.1	2.6	3.3	0.9	–	–
J01MA01	Ofloxacin	<0.1	0.2	0.4	6.8	2.1	0.8
J01CF04	Oxacillin	–	<0.1	<0.1	<0.1	–	–
J01MB05	Oxolinic acid	–	–	<0.1	–	–	–
J01AA06	Oxytetracycline	0.1	–	–	–	<0.1	10.3
J01AA56	Oxytetracycline, combinations	–	–	–	4.9	–	–
A02BD04	Pantoprazole, amoxicillin and clarithromycin	–	–	–	2.1	1.3	–
A07AA06	Paromomycin	–	1.0	1.2	<0.1	<0.1	–
J01MA03	Pefloxacin	–	0.9	1.0	–	–	–
J01CE06	Penamcillin	–	–	–	–	–	<0.1
J01RA01	Penicillins, combinations with other antibacterials	–	–	<0.1	–	–	–
J01CE05	Pheneticillin	–	–	–	–	8.4	–
J01CE02	Phenoxyethylpenicillin	161.9	–	0.1	30.8	2.4	–
J01MB04	Pipemidic acid	–	1.5	2.4	<0.1	0.5	–
J01CA12	Piperacillin	<0.1	0.1	0.1	<0.1	<0.1	<0.1
J01CR05	Piperacillin and enzyme inhibitor	<0.1	0.4	0.2	<0.1	<0.1	<0.1
J01MB03	Piromidic acid	–	–	<0.1	–	–	–
J01CA02	Pivampicillin	24.2	–	–	–	–	0.2
J01CA08	Pivmecillinam	33.3	–	–	–	–	0.1
J01XB02	Polymyxin b	–	–	–	–	<0.1	–
J01CE09	Procaine benzylpenicillin	<0.1	–	–	–	–	<0.1
J01CE03	Propicillin	–	–	–	1.5	–	–
J04AD01	Protionamide	–	–	–	<0.1	–	<0.1
J01MA17	Prulifloxacin	–	7.2	5.3	–	–	–
J04AK01	Pyrazinamide	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
J04AB04	Rifabutin	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1

**Table 5** continued

		Denmark (AUH)	Italy (ERD)	Italy (HSD)	Germany (GePaRD)	The Netherlands (PHARMO)	The United Kingdom (THIN)
J04AB02	Rifampicin	0.1	0.4	0.5	0.2	0.2	0.2
J04AM02	Rifampicin and isoniazid	–	<0.1	<0.1	<0.1	<0.1	0.1
J04AM05	Rifampicin, pyrazinamide and isoniazid	–	<0.1	<0.1	<0.1	–	–
J04AM06	Rifampicin, pyrazinamide, ethambutol and isoniazid	–	<0.1	<0.1	–	<0.1	–
J04AB03	Rifamycin	–	<0.1	0.2	–	–	–
A07AA11	Rifaximin	–	22.4	19.4	<0.1	–	–
J01FA12	Rokitamycin	–	1.7	2.8	–	–	–
J01FA06	Roxithromycin	19.7	4.5	4.2	26.4	0.7	–
J01MA10	Rufloxacin	–	0.5	0.2	–	–	–
J01XX04	Spectinomycin	–	<0.1	<0.1	<0.1	–	–
J01FA02	Spiramycin	<0.1	4.2	6.1	0.2	0.1	<0.1
J01GA01	Streptomycin	–	<0.1	<0.1	<0.1	–	<0.1
J01EC02	Sulfadiazine	–	<0.1	<0.1	<0.1	<0.1	<0.1
J01EE06	Sulfadiazine and tetroxoprim	–	–	<0.1	<0.1	–	–
J01EE02	Sulfadiazine and trimethoprim	<0.1	–	<0.1	–	–	–
J01ED01	Sulfadimethoxine	–	–	–	–	–	<0.1
J01EB05	Sulfafurazole	–	–	–	–	<0.1	–
J01ED02	Sulfalene	–	–	<0.1	–	–	<0.1
J01ED09	Sulfamazone	–	–	<0.1	–	–	–
J01EE07	Sulfamerazine and trimethoprim	–	–	–	0.1	–	–
J01EB02	Sulfamethizole	36.3	–	–	–	<0.1	–
J01EC01	Sulfamethoxazole	–	–	–	–	<0.1	–
J01EE01	Sulfamethoxazole and trimethoprim	0.1	6.9	8.3	31.5	7.2	0.2
J01ED05	Sulfamethoxypridazine	–	–	–	–	–	<0.1
J01EE04	Sulfamoxole and trimethoprim	–	–	–	–	–	<0.1
J01EB04	Sulfapyridine	–	–	–	–	<0.1	<0.1
J01EB07	Sulfathiazole	–	–	–	–	<0.1	–
J01RA02	Sulfonamides, combinations with other antibacterials (excl. Trimethoprim)	–	–	–	<0.1	–	–
J01CR04	Sultamicillin	–	<0.1	<0.1	2.4	–	–
J01CA15	Talampicillin	–	–	–	–	–	<0.1
J01XA02	Teicoplanin	<0.1	0.1	0.1	<0.1	<0.1	<0.1
J01FA15	Telithromycin	–	1.1	1.3	0.7	–	<0.1
J01MA05	Temaflaxacin	–	<0.1	0.1	–	–	<0.1
J01CA17	Temocillin	–	–	–	–	–	<0.1
J04AK03	Terizidone	–	–	–	<0.1	–	–
J01AA07	Tetracycline	0.6	<0.1	0.1	0.7	0.9	1.0
J01BA02	Thiamphenicol	–	<0.1	2.5	–	–	–
J01CA13	Ticarillin	–	–	–	–	–	<0.1
J01CR03	Ticarillin and enzyme inhibitor	–	–	<0.1	–	–	<0.1
J01AA12	Tigecycline	–	–	<0.1	<0.1	<0.1	–
J01XD02	Tinidazole	–	–	–	–	–	0.1
J01GB01	Tobramycin	<0.1	0.1	0.3	<0.1	<0.1	<0.1
J01EA01	Trimethoprim	6.9	–	<0.1	1.9	12.6	–
J01MA13	Trovafloxacin	–	–	–	–	<0.1	–

**Table 5** continued

		Denmark (AUH)	Italy (ERD)	Italy (HSD)	Germany (GePaRD)	The Netherlands (PHARMO)	The United Kingdom (THIN)
R02AB02	Tyrothricin	–	<0.1	0.1	<0.1	–	–
A07AA09	Vancomycin	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
J01XA01	Vancomycin	<0.1	–	<0.1	0.1	<0.1	<0.1

Annual prevalence is expressed per 1000 person-years and is calculated by adding the number of individuals exposed to the antibiotic compound for at least 1 day divided by the total persons in the study and divided by the number of years of observation

*AUH* Aarhus University Hospital, *ERD* Emilia-Romagna regional database, *GePaRD* German Pharmacoepidemiological Research Database, *THIN* the health initiative network