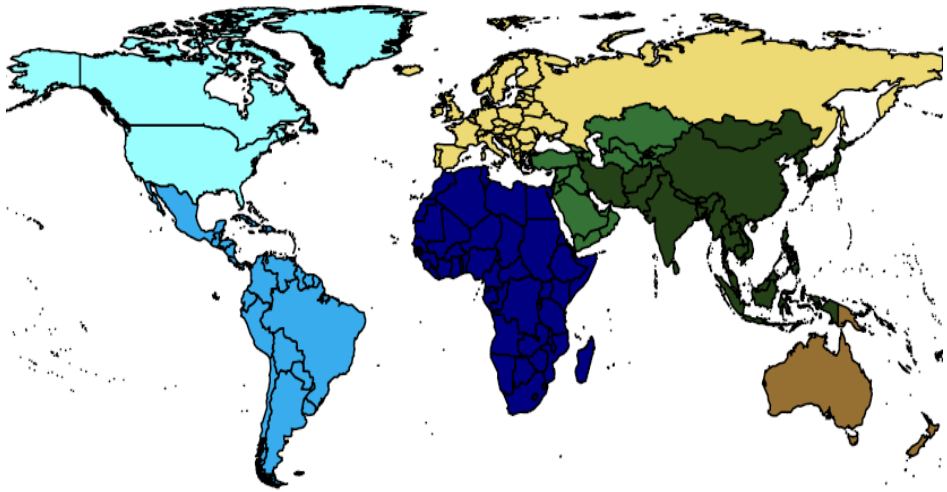
Global Point Prevalence Survey of Antimicrobial Consumption and Resistance

Hospital ID: XXX
Survey: 2023−P3

Participation to Global−PPS by UN macro−geographical regions, year 2023

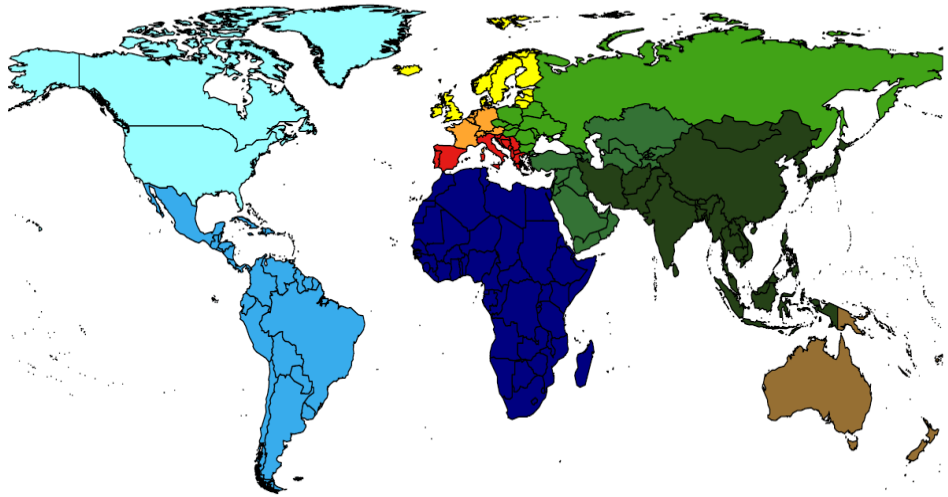
	Number of countries	Number of hospitals
North America	1	6
South America	3	3
Africa	11	110
Europe	6	27
West & Central Asia	1	2
East & South Asia	8	43
Australia & New Zealand	0	0



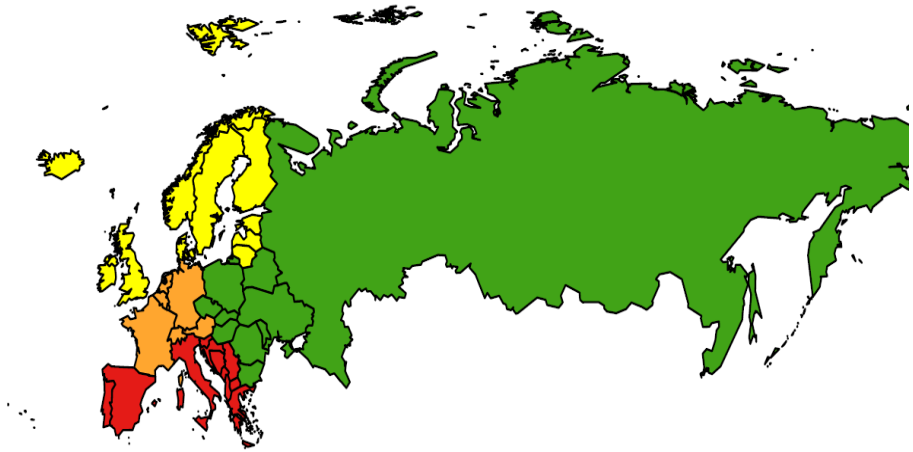
North America
Latin America
Africa
West & Central Asia
East & South Asia
Europe
Australia & New Zealand

Participation to Global−PPS by UN macro−geographical subregion, year 2023

	Number of countries	Number of hospitals
North America	1	6
South America	3	3
Africa	11	110
North Europe	2	4
West Europe	1	8
South Europe	2	8
East Europe	1	7
West & Central Asia	1	2
East & South Asia	8	43
Australia & New Zealand	0	0



- North America
- Latin America
- Africa
- North Europe
- West Europe
- South Europe
- East Europe
- West & Central Asia
- East & South Asia
- Australia & New Zealand



Explanatory notes for this feedback report

Below each slide extra information is provided to help you to correctly interpret the results.

The slides present the results for your hospital, your country, your region according to the UN classification, merged results on the hospital type for your region and Europe.

Below each slide you find the designation of your own country, your region and hospital type displayed.

Reference data include validated data from the current or most recent year with a minimum number of 4 hospitals for country and hospital type, and at least 25 hospitals for continent.

Reference data: country − 2023 (N = 32), continent − 2023 (N = 43), hospital type − 2023 (N = 28), EU − 2023 (N = 27).

Results at country level are not displayed if there are less than 4 hospitals participating during the current or any of the previous years.

Overall antimicrobial prevalence by region and type of adult ward

	Total	AMW	HO−AMW	T−AMW	P−AMW	ASW	AICU
North America	31.5	27.1	35.9	0.0	0.0	38.5	58.2
South America	48.7	30.0	100.0	0.0	0.0	49.5	61.6
Africa	36.0	37.3	27.6	75.0	63.6	32.2	61.1
North Europe	34.8	29.9	0.0	0.0	0.0	34.4	50.0
West Europe	31.4	26.2	35.3	0.0	32.1	39.0	52.2
South Europe	49.1	43.0	84.6	81.0	41.3	66.3	62.0
East Europe	49.3	50.7	0.0	0.0	46.3	49.1	47.8
West & Central Asia	38.0	32.3	0.0	0.0	0.0	64.3	0.0
East & South Asia	52.8	50.2	54.3	91.9	68.9	56.0	65.3
Australia & New Zealand	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Our hospital 2023−P3	92.8	97.2	0.0	0.0	0.0	80.0	0.0
Country	54.9	53.5	47.8	88.9	57.6	56.8	67.3

Antimicrobial prevalence (%): 100*(number of treated patients/number of registered patients according to UN macro−geographical subregions).
Total = Overall antimicrobial prevalence in adult wards; AMW = Adult Medical Ward; HO−AMW = Haematology−Oncology AMW;
T−AMW = Transplant (BMT/solid) AMW; P−AMW = Pneumology AMW; ASW = Adult Surgical Ward; AICU = Adult Intensive Care Unit.

Overall antimicrobial prevalence by region and type of child or neonatal ward

	Total	PMW	HO−PMW	T−PMW	PSW	PICU	NMW	NICU
North America	19.1	19.5	0.0	0.0	0.0	0.0	0.0	20.6
South America	50.0	100.0	0.0	0.0	60.0	0.0	0.0	60.0
Africa	52.0	57.0	41.6	0.0	36.8	85.1	36.2	60.9
North Europe	41.7	36.6	73.3	0.0	31.9	68.6	37.5	0.0
West Europe	18.8	28.0	0.0	0.0	0.0	0.0	5.6	0.0
South Europe	61.9	60.0	0.0	0.0	0.0	100.0	0.0	0.0
East Europe	43.1	71.4	0.0	0.0	0.0	0.0	7.1	66.7
West & Central Asia	82.7	89.6	0.0	0.0	90.9	0.0	75.6	0.0
East & South Asia	66.3	65.5	76.9	87.5	72.7	88.4	27.2	69.2
Australia & New Zealand	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Our hospital 2023−P3	83.9	84.1	0.0	0.0	72.2	100.0	0.0	90.9
Country	71.5	69.3	75.5	0.0	87.1	91.8	41.2	74.5

Antimicrobial prevalence (%): 100*(number of treated patients/number of registered patients according to UN macro−geographical subregions).
Total = Overall antimicrobial prevalence in wards admitting children and neonates; PMW = Paediatric Medical Ward;
HO−PMW = Haematology−Oncology PMW; T−PMW = Transplant (BMT/solid) PMW; PSW = Paediatric Surgical Ward;
PICU = Paediatric Intensive Care Unit; NMW = Neonatal Medical Ward; NICU = Neonatal Intensive Care Unit.

Antimicrobial prevalence in adult wards (1)

	Total*	AMW**	HO−AMW	T−AMW	P−AMW	ASW	AICU
Our hospital 2023−P3							
patients (N)	194	144	0	0	0	50	0
treated patients (%)	92.8	97.2	0	0	0	80	0
Country							
patients (N)	7995	5598	182	9	33	1690	483
treated patients (%)	54.9	53.5	47.8	88.9	57.6	56.8	67.3
Continent							
patients (N)	12350	8648	258	37	74	2453	880
treated patients (%)	52.8	50.2	54.3	91.9	68.9	56	65.3
Hospital type							
patients (N)	7298	5146	182	9	33	1472	456
treated patients (%)	55.2	53.4	47.8	88.9	57.6	58.4	67.8
Europe							
patients (N)	5099	2850	140	21	252	1428	408
treated patients (%)	40.8	37.3	78.6	81	41.7	39.6	53.9

Patients (N) = number of admitted adults.
Treated patients (%) = 100*(number of adults treated with at least one antimicrobial/number of admitted adults).

Country: Country ; Continent: Continent ; Hospital type: Tertiary/Spec/Inf.dis. hosp.

*Total = overall prevalence for all adult wards combined, including all specialized adult medical ward types (see next slide).

**AMW=includes also all specialized AMW types displayed on next slide.
Specialized AMW types are available following the new protocol available since September 2019.

Antimicrobial prevalence in Adult Medical Wards (AMW) (2)

	AMW*	CAR	DB	GER	ID	IS	LTC	NEU	OBG	PSY	REH	REN
Our hospital 2023−P3												
patients (N)	144											
treated patients (%)	97.2											
Country												
patients (N)	4607	62			22	180		0	664	63		
treated patients (%)	54.1	43.5			45.5	70.6		0	49.1	15.9		
Continent												
patients (N)	6555	328		426	51	276	34	73	753	92	38	22
treated patients (%)	52.6	30.8		38.7	74.5	64.9	44.1	31.5	46.6	12	13.2	40.9
Hospital type												
patients (N)	4260	62			22	176			563	63		
treated patients (%)	54	43.5			45.5	69.9			49.2	15.9		
Europe												
patients (N)	1564	312	34	215	209			95	96	76	172	77
treated patients (%)	43.6	15.4	41.2	32.1	75.6			15.8	22.9	3.9	11.6	41.6

Patients (N) = number of admitted adults.
Treated patients (%) = 100*(number of adults treated with at least one antimicrobial/number of admitted adults).

Country: Country ; Continent: Continent ; Hospital type: Tertiary/Spec/Inf.dis. hosp.

*AMW includes General/Mixed Adult Medical Wards following the new protocol available since September 2019.

CAR=Cardiology; DB=Dermatology−Burn wards; GER=Geriatrics; ID=Infectious Disease; IS=Isolation ward;
LTC=Long−Term care; NEU=Neurology; OBG=Gynaecology−obstetrics; PSY=Psychiatry; REH=Rehabilitation; REN=Nephrology.

Antimicrobial prevalence in paediatric wards

	Total	PMW	HO−PMW	T−PMW	PSW	PICU
Our hospital 2023−P3						
patients (N)	132	107	0	0	18	7
treated patients (%)	83.3	84.1	0	0	72.2	100
Country						
patients (N)	1761	1477	53	0	85	146
treated patients (%)	72.2	69.3	75.5	0	87.1	91.8
Continent						
patients (N)	2119	1704	108	8	110	189
treated patients (%)	68.6	65.5	76.9	87.5	72.7	88.4
Hospital type						
patients (N)	1638	1362	53	0	85	138
treated patients (%)	72	69	75.5	0	87.1	91.3
Europe						
patients (N)	466	259	30	0	138	39
treated patients (%)	45.7	45.9	73.3	0	31.9	71.8

Patients (N) = Number of admitted children in the hospital, country, UN macro−geographical region to which the hospital belongs; and the continental results for the hospital type to which the hospital belongs (possible types are primary + secondary level, tertiary level, paediatric and infectious diseases + specialized hospital).
Treated patients (%) = 100*(number of children treated with at least one antimicrobial/number of admitted children).

Country: Country ; Continent: Continent ; Hospital type: Tertiary/Spec/Inf.dis. hosp.

Antimicrobial prevalence in neonatal wards

	Total	NMW	NICU
Our hospital 2023−P3			
patients (N)	11	0	11
treated patients (%)	90.9	0	90.9
Country			
patients (N)	499	80	419
treated patients (%)	69.1	41.2	74.5
Continent			
patients (N)	622	158	464
treated patients (%)	58.5	27.2	69.2
Hospital type			
patients (N)	431	65	366
treated patients (%)	68.9	41.5	73.8
Europe			
patients (N)	75	54	21
treated patients (%)	16	11.1	28.6

Patients (N) = Number of admitted neonates in the hospital, country, UN macro−geographicl region to which the hospital belongs; and the continental results for the hospital type to which the hospital belongs (possible types are primary + secondary level, tertiary level, paediatric and infectious diseases + specialized hospital).
Treated patients (%) = 100*(number of neonates treated with at least one antimicrobial/number of admitted neonates).

Country: Country ; Continent: Continent ; Hospital type: Tertiary/Spec/Inf.dis. hosp.

Antimicrobial prevalence (%) by activity

	Hospital 2023−P3	Country	Continent	Hospital type	Europe
Adults					
Medical	93.5	50.9	48.4	50.6	39.9
Surgical	90.8	59.8	58.9	61.0	39.2
ICU	100.0	68.4	66.9	69.0	53.9
Children					
Medical	83.7	69.8	67.2	69.6	47.9
Surgical	76.2	76.0	61.2	75.7	30.4
ICU	100.0	92.1	88.7	91.6	71.8
Neonates					
GNMW	0.0	44.3	27.7	45.5	8.3
NICU	0.0	50.0	50.0	50.0	33.3

Antimicrobial prevalence = 100*(number of treated patients/number of admitted patients)
Antimicrobial prevalence by activity for adults, children and neonates separately for the hospital, country, continent to which the hospital belongs; and the continental results for the hospital type to which the hospital belongs (possible types are primary + secondary level, tertiary level, paediatric and infectious diseases + specialized hospital).

Country: Country ; Continent: Continent ; Hospital type: Tertiary/Spec/Inf.dis. hosp.

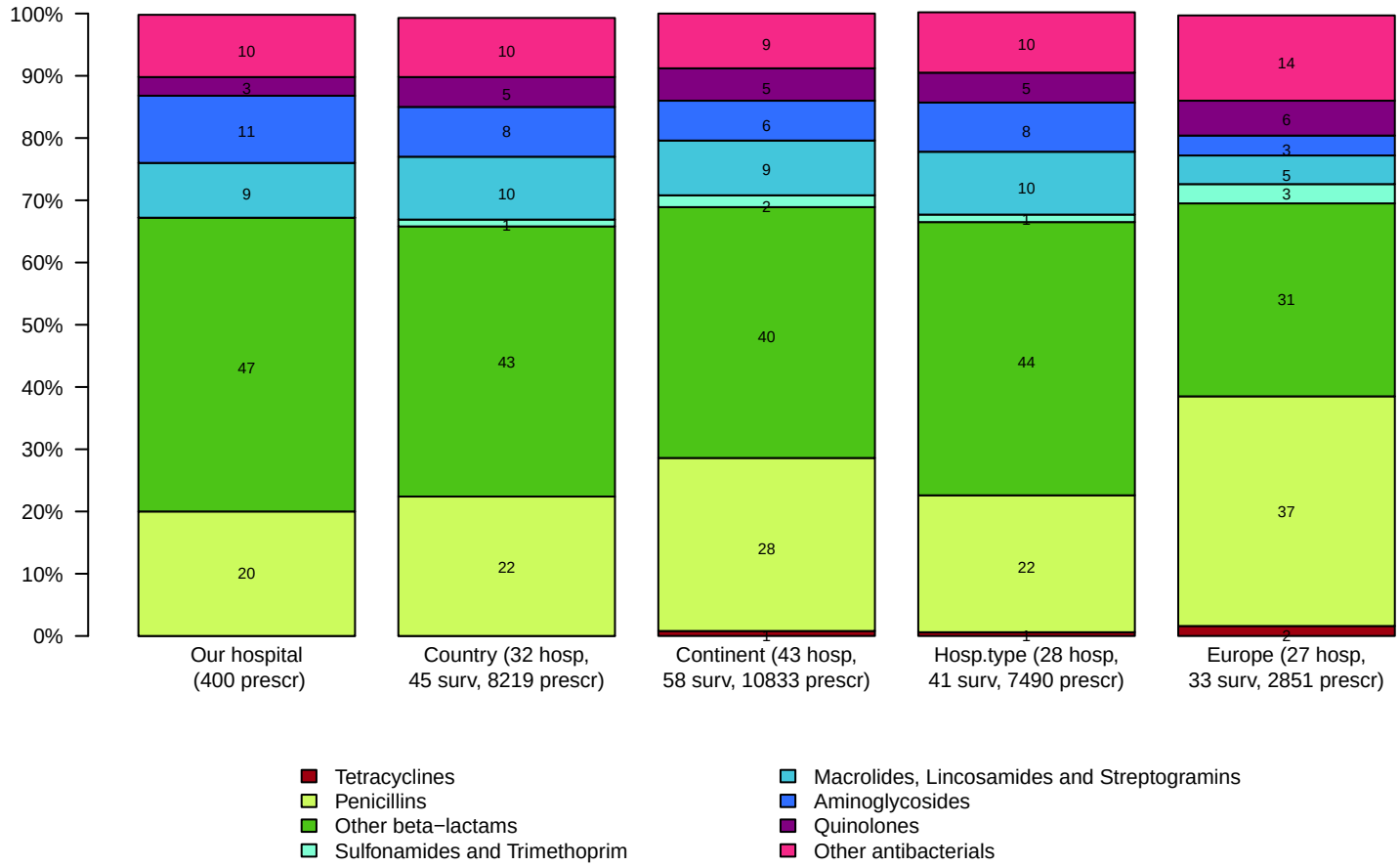
Prevalence of patients prescribed at least one antimicrobial on day of survey

	Our hospital 2023−P3		Country		Continent		Hospital type		Europe	
	N	%	N	%	N	%	N	%	N	%
N admitted patients (=denominator)	337		10255		15091		9367		5640	
N patients on antimicrobials	300	89.0	6010	58.6	8336	55.2	5509	58.8	2306	40.9
N patients with antibacterials for systemic use	294	87.2	5872	57.3	8109	53.7	5377	57.4	2182	38.7
N patients with antimycotics or antifungals for systemic use	2	0.6	215	2.1	312	2.1	205	2.2	129	2.3
N patients with drugs for treatment of tuberculosis	8	2.4	185	1.8	215	1.4	178	1.9	41	0.7
N patients with antivirals for systemic use	0	0.0	67	0.7	168	1.1	61	0.7	146	2.6
N patients with antibiotics used as intestinal anti−infectives	0	0.0	34	0.3	101	0.7	34	0.4	54	1.0
N patients with nitroimidazole derivatives	14	4.2	101	1.0	123	0.8	92	1.0	21	0.4
N patients with antimalarials	0	0.0	1	0.0	13	0.1	1	0.0	1	0.0

N = number. ATC codes used : antibacterials for systemic use = J01; antimycotics = D01BA; antifungals for systemic use = J02; drug for the treatment of tuberculosis = J04A; antivirals for systemic use = J05; antibiotics used as intestinal anti−infectives = A07A; nitroimidazole derivatives = P01AB; antimalarials = P01B.

Country: Country ; Continent: Continent ; Hospital type: Tertiary/Spec/Inf.dis. hosp.

Overall proportional antibiotic use



Percentage of antibacterials for systemic use (ATC J01) at ATC3 level (pharmacological subgroup). Proportional antibiotic use below 0.5% is not reported.

hosp = hospitals, surv = surveys, prescr = prescriptions.

Country: Country ; Continent: Continent ; Hospital type: Tertiary/Spec/Inf.dis. hosp.

Proportional antibiotic use (% of prescriptions)

ATC4	Antibiotics Subgroup	Our Hospital	Country	Continent	Type	Europe
J01CA	Penicillins with extended spectrum	18.2	10.3	8.6	10.4	5.9
J01CF	Beta−lactamase resistant penicillins	1.3	0.8	0.8	0.8	1.6
J01CR	Penicillins incl. beta−lactam. inh.		10.2	17.4	9.7	28.0
J01DB	First−generation cephalosporins	8.2	3.6	4.3	3.4	5.3
J01DC	Second−generation cephalosporins	5.2	11.5	9.4	11.6	4.2
J01DD	Third−generation cephalosporins	25.2	19.1	17.7	19.1	13.6
J01DE	Fourth−generation cephalosporins	3.5	2.2	1.9	2.4	0.7
J01DH	Carbapenems	5.0	6.7	6.6	7.0	6.7
J01FA	Macrolides	5.2	5.2	4.6	5.2	3.2
J01FF	Lincosamides	3.5	4.9	4.1	4.9	1.4
J01GB	Other aminoglycosides	10.8	8.0	6.4	7.9	3.2
J01MA	Fluoroquinolones	3.0	4.8	5.2	4.8	5.6
J01XA	Glycopeptide antibacterials	4.0	4.2	3.8	4.3	5.2
J01XB	Polymyxins	0.7	0.4	0.4	0.5	1.8
J01XD	Imidazole derivatives	5.2	4.4	4.1	4.4	4.5

Our hospital: 400 prescriptions, 294 treated patients; Country: 8219 prescriptions, 32 hospitals, 45 surveys
Continent: 10833 prescriptions, 43 hospitals, 58 surveys; Type: 7490 prescriptions, 28 hospitals, 41 surveys
Europe: 2851 prescriptions, 27 hospitals, 33 surveys

Country: Country ; Continent: Continent ; Hospital type: Tertiary/Spec/Inf.dis. hosp.

10 most prescribed ATC4 at country level plus 5 extra ATC4 at hospital level which do not fall within top 10 at country level

Proportional antibiotic use (% of prescriptions) − Adult Medical Ward

ATC4	Antibiotics Subgroup	Our Hospital	Country	Continent	Type	Europe
J01CA	Penicillins with extended spectrum	17.5	7.9	6.5	8.0	4.8
J01CR	Penicillins incl. beta−lactam. inh.		13.4	22.6	12.5	33.8
J01DB	First−generation cephalosporins	14.8	4.4	4.7	4.2	1.4
J01DC	Second−generation cephalosporins	6.0	11.9	9.3	12.6	2.2
J01DD	Third−generation cephalosporins	23.5	20.0	17.8	19.8	17.7
J01DE	Fourth−generation cephalosporins	0.5	1.5	1.2	1.6	0.7
J01DH	Carbapenems	4.9	6.0	5.9	6.4	6.1
J01EE	Comb. Sulfonamides/trimethoprim	0.5	1.1	1.4	1.1	2.5
J01FA	Macrolides	8.2	8.1	6.6	8.1	3.8
J01FF	Lincosamides	4.4	6.1	4.9	6.0	1.2
J01GB	Other aminoglycosides	9.3	2.7	2.3	2.6	2.2
J01MA	Fluoroquinolones	2.2	5.8	6.3	5.6	6.9
J01XA	Glycopeptide antibacterials	2.7	3.8	3.3	4.0	3.8
J01XD	Imidazole derivatives	5.5	4.1	3.6	4.3	3.4

Our hospital: 183 prescriptions, 136 treated patients; Country: 3909 prescriptions, 31 hospitals, 44 surveys
Continent: 5378 prescriptions, 42 hospitals, 56 surveys; Type: 3575 prescriptions, 27 hospitals, 40 surveys
Europe: 1249 prescriptions, 23 hospitals, 26 surveys

Country: Country ; Continent: Continent ; Hospital type: Tertiary/Spec/Inf.dis. hosp.

10 most prescribed ATC4 at country level plus 5 extra ATC4 at hospital level which do not fall within top 10 at country level

Proportional antibiotic use (% of prescriptions) − Adult Surgical Ward

ATC4	Antibiotics Subgroup	Our Hospital	Country	Continent	Type	Europe
J01CA	Penicillins with extended spectrum	22.4	7.6	6.6	8.4	8.9
J01CR	Penicillins incl. beta−lactam. inh.		7.1	15.2	6.6	27.4
J01DB	First−generation cephalosporins		7.3	8.8	6.8	16.5
J01DC	Second−generation cephalosporins	13.8	21.6	16.6	20.5	7.2
J01DD	Third−generation cephalosporins	24.1	19.3	18.1	20.0	5.4
J01DH	Carbapenems	5.2	4.0	3.9	4.5	4.5
J01FA	Macrolides	5.2	2.3	2.1	2.4	0.1
J01FF	Lincosamides	1.7	6.8	5.4	6.8	1.3
J01GB	Other aminoglycosides	3.4	3.0	2.3	2.8	2.3
J01MA	Fluoroquinolones	6.9	4.6	5.0	4.6	5.0
J01XA	Glycopeptide antibacterials	8.6	3.0	2.8	3.3	4.2
J01XD	Imidazole derivatives	8.6	10.1	9.1	10.3	8.3

Our hospital: 58 prescriptions, 39 treated patients; Country: 1271 prescriptions, 21 hospitals, 30 surveys
Continent: 1746 prescriptions, 27 hospitals, 37 surveys; Type: 1138 prescriptions, 19 hospitals, 28 surveys
Europe: 707 prescriptions, 17 hospitals, 20 surveys

Country: Country ; Continent: Continent ; Hospital type: Tertiary/Spec/Inf.dis. hosp.

10 most prescribed ATC4 at country level plus 5 extra ATC4 at hospital level which do not fall within top 10 at country level

Proportional antibiotic use (% of prescriptions) − Paediatric Medical Ward

ATC4	Antibiotics Subgroup	Our Hospital	Country	Continent	Type	Europe
J01CA	Penicillins with extended spectrum	21.6	14.0	13.9	14.0	16.2
J01CE	Beta−lactamase sensitive penicillins	1.7	2.4	2.4	2.5	3.9
J01CF	Beta−lactamase resistant penicillins	2.6	2.2	2.3	2.3	2.6
J01CR	Penicillins incl. beta−lactam. inh.		6.1	6.7	5.8	16.9
J01DB	First−generation cephalosporins	5.2	1.1	1.7	1.2	
J01DC	Second−generation cephalosporins		11.1	11.2	10.9	14.9
J01DD	Third−generation cephalosporins	31.0	21.8	21.8	21.7	15.6
J01DE	Fourth−generation cephalosporins	9.5	4.4	4.1	4.8	0.6
J01DH	Carbapenems	5.2	5.1	4.8	5.3	2.6
J01FA	Macrolides	1.7	2.5	2.6	2.3	5.2
J01FF	Lincosamides	2.6	3.4	3.3	3.5	3.9
J01GB	Other aminoglycosides	14.7	16.9	16.0	16.7	9.7
J01MA	Fluoroquinolones	0.9	1.8	1.7	1.8	1.3
J01XA	Glycopeptide antibacterials	1.7	4.4	4.1	4.5	2.6
J01XD	Imidazole derivatives	1.7	1.8	1.9	1.7	0.6

Our hospital: 116 prescriptions, 90 treated patients; Country: 1424 prescriptions, 30 hospitals, 41 surveys
Continent: 1521 prescriptions, 35 hospitals, 46 surveys; Type: 1302 prescriptions, 26 hospitals, 37 surveys
Europe: 154 prescriptions, 12 hospitals, 14 surveys

Country: Country ; Continent: Continent ; Hospital type: Tertiary/Spec/Inf.dis. hosp.

10 most prescribed ATC4 at country level plus 5 extra ATC4 at hospital level which do not fall within top 10 at country level

Proportional antibiotic use (% of prescriptions) − Paediatric Surgical Ward

ATC4	Antibiotics Subgroup	Our Hospital	Country	Continent	Type	Europe
J01CA	Penicillins with extended spectrum	6.2	11.5	10.7	11.5	
J01CE	Beta−lactamase sensitive penicillins		4.2	3.9	4.2	
J01CF	Beta−lactamase resistant penicillins	12.5	4.2	3.9	4.2	
J01DB	First−generation cephalosporins		3.1	3.9	3.1	
J01DC	Second−generation cephalosporins	12.5	19.8	19.4	19.8	
J01DD	Third−generation cephalosporins	31.2	24.0	22.3	24.0	
J01DE	Fourth−generation cephalosporins		2.1	1.9	2.1	
J01FA	Macrolides	6.2	2.1	2.9	2.1	
J01FF	Lincosamides	12.5	3.1	2.9	3.1	
J01GB	Other aminoglycosides	6.2	11.5	10.7	11.5	
J01MA	Fluoroquinolones	12.5	2.1	1.9	2.1	
J01XD	Imidazole derivatives		8.3	7.8	8.3	

Our hospital: 16 prescriptions, 13 treated patients; Country: 96 prescriptions, 6 hospitals, 9 surveys
Continent: 103 prescriptions, 7 hospitals, 10 surveys; Type: 96 prescriptions, 6 hospitals, 9 surveys

Country: Country ; Continent: Continent ; Hospital type: Tertiary/Spec/Inf.dis. hosp.

10 most prescribed ATC4 at country level plus 5 extra ATC4 at hospital level which do not fall within top 10 at country level

Proportional antibiotic use (% of prescriptions) − Paediatric Intensive Care Unit

ATC4	Antibiotics Subgroup	Our Hospital	Country	Continent	Type	Europe
J01CA	Penicillins with extended spectrum		7.1	6.3	7.6	
J01CR	Penicillins incl. beta−lactam. inh.		4.6	5.3	4.0	
J01DD	Third−generation cephalosporins		13.8	17.5	12.4	
J01DE	Fourth−generation cephalosporins	9.1	5.8	4.9	6.2	
J01DH	Carbapenems	18.2	14.6	13.7	15.1	
J01GB	Other aminoglycosides	9.1	21.2	18.2	22.7	
J01MA	Fluoroquinolones	9.1	5.8	4.9	6.2	
J01XA	Glycopeptide antibacterials	36.4	13.3	13.0	12.0	
J01XB	Polymyxins	9.1	2.5	2.1	2.7	
J01XD	Imidazole derivatives	9.1	3.8	4.2	3.6	

Our hospital: 11 prescriptions, 7 treated patients; Country: 240 prescriptions, 18 hospitals, 27 surveys
Continent: 285 prescriptions, 21 hospitals, 31 surveys; Type: 225 prescriptions, 16 hospitals, 25 surveys

Country: Country ; Continent: Continent ; Hospital type: Tertiary/Spec/Inf.dis. hosp.

10 most prescribed ATC4 at country level plus 5 extra ATC4 at hospital level which do not fall within top 10 at country level

Proportional antibiotic use (% of prescriptions) − Neonatal Intensive Care Unit

ATC4	Antibiotics Subgroup	Our Hospital	Country	Continent	Type	Europe
J01CA	Penicillins with extended spectrum	12.5	23.9	23.6	24.1	
J01CE	Beta−lactamase sensitive penicillins		1.6	1.7	1.6	
J01CR	Penicillins incl. beta−lactam. inh.		3.1	3.1	2.7	
J01DD	Third−generation cephalosporins	18.8	13.0	12.7	13.3	
J01DE	Fourth−generation cephalosporins	6.2	2.3	2.2	2.5	
J01DH	Carbapenems		10.7	10.7	10.6	
J01GB	Other aminoglycosides	31.2	32.2	31.7	32.9	
J01MA	Fluoroquinolones		2.4	2.4	2.9	
J01XA	Glycopeptide antibacterials		5.7	5.6	5.1	
J01XB	Polymyxins	12.5	1.2	1.2	1.4	
J01XD	Imidazole derivatives	18.8	2.1	2.0	1.4	

Our hospital: 16 prescriptions, 9 treated patients; Country: 577 prescriptions, 25 hospitals, 37 surveys
Continent: 590 prescriptions, 27 hospitals, 39 surveys; Type: 489 prescriptions, 21 hospitals, 33 surveys

Country: Country ; Continent: Continent ; Hospital type: Tertiary/Spec/Inf.dis. hosp.

10 most prescribed ATC4 at country level plus 5 extra ATC4 at hospital level which do not fall within top 10 at country level

Proportional antibiotic use (% of prescriptions) − Community Acquired Infections

ATC4	Antibiotics Subgroup	Our Hospital	Country	Continent	Type	Europe
J01CA	Penicillins with extended spectrum	18.0	11.0	9.4	11.5	7.0
J01CF	Beta−lactamase resistant penicillins	1.5	0.9	1.1	1.0	2.2
J01CR	Penicillins incl. beta−lactam. inh.		11.1	18.6	10.4	33.4
J01DC	Second−generation cephalosporins	3.5	6.8	5.6	6.5	3.2
J01DD	Third−generation cephalosporins	29.0	22.3	20.5	22.3	17.4
J01DE	Fourth−generation cephalosporins	3.5	2.0	1.7	2.1	0.4
J01DH	Carbapenems	7.5	6.4	6.1	6.6	4.9
J01EE	Comb. Sulfonamides/trimethoprim	0.5	0.8	0.8	0.8	0.9
J01FA	Macrolides	9.5	8.0	7.1	7.9	4.4
J01FF	Lincosamides	3.0	5.9	5.0	5.9	1.5
J01GB	Other aminoglycosides	11.0	7.8	6.4	8.0	3.3
J01MA	Fluoroquinolones	3.0	4.7	5.3	4.7	6.0
J01XA	Glycopeptide antibacterials	4.5	4.5	3.8	4.5	4.4
J01XB	Polymyxins	0.5	0.2	0.2	0.1	0.4
J01XD	Imidazole derivatives	5.0	4.3	3.9	4.4	4.0

Our hospital: 200 prescriptions, 141 treated patients; Country: 4538 prescriptions, 31 hospitals, 44 surveys
Continent: 5824 prescriptions, 41 hospitals, 55 surveys; Type: 4121 prescriptions, 27 hospitals, 40 surveys
Europe: 1580 prescriptions, 27 hospitals, 33 surveys

Country: Country ; Continent: Continent ; Hospital type: Tertiary/Spec/Inf.dis. hosp.

10 most prescribed ATC4 at country level plus 5 extra ATC4 at hospital level which do not fall within top 10 at country level

Proportional antibiotic use (% of prescriptions) − Healthcare Associated Infections

ATC4	Antibiotics Subgroup	Our Hospital	Country	Continent	Type	Europe
J01CA	Penicillins with extended spectrum	17.9	7.7	5.6	7.8	2.9
J01CF	Beta−lactamase resistant penicillins	5.1	0.7	0.6	0.8	0.8
J01CR	Penicillins incl. beta−lactam. inh.		11.9	25.9	11.0	23.7
J01DB	First−generation cephalosporins	7.7	0.5	1.3	0.5	0.9
J01DC	Second−generation cephalosporins	2.6	2.0	1.5	1.9	1.4
J01DD	Third−generation cephalosporins	28.2	12.4	10.8	12.0	11.0
J01DE	Fourth−generation cephalosporins	5.1	5.7	4.1	6.0	1.7
J01DH	Carbapenems	5.1	17.3	15.3	17.9	15.1
J01FA	Macrolides	2.6	2.6	2.2	2.7	0.8
J01FF	Lincosamides	7.7	4.0	3.0	4.0	1.7
J01GB	Other aminoglycosides	7.7	7.8	5.6	7.9	4.1
J01MA	Fluoroquinolones	5.1	9.8	9.1	9.5	5.0
J01XA	Glycopeptide antibacterials	5.1	8.7	7.0	8.8	9.3

Our hospital: 39 prescriptions, 32 treated patients; Country: 1250 prescriptions, 30 hospitals, 43 surveys
Continent: 1931 prescriptions, 41 hospitals, 55 surveys; Type: 1180 prescriptions, 26 hospitals, 39 surveys
Europe: 657 prescriptions, 26 hospitals, 32 surveys

Country: Country ; Continent: Continent ; Hospital type: Tertiary/Spec/Inf.dis. hosp.

10 most prescribed ATC4 at country level plus 5 extra ATC4 at hospital level which do not fall within top 10 at country level

Proportional antibiotic use (% of prescriptions) − Surgical Prophylaxis

ATC4	Antibiotics Subgroup	Our Hospital	Country	Continent	Type	Europe
J01CA	Penicillins with extended spectrum	16.7	5.3	5.5	5.6	6.1
J01CR	Penicillins incl. beta−lactam. inh.		9.0	10.0	8.9	18.3
J01DB	First−generation cephalosporins	33.3	15.3	17.7	14.4	37.2
J01DC	Second−generation cephalosporins	13.3	35.6	32.0	36.2	12.2
J01DD	Third−generation cephalosporins	14.4	14.9	15.5	14.7	5.8
J01DH	Carbapenems	1.1	1.0	1.0	1.1	1.6
J01FF	Lincosamides	4.4	3.8	3.8	3.7	0.3
J01GB	Other aminoglycosides	3.3	2.1	2.1	2.2	2.6
J01MA	Fluoroquinolones	2.2	1.8	1.7	2.0	2.6
J01XA	Glycopeptide antibacterials	4.4	1.1	1.1	1.2	1.9
J01XD	Imidazole derivatives	6.7	6.9	6.9	6.9	5.4

Our hospital: 90 prescriptions, 75 treated patients; Country: 1406 prescriptions, 31 hospitals, 43 surveys
Continent: 1692 prescriptions, 40 hospitals, 54 surveys; Type: 1297 prescriptions, 27 hospitals, 39 surveys
Europe: 312 prescriptions, 23 hospitals, 28 surveys

Country: Country ; Continent: Continent ; Hospital type: Tertiary/Spec/Inf.dis. hosp.

10 most prescribed ATC4 at country level plus 5 extra ATC4 at hospital level which do not fall within top 10 at country level

Proportional antimicrobial use (% of prescriptions) − Medical Prophylaxis

ATC4	Antimicrobials Subgroup	Our Hospital	Country	Continent	Type	Europe
J01	Antibacterials for systemic use					
J01CA	Penicillins−extended spectrum	20.5	16.9	12.0	15.1	5.9
J01CR	Comb penicillins incl. B−lact.Inh		4.5	4.2	4.2	28.0
J01DB	First−gen. cephalosporins		1.9	1.6	2.1	5.3
J01DC	Second−gen. cephalosporins	1.4	8.8	6.6	10.0	4.2
J01DD	Third−gen. cephalosporins	24.7	17.4	15.5	19.1	13.6
J01DH	Carbapenems	2.7	2.0	2.6	2.0	6.7
J01FA	Macrolides	1.4	1.6	1.8	1.6	3.2
J01FF	Lincosamides	1.4	2.8	2.3	3.1	1.4
J01GB	Other aminoglycosides	20.5	17.3	12.1	15.2	3.2
J01MA	Fluoroquinolones	2.7	3.1	3.0	2.9	5.6

Our hospital: 73 prescriptions, 48 treated patients; Country: 941 prescriptions, 25 hospitals, 34 surveys
Continent: 1370 prescriptions, 34 hospitals, 45 surveys; Type: 817 prescriptions, 21 hospitals, 30 surveys
Europe: 252 prescriptions, 17 hospitals, 22 surveys

Country: Country ; Continent: Continent ; Hospital type: Tertiary/Spec/Inf.dis. hosp.

5 most prescribed at hospital level plus 5 extra ATC4 at continental level which do not fall within top 5 at hospital level

Therapeutic antimicrobial use for community acquired and healthcare associated infections by type of treatment

	CAI Empiric		CAI Targeted		CAI Total	
	N	%	N	%	N	%
Our hospital 2023−P3	192	91.0	19	9.0	211	84.4
Country	4429	87.8	614	12.2	5043	78.9
Continent	5465	84.6	996	15.4	6461	75.6
Hospital type	4020	87.3	585	12.7	4605	78.3

	HAI Empiric		HAI Targeted		HAI Total	
	N	%	N	%	N	%
Our hospital 2023−P3	29	74.4	10	25.6	39	15.6
Country	959	70.9	393	29.1	1352	21.1
Continent	1472	70.4	618	29.6	2090	24.4
Hospital type	893	69.9	384	30.1	1277	21.7

CAI= Community Acquired Infections; HAI=Healthcare Associated Infections
Type of treatment= empiric versus targeted treatment.
For each subgroup of therapeutic use (CAI or HAI) the number of antimicrobials and proportion (%) for empiric versus targeted prescribing is reported.

Country: Country ; Continent: Continent ; Hospital type: Tertiary/Spec/Inf.dis. hosp.

Prophylactic antimicrobial use by indication

	Medical		Surgical	
	N	%	N	%
Our hospital 2023−P3	73	42.2	100	57.8
Country	941	39.4	1445	60.6
Continent	1370	44.1	1734	55.9
Hospital type	817	38.0	1333	62.0

Percentage of antimicrobials prescribed for medical or surgical prophylaxis. Antimicrobials include the antibacterials, antifungals and antivirals for systemic use as well as antibiotics used as intestinal anti−infectives and drugs to treat tuberculosis.

Country: Country ; Continent: Continent ; Hospital type: Tertiary/Spec/Inf.dis. hosp.

Ten most common diagnoses treated with therapeutic antimicrobials

	Our hospital 2023−P3		Country		Continent		Hospital type		Europe	
Diagnosis	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**
Pneu	83	45.1	1748	41.5	2261	37.4	1624	42.0	485	25.3
SST	19	10.3	452	10.7	754	12.5	413	10.7	148	7.7
TB	9	4.9	182	4.3	212	3.5	173	4.5	25	1.3
CNS	8	4.3	134	3.2	163	2.7	121	3.1	31	1.6
Cys	7	3.8	185	4.4	320	5.3	168	4.3	131	6.8
Proph GI	7	3.8	19	0.5	22	0.4	19	0.5	3	0.2
GI	6	3.3	248	5.9	294	4.9	220	5.7	52	2.7
IA	6	3.3	163	3.9	339	5.6	155	4.0	164	8.6
SEPSIS	6	3.3	276	6.6	333	5.5	255	6.6	100	5.2
Proph UTI	5	2.7	23	0.5	24	0.4	23	0.6	2	0.1

Top ten diagnoses in our hospital. Count on the number of diagnoses treated with at least one antimicrobal.
This implies that a patient with multiple diagnoses can be counted several times. Prophylactic prescribing and patients admitted on NICU or NMW are excluded from this analysis.

Country: Country Continent: Continent Hospital type: Tertiary/Spec/Inf.dis. hosp.

CNS=infection of central nervous system; Eye=eye infections; ENT=ear, nose and throat infections; URTI=upper respiratory tract infection; Bron=bronchitis; Pneu=Pneumonia or lower respiratory tract infection; TB=tuberculosis; CVS=cardiovascular system infections; GI=gastro−intestinal infections; IA=intra−abdominal sepsis; SST=skin and soft tissue; BJ=bone/joint infections; Cys=lower urinary tract infection; Pye=Upper urinary tract infection; OBGY=obstetric/gynaecological infections; GUM=genito−urinary males; BAC=bacteraemia; PUO=pyrexia of unknown origin; PUO−HO=fever syndrome in non−neutropaenic haematology−oncology patient; FN=fever neutropaenic patient; LYMPH=infection lymphatics

Summary of quality indicators for antibiotic use

	Our hospital 2023−P3		Country		Continent		Hospital type		Europe	
	N	%	N	%	N	%	N	%	N	%
Medical										
Reason in notes	244	95.3	4166	87.4	5621	88.5	3818	88.3	1382	81.2
Guidelines missing	0	0.0	24	0.5	287	4.5	20	0.5	331	19.4
Guideline compliant	109	58.3	3070	89.8	4002	87.4	2784	89.7	820	76.9
Stop/review date documented	205	80.1	3066	64.3	4005	63.1	2863	66.2	554	32.5
Surgical										
Reason in notes	99	98.0	1621	75.7	2238	78.3	1561	78.6	464	60.8
Guidelines missing	0	0.0	37	1.7	155	5.4	26	1.3	28	3.7
Guideline compliant	54	64.3	1123	68.1	1548	71.6	1027	66.7	361	65.8
Stop/review date documented	71	70.3	1305	61.0	1709	59.8	1256	63.2	266	34.9
ICU										
Reason in notes	43	100.0	1009	77.0	1280	78.7	923	78.1	356	92.5
Guidelines missing	0	0.0	8	0.6	48	3.0	6	0.5	69	17.9
Guideline compliant	16	59.3	740	92.6	928	91.6	678	93.0	183	86.3
Stop/review date	43	100.0	767	58.5	981	60.3	698	59.1	180	46.8

Antibiotic quality indicators by activity (medical, surgery, ICU) for all patients receiving antibacterials for systemic use (ATC J01).

- For reason in notes and stop/review date documented: Count at antibacterial level.
- For guidelines missing: Count on NA (= no guideline for an indication) at patient level and diagnosis over total scores for this indicator.
- For guideline compliance: Count at patient level and diagnosis for compliance= yes or no only. For combination therapy with >1 antibiotic: if 1 antibiotic by diagnosis is not compliant, this combination therapy as a whole for this diagnosis will be counted as non−compliant.

Antibiotic quality indicators − adult wards

	Our hospital 2023−P3		Country		Continent		Hospital type		Europe	
	N	%	N	%	N	%	N	%	N	%
Medical										
Reason in notes	133	93.0	2914	88.7	4271	90.5	2654	89.3	1199	79.9
Guidelines missing	0	0.0	21	0.6	270	5.7	19	0.6	320	21.3
Guideline compliant	49	49.0	2148	88.9	2978	86.1	1939	88.6	698	75.1
Stop/review date documented	100	69.9	2043	62.2	2938	62.3	1878	63.2	438	29.2
Surgical										
Reason in notes	81	98.8	1517	75.5	2119	78.5	1457	78.5	418	58.5
Guidelines missing	0	0.0	37	1.8	148	5.5	26	1.4	28	3.9
Guideline compliant	38	55.9	1044	67.8	1457	71.5	950	66.3	328	63.8
Stop/review date documented	63	76.8	1219	60.7	1605	59.4	1170	63.1	225	31.5
ICU										
Reason in notes	16	100.0	414	86.4	633	86.0	393	86.8	302	92.9
Guidelines missing	0	0.0	4	0.8	37	5.0	2	0.4	69	21.2
Guideline compliant	0	0.0	311	90.1	462	88.5	298	90.6	149	84.2
Stop/review date documented	16	100.0	275	57.4	450	61.1	258	57.0	142	43.7

Antibiotic quality indicators by activity (medical, surgical, ICU) for patients admitted on adult wards receiving antibacterials for systemic use (ATC J01).

− For reason in notes and stop/review date documented: Count at antibacterial level.

− For guidelines missing: Count on NA (= no guideline for an indication) at patient level and diagnosis over total scores for this indicator.

− For guideline compliance: Count at patient level and diagnosis for compliance = yes or no only. For combination therapy with >1 antibiotic: if 1 antibiotic by diagnosis is not compliant, this combination therapy as a whole for this diagnosis will be counted as non−compliant.

Antibiotic quality indicators − paediatric and neonatal wards

	Our hospital 2023−P3		Country		Continent		Hospital type		Europe	
	N	%	N	%	N	%	N	%	N	%
Medical										
Reason in notes	111	98.2	1252	84.5	1350	82.7	1164	86.2	183	90.6
Guidelines missing	0	0.0	3	0.2	17	1.0	1	0.1	11	5.4
Guideline compliant	60	69.0	922	92.0	1024	91.5	845	92.2	122	88.4
Stop/review date documented	105	92.9	1023	69.1	1067	65.4	985	73.0	116	57.4
Surgical										
Reason in notes	18	94.7	104	78.2	119	76.3	104	79.4	46	93.9
Guidelines missing	0	0.0	0	0.0	7	4.5	0	0.0	0	0.0
Guideline compliant	16	100.0	79	71.8	91	74.0	77	71.3	33	94.3
Stop/review date documented	8	42.1	86	64.7	104	66.7	86	65.6	41	83.7
ICU										
Reason in notes	27	100.0	595	71.5	647	72.7	530	72.7	54	90.0
Guidelines missing	0	0.0	4	0.5	11	1.2	4	0.5	0	0.0
Guideline compliant	16	100.0	429	94.5	466	94.9	380	95.0	34	97.1
Stop/review date documented	27	100.0	492	59.1	531	59.7	440	60.4	38	63.3

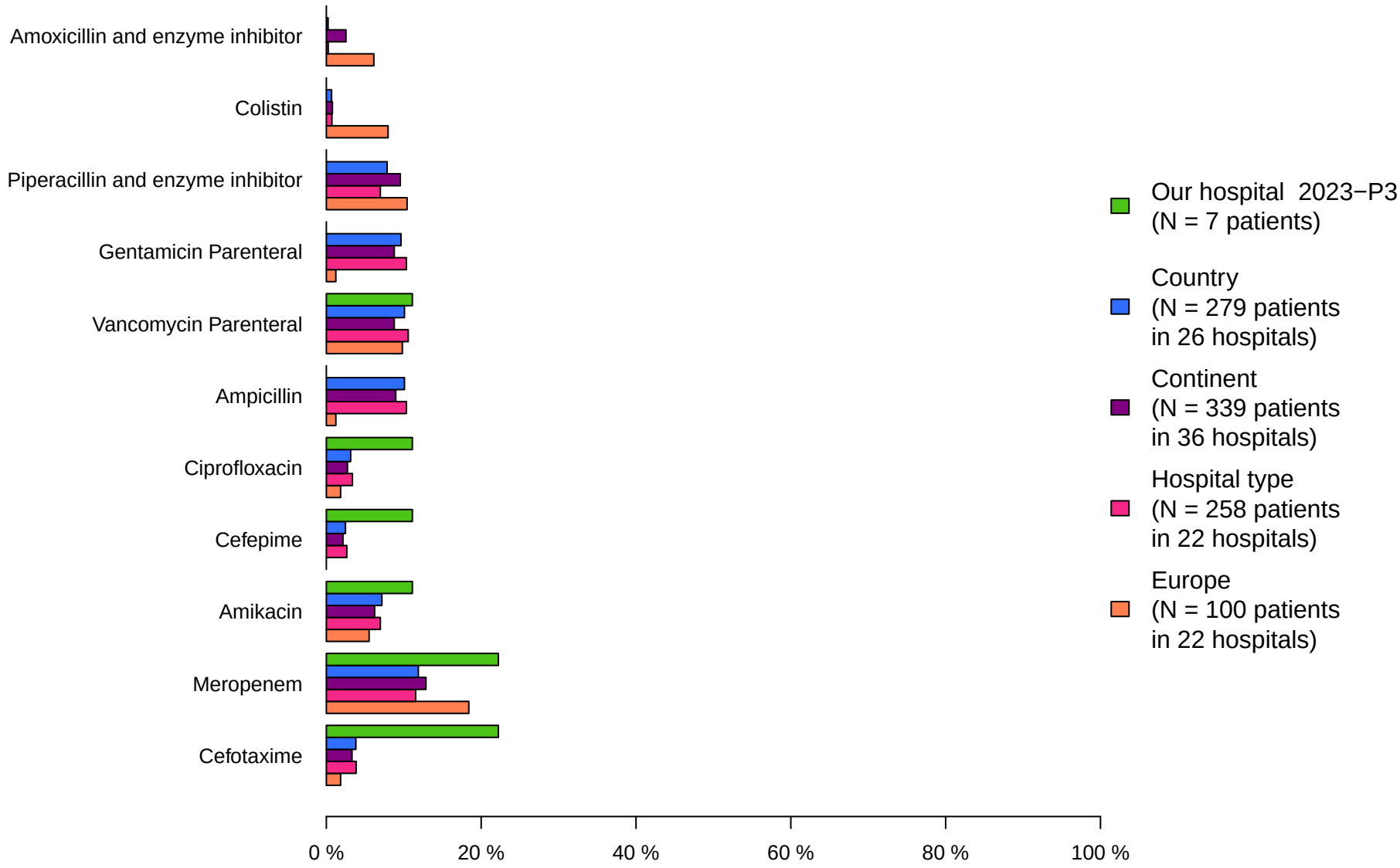
Antibiotic quality indicators by activity (medical, surgical, ICU) for patients admitted on paediatric and neonatal wards receiving antibacterials for systemic use (ATC J01).

− For reason in notes and stop/review date documented: Count at antibacterial level.

− For guidelines missing: Count on NA (= no guideline for an indication) at patient level and diagnosis over total scores for this indicator.

− For guideline compliance: Count at patient level and diagnosis for compliance = yes or no only. For combination therapy with >1 antibiotic: if 1 antibiotic by diagnosis is not compliant, this combination therapy as a whole for this diagnosis will be counted as non−compliant.

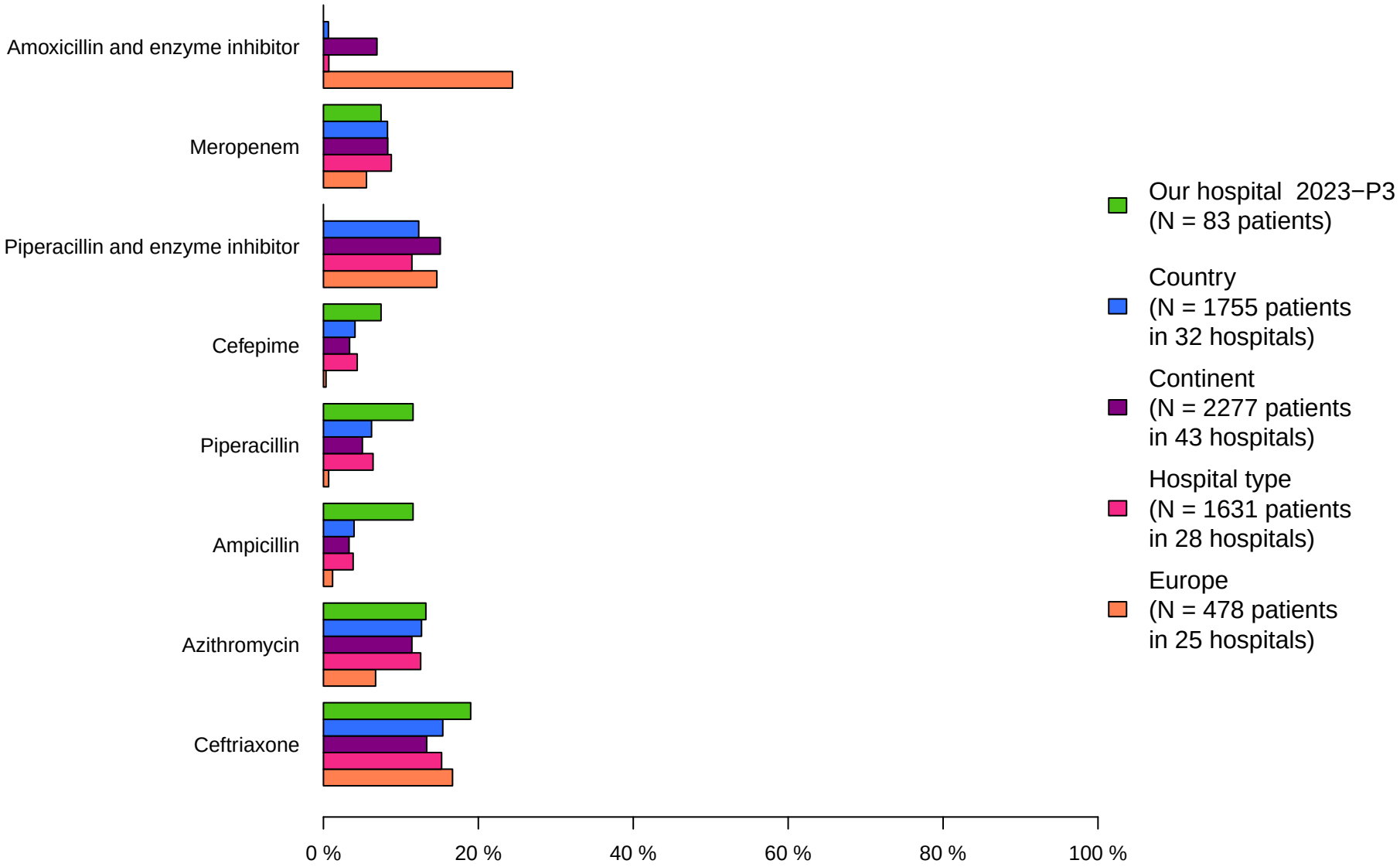
Top 5 most frequently used antibiotics for sepsis in adults and children



Selection on antibacterials for systemic use (J01). Top 5 most prescribed antibiotics (ATC5, substance level) for sepsis at hospital level, supplemented with the most prescribed antibiotics at country, continental and hospital type level if they do not fall within top 5 of the hospital. Selection on diagnostic code = sepsis; All patients are included with exception of patients admitted on NMW and NICU.

Country: Country ; Continent: Continent ; Hospital type: Tertiary/Spec/Inf.dis. hosp.

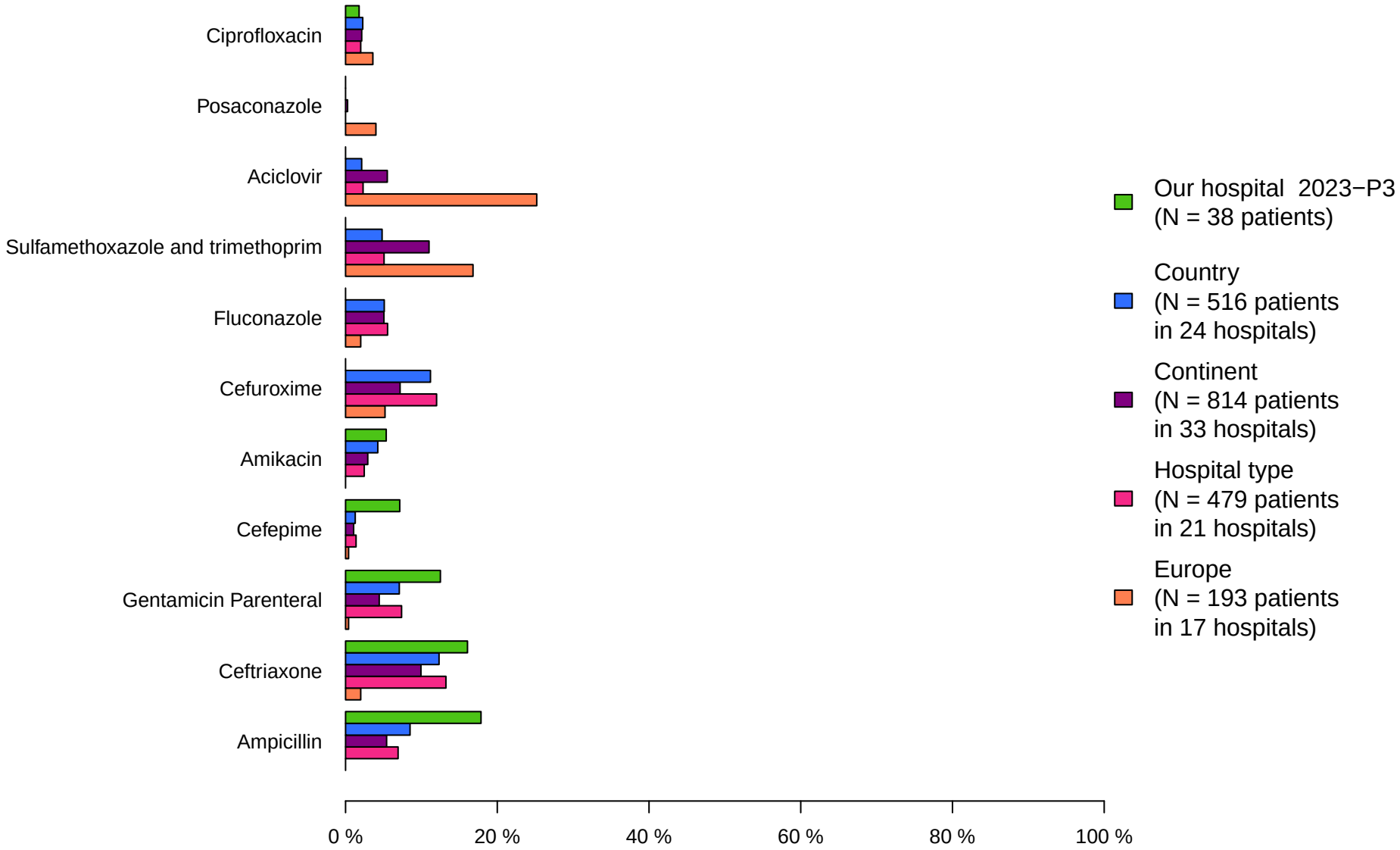
Top 5 most frequently used antibiotics for pneumonia in adults and children



Selection on antibacterials for systemic use (J01). Top 5 most prescribed antibiotics (ATC5, substance level) for pneumonia at hospital level, supplemented with the most prescribed antibiotics at country, continent and hospital type level if they do not fall within top 5 of the hospital. Selection on diagnostic code = pneu; All patients are included with exception of patients admitted on NMW and NICU.

Country: Country ; Continent: Continent ; Hospital type: Tertiary/Spec/Inf.dis. hosp.

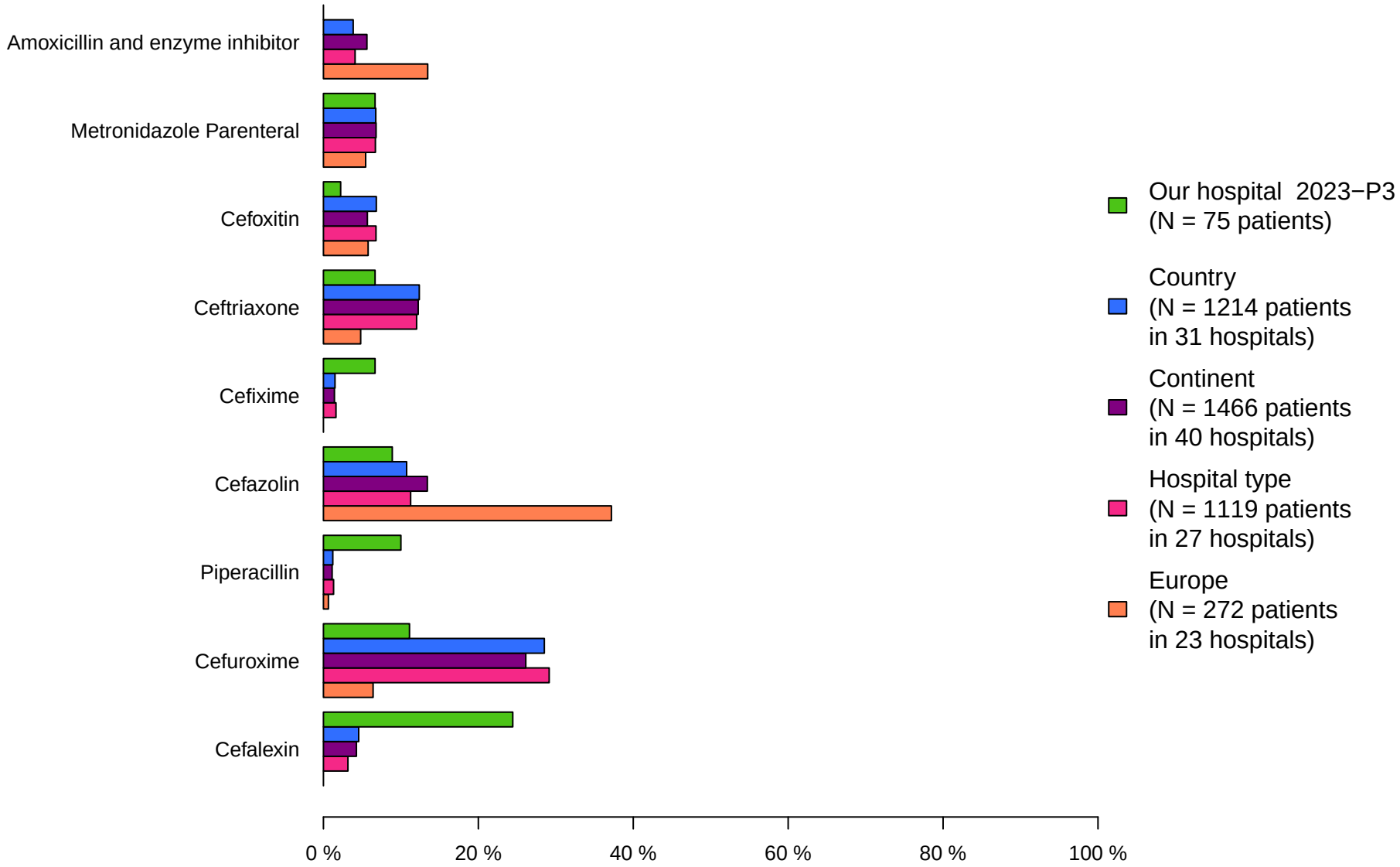
Top 5 most frequently used antimicrobials for medical prophylaxis in adults and children



Top 5 most prescribed antimicrobials (ATC5, substance level) for medical prophylaxis at hospital level, supplemented with the most prescribed antimicrobials at country, continent and hospital type level if they do not fall within top 5 of the hospital.
Selection on indication = MP; All patients are included with exception of patients admitted on NMW and NICU.

Country: Country ; Continent: Continent ; Hospital type: Tertiary/Spec/Inf.dis. hosp.

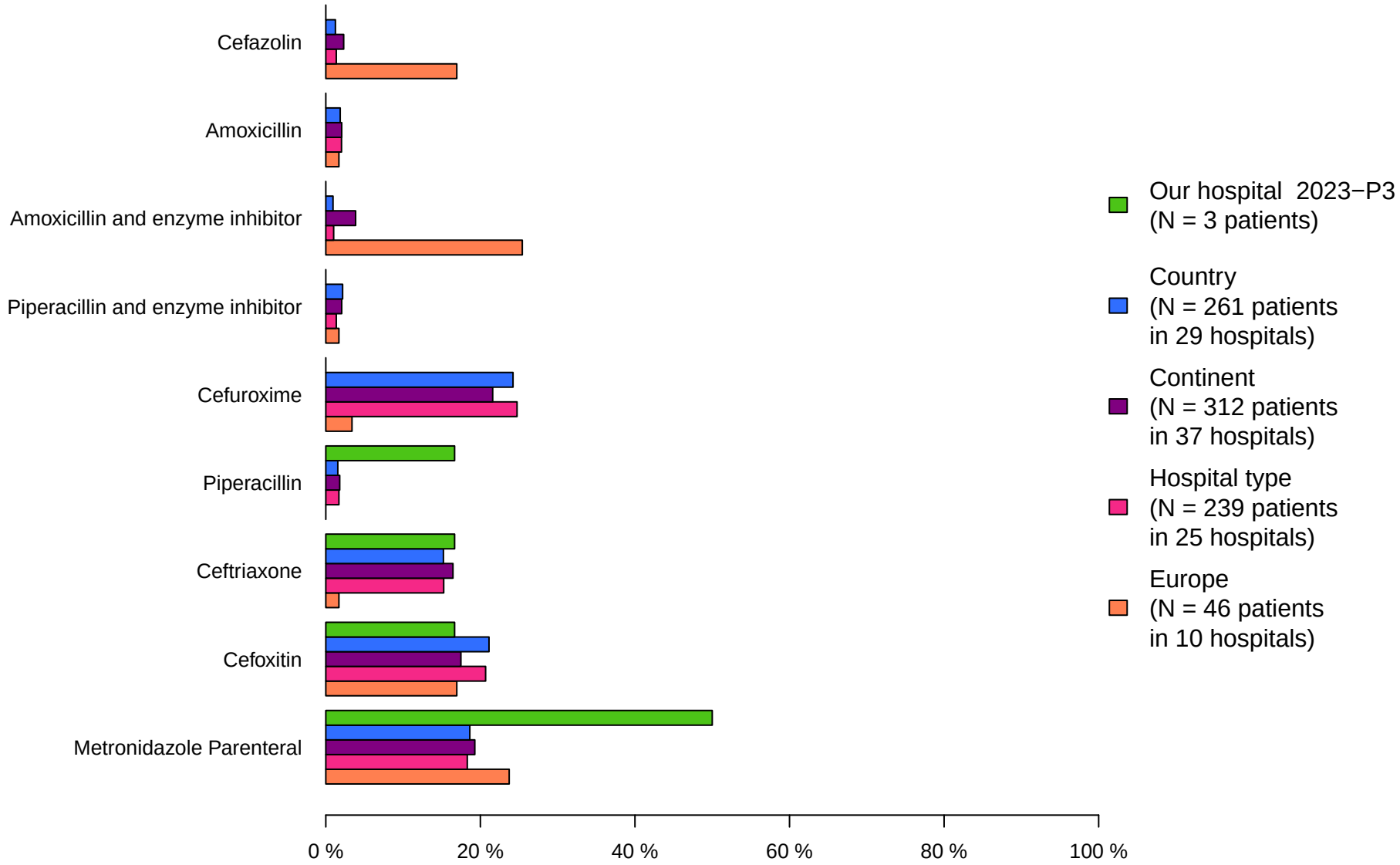
Top 5 most frequently used antibiotics for surgical prophylaxis in adults and children



Top 5 most prescribed antibacterials for systemic use (ATC code J01) for surgical prophylaxis use at hospital level, supplemented with the most prescribed antibiotics at country, continent and hospital type level if they do not fall within the top 5 of the hospital. Selection on indication = SP; All patients are included with exception of patients admitted on NMW and NICU.

Country: Country ; Continent: Continent ; Hospital type: Tertiary/Spec/Inf.dis. hosp.

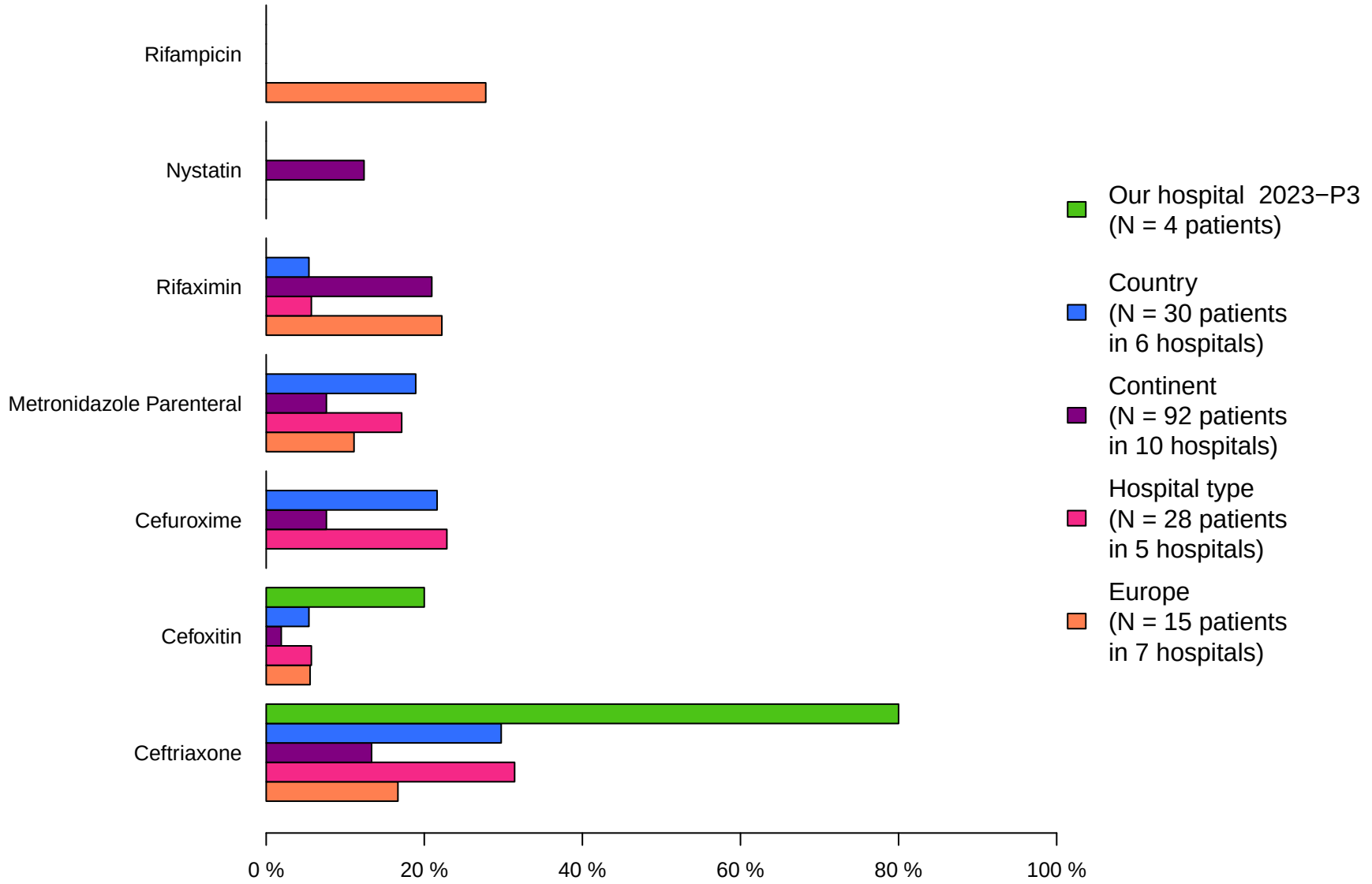
Top 5 most frequently used antibiotics for surgical prophylaxis of the gastro−intestinal tract in adults and children



Selection on antibacterials for systemic use (J01). Top 5 antibiotics (ATC5, substance level) prescribed for surgical prophylaxis of the gastro−intestinal tract at hospital level, supplemented with the most prescribed antibiotics at country, continent and hospital type level if they do not fall within top 5 of the hospital. Selection on diagnostic code = Proph GI and indication = SP; All patients are included with exception of patients admitted on NMW and NICU.

Country: Country ; Continent: Continent ; Hospital type: Tertiary/Spec/Inf.dis. hosp.

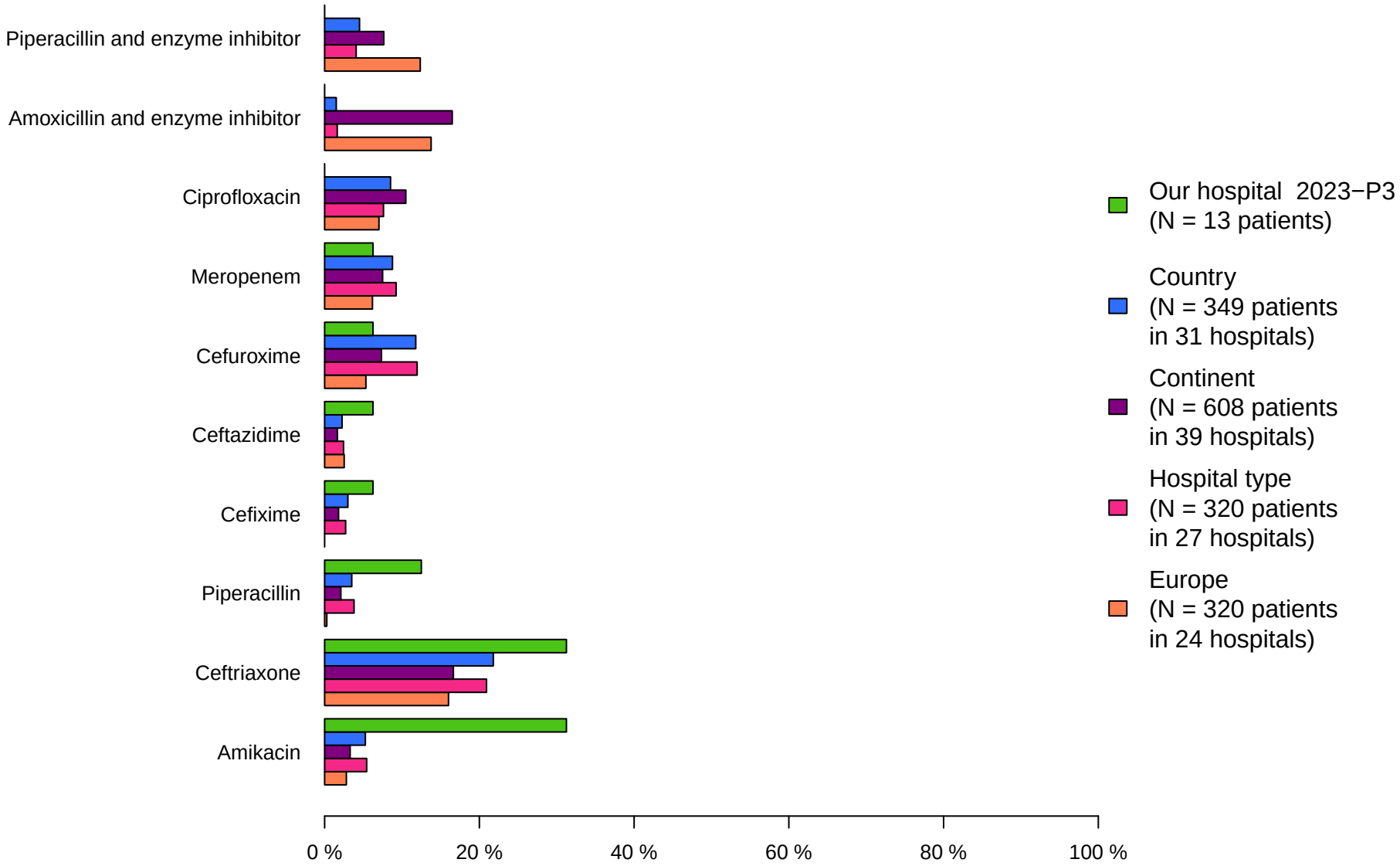
Top 5 most frequently used antimicrobials for medical prophylaxis of the gastro−intestinal tract



Top 5 antimicrobials (ATC5, substance level) prescribed for medical prophylaxis of the gastro−intestinal tract at hospital level, supplemented with the most prescribed antimicrobials at country, continent and hospital type level if they do not fall within top 5 of the hospital.
Selection on diagnostic code = Proph GI and indication = MP; All patients are included with exception of patients admitted on NMW and NICU.

Country: Country ; Continent: Continent ; Hospital type: Tertiary/Spec/Inf.dis. hosp.

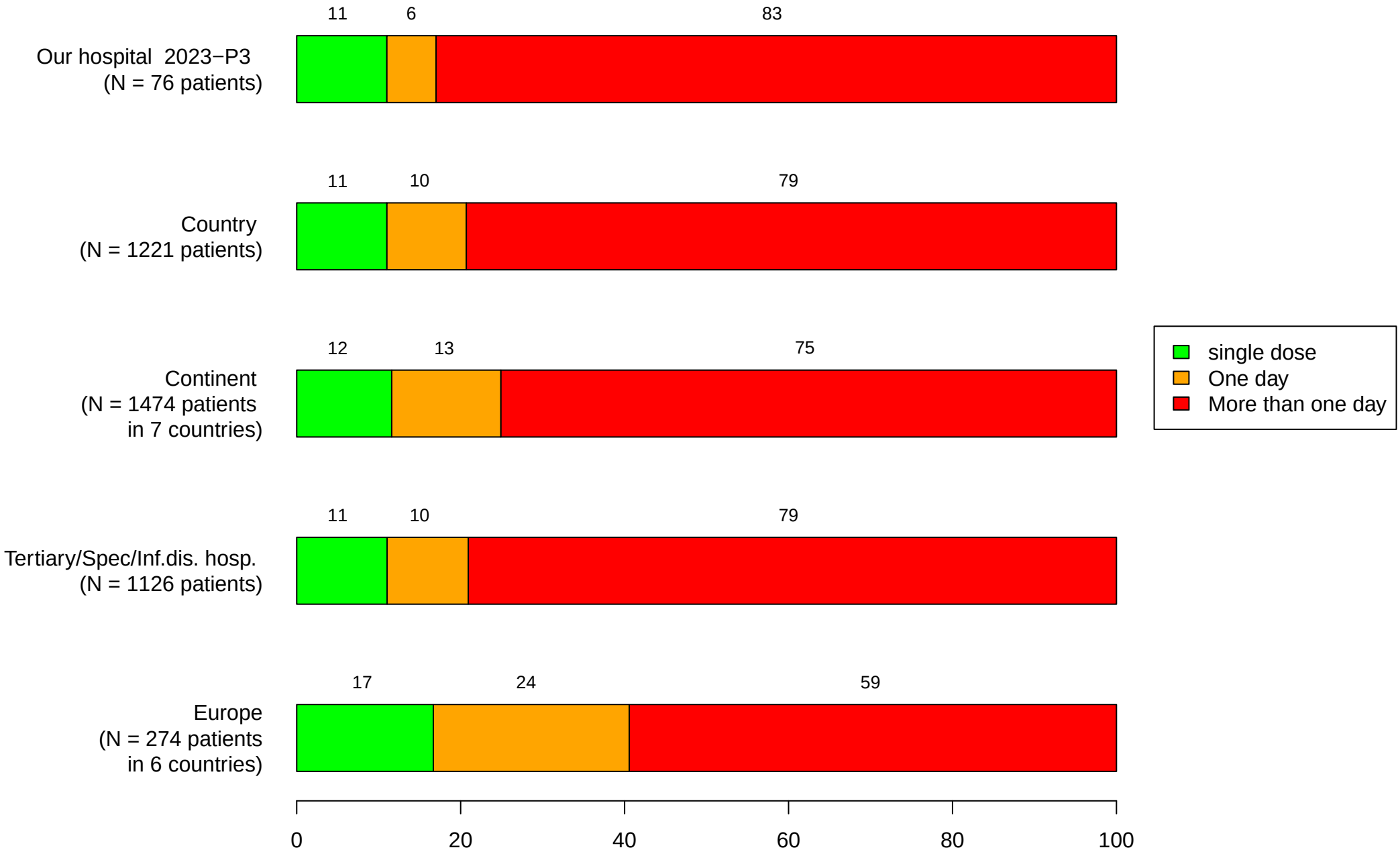
Top 5 most frequently used antibiotics for lower (Cys) and upper (Pye) Urinary Tract Infections



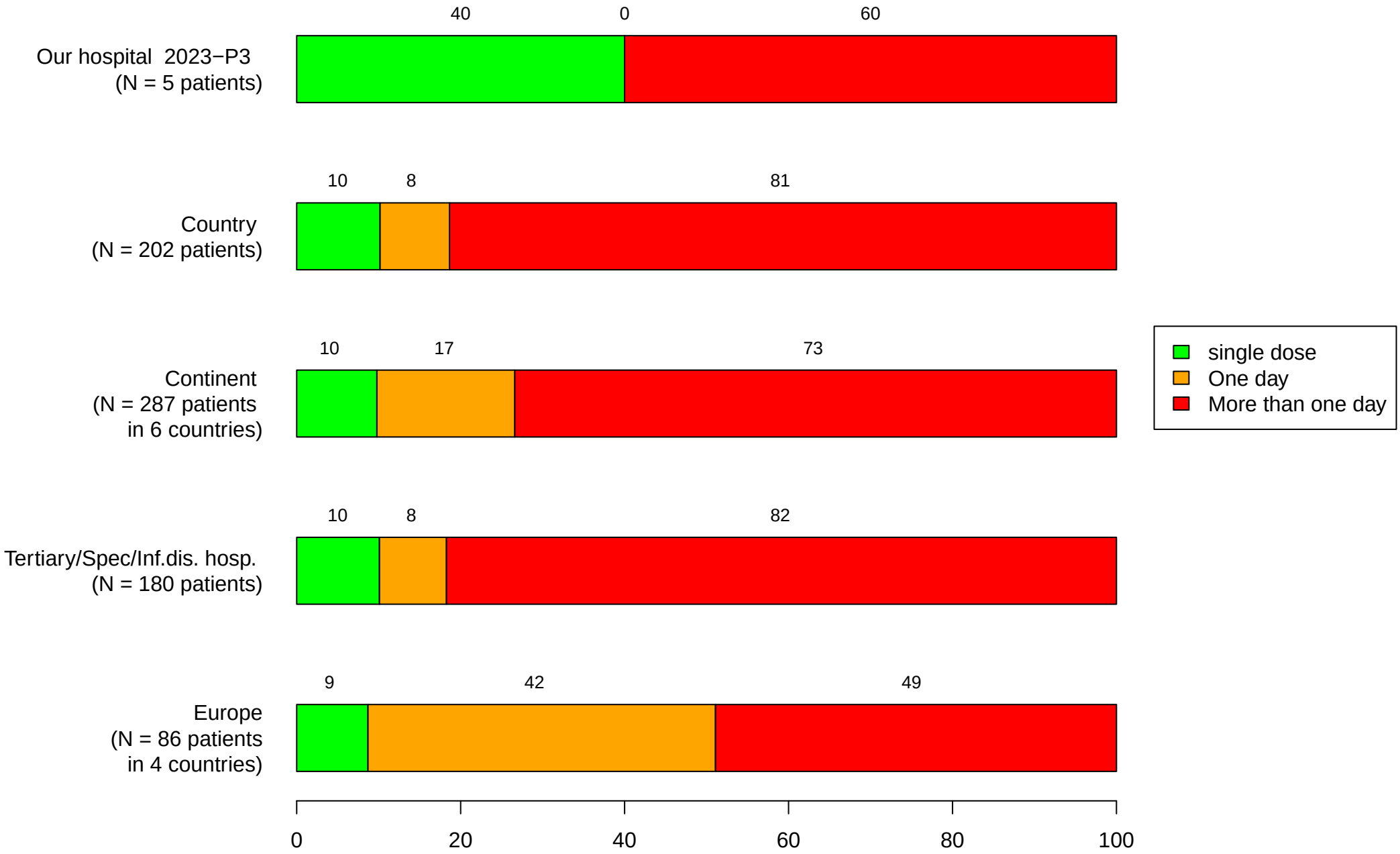
Selection on antibacterials for systemic use (J01). Top 5 most prescribed antibiotics (ATC5, substance level) for lower and upper urinary tract infections at hospital level, supplemented with the most prescribed antibiotics at country, continent and hospital type level if they do not fall within top 5 of the hospital. Selection on diagnostic code = Cys or Pye; All patients are included with exception of patients admitted on NMW and NICU.

Country: Country ; Continent: Continent ; Hospital type: Tertiary/Spec/Inf.dis. hosp.

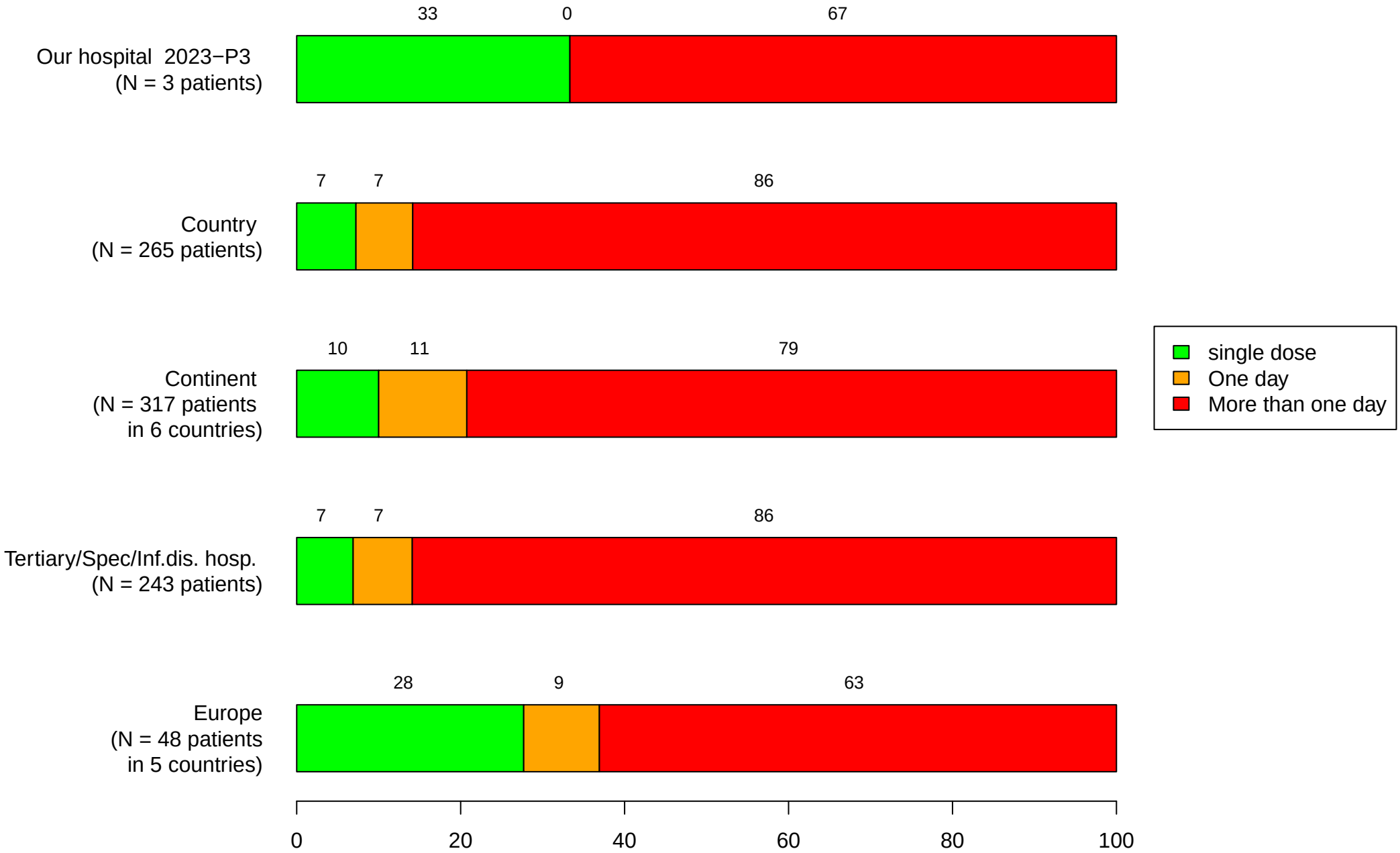
Duration of surgical prophylaxis in adults and children



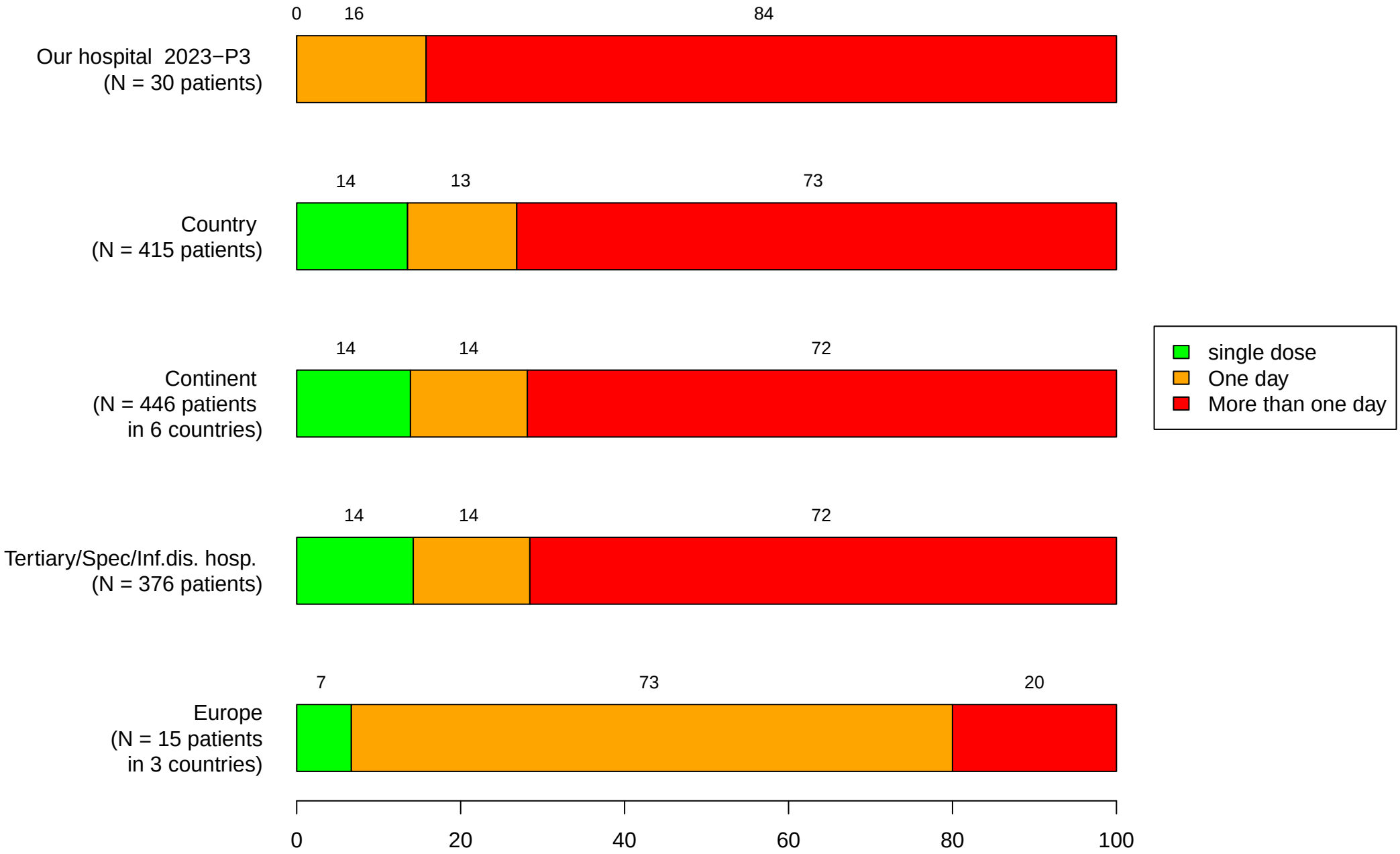
Duration of prophylaxis for plastic and orthopedic surgery in adults and children



Duration of GI prophylaxis in adults and children



Duration of obstetric or gynaecological prophylaxis in adult wards



Key prescription patterns (adults and children)

	Our hospital 2023−P3		Country		Continent		Hospital type		Europe	
	N	%	N	%	N	%	N	%	N	%
All patients										
IV therapy	232	81.4	4602	83.1	6214	80.1	4208	82.7	1880	86.6
Multiple ATB diagnosis	90	31.1	1696	29.5	1960	24.4	1544	29.3	487	21.5
Multiple ATB patient	91	31.9	1834	33.1	2161	27.9	1669	32.8	539	24.8
Medical										
IV therapy	162	87.6	2862	85.0	3762	79.4	2599	84.8	1104	83.2
Multiple ATB diagnosis	65	34.8	1139	32.6	1267	25.7	1027	32.3	279	20.1
Multiple ATB patient	65	35.1	1228	36.4	1401	29.6	1105	36.0	311	23.4
Surgical										
IV therapy	54	64.3	1285	75.5	1784	76.9	1177	74.5	547	91.0
Multiple ATB diagnosis	17	20.2	353	20.3	436	18.4	328	20.3	118	19.2
Multiple ATB patient	17	20.2	383	22.5	476	20.5	356	22.5	127	21.1
ICU										
IV therapy	16	100.0	455	97.4	668	95.8	432	97.5	229	94.6
Multiple ATB diagnosis	8	44.4	204	40.7	257	34.7	189	39.8	90	34.4
Multiple ATB patient	9	56.2	223	47.8	284	40.7	208	47.0	101	41.7

Analyses at patient level. Patients admitted on a NMW and NICU are excluded.
Multiple ATB diagnosis is defined as receiving > 1 antibiotic (J01) for a single identified reason to treat (=diagnose code) at patient level.
Multiple ATB patient is defined as receiving > 1 antibiotic (J01) at patient level.

Country: Country ; Continent: Continent ; Hospital type: Tertiary/Spec/Inf.dis. hosp.

Type of antibiotic treatment − Summary

	Our hospital 2023−P3		Country		Continent		Hospital type		Europe	
	N	%	N	%	N	%	N	%	N	%
All patients										
Empiric	368	92.5	7028	89.2	8984	86.6	6338	88.6	2064	74.8
Targeted	30	7.5	851	10.8	1386	13.4	816	11.4	696	25.2
Adults (>= 18 years)										
Empiric	227	93.4	4675	88.2	6412	84.9	4250	87.6	1784	73.5
Targeted	16	6.6	625	11.8	1144	15.1	599	12.4	644	26.5
Children (< 18 years)										
Empiric	125	89.9	1824	90.3	2032	90.6	1643	89.6	268	83.8
Targeted	14	10.1	196	9.7	210	9.4	190	10.4	52	16.2
Neonates (NICU)										
Empiric	16	100.0	529	94.6	540	94.4	445	94.3	12	100.0
Targeted	0	0.0	30	5.4	32	5.6	27	5.7	0	0.0

Selection on antibiotic treatments.
N = number of antibiotics (J01) included per type of treatment and subgroup (all patients, adults, children and neonates).

Country: Country ; Continent: Continent ; Hospital type: Tertiary/Spec/Inf.dis. hosp.

Type of antibiotic treatment by activity

	Our hospital 2023−P3		Country		Continent		Hospital type		Europe	
	N	%	N	%	N	%	N	%	N	%
All patients										
Empiric	214	89.5	4984	86.1	6442	83.1	4530	85.5	1558	69.6
Targeted	25	10.5	804	13.9	1313	16.9	771	14.5	679	30.4
Medical										
Empiric	161	89.4	3494	87.1	4528	84.5	3166	86.5	1115	73.8
Targeted	19	10.6	519	12.9	830	15.5	496	13.5	396	26.2
Surgical										
Empiric	36	92.3	665	84.5	959	77.2	596	83.1	259	62.9
Targeted	3	7.7	122	15.5	283	22.8	121	16.9	153	37.1
ICU										
Empiric	17	85.0	825	83.5	955	82.7	768	83.3	184	58.6
Targeted	3	15.0	163	16.5	200	17.3	154	16.7	130	41.4

Selection on antibiotic treatments (prophylactic and unknown prescribing are excluded) by activity.
N = number of antibiotics (J01) included per type of treatment and activity (medical, surgical, ICU).

Country: Country ; Continent: Continent ; Hospital type: Tertiary/Spec/Inf.dis. hosp.

Treatment based on microbiology data

	Our hospital 2023−P3		Country		Continent		Hospital type		Europe	
	N	%	N	%	N	%	N	%	N	%
MRSA	1	0.6	25	0.6	30	0.5	25	0.7	14	0.8
MRCoNS	2	1.2	51	1.3	54	0.9	47	1.3	23	1.4
VRE	0	0.0	10	0.3	11	0.2	10	0.3	4	0.2
ESBL	7	4.0	112	2.8	122	2.1	109	3.0	56	3.3
3GCREB	0	0.0	14	0.4	32	0.6	13	0.4	12	0.7
CRE	1	0.6	22	0.6	23	0.4	21	0.6	30	1.8
ESBL−NF	2	1.2	46	1.2	48	0.8	45	1.2	6	0.4
CR−NF	1	0.6	40	1.0	43	0.8	40	1.1	31	1.8
Other MDR	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
PNSP	1	0.6	1	0.0	1	0.0	1	0.0	0	0.0
MLS	1	0.6	6	0.2	6	0.1	6	0.2	1	0.1
Any of the above	15	8.7	291	7.3	332	5.8	281	7.7	157	9.2

N = the number of patients reported to have received a microbiology−based treatment for the respective pathogen.
% = 100*(the number of patients reported to have received a microbiology−based treatment for the respective pathogen/total number of patients receiving a therapeutic treatment (CAI or HAI) with at least one antibacterial for systemic use (J01)).

Country: Country ; Continent: Continent ; Hospital type: Tertiary/Spec/Inf.dis. hosp.

Prevalence (%) of Healthcare Associated Infections: Hospital−wide

	Hospital 2023−P3	Country	Continent	Hospital type	Europe
Numerator (N patients)	32	900	1541	847	492
Denominator (N admitted patients)	337	10255	15091	9367	5640
HAI rate (%)	9.5	8.8	10.2	9.0	8.7
Post−operative surgical site infection (%)	0.9	0.7	0.7	0.7	1.5
Intervention related infection (%)	1.8	1.8	1.8	1.9	2.3
CDAD (%)	0.3	0.1	0.1	0.1	0.4
Other HAI (%)	5.9	6.2	6.8	6.4	4.1
HAI from another hospital (%)	0.0	0.3	0.4	0.3	0.4
HAI from LTCF or nursing home (%)	0.6	0.1	0.6	0.0	0.7

Country: Country ; Continent: Continent ; Hospital type: Tertiary/Spec/Inf.dis. hosp.

Prevalence (%) of Intervention−related versus Other Hospital−Associated Infections Hospital−wide

	Hospital 2023−P3	Country	Continent	Hospital type	Europe
Numerator (N patients)	32	900	1541	847	492
Denominator (N admitted patients)	337	10255	15091	9367	5640
HAI rate (%)	9.5	8.8	10.2	9.0	8.7
Intervention−related infections (%)					
Mixed origin	0.3	0.4	0.4	0.4	0.6
CVC−BSI	0.3	0.3	0.3	0.3	0.1
PVC−BSI	0.3	0.2	0.1	0.2	0.1
Ventilator−Associated Pneumonia (VAP)	0.9	0.7	0.6	0.8	0.5
CAUTI	0.0	0.3	0.4	0.3	1.1
Other Hospital−Associated Infections (%)					
HAI of mixed or undefined origin	1.5	2.2	2.6	2.4	2.2
Blood Stream Infection (BSI)	2.4	1.0	0.8	1.0	0.4
Hospital−Acquired Pneumonia (not VAP)	0.6	2.6	2.8	2.7	1.0
Urinary Tract Infection (UTI)	1.5	0.6	0.7	0.5	0.7

CVC−BSI = Central Venous Catheter−related Blood Stream Infection
PVC−BSI = Peripheral Vascular Catheter−related Blood Stream Infection
CAUTI = Catheter−Associated Urinary Tract Infection

Intervention−related infections are scored by code HAI2 and Other Hospital−Associated Infections by HAI4 of the variable Indication

Prevalence (%) of Healthcare Associated Infections: Adult wards

	Hospital 2023−P3	Country	Continent	Hospital type	Europe
Numerator (N patients)	13	624	1236	590	469
Denominator (N admitted patients)	194	7995	12350	7298	5099
HAI rate (%)	6.7	7.8	10.0	8.1	9.2
Post−operative surgical site infection (%)	1.5	0.7	0.8	0.8	1.5
Intervention related infection (%)	2.1	1.4	1.6	1.5	2.4
CDAD (%)	0.0	0.1	0.1	0.1	0.4
Other HAI (%)	3.1	5.5	6.6	5.7	4.3
HAI from another hospital (%)	0.0	0.3	0.4	0.3	0.5
HAI from LTCF or nursing home (%)	0.0	0.1	0.8	0.0	0.8

Country: Country ; Continent: Continent ; Hospital type: Tertiary/Spec/Inf.dis. hosp.

Prevalence (%) of Intervention−related versus Other Hospital−Associated Infections
Adult Wards

	Hospital 2023−P3	Country	Continent	Hospital type	Europe
Numerator (N patients)	13	624	1236	590	469
Denominator (N admitted patients)	194	7995	12350	7298	5099
HAI rate (%)	6.7	7.8	10.0	8.1	9.2
Intervention−related infections (%)					
Mixed origin	0.5	0.4	0.4	0.4	0.6
CVC−BSI	0.0	0.2	0.2	0.2	0.2
PVC−BSI	0.0	0.1	0.1	0.1	0.1
Ventilator−Associated Pneumonia (VAP)	1.5	0.4	0.4	0.5	0.5
CAUTI	0.0	0.3	0.5	0.3	1.2
Other Hospital−Associated Infections (%)					
HAI of mixed or undefined origin	0.0	2.1	2.6	2.2	2.3
Blood Stream Infection (BSI)	1.5	0.5	0.4	0.5	0.5
Hospital−Acquired Pneumonia (not VAP)	0.0	2.5	2.9	2.6	1.1
Urinary Tract Infection (UTI)	1.5	0.6	0.8	0.5	0.8

CVC−BSI = Central Venous Catheter−related Blood Stream Infection
PVC−BSI = Peripheral Vascular Catheter−related Blood Stream Infection
CAUTI = Catheter−Associated Urinary Tract Infection

Intervention−related infections are scored by code HAI2 and Other Hospital−Associated Infections by HAI4 of the variable Indication

Prevalence (%) of Healthcare Associated Infections: Child and Neonatal Wards

	Hospital 2023−P3	Country	Continent	Hospital type	Europe
Numerator (N patients)	19	276	305	257	23
Denominator (N admitted patients)	143	2260	2741	2069	541
HAI rate (%)	13.3	12.2	11.1	12.4	4.3
Post−operative surgical site infection (%)	0.0	0.5	0.5	0.4	1.5
Intervention related infection (%)	1.4	3.2	2.8	3.4	1.1
CDAD (%)	0.7	0.1	0.1	0.1	0.0
Other HAI (%)	9.8	8.8	7.9	9.0	2.4
HAI from another hospital (%)	0.0	0.3	0.3	0.3	0.0
HAI from LTCF or nursing home (%)	1.4	0.1	0.1	0.1	0.0

Country: Country ; Continent: Continent ; Hospital type: Tertiary/Spec/Inf.dis. hosp.

Prevalence (%) of Intervention−related versus Other Hospital−Associated Infections Child and Neonatal Wards

	Hospital 2023−P3	Country	Continent	Hospital type	Europe
Numerator (N patients)	19	276	305	257	23
Denominator (N admitted patients)	143	2260	2741	2069	541
HAI rate (%)	13.3	12.2	11.1	12.4	4.3
Intervention−related infections (%)					
Mixed origin	0.0	0.6	0.5	0.6	0.2
CVC−BSI	0.7	0.5	0.4	0.5	0.0
PVC−BSI	0.7	0.4	0.3	0.4	0.0
Ventilator−Associated Pneumonia (VAP)	0.0	1.8	1.6	1.9	0.7
CAUTI	0.0	0.1	0.1	0.1	0.2
Other Hospital−Associated Infections (%)					
HAI of mixed or undefined origin	3.5	2.7	2.7	2.8	1.8
Blood Stream Infection (BSI)	3.5	3.1	2.5	3.0	0.2
Hospital−Acquired Pneumonia (not VAP)	1.4	2.9	2.6	3.0	0.6
Urinary Tract Infection (UTI)	1.4	0.5	0.4	0.5	0.0

CVC−BSI = Central Venous Catheter−related Blood Stream Infection
PVC−BSI = Peripheral Vascular Catheter−related Blood Stream Infection
CAUTI = Catheter−Associated Urinary Tract Infection

Intervention−related infections are scored by code HAI2 and Other Hospital−Associated Infections by HAI4 of the variable Indication

Prevalence (%) of Healthcare Associated Infections: Adult Medical Wards

	Hospital 2023−P3	Country	Continent	Hospital type	Europe
Numerator (N patients)	13	435	867	409	292
Denominator (N admitted patients)	144	5822	9017	5370	3263
HAI rate (%)	9.0	7.5	9.6	7.6	8.9
Post−operative surgical site infection (%)	2.1	0.5	0.5	0.5	0.5
Intervention related infection (%)	2.8	1.4	1.5	1.4	1.7
CDAD (%)	0.0	0.1	0.2	0.1	0.4
Other HAI (%)	4.2	5.3	6.3	5.4	5.3
HAI from another hospital (%)	0.0	0.3	0.4	0.3	0.6
HAI from LTCF or nursing home (%)	0.0	0.1	1.0	0.0	1.1

Country: Country ; Continent: Continent ; Hospital type: Tertiary/Spec/Inf.dis. hosp.

Prevalence (%) of Intervention−related versus Other Hospital−Associated Infections
Adult Medical Wards

	Hospital 2023−P3	Country	Continent	Hospital type	Europe
Numerator (N patients)	13	435	867	409	292
Denominator (N admitted patients)	144	5822	9017	5370	3263
HAI rate (%)	9.0	7.5	9.6	7.6	8.9
Intervention−related infections (%)					
Mixed origin	0.7	0.3	0.4	0.4	0.4
CVC−BSI	0.0	0.2	0.2	0.2	0.1
PVC−BSI	0.0	0.1	0.1	0.1	0.1
Ventilator−Associated Pneumonia (VAP)	2.1	0.4	0.3	0.4	0.1
CAUTI	0.0	0.3	0.5	0.3	1.1
Other Hospital−Associated Infections (%)					
HAI of mixed or undefined origin	0.0	1.9	2.4	2.1	2.8
Blood Stream Infection (BSI)	2.1	0.4	0.3	0.4	0.5
Hospital−Acquired Pneumonia (not VAP)	0.0	2.4	2.8	2.4	1.3
Urinary Tract Infection (UTI)	2.1	0.7	0.9	0.6	1.0

CVC−BSI = Central Venous Catheter−related Blood Stream Infection
PVC−BSI = Peripheral Vascular Catheter−related Blood Stream Infection
CAUTI = Catheter−Associated Urinary Tract Infection

Intervention−related infections are scored by code HAI2 and Other Hospital−Associated Infections by HAI4 of the variable Indication

Explanatory notes for the slides on AWaRe antibiotic use

The following slides present antibiotic prescribing patterns according to the WHO Access, Watch, Reserve (AWaRe) classification. Antibiotic prescriptions for systemic use (ATC J01) are classified into 4 categories:

Access

1st or 2nd choice for empiric treatment of the most common infections
Lower risk of resistance selection
Amoxicillin, cefazolin, cloxacillin, clindamycin...

Watch

1st or 2nd choice for limited indications only
Higher risk of resistance selection
Quinolones, carbapenems, cephalosporins 2nd / 3rd gen...

Reserve

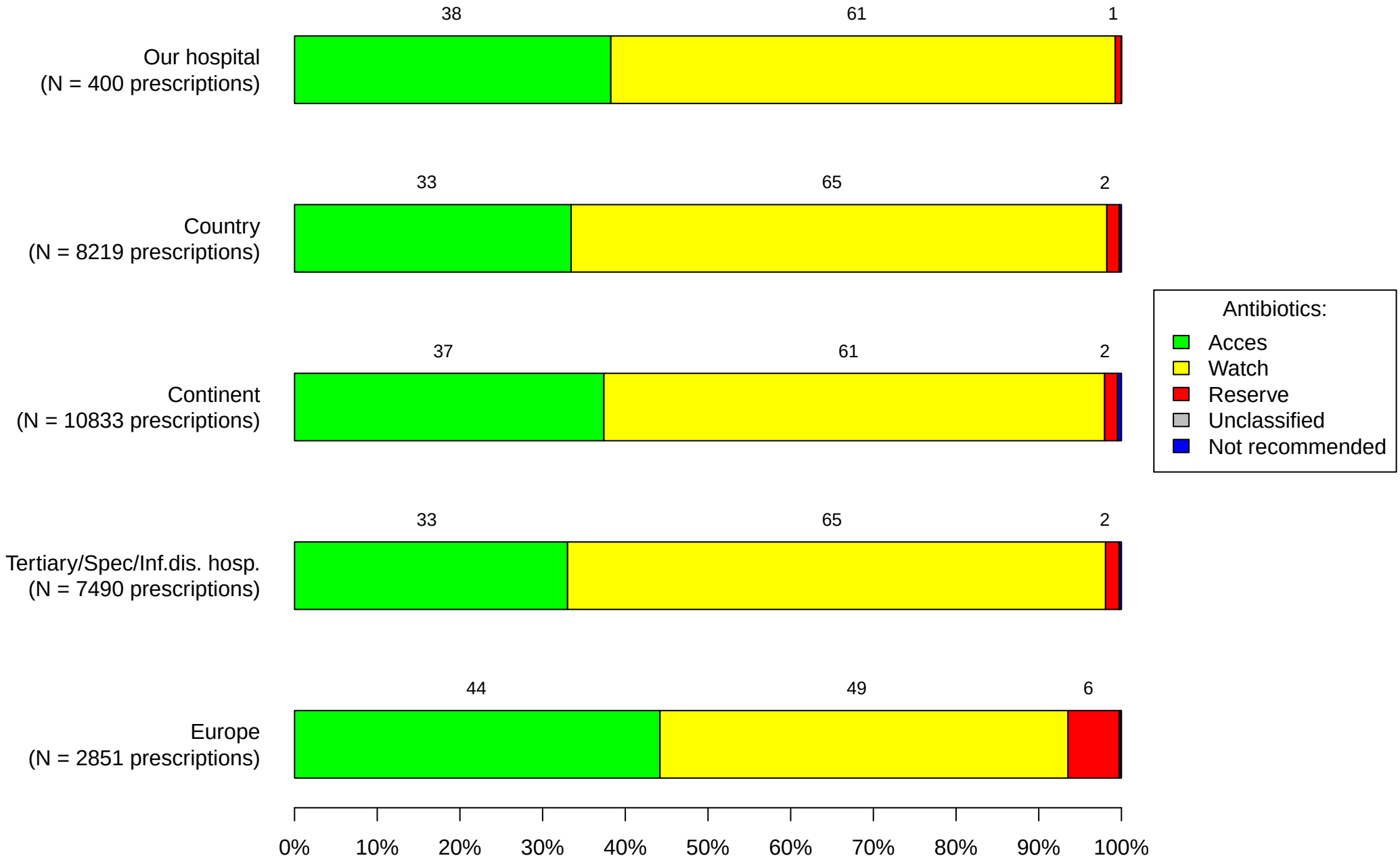
To be used only as a last resort, when no other alternatives are available
Colistin, linezolid, tigecyclin...

Not recommended (new category 2019)

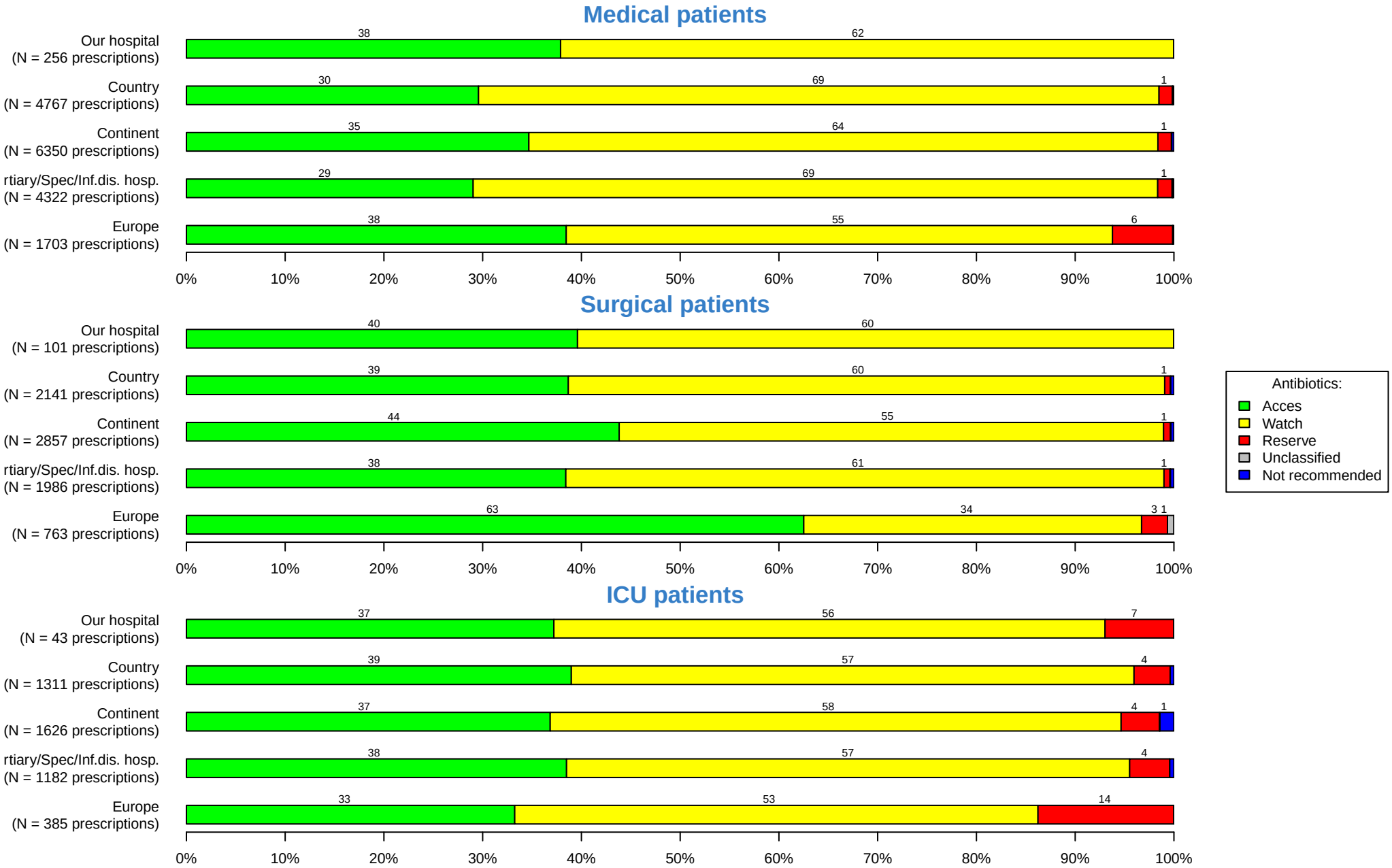
Mainly fixed−dose combinations of broad−spectrum antibiotics

More info on the WHO AWaRe classification:
https://adoptaware.org/

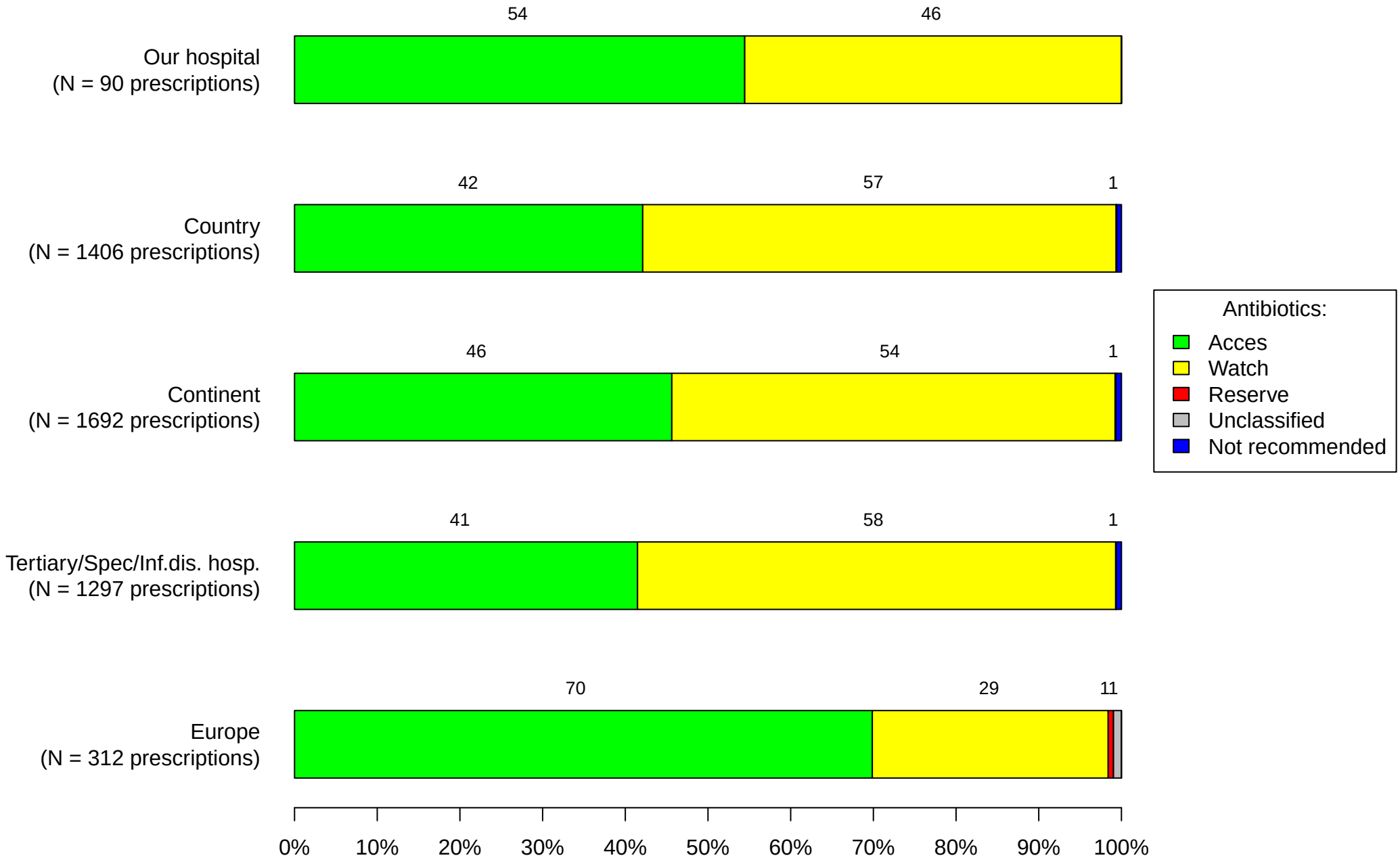
Overall antibiotic use (ATC J01) according to the WHO AWaRe classification



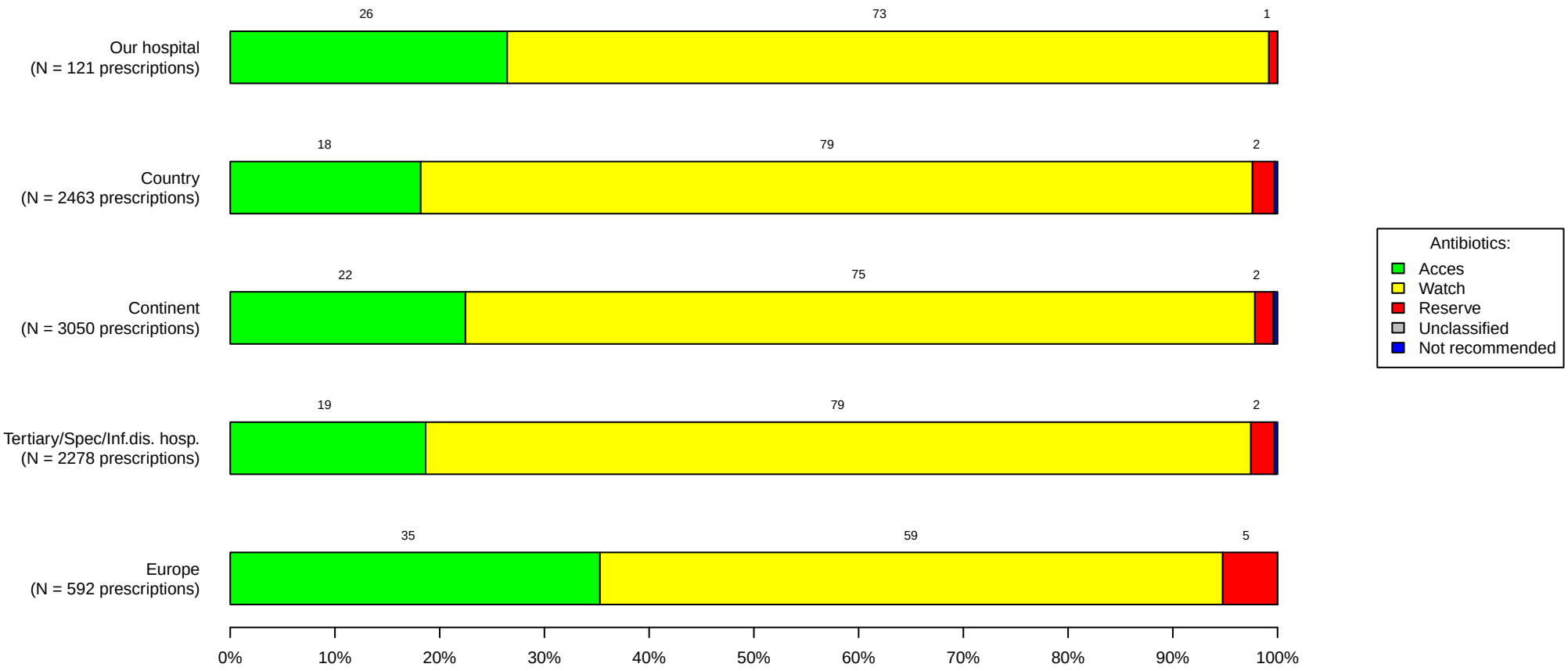
Antibiotic use (ATC J01) by activity according to the WHO AWaRe classification



Overall antibiotic use (ATC J01) according to the WHO AWaRe classification − Patients receiving surgical prophylaxis

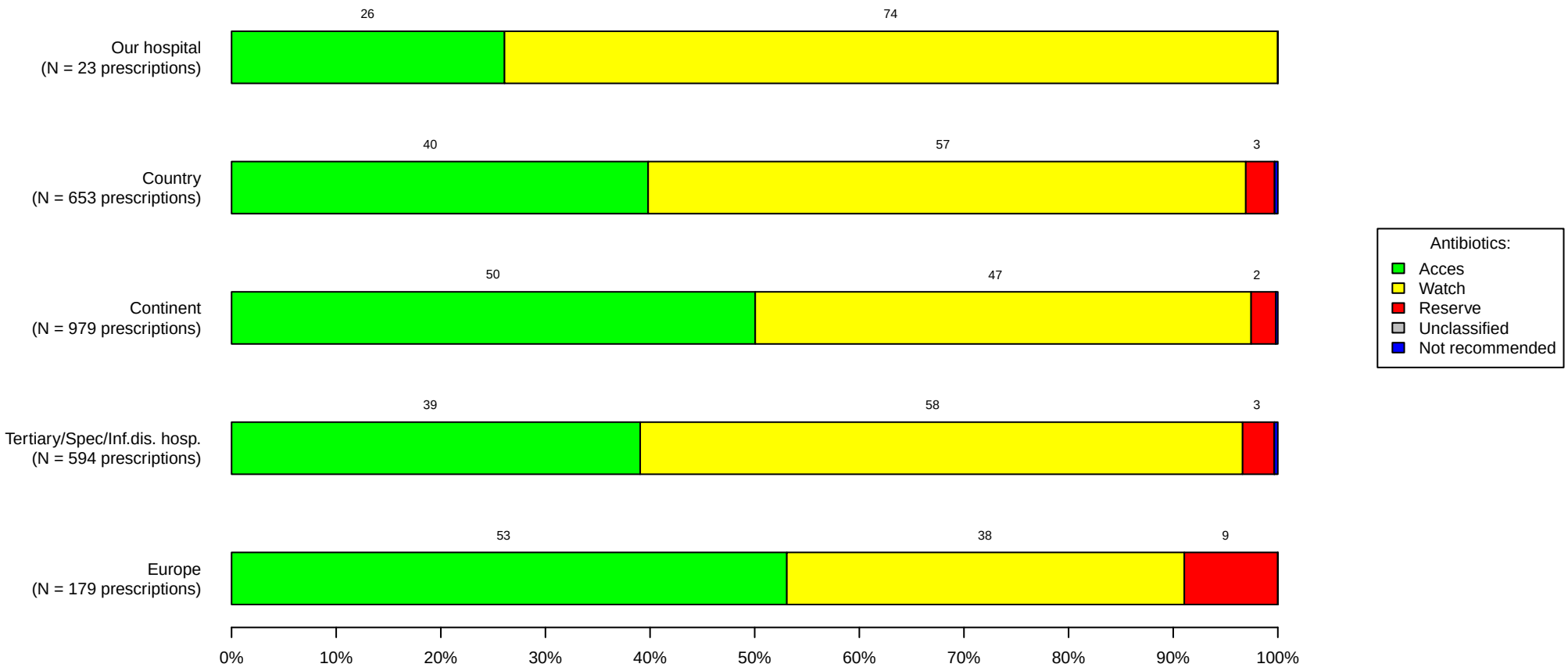


Overall antibiotic use (ATC J01) according to the WHO AWaRe classification – pneumonia



Prophylactic prescribing and patients admitted on NICU or NMW are excluded from this analysis

Overall antibiotic use (ATC J01) according to the WHO AWaRe classification − skin and soft tissue infections



Prophylactic prescribing and patients admitted on NICU or NMW are excluded from this analysis

Overall antibiotic use (ATC J01) according to the WHO AWaRe classification

Access Our Hospital	Access Country	Watch Our Hospital	Watch Country	Reserve Our Hospital	Reserve Country
Ampicillin 7.5%	Ampicillin 5%	Ceftriaxone 17%	Ceftriaxone 13%	Colistin 0.8%	CZA 0.3%
Cefalexin 6%	Clindamycin 4.9%	Piperacillin 9.8%	Cefuroxime 9.6%		Linezolid 0.3%
Gentamicin P 5.5%	Gentamicin P 4.5%	Meropenem 5%	TZP 7.1%		Polymyxin b P 0.2%
Amikacin 5.2%	Metronidazole P 4.4%	Azithromycin 4.8%	Meropenem 6.1%		Aztreonam 0.2%
Metronidazole P 5.2%	Amikacin 3.6%	Vancomycin P 4%	Azithromycin 4.7%		Colistin 0.2%

Top 5 antibiotics by AWaRe classification and percentage of all prescriptions. Only antibacterials for systemic use (ATC J01) are included.

P=Parenteral, O=Oral, I=Inhalation, R=Rectal.

TZP=Piperacillin and enzyme inhibitor, AMC=Amoxicillin and enzyme inhibitor, SXT=Sulfamethoxazole and trimethoprim, SAM=Ampicillin and enzyme inhibitor, I−R=Imipenem and enzyme inhibitor, Cefo−Sul=Cefoperazone and beta−lactamase inhibitor, TMP/SDZ=Sulfadiazine and trimethoprim, Pen−G=Benzathine benzylpenicillin, AMP−Com=Ampicillin, combinations, Pen−Com=Penicillins, combinations with other antibacterials, Chl=Chloramphenicol, Pen V=Phenoxymethylpenicillin, Ceftr−com=Ceftriaxone, combinations, Ceftr−BLI=Ceftriaxone and beta−lactamase inhibitor, Cefu−Com=Cefuroxime, combinations with other antibacterials, Sulfam−TMP=Sulfamoxole and trimethoprim, Sulfad−TMP=Sulfadimidine and trimethoprim, Ben−Pen−V=Benzathine phenoxymethylpenicillin, CIP−Met=Ciprofloxacin and metronidazole, CZA=Ceftazidime and beta−lactamase inhibitor, TIM=Ticarcillin and enzyme inhibitor, Pani−Bet=Panipenem and betamipron, Cef−TAZ=Ceftolozane and beta−lactamase inhibitor.

Prevalence of missed doses hospital wide

	Our Hospital	Country	Continent	Hospital type	Europe
Hospital (%)					
N antimicrobials	424	8977	11968	8212	3317
Percentage missed doses	22.17	8.09	6.14	8.82	1.42
Mean missed doses	2.43	2.78	2.78	2.78	1.87
Median missed doses	2	2	2	2	1
Reason missed doses (%)					
Stock out	24.5	14.7	14.6	14.8	12.8
Could not purchase	9.6	8.4	8.3	8.2	0.0
Declined/refused	0.0	1.0	0.9	1.0	0.0
Other reason	31.9	43.7	44.1	43.8	14.9
Multiple reasons	10.6	7.3	7.2	7.3	4.3
Unknown	23.4	24.9	24.9	25.0	68.1

Analyses are performed at antimicrobial level.

% AM with missed doses : 100*(number of reported antimicrobials with at least one missed dose = 0/number of all reported antimicrobials (antimicrobials with unknown number of missed doses are also included in the denominator under the assumption that missing doses equals no missed dose).
Mean and median missed doses are calculated using all antimicrobials with at least one missed dose = 0.
Antimicrobials for which no missed doses reported (missing values) are excluded for these analyses.
Reason missed doses (%) : Proportion (%) of reason for missed doses out of all possible reasons for antimicrobials with at least one missed dose = 0.
Unknown reason : Counts those antimicrobials with code U + empty/missing values for antimicrobials for which at least one missed dose = 0 was reported

Country: Country ; Continent: Continent ; Hospital type: Tertiary/Spec/Inf.dis. hosp.

Prevalence of missed doses adult wards

	Our Hospital	Country	Continent	Hospital type	Europe
Adult wards (%)					
N antimicrobials	259	6317	9007	5799	2964
Percentage missed doses	27.8	8.6	6.03	9.33	1.59
Mean missed doses	2.56	2.79	2.79	2.8	1.87
Median missed doses	2	2	2	2	1
Reason missed doses (%)					
Stock out	23.6	15.3	15.3	15.3	12.8
Could not purchase	8.3	8.1	8.1	7.8	0.0
Declined/refused	0.0	1.3	1.3	1.3	0.0
Other reason	34.7	44.4	44.4	44.5	14.9
Multiple reasons	11.1	5.5	5.5	5.5	4.3
Unknown	22.2	25.4	25.4	25.5	68.1

Analyses are performed at antimicrobial level.

% AM with missed doses : 100*(number of reported antimicrobials with at least one missed dose = 0/number of all reported antimicrobials (antimicrobials with unknown number of missed doses are also included in the denominator under the assumption that missing doses equals no missed dose).
Mean and median missed doses are calculated using all antimicrobials with at least one missed dose = 0.
Antimicrobials for which no missed doses reported (missing values) are excluded for these analyses.
Reason missed doses (%) : Proportion (%) of reason for missed doses out of all possible reasons for antimicrobials with at least one missed dose = 0.
Unknown reason : Counts those antimicrobials with code U + empty/missing values for antimicrobials for which at least one missed dose = 0 was reported

Country: Country ; Continent: Continent ; Hospital type: Tertiary/Spec/Inf.dis. hosp.

Prevalence of missed doses paediatric wards

	Our Hospital	Country	Continent	Hospital type	Europe
Paediatric wards (%)					
N antimicrobials	148	1986	2252	1845	332
Percentage missed doses	14.86	8.66	7.99	9.32	0
Mean missed doses	2	2.72	2.74	2.72	0
Median missed doses	2	2	2	2	0
Reason missed doses (%)					
Stock out	27.3	13.9	13.3	13.9	0.0
Could not purchase	13.6	9.9	9.4	9.9	0.0
Declined/refused	0.0	0.0	0.0	0.0	0.0
Other reason	22.7	39.5	41.7	39.5	0.0
Multiple reasons	9.1	13.4	12.8	13.4	0.0
Unknown	27.3	23.3	22.8	23.3	0.0

Analyses are performed at antimicrobial level.

% AM with missed doses : 100*(number of reported antimicrobials with at least one missed dose = 0/number of all reported antimicrobials (antimicrobials with unknown number of missed doses are also included in the denominator under the assumption that missing doses equals no missed dose).
Mean and median missed doses are calculated using all antimicrobials with at least one missed dose = 0.
Antimicrobials for which no missed doses reported (missing values) are excluded for these analyses.
Reason missed doses (%) : Proportion (%) of reason for missed doses out of all possible reasons for antimicrobials with at least one missed dose = 0.
Unknown reason : Counts those antimicrobials with code U + empty/missing values for antimicrobials for which at least one missed dose = 0 was reported

Country: Country ; Continent: Continent ; Hospital type: Tertiary/Spec/Inf.dis. hosp.

Explanatory notes for the slides on Healthcare Associated Infections (HAI)

The following slides provide results for hospitals which have participated in the HAI module.

The slides present the results for your hospital, merged main results for your country, your region according to the UN classification and merged results on the hospital type for your region and Europe.

Reference data include validated data from the current or most recent year with a minimum number of 4 hospitals for country and hospital type, and at least 25 hospitals for continent.

Reference data − hospitals that participated in the HAI module: country − 2023 (N = 32), continent − 2023 (N = 43),
hospital type − 2023 (N = 28), EU − 2023 (N = 27).

Results at country level are not displayed if there are less than 4 hospitals participating in the HAI module during the current or any of the previous years.

Blank or empty, not completed fields have not been taken into account for these analyses.

Invasive device use hospital−wide

	Our hospital 2023−P3		Country		Continent		Hospital type		Europe	
	N	%	N	%	N	%	N	%	N	%
N total admitted patients	337		10111		11327		9223		2236	
N admitted patients with:										
PVC	329	97.6	7683	76.0	8499	75.0	7019	76.1	1192	53.3
CVC	25	7.4	903	8.9	985	8.7	855	9.3	147	6.6
Indwelling UC	31	9.2	1384	13.7	1574	13.9	1295	14.0	330	14.8
Tubes/Drains	30	8.9	880	8.7	969	8.6	836	9.1	142	6.4
IRI	12	3.6	506	5.0	536	4.7	475	5.2	50	2.2
CiPAP−BiPAP	13	3.9	690	6.8	735	6.5	672	7.3	36	1.6

CVC = Central Venous Catheter; PVC = Peripheral Vascular Catheter;
UC = Urinary Catheter; IRI = Invasive endotracheal Respiratory Intubation;
CiPAP, BiPAP = Non−invasive mechanical ventilation

Country: Country ; Continent: Continent ; Hospital type: Tertiary/Spec/Inf.dis. hosp.

Invasive device use − Adult wards

	Our hospital 2023−P3		Country		Continent		Hospital type		Europe	
	N	%	N	%	N	%	N	%	N	%
N total admitted patients	194		7853		9016		7156		2091	
N admitted patients with:										
PVC	193	99.5	5871	74.8	6644	73.7	5353	74.8	1135	54.3
CVC	7	3.6	662	8.4	744	8.3	616	8.6	141	6.7
Indwelling UC	28	14.4	1274	16.2	1464	16.2	1196	16.7	329	15.7
Tubes/Drains	10	5.2	649	8.3	738	8.2	620	8.7	142	6.8
IRI	4	2.1	317	4.0	347	3.8	297	4.2	47	2.2
CiPAP−BiPAP	1	0.5	471	6.0	516	5.7	462	6.5	36	1.7

CVC = Central Venous Catheter; PVC = Peripheral Vascular Catheter;
UC = Urinary Catheter; IRI = Invasive endotracheal Respiratory Intubation;
CiPAP, BiPAP = Non−invasive mechanical ventilation

Country: Country ; Continent: Continent ; Hospital type: Tertiary/Spec/Inf.dis. hosp.

Invasive device use − Adult medical wards

	Our hospital 2023−P3		Country		Continent		Hospital type		Europe	
	N	%	N	%	N	%	N	%	N	%
N total admitted patients	144		5705		6571		5253		1182	
N admitted patients with:										
PVC	143	99.3	4203	73.7	4748	72.3	3888	74.0	605	51.2
CVC	6	4.2	485	8.5	523	8.0	447	8.5	40	3.4
Indwelling UC	24	16.7	762	13.4	877	13.3	723	13.8	129	10.9
Tubes/Drains	8	5.6	404	7.1	450	6.8	386	7.3	30	2.5
IRI	4	2.8	126	2.2	129	2.0	120	2.3	2	0.2
CiPAP−BiPAP	1	0.7	276	4.8	308	4.7	275	5.2	7	0.6

CVC = Central Venous Catheter; PVC = Peripheral Vascular Catheter;
UC = Urinary Catheter; IRI = Invasive endotracheal Respiratory Intubation;
CiPAP, BiPAP = Non−invasive mechanical ventilation

Country: Country ; Continent: Continent ; Hospital type: Tertiary/Spec/Inf.dis. hosp.

Invasive device use − Adult surgical ward

	Our hospital 2023−P3		Country		Continent		Hospital type		Europe	
	N	%	N	%	N	%	N	%	N	%
N total admitted patients	50		1673		1921		1455		767	
N admitted patients with:										
PVC	50	100.0	1278	76.4	1467	76.4	1097	75.4	432	56.3
CVC	1	2.0	59	3.5	73	3.8	52	3.6	35	4.6
Indwelling UC	4	8.0	242	14.5	278	14.5	218	15.0	109	14.2
Tubes/Drains	2	4.0	113	6.8	144	7.5	105	7.2	70	9.1
IRI	0	0.0	57	3.4	63	3.3	55	3.8	7	0.9
CiPAP−BiPAP	0	0.0	89	5.3	91	4.7	86	5.9	3	0.4

CVC = Central Venous Catheter; PVC = Peripheral Vascular Catheter;
UC = Urinary Catheter; IRI = Invasive endotracheal Respiratory Intubation;
CiPAP, BiPAP = Non−invasive mechanical ventilation

Country: Country ; Continent: Continent ; Hospital type: Tertiary/Spec/Inf.dis. hosp.

Prevalence of patients (%) with previous hospitalisation < 3 months

	Hospital (%)	Adult wards (%)	Paediatric wards (%)
Our Hospital − N patients (denominator)	294	177	117
Yes, ICU	0.7	0.6	0.9
Yes, Other	8.8	11.3	5.1
No	77.6	76.8	78.6
Unknown	12.9	11.3	15.4
Country Country − N patients (denominator)	5495	3959	1536
Yes, ICU	1.0	0.7	1.8
Yes, Other	11.8	11.6	12.4
No	74.2	73.6	76.0
Unknown	12.9	14.1	9.9
Continent − N patients (denominator)	6092	4535	1557
Yes, ICU	1.0	0.7	1.7
Yes, Other	11.1	10.7	12.2
No	69.2	66.8	76.3
Unknown	12.3	13.2	9.8
Hospital type − N patients (denominator)	5000	3602	1398
Yes, ICU	1.1	0.8	1.8
Yes, Other	12.1	11.7	13.1
No	73.0	72.5	74.4
Unknown	13.8	15.0	10.7
Europe − N patients (denominator)	679	637	42
Yes, ICU	3.1	3.3	0.0
Yes, Other	31.1	32.7	7.1
No	58.5	56.4	90.5
Unknown	7.4	7.7	2.4

Prevalence of patients (%) with surgery during current admission in hospital

	Hospital (%)	Adult wards (%)	Paediatric wards (%)
Our Hospital − N patients (denominator)	300	180	120
Yes	30.3	37.2	20.0
No	65.7	60.6	73.3
Unknown	4.0	2.2	6.7
Country Country − N patients (denominator)	5919	4305	1614
Yes	31.2	37.0	15.7
No	63.7	58.0	78.7
Unknown	5.1	5.0	5.5
Continent − N patients (denominator)	6518	4883	1635
Yes	31.2	36.4	15.6
No	64.1	59.2	79.0
Unknown	4.7	4.4	5.4
Hospital type − N patients (denominator)	5418	3944	1474
Yes	32.2	38.0	16.8
No	62.2	56.7	77.1
Unknown	5.5	5.3	6.0
Europe − N patients (denominator)	738	695	43
Yes	31.7	33.1	9.3
No	65.6	64.2	88.4
Unknown	2.7	2.7	2.3

Prevalence of patients (%) with previous antibiotic treatment < 1 month

	Hospital (%)	Adult wards (%)	Paediatric wards (%)
Our Hospital − N patients (denominator)	274	165	109
Yes	5.8	6.1	5.5
No	74.5	75.2	73.4
Unknown	19.7	18.8	21.1
Country Country − N patients (denominator)	5583	4085	1498
Yes	18.9	18.0	21.3
No	66.7	66.1	68.6
Unknown	14.4	15.9	10.1
Continent − N patients (denominator)	6181	4662	1519
Yes	19.5	19.0	21.1
No	66.3	65.7	68.1
Unknown	14.2	15.3	10.9
Hospital type − N patients (denominator)	5084	3724	1360
Yes	19.6	18.7	22.0
No	64.8	64.0	66.8
Unknown	15.6	17.3	11.2
Europe − N patients (denominator)	732	690	42
Yes	32.5	33.5	16.7
No	43.6	41.7	73.8
Unknown	23.9	24.8	9.5

Prevalence of patients (%) with severity of underlying medical conditions (Mc Cabe score)

	Hospital (%)	Adult wards (%)	Paediatric wards (%)
Our Hospital − N patients (denominator)	300	180	120
Non−fatal disease	49.0	58.9	34.2
Rapidly fatal disease	5.0	3.3	7.5
Ultimately fatal disease	32.7	32.2	33.3
Unknown	13.3	5.6	25.0
Country Country − N patients (denominator)	5919	4305	1614
Non−fatal disease	54.1	57.8	44.2
Rapidly fatal disease	3.3	3.7	2.2
Ultimately fatal disease	15.7	16.1	14.5
Unknown	26.9	22.4	39.0
Continent − N patients (denominator)	6518	4883	1635
Non−fatal disease	55.5	59.0	44.9
Rapidly fatal disease	3.2	3.6	2.2
Ultimately fatal disease	16.0	16.6	14.4
Unknown	25.3	20.8	38.5
Hospital type − N patients (denominator)	5418	3944	1474
Non−fatal disease	55.9	59.5	46.3
Rapidly fatal disease	3.4	3.9	2.2
Ultimately fatal disease	15.8	16.8	13.4
Unknown	24.8	19.8	38.1
Europe − N patients (denominator)	738	695	43
Non−fatal disease	52.6	51.2	74.4
Rapidly fatal disease	4.1	4.3	0.0
Ultimately fatal disease	14.0	14.8	0.0
Unknown	29.4	29.6	25.6