

Resistance of select antimicrobial agents
in *S. pneumoniae*

	% Resistance				
	SDT	Temefloxacin	Levofloxacin	Gatifloxacin	Moxifloxacin
1	28.9	42.3	0.3	0.3	0
2	19	13.8	0.2	0.2	0
3	27.3	38.4	0	0	0
4	9.8	21.7	1.1	1.1	0.3
5	4.5	35.1	0.4	0.4	0.4
6	14	3.9	0	0	0

Distributions of fluoroquinolones against
S. pneumoniae according to penicillin status

Legend: ☐ Gatifloxacin ☐ Levofloxacin

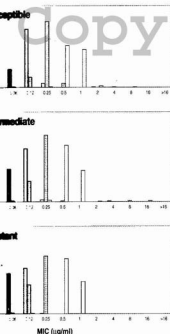


Table 2: Antibiograms of *S. pneumoniae* with levofloxacin MICs $\geq 2 \mu\text{g/ml}$

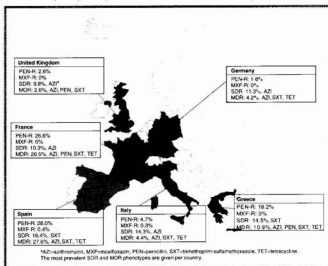
MIC (µg/ml)											MIC (µg/ml)										
Isolate #	SDT	GAT	LEV	PEN	Country	HD	Location	Gender	Age group	Source	Isolate #	SDT	GAT	LEV	PEN	Country	HD	Location	Gender	Age group	Source
1	2	4	8	≤ 0.03	France		Inpatient	Female	18-64	Blood	18	0.25	0.5	2	1	Germany	18279	Inpatient	Unknown	>65	Blood
2	0.12	0.5	2	≤ 0.03	Germany ^a	18736	Inpatient	Female	>65	Respiratory ^b	19	0.25	0.25	2	≤ 0.03	Germany		Outpatient	Male	<17	Respiratory
3	0.12	0.5	2	≤ 0.03	Germany	18738	Inpatient	Female	>65	Respiratory	20	0.12	0.25	2	0.06	Greece		Outpatient	Female	18-64	Respiratory
4	0.25	0.5	2	≤ 0.03	Germany	18738	Outpatient ^c	Female	<17	Respiratory	21	0.12	0.5	2	≤ 0.03	Italy	18417	Outpatient	Male	<17	Respiratory
5	0.25	0.5	2	≤ 0.03	Germany	18738	Inpatient	Male	>65	Respiratory	22	0.25	0.5	2	≤ 0.03	Italy	18419	Inpatient	Male	>65	Respiratory
6	0.25	0.5	2	≤ 0.03	Germany	18738	Outpatient	Male	18-64	Respiratory	23	2	4	8	≤ 0.03	Italy	18419	Inpatient	Male	>65	Respiratory
7	0.25	0.5	2	≤ 0.03	Germany	18738	Inpatient	Female	18-64	Respiratory	24	4	8	16	0.5	Italy	18419	Inpatient	Male	18-64	Blood
8	0.25	0.5	2	≤ 0.03	Germany	18738	Outpatient	Male	18-64	Respiratory	25	2	4	8	≤ 0.03	Italy		Inpatient	Male	18-64	Respiratory
9	0.25	0.5	2	≤ 0.03	Germany	18738	Inpatient	Female	>65	Respiratory	26	2	4	8	≤ 0.03	Italy		Inpatient	Male	18-64	Respiratory
10	0.25	0.5	2	≤ 0.03	Germany	18738	Inpatient	Male	>65	Respiratory	27	0.12	0.5	2	≤ 0.03	Spain	18225	Inpatient	Female	>65	Respiratory
11	0.25	0.5	2	≤ 0.03	Germany	18738	Outpatient	Male	>65	Respiratory	28	0.25	0.5	2	≤ 0.03	Spain		Outpatient	Male	>65	Respiratory
12	0.25	0.5	2	≤ 0.03	Germany	18738	Inpatient	Male	>65	Respiratory	29	4	8	16	0.25	Spain		Inpatient	Female	18-64	Respiratory
13	0.25	0.5	2	≤ 0.03	Germany	18738	Inpatient	Female	<17	Respiratory	30	0.25	0.5	2	≤ 0.03	UK		Outpatient	Female	>65	Respiratory

^aShaded isolates were collected from a single site

^bRespiratory sources include, nasopharynx/throat/nose, sinus, and sputum

^cOutpatients include nonhospitalized patients and inpatients cultured within 48 hours of admission

Figure 2: Prevalence of penicillin resistance (PEN-R), moxifloxacin resistance (MXF-R), single-drug resistance (SDR) and multidrug resistance (MDR) in *S. pneumoniae* collected from 6 European countries



CONCLUSIONS

- Regardless of resistance to other agents, fluoroquinolones maintained consistent activity in all countries studied.
- Continued surveillance is needed to monitor any changes in fluoroquinolone resistance.

ACKNOWLEDGMENTS

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REFERENCES

- Jones, ME, Staples, AM, Critchley, I, Thornsberry, C, Heinze, P, Engler, HD, and DF Sahn. 2000. Benchmarking the *in vitro* activity of moxifloxacin against recent isolates of *Streptococcus pneumoniae*, *Moraxella catarrhalis*, and *Haemophilus influenzae*. A European multi-centre study. *Diag Microbiol Infect Dis* 37: 203-211.