

Comparative in-vitro evaluation of antibacterial activity of levofloxacin brands available in Pakistan

Brand No.	Brand Name	Zone of Inhibition			
		S. aureus	S. epidermidis	E. coli	K. pneumoniae
1	Levomerc	39±0.1633	23±0.3266	41±0.141	32±0
2	Mclevo	38±0.4082	21±0.04082	40±0.367	30.6667±0.62361
3	Levo	35±0.3266	18±0.8165	38±0.81	28.5333±0.34721
4	Tavanic	38±0.08165	22±0.70711	41±0.408	32±0.40825
5	Qumic	38±1.22474	21±0	40±1.224	32.0667±0.12472
6	Levotas	35±0.40825	17±1.22474	37±1.224	27±0
7	Leflox	37±1.63299	18.5±0.20412	39±0.326	29±0.40825
8	Protektin	36±0.40825	18±0.3266	38±1.224	29±0.04082
9	Spectrix	38±0.1633	19±0.8165	39±0	30±0.24495
10	Levovis	37±0.08165	21±0.70711	38±0.408	29±0
11	Levocil	37±0.40825	19±0	38±1.632	29±0.40825
12	Xeflox	36±0.3266	18±0.20412	37±1.224	27.5333±0.34721
13	Effiflox	38±0.40825	22±0.70711	39±0	29±0
14	Voxiquin	37±0	21±1.22474	38±0.367	29±0.20412
15	Levoday	35±0.08165	20±1.22474	36±0.408	27±0.28577
16	Floxolev	37±0.40825	19±0.3266	38±1.224	28±0
17	Levoscot	36±0.40825	18±0.8165	38±0.816	28±0.40825
18	Levocure	35±0.08165	16±1.22474	37±1.224	25±1.22474
19	Locus	37±0.3266	18±1.63299	39±0.408	28±0.40825
20	Glit	37±1.22474	18±0.40825	38±0.163	28±0.12247
21	Vizor	35±1.22474	18±1.22474	37±1.224	27±0.8165
22	Voksec	35±0.40825	19±1.22474	38±0.816	28±0.24495
23	L-cyn	35±0.12247	18±0.28577	37±1.632	29±1.22474
24	Lazer	35±0	18±2.04124	37±0	31±0.8165
25	Cravit	38±0.3266	21±0.40825	40±0.408	32±0.04082
26	Dynaquin	39±0.3266	22±0.40825	40±0.040	32±0.36742
27	Bexus	37±0.40825	12±0.8165	35±0.326	26.5333±0.34721
28	Lecin,250mg	37±0.8165	16±0	37±0.408	27±0.20412
29	Levotar	38±1.22474	18±0.40825	37±0	28±0.3266

Table S1: Activities of 29 brands of levofloxacin against selected bacterial strains

	Sum of Squares	df	Mean Square	F	. P-value
Between Groups	191.172	28	6.828	4.319	.000***
Within Groups	137.540	87	1.581		
Total	328.712	115			

Key: df = Degree of Freedom, *** = significant,

Table S2: One way ANOVA for S. aureus.



	Levomerc	Mclevo	Levo	Tavanic	Qumic	Levotas	Leflox	Protektin	Spectrix	Levovis
Levomerc	-	1	0.006**	1	1	0.006**	0.893	0.181	1	0.893
Mclevo	1	-	0.181	1	1	0.181	1	0.893	1	1
Levo	0.006**	0.181	-	0.181	0.181	1	0.893	1	0.181	0.893
Tavanic	1	1	0.181	-	1	0.181	1	0.893	1	1
Qumic	1	1	0.181	1	-	0.181	1	0.893	1	1
Levotas	0.006**	0.181	1	0.181	0.181	-	0.893	1	0.181	0.893
Leflox	0.893	1	0.893	1	1	0.893	-	1	1	1
Protektin	0.181	0.893	1	0.893	0.893	1	1	-	0.893	1
Spectrix	1	1	0.181	1	1	0.181	1	0.893	-	1
Levovis	0.893	1	0.893	1	1	0.893	1	1	1	
Levocil	0.893	1	0.893	1	1	0.893	1	1	1	1
Xeflox	0.181	0.893	1	0.893	0.893	1	1	1	0.893	1
Effiflox	1	1	0.181	1	1	0.181	1	0.893	1	1
Voxiquin	0.893	1	0.893	1	1	0.893	1	1	1	1
Levoday	0.006	0.181	1	0.181	0.181	1	0.893	1	0.181	0.893
Floxolev	0.893	1	0.893	1	1	0.893	1	1	1	1
Levoscot	0.181	0.893	1	0.893	0.893	1	1	1	0.893	1
Levocure	0.006	0.181	1	0.181	0.181	1	0.893	1	0.181	0.893
Locus	0.893	1	0.893	1	1	0.893	1	1	1	1
Glit	0.893	1	0.893	1	1	0.893	1	1	1	1
Vizor	0.006**	0.181	1	0.181	0.181	1	0.893	1	0.181	0.893
Voksec	0.006**	0.181	1	0.181	0.181	1	0.893	1	0.181	0.893
L-cyn	0.006**	0.181	1	0.181	0.181	1	0.893	1	0.181	0.893
Lazer	0.006**	0.181	1	0.181	0.181	1	0.893	1	0.181	0.893
Cravit	1	1	0.181	1	1	0.181	1	0.893	1	1
Dynaquin	1	1	0.006	1	1	0.006	0.893	0.181	1	0.893
Bexus	0.893	1	0.893	1	1	0.893	1	1	1	1
Lecin, 250mg	0.893	1	0.893	1	1	0.893	1	1	1	1
Levotar	1	1	0.181	1	1	0.181	1	0.893	1	1

Table S3: Contd.

	Vizor	Voksec	L-cyn	Lazer	Cravit	Dynaquin	Bexus	Lecin,250mg	Levotar
Levomerc	0.006**	0.006**	0.006**	0.006**	1	1	0.893	0.893	1
Mclevo	0.181	0.181	0.181	0.181	1	1	1	1	1
Levo	1	1	1	1	0.181	0.006**	0.893	0.893	0.181
Tavanic	0.181	0.181	0.181	0.181	1	1	1	1	1
Qumic	0.181	0.181	0.181	0.181	1	1	1	1	1
Levotas	1	1	1	1	0.181	0.006**	0.893	0.893	0.181
Leflox	0.893	0.893	0.893	0.893	1	0.893	1	1	1
Protektin	1	1	1	1	0.893	0.181	1	1	0.893
Spectrix	0.181	0.181	0.181	0.181	1	1	1	1	1
Levovis	0.893	0.893	0.893	0.893	1	0.893	1	1	1
Levocil	0.893	0.893	0.893	0.893	1	0.893	1	1	1
Xeflox	1	1	1	1	0.893	0.181	1	1	0.893
Effiflox	0.181	0.181	0.181	0.181	1	1	1	1	1
Voxiquin	0.893	0.893	0.893	0.893	1	0.893	1	1	1
Levoday	1	1	1	1	0.181	0.006**	0.893	0.893	0.181

Floxolev	0.893	0.893	0.893	0.893	1	0.893	1	1	1
Levoscot	1	1	1	1	0.893	0.181	1	1	0.893
Levocure	1	1	1	1	0.181	0.006**	0.893	0.893	0.181
Locus	0.893	0.893	0.893	0.893	1	0.893	1	1	1
Glit	0.893	0.893	0.893	0.893	1	0.893	1	1	1
Vizor	-	1	1	1	0.181	0.006**	0.893	0.893	0.181
Voksec	1	-	1	1	0.181	0.006**	0.893	0.893	0.181
L-cyn	1	1	-	1	0.181	0.006**	0.893	0.893	0.181
Lazer	1	1	1	-	0.181	0.006**	0.893	0.893	0.181
Cravit	0.181	0.181	0.181	0.181	-	1	1	1	1
Dynaquin	0.006**	0.006**	0.006**	0.006**	1	-	0.893	0.893	1
Bexus	0.893	0.893	0.893	0.893	1	0.893	-	1	1
Lecin,250mg	0.893	0.893	0.893	0.893	1	0.893	1	-	1
Levotar	0.181	0.181	0.181	0.181	1	1	1	1	-

Data is expressed as Tukey's significant values at (P<0.05-P<0.001), where *=0.05, **=0.01, and ***=0.001. In Tukey test, variations among brands against each microorganism are evaluated i.e value of one brand with all other brands and this is done for each brand similarly. The values in tables are P value and these are evaluated on a range of P values from 0.05, 0.01, 0.001. With steric mark *, **, *** respectively. Tukey test basically is multiple response analysis of test organism to different test antibiotics.

Table S3: Tukey test for *S. aureus*

	Sum of Squares	df	Mean Square	F	P-value
Between Groups	580.690	28	20.739	7.108	.000***
Within Groups	253.840	87	2.918		
Total	834.530	115			

Key: df = Degree of Freedom, *** = Significant

Table S4 One way ANOVA for *S. epidermidis*

	Levomerc	Mclevo	Levo	Tavanic	Qumic	Levotas	Leflox	Protektin	Spectrix	Levovis
Levomerc	-	0.997	0.021	1	0.997	0.001**	0.073	0.021*	0.209	0.997
Mclevo	0.997	-	0.766	1	1	0.209	0.953	0.766	0.997	1
Levo	0.021*	0.766	-	0.209	0.766	1	1	1	1	0.766
Tavanic	1	1	0.209	-	1	0.021*	0.464	0.209	0.766	1
Qumic	0.997	1	0.766	1	-	0.209	0.953	0.766	0.997	1
Levotas	0.001**	0.209	1	0.021*	0.209	-	1	1	0.997	0.209
Leflox	0.073	0.953	1	0.464	0.953	1	-	1	1	0.953
Protektin	0.021	0.766	1	0.209	0.766	1	1	-	1	0.766
Spectrix	0.209	0.997	1	0.766	0.997	0.997	1	1	-	0.997
Levovis	0.997	1	0.766	1	1	0.209	0.953	0.766	0.997	-
Levocil	0.209	0.997	1	0.766	0.997	0.997	1	1	1	0.997
Xeflox	0.021*	0.766	1	0.209	0.766	1	1	1	1	0.766
Effiflox	1	1	0.209	1	1	0.021*	0.464	0.209	0.766	1
Voxiquin	0.997	1	0.766	1	1	0.209	0.953	0.766	0.997	1
Levoday	0.766	1	0.997	0.997	1	0.766	1	0.997	1	1
Floxolev	0.209	0.997	1	0.766	0.997	0.997	1	1	1	0.997
Levoscot	0.021*	0.766	1	0.209	0.766	1	1	1	1	0.766
Levocure	0***	0.021*	0.997	0.001**	0.021*	1	0.953	0.997	0.766	0.021*
Locus	0.021*	0.766	1	0.209	0.766	1	1	1	1	0.766
Glit	0.021*	0.766	1	0.209	0.766	1	1	1	1	0.766
Vizor	0.021*	0.766	1	0.209	0.766	1	1	1	1	0.766
Voksec	0.209	0.997	1	0.766	0.997	0.997	1	1	1	0.997

L-cyn	0.021	0.766	1	0.209	0.766	1	1	1	1	0.766
Lazer	0.021	0.766	1	0.209	0.766	1	1	1	1	0.766
Cravit	0.997	1	0.766	1	1	0.209	0.953	0.766	0.997	1
Dynaquin	1	1	0.209	1	1	0.021*	0.464	0.209	0.766	1
Bexus	0***	0***	0.001**	0***	0***	0.021	0***	0.001**	0***	0***
Lecin,250mg	0***	0.021*	0.997	0.001**	0.021*	1	0.953	0.997	0.766	0.021*
g										
Levotar	0.021*	0.766	1	0.209	0.766	1	1	1	1	0.766

Table S5: Tukey test for *S. epidermidis*. For explanation of this analysis please see legend of Table S3.

	Levocil	Xeflox	Effiflox	Voxiquin	Levoday	Floxolev	Levoscot	Levocure	Locus	Glit
Levomerc	0.209	0.021*	1	0.997	0.766	0.209	0.021*	0***	0.021*	0.021*
Mclevo	0.997	0.766	1	1	1	0.997	0.766	0.021*	0.766	0.766
Levo	1	1	0.209	0.766	0.997	1	1	0.997	1	1
Tavanic	0.766	0.209	1	1	0.997	0.766	0.209	0.001**	0.209	0.209
Qumic	0.997	0.766	1	1	1	0.997	0.766	0.021*	0.766	0.766
Levotas	0.997	1	0.021*	0.209	0.766	0.997	1	1	1	1
Leflox	1	1	0.464	0.953	1	1	1	0.953	1	1
Protektin	1	1	0.209	0.766	0.997	1	1	0.997	1	1
Spectrix	1	1	0.766	0.997	1	1	1	0.766	1	1
Levovis	0.997	0.766	1	1	1	0.997	0.766	0.021*	0.766	0.766
Levocil	-	1	0.766	0.997	1	1	1	0.766	1	1
Xeflox	1	-	0.209	0.766	0.997	1	1	0.997	1	1
Effiflox	0.766	0.209	-	1	0.997	0.766	0.209	0.001**	0.209	0.209
Voxiquin	0.997	0.766	1	-	1	0.997	0.766	0.021*	0.766	0.766
Levoday	1	0.997	0.997	1	-	1	0.997	0.209	0.997	0.997
Floxolev	1	1	0.766	0.997	1	-	1	0.766	1	1
Levoscot	1	1	0.209	0.766	0.997	1	-	0.997	1	1
Levocure	0.766	0.997	0.001**	0.021*	0.209	0.766	0.997	-	0.997	0.997
Locus	1	1	0.209	0.766	0.997	1	1	0.997	-	1
Glit	1	1	0.209	0.766	0.997	1	1	0.997	1	-
Vizor	1	1	0.209	0.766	0.997	1	1	0.997	1	1
Voksec	1	1	0.766	0.997	1	1	1	0.766	1	1
L-cyn	1	1	0.209	0.766	0.997	1	1	0.997	1	1
Lazer	1	1	0.209	0.766	0.997	1	1	0.997	1	1
Cravit	0.997	0.766	1	1	1	0.997	0.766	0.021*	0.766	0.766
Dynaquin	0.766	0.209	1	1	0.997	0.766	0.209	0.001**	0.209	0.209
Bexus	0***	0.001**	0***	0***	0***	0***	0.001**	0.209	0.001**	0.001**
Lecin,250mg	0.766	0.997	0.001**	0.021*	0.209	0.766	0.997	1	0.997	0.997
Levotar	1	1	0.209	0.766	0.997	1	1	0.997	1	1

Table S5: Cont.

	Vizor	Voksec	L-cyn	Lazer	Cravit	Dynaquin	Bexus	Lecin,250mg	Levotar
Levomerc	0.021*	0.209	0.021*	0.021*	0.997	1	0***	0***	0.021*
Mclevo	0.766	0.997	0.766	0.766	1	1	0***	0.021*	0.766
Levo	1	1	1	1	0.766	0.209	0.001**	0.997	1
Tavanic	0.209	0.766	0.209	0.209	1	1	0***	0.001**	0.209
Qumic	0.766	0.997	0.766	0.766	1	1	0***	0.021**	0.766
Levotas	1	0.997	1	1	0.209	0.021*	0.021*	1	1
Leflox	1	1	1	1	0.953	0.464	0***	0.953	1

Protektin	1	1	1	1	0.766	0.209	0.001**	0.997	1
Spectrix	1	1	1	1	0.997	0.766	0***	0.766	1
Levois	0.766	0.997	0.766	0.766	1	1	0***	0.021*	0.766
Levocil	1	1	1	1	0.997	0.766	0***	0.766	1
Xeflox	1	1	1	1	0.766	0.209	0.001**	0.997	1
Effiflox	0.209	0.766	0.209	0.209	1	1	0***	0.001**	0.209
Voxiquin	0.766	0.997	0.766	0.766	1	1	0***	0.021*	0.766
Levoday	0.997	1	0.997	0.997	1	0.997	0***	0.209	0.997
Floxolev	1	1	1	1	0.997	0.766	0***	0.766	1
Levoscot	1	1	1	1	0.766	0.209	0.001**	0.997	1
Levocure	0.997	0.766	0.997	0.997	0.021*	0.001**	0.209	1	0.997
Locus	1	1	1	1	0.766	0.209	0.001**	0.997	1
Glit	1	1	1	1	0.766	0.209	0.001**	0.997	1
Vizor	-	1	1	1	0.766	0.209	0.001**	0.997	1
Voksec	1	-	1	1	0.997	0.766	0***	0.766	1
L-cyn	1	1	-	1	0.766	0.209	0.001**	0.997	1
Lazer	1	1	1	-	0.766	0.209	0.001**	0.997	1
Cravit	0.766	0.997	0.766	0.766	-	1	0***	0.021*	0.766
Dynaquin	0.209	0.766	0.209	0.209	1	-	0***	0.001**	0.209
Bexus	0.001**	0***	0.001**	0.001**	0***	0***	-	0.209	0.001
Lecin,250mg	0.997	0.766	0.997	0.997	0.021*	0.001**	0.209	-	0.997
Levotar	1	1	1	1	0.766	0.209	0.001**	0.997	-

Data is expressed as Tukey's significant values at (P<0.05-P<0.001), where *=0.05, **=0.01, and ***=0.001. For explanation of this analysis please see legend of Table S3.

Table S5: Tukey test for *S. epidermidis*

	Sum of Squares	df	Mean Square	F	.P-value
Between Groups	232.552	28	8.305	3.109	.000***
Within Groups	232.380	87	2.671		
Total	464.932	115			

Key: df = Degree of Freedom, *** = Significant. Probability percentage is 0.01.

Table S6: One way ANOVA for *E.coli*

	Levomerc	Mclevo	Levo	Tavanic	Qumic	Levotas	Leflox	Protektin	Spectrix	Levois
Levomerc	-	1	0.689	1	1	0.147	0.995	0.689	0.995	0.689
Mclevo	1	-	0.995	1	1	0.689	1	0.995	1	0.995
Levo	0.689	0.995	-	0.689	0.995	1	1	1	1	1
Tavanic	1	1	0.689	-	1	0.147	0.995	0.689	0.995	0.689
Qumic	1	1	0.995	1	-	0.689	1	0.995	1	0.995
Levotas	0.147	0.689	1	0.147	0.689	-	0.995	1	0.995	1
Leflox	0.995	1	1	0.995	1	0.995	-	1	1	1
Protektin	0.689	0.995	1	0.689	0.995	1	1	-	1	1
Spectrix	0.995	1	1	0.995	1	0.995	1	1	-	1
Levois	0.689	0.995	1	0.689	0.995	1	1	1	1	-
Levocil	0.689	0.995	1	0.689	0.995	1	1	1	1	1
Xeflox	0.147	0.689	1	0.147	0.689	1	0.995	1	0.995	1
Effiflox	0.995	1	1	0.995	1	0.995	1	1	1	1
Voxiquin	0.689	0.995	1	0.689	0.995	1	1	1	1	1
Levoday	0.011*	0.147	0.995	0.011*	0.147	1	0.689	0.995	0.689	0.995

Floxolev	0.689	0.995	1	0.689	0.995	1	1	1	1	1
Levoscot	0.689	0.995	1	0.689	0.995	1	1	1	1	1
Levocure	0.147	0.689	1	0.147	0.689	1	0.995	1	0.995	1
Locus	0.995	1	1	0.995	1	0.995	1	1	1	1
Glit	0.689	0.995	1	0.689	0.995	1	1	1	1	1
Vizor	0.147	0.689	1	0.147	0.689	1	0.995	1	0.995	1
Voksec	0.689	0.995	1	0.689	0.995	1	1	1	1	1
L-cyn	0.147	0.689	1	0.147	0.689	1	0.995	1	0.995	1
Lazer	0.147	0.689	1	0.147	0.689	1	0.995	1	0.995	1
Cravit	1	1	0.995	1	1	0.689	1	0.995	1	0.995
Dynaquin	1	1	0.995	1	1	0.689	1	0.995	1	0.995
Bexus	0***	0.011	0.689	0***	0.011*	0.995	0.147	0.689	0.147	0.689
Lecin,250mg	0.147	0.689	1	0.147	0.689	1	0.995	1	0.995	1
Levotar	0.147	0.689	1	0.147	0.689	1	0.995	1	0.995	1

Table S7: Cont.

	Levocil	Xeflox	Effiflox	Voxiquin	Levoday	Floxolev	Levoscot	Levocure	Locus	Glit
Levomerc	0.689	0.147	0.995	0.689	0.011*	0.689	0.689	0.147	0.995	0.689
Mclevo	0.995	0.689	1	0.995	0.147	0.995	0.995	0.689	1	0.995
Levo	1	1	1	1	0.995	1	1	1	1	1
Tavanic	0.689	0.147	0.995	0.689	0.011*	0.689	0.689	0.147	0.995	0.689
Qumic	0.995	0.689	1	0.995	0.147	0.995	0.995	0.689	1	0.995
Levotas	1	1	0.995	1	1	1	1	1	0.995	1
Leflox	1	0.995	1	1	0.689	1	1	0.995	1	1
Protektin	1	1	1	1	0.995	1	1	1	1	1
Spectrix	1	0.995	1	1	0.689	1	1	0.995	1	1
Levovis	1	1	1	1	0.995	1	1	1	1	1
Levocil	-	1	1	1	0.995	1	1	1	1	1
Xeflox	1	-	0.995	1	1	1	1	1	0.995	1
Effiflox	1	0.995	-	1	0.689	1	1	0.995	1	1
Voxiquin	1	1	1	-	0.995	1	1	1	1	1
Levoday	0.995	1	0.689	0.995	-	0.995	0.995	1	0.689	0.995
Floxolev	1	1	1	1	0.995	-	1	1	1	1
Levoscot	1	1	1	1	0.995	1	-	1	1	1
Levocure	1	1	0.995	1	1	1	1	-	0.995	1
Locus	1	0.995	1	1	0.689	1	1	0.995	-	1
Glit	1	1	1	1	0.995	1	1	1	1	-
Vizor	1	1	0.995	1	1	1	1	1	0.995	1
Voksec	1	1	1	1	0.995	1	1	1	1	1
L-cyn	1	1	0.995	1	1	1	1	1	0.995	1
Lazer	1	1	0.995	1	1	1	1	1	0.995	1
Cravit	0.995	0.689	1	0.995	0.147	0.995	0.995	0.689	1	0.995
Dynaquin	0.995	0.689	1	0.995	0.147	0.995	0.995	0.689	1	0.995
Bexus	0.689	0.995	0.147	0.689	1	0.689	0.689	0.995	0.147	0.689
Lecin,250mg	1	1	0.995	1	1	1	1	1	0.995	1
Levotar	1	1	0.995	1	1	1	1	1	0.995	1

Table 07: Cont.

	Vizor	Voksec	L-cyn	Lazer	Cravit	Dynaquin	Bexus	Lecin, 250mg	Levotar
Levomerc	0.147	0.689	0.147	0.147	1	1	0***	0.147	0.147
Mclevo	0.689	0.995	0.689	0.689	1	1	0.011	0.689	0.689
Levo	1	1	1	1	0.995	0.995	0.689	1	1
Tavanic	0.147	0.689	0.147	0.147	1	1	0***	0.147	0.147
Qumic	0.689	0.995	0.689	0.689	1	1	0.011	0.689	0.689
Levotas	1	1	1	1	0.689	0.689	0.995	1	1
Leflox	0.995	1	0.995	0.995	1	1	0.147	0.995	0.995
Protektin	1	1	1	1	0.995	0.995	0.689	1	1
Spectrix	0.995	1	0.995	0.995	1	1	0.147	0.995	0.995
Levovis	1	1	1	1	0.995	0.995	0.689	1	1
Levocil	1	1	1	1	0.995	0.995	0.689	1	1
Xeflox	1	1	1	1	0.689	0.689	0.995	1	1
Effiflox	0.995	1	0.995	0.995	1	1	0.147	0.995	0.995
Voxiquin	1	1	1	1	0.995	0.995	0.689	1	1
Levoday	1	0.995	1	1	0.147	0.147	1	1	1
Floxolev	1	1	1	1	0.995	0.995	0.689	1	1
Levoscot	1	1	1	1	0.995	0.995	0.689	1	1
Levocure	1	1	1	1	0.689	0.689	0.995	1	1
Locus	0.995	1	0.995	0.995	1	1	0.147	0.995	0.995
Glit	1	1	1	1	0.995	0.995	0.689	1	1
Vizor	-	1	1	1	0.689	0.689	0.995	1	1
Voksec	1	-	1	1	0.995	0.995	0.689	1	1
L-cyn	1	1	-	1	0.689	0.689	0.995	1	1
Lazer	1	1	1	-	0.689	0.689	0.995	1	1
Cravit	0.689	0.995	0.689	0.689	-	1	0.011*	0.689	0.689
Dynaquin	0.689	0.995	0.689	0.689	1	-	0.011*	0.689	0.689
Bexus	0.995	0.689	0.995	0.995	0.011*	0.011*	-	0.995	0.995
Lecin,250mg	1	1	1	1	0.689	0.689	0.995	-	1
Levotar	1	1	1	1	0.689	0.689	0.995	1	-

Table S7 Cont.

	Vizor	Voksec	L-cyn	Lazer	Cravit	Dynaquin	Bexus	Lecin,250mg	Levotar
Levomerc	0.147	0.689	0.147	0.147	1	1	0***	0.147	0.147
Mclevo	0.689	0.995	0.689	0.689	1	1	0.011	0.689	0.689
Levo	1	1	1	1	0.995	0.995	0.689	1	1
Tavanic	0.147	0.689	0.147	0.147	1	1	0***	0.147	0.147
Qumic	0.689	0.995	0.689	0.689	1	1	0.011	0.689	0.689
Levotas	1	1	1	1	0.689	0.689	0.995	1	1
Leflox	0.995	1	0.995	0.995	1	1	0.147	0.995	0.995
Protektin	1	1	1	1	0.995	0.995	0.689	1	1
Spectrix	0.995	1	0.995	0.995	1	1	0.147	0.995	0.995
Levovis	1	1	1	1	0.995	0.995	0.689	1	1
Levocil	1	1	1	1	0.995	0.995	0.689	1	1
Xeflox	1	1	1	1	0.689	0.689	0.995	1	1
Effiflox	0.995	1	0.995	0.995	1	1	0.147	0.995	0.995
Voxiquin	1	1	1	1	0.995	0.995	0.689	1	1
Levoday	1	0.995	1	1	0.147	0.147	1	1	1
Floxolev	1	1	1	1	0.995	0.995	0.689	1	1
Levoscot	1	1	1	1	0.995	0.995	0.689	1	1

Levocure	1	1	1	1	0.689	0.689	0.995	1	1
Locus	0.995	1	0.995	0.995	1	1	0.147	0.995	0.995
Glit	1	1	1	1	0.995	0.995	0.689	1	1
Vizor	-	1	1	1	0.689	0.689	0.995	1	1
Voksec	1	-	1	1	0.995	0.995	0.689	1	1
L-cyn	1	1	-	1	0.689	0.689	0.995	1	1
Lazer	1	1	1	-	0.689	0.689	0.995	1	1
Cravit	0.689	0.995	0.689	0.689	-	1	0.011*	0.689	0.689
Dynaquin	0.689	0.995	0.689	0.689	1	-	0.011*	0.689	0.689
Bexus	0.995	0.689	0.995	0.995	0.011*	0.011*	-	0.995	0.995
Lecin,250mg	1	1	1	1	0.689	0.689	0.995	-	1
Levotar	1	1	1	1	0.689	0.689	0.995	1	-

Table S7: Tukey test for *E.coli*. For explanation of this analysis please see legend of Table S3. Data is expressed as Turkey’s significant values at (P<0.05-P<0.001), where *=0.05, **=0.01, and ***=0.001

	Sum of Squares	df	Mean Square	F	P- value
Between Groups	397.561	28	14.199	15.891	.000***
Within Groups	77.733	87	.893		
Total	475.295	115			

Key: df = Degree of Freedom, *** = Significant.

Table S8: One way ANOVA for *K. pneumoniae*.

	Levomerc	Mclevo	Levo	Tavanic	Qumic	Levotas	Leflox	Protektin	Spectrix	Levovis
Levomerc	-	0.969	0***	1	1	0***	0.007**	0.007**	0.396	0.007**
Mclevo	0.969	-	0.271	0.969	0.946	0***	0.76	0.76	1	0.76
Levo	0***	0.271	-	0***	0***	0.873	1	1	0.915	1
Tavanic	1	0.969	0***	-	1	0***	0.007**	0.007**	0.396	0.007**
Qumic	1	0.946	0***	1	-	0***	0.005**	0.005**	0.33	0.005**
Levotas	0***	0***	0.873	0***	0***	-	0.396	0.396	0.007**	0.396
Leflox	0.007**	0.76	1	0.007**	0.005**	0.396	-	1	0.999	1
Protektin	0.007**	0.76	1	0.007**	0.005**	0.396	1	-	0.999	1
Spectrix	0.396	1	0.915	0.396	0.33	0.007**	0.999	0.999	-	0.999
Levovis	0.007**	0.76	1	0.007**	0.005**	0.396	1	1	0.999	-
Levocil	0.007**	0.76	1	0.007**	0.005**	0.396	1	1	0.999	1
Xeflox	0***	0.003**	0.999	0***	0***	1	0.915	0.915	0.081	0.915
Effiflox	0.007**	0.76	1	0.007**	0.005**	0.396	1	1	0.999	1
Voxiquin	0.007**	0.76	1	0.007**	0.005**	0.396	1	1	0.999	1
Levoday	0***	0***	0.873	0***	0***	1	0.396	0.396	0.007**	0.396
Floxolev	0***	0.034*	1	0***	0***	0.999	0.999	0.999	0.396	0.999
Levoscot	0***	0.034*	1	0***	0***	0.999	0.999	0.999	0.396	0.999
Levocure	0***	0***	0***	0***	0***	0.396	0***	0***	0***	0***
Locus	0***	0.034*	1	0***	0***	0.999	0.999	0.999	0.396	0.999
Glit	0***	0.034*	1	0***	0***	0.999	0.999	0.999	0.396	0.999
Vizor	0***	0***	0.873	0***	0***	1	0.396	0.396	0.007**	0.396

Voksec	0***	0.034*	1	0***	0***	0.999	0.999	0.999	0.396	0.999
L-cyn	0.007**	0.76	1	0.007**	0.005**	0.396	1	1	0.999	1
Lazer	0.999	1	0.081	0.999	0.998	0***	0.396	0.396	0.999	0.396
Cravit	1	0.969	0***	1	1	0***	0.007**	0.007**	0.396	0.007**
Dynaquin	1	0.969	0***	1	1	0***	0.007**	0.007***	0.396	0.007**
Bexus	0***	0***	0.396	0***	0***	1	0.081	0.081	0***	0.081*
Lecin,250mg	0***	0***	0.873	0***	0***	1	0.396	0.396	0.007**	0.396
Levotar	0***	0.034*	1	0***	0***	0.999	0.999	0.999	0.396	0.999

Table S9: Cont.

	Levocil	Xeflox	Effiflox	Voxiquin	Levoday	Floxolev	Levoscot	Levocure	Locus	Glit
Levomerc	0.007**	0***	0.007**	0.007**	0***	0***	0***	0***	0***	0***
Mclevo	0.76	0.003**	0.76	0.76	0***	0.034*	0.034*	0***	0.034*	0.034*
Levo	1	0.999	1	1	0.873	1	1	0***	1	1
Tavanic	0.007**	0***	0.007**	0.007**	0***	0***	0***	0***	0***	0***
Qumic	0.005**	0***	0.005**	0.005**	0***	0***	0***	0***	0***	0***
Levotas	0.396	1	0.396	0.396	1	0.999	0.999	0.396	0.999	0.999
Leflox	1	0.915	1	1	0.396	0.999	0.999	0***	0.999	0.999
Protektin	1	0.915	1	1	0.396	0.999	0.999	0***	0.999	0.999
Spectrix	0.999	0.081	0.999	0.999	0.007	0.396	0.396	0***	0.396	0.396
Levovis	1	0.915	1	1	0.396	0.999	0.999	0***	0.999	0.999
Levocil	-	0.915	1	1	0.396	0.999	0.999	0***	0.999	0.999
Xeflox	0.915	-	0.915	0.915	1	1	1	0.061	1	1
Effiflox	1	0.915	-	1	0.396	0.999	0.999	0***	0.999	0.999
Voxiquin	1	0.915	1	-	0.396	0.999	0.999	0***	0.999	0.999
Levoday	0.396	1	0.396	0.396	-	0.999	0.999	0.396	0.999	0.999
Floxolev	0.999	1	0.999	0.999	0.999	-	1	0.007**	1	1
Levoscot	0.999	1	0.999	0.999	0.999	0.007**	-	1	1	0.999
Levocure	0***	0.061	0***	0***	0.396	0.007**	0.007**	-	0.007**	0.007**
Locus	0.999	1	0.999	0.999	0.999	1	1	0.007**	-	1
Glit	0.999	1	0.999	0.999	0.999	1	1	0.007**	1	-
Vizor	0.396	1	0.396	0.396	1	0.999	0.999	0.396	0.999	0.999
Voksec	0.999	1	0.999	0.999	0.999	1	1	0.007**	1	1
L-cyn	1	0.915	1	1	0.396	0.999	0.999	0***	0.999	0.999
Lazer	0.396	0***	0.396	0.396	0***	0.007**	0.007**	0***	0.007**	0.007**
Cravit	0.007**	0***	0.007	0.007**	0***	0***	0***	0***	0***	0***
Dynaquin	0.007**	0***	0.007**	0.007**	0***	0***	0***	0***	0***	0***
Bexus	0.081	0.999	0.081	0.081	1	0.915	0.915	0.873	0.915	0.915
Lecin,250mg	0.396	1	0.396	0.396	1	0.999	0.999	0.396	0.999	0.999
Levotar	0.999	1	0.999	0.999	0.999	1	1	0.007	1	1

Table S9: Contd.

	Vizor	Voksec	L-cyn	Lazer	Cravit	Dynaquin	Bexus	Lecin,250mg	Levotar
Levomerc	0***	0***	0.007**	0.999	1	1	0***	0***	0***
Mclevo	0***	0.034*	0.76	1	0.969	0.969	0***	0***	0.034*
Levo	0.873	1	1	0.081	0***	0***	0.396	0.873	1
Tavanic	0***	0***	0.007**	0.999	1	1	0***	0***	0***

Qumic	0***	0***	0.005**	0.998	1	1	0***	0***	0***
Levotas	1	0.999	0.396	0***	0***	0***	1	1	0.999
Leflox	0.396	0.999	1	0.396	0.007**	0.007**	0.081	0.396	0.999
Protektin	0.396	0.999	1	0.396	0.007**	0.007**	0.081	0.396	0.999
Spectrix	0.007**	0.396	0.999	0.999	0.396	0.396	0***	0.007**	0.396
Levovis	0.396	0.999	1	0.396	0.007**	0.007**	0.081	0.396	0.999
Levocil	0.396	0.999	1	0.396	0.007**	0.007**	0.081	0.396	0.999
Xeflox	1	1	0.915	0***	0***	0***	0.999	1	1
Effiflox	0.396	0.999	1	0.396	0.007**	0.007**	0.081	0.396	0.999
Voxiquin	0.396	0.999	1	0.396	0.007**	0.007**	0.081	0.396	0.999
Levoday	1	0.999	0.396	0***	0***	0***	1	1	0.999
Floxolev	0.999	1	0.999	0.007**	0***	0***	0.915	0.999	1
Levoscot	1	0.999	0.007**	0***	0***	0.915	0.999	1	1
Levocure	0.396	0.007**	0***	0***	0***	0***	0.873	0.396	0.007
Locus	0.999	1	0.999	0.007**	0***	0***	0.915	0.999	1
Glit	0.999	1	0.999	0.007**	0***	0***	0.915	0.999	1
Vizor	-	0.999	0.396	0***	0***	0***	1	1	0.999
Voksec	0.999	-	0.999	0.007**	0***	0***	0.915	0.999	1
L-cyn	0.396	0.999	-	0.396	0.007**	0.007**	0.081	0.396	0.999
Lazer	0***	0.007**	0.396	-	0.999	0.999	0***	0***	0.007**
Cravit	0***	0***	0.007**	0.999	-	1	0***	0***	0***
Dynaquin	0***	0***	0.007**	0.999	1	-	0***	0***	0***
Bexus	1	0.915	0.081	0***	0***	0***	-	1	0.915
Lecin,250mg	1	0.999	0.396	0***	0***	0***	1	-	0.999
Levotar	0.999	1	0.999	0.007**	0***	0***	0.915	0.999	-

Data is expressed as Tukey's significant values at ($P < 0.05$ - $P < 0.001$), where * $=0.05$, ** $=0.01$, and *** $=0.001$

Table S9: Tukey test for *K. pneumonia* For explanation of this analysis please see legend of Table S3.