

**Table S1.** The results of ciprofloxacin minimum inhibitory concentration, MLST type and resistance genotype by WGS for clinical ciprofloxacin-resistant *S. Typhimurium*

Isolate ID	Year of isolation	Patient status	MLST type	CIP MIC (mg/L)	Fluroquinolone resistance mechanisms				Other AMR gene
					QRDR mutations in:			PMQRs	
					GyrA		ParC		
					Ser 83	Asp 87	Thr 57		
270/19	2019	patient	19	0.38	-	-	-	<i>qnrB19</i>	<i>aac(6')-Iaa</i>
383/19	2019	patient	19	0.25	Tyr	-	-	-	<i>bla</i> <sub>TEM-1A</sub> , <i>CARB-2</i> , <i>sul1</i> , <i>tet(G)</i> , <i>floR</i> , <i>aadA2</i> , <i>aac(6')-Iaa</i>
138/18	2018	convalescent	19	0.19	-	Asn	-	-	<i>CARB-2</i> , <i>sul1</i> , <i>tet(G)</i> , <i>floR</i> , <i>aadA2</i> , <i>aac(6')-Iaa</i>
29/19	2019	ND	19	0.19	-	Asn	-	-	<i>CARB-2</i> , <i>sul1</i> , <i>tet(G)</i> , <i>floR</i> , <i>aadA2</i> , <i>aac(6')-Iaa</i>
94/19	2019	patient	19	0.19	-	Asn	-	-	<i>CMY-2</i> , <i>CARB-2</i> , <i>sul1</i> , <i>tet(G)</i> , <i>floR</i> , <i>aadA2</i> , <i>aac(6')-Iaa</i>
186/18	2018	patient	19	0.125	-	Asn	-	-	<i>sul1</i> , <i>aadA2</i> , <i>aac(6')-Iaa</i>
297/18	2018	patient	19	0.125	-	Asn	-	-	<i>CARB-2</i> , <i>sul1</i> , <i>tet(G)</i> , <i>floR</i> , <i>aadA2</i> , <i>aac(6')-Iaa</i>
310/18	2018	patient	19	0.125	-	Asn	-	-	<i>aac(6')-Iaa</i>
358/18	2018	patient	19	0.125	-	Asn	-	-	<i>CARB-2</i> , <i>sul1</i> , <i>tet(G)</i> , <i>floR</i> , <i>aadA2</i> , <i>aac(6')-Iaa</i>
227/19	2019	patient	19	0.125	-	Asn	-	-	<i>CMY-2</i> , <i>sul1</i> , <i>tet(G)</i> , <i>floR</i> , <i>aadA2</i> , <i>aac(6')-Iaa</i>
350/19	2019	patient	19	0.125	-	Asn	-	-	<i>CARB-2</i> , <i>sul1</i> , <i>tet(G)</i> , <i>floR</i> , <i>aadA2</i> , <i>aac(6')-Iaa</i>
445/19	2019	patient	19	0.125	-	Asn	-	-	<i>bla</i> <sub>TEM-1A</sub> , <i>CARB-2</i> , <i>sul1</i> , <i>tet(G)</i> , <i>floR</i> , <i>aadA2</i> , <i>aac(6')-Iaa</i>

MIC – minimum inhibitory concentration; CIP – ciprofloxacin; PMQR – plasmid-mediated quinolone resistance; ND- not detected; AMR – antimicrobial resistance;

**Table S2.** The results of ciprofloxacin minimum inhibitory concentration, MLST type and resistance genotype by WGS for clinical ciprofloxacin-resistant monophasic *S. Typhimurium* 1,4,[5],12:i:-

Isolate ID	Year of isolation	Patient status	MLST type	CIP MIC (mg/L)	Fluroquinolone resistance mechanisms			PMQRs	Other AMR gene
					QRDR mutations in:				
					GyrA		ParC		
					Ser 83	Asp 87	Thr 57		
531/19	2019	patient	34	0.5	-	-	-	<i>qnrB19</i>	<i>bla</i> <sub>TEM-1B</sub> , <i>sul2</i> , <i>aph</i> (6)-Id, <i>aph</i> (3'')-Ib, <i>aac</i> (6')-Iaa
83/18	2018	patient	34	0.25	-	-	-	<i>qnrB19</i>	<i>bla</i> <sub>TEM-1B</sub> , <i>sul2</i> , <i>tet</i> (B), <i>aph</i> (6)-Id, <i>aph</i> (3'')-Ib, <i>aac</i> (6')-Iaa
463/18	2018	convalescent	34	0.25	Tyr	-	-	-	<i>bla</i> <sub>TEM-1B</sub> , <i>sul2</i> , <i>sul3</i> , <i>tet</i> (B), <i>cmlA1</i> , <i>aadA1</i> , <i>aadA2</i> , <i>ant</i> (3'')-Ia, <i>aph</i> (6)-Id, <i>aph</i> (3'')-Ib, <i>aac</i> (6')-Iaa
125/18	2018	patient	34	0.38	-	-	-	<i>qnrB19</i>	<i>bla</i> <sub>TEM-1B</sub> , <i>sul2</i> , <i>tet</i> (B), <i>aph</i> (6)-Id, <i>aph</i> (3'')-Ib, <i>aac</i> (6')-Iaa
408/18	2018	patient	34	0.38	-	-	-	<i>qnrB19</i> , <i>qnrB36</i>	<i>bla</i> <sub>TEM-1B</sub> , <i>sul2</i> , <i>aph</i> (6)-Id, <i>aph</i> (3'')-Ib, <i>aac</i> (6')-Iaa
450/18	2018	convalescent	34	0.38	Tyr	-	-	-	<i>sul2</i> , <i>sul3</i> , <i>tet</i> (B), <i>cmLA1</i> , <i>aadA2</i> , <i>ant</i> (3'')-Ia, <i>aph</i> (6)-Id, <i>aph</i> (3'')-Ib, <i>aac</i> (6')-Iaa

MIC – minimum inhibitory concentration; CIP – ciprofloxacin; PMQR – plasmid-mediated quinolone resistance; AMR – antimicrobial resistance;

**Table S3.** The results of ciprofloxacin minimum inhibitory concentration (MIC), MLST type and resistance genotype by WGS for clinical ciprofloxacin-resistant *S. Hadar*

Isolate ID	Year of isolation	Patient status	MLST type	CIP MIC (mg/L)	Fluroquinolone resistance mechanisms			Other AMR gene	
					QRDR mutations in:		PMQRs		
					GyrA				
					Ser 83	Asp 87			Thr 57
79/18	2018	patient	33	0.25	-	-	Ser	<i>qnrB19, qnrB36, qnrB82</i>	<i>tet(A), aph(6)-Id, aph(3'')-Ib, aac(6')-Iaa</i>
86/19	2019	patient	33	0.25	-	-	Ser	<i>qnrB19, qnrB36</i>	<i>tet(A), aph(6)-Id, aph(3'')-Ib, aac(6')-Iaa</i>
113/19	2019	patient	33	0.25	-	-	Ser	<i>qnrB19</i>	<i>tet(A), aph(6)-Id, aph(3'')-Ib, aac(6')-Iaa</i>
229/19	2019	patient	33	0.25	-	-	Ser	<i>qnrB19</i>	<i>tet(A), aph(6)-Id, aph(3'')-Ib, aac(6')-Iaa</i>
78/18	2018	patient	33	0.19	-	-	Ser	<i>qnrB19, qnrB36, qnrB82</i>	<i>tet(A), aph(6)-Id, aph(3'')-Ib, aac(6')-Iaa</i>
92/18	2018	patient	33	0.19	-	-	Ser	<i>qnrB19, qnrB36, qnrB67, qnrB82</i>	<i>tet(A), aph(6)-Id, aph(3'')-Ib, aac(6')-Iaa</i>
197/18	2018	patient	9181	0.19	-	-	Ser	-	<i>aac(6')-Iaa</i>
85/19	2019	patient	33	0.19	-	-	Ser	-	<i>tet(A), aph(6)-Id, aph(3'')-Ib, aac(6')-Iaa</i>
112/19	2019	patient	33	0.19	-	-	Ser	<i>qnrB19, qnrB67, qnrB82</i>	<i>tet(A), aph(6)-Id, aph(3'')-Ib, aac(6')-Iaa</i>
410/19	2019	convalescent	33	0.19	-	Asn	Ser	-	<i>tet(A), aph(6)-Id, aph(3'')-Ib, aac(6')-Iaa</i>
411/19	2019	convalescent	33	0.19	-	Asn	Ser	-	<i>tet(A), aph(6)-Id, aph(3'')-Ib, aac(6')-Iaa</i>
328/19	2019	convalescent	33	0.125	-	Tyr	Ser	-	<i>tet(A), aph(6)-Id, aph(3'')-Ib, aac(6')-Iaa</i>

MIC – minimum inhibitory concentration; CIP – ciprofloxacin; PMQR – plasmid-mediated quinolone resistance; AMR – antimicrobial resistance;

**Table S4.** The results of ciprofloxacin minimum inhibitory concentration (MIC), MLST type and resistance genotype by WGS for clinical ciprofloxacin-resistant *S. Infantis*

Isolate ID	Year of isolation	Patient status	MLST type	CIP MIC (mg/L)	Fluroquinolone resistance mechanisms				Other AMR gene
					QRDR mutations in:			PMQRs	
					GyrA		ParC		
					Ser 83	Asp 87	Thr 57		
8/19	2019	patient	32	3	-	Tyr	Ser	<i>qnrS1</i>	<i>bla</i> <sub>TEM-1B</sub> , <i>sul1</i> , <i>tet(A)</i> , <i>ant(3'')</i> -Ia, <i>aac(6')</i> -Iaa
104/19	2019	patient	32	3	Tyr	-	Ser	<i>qnrS1</i>	<i>bla</i> <sub>TEM-1B</sub> , <i>sul1</i> , <i>tet(A)</i> , <i>ant(3'')</i> -Ia, <i>aac(6')</i> -Iaa
227/18	2018	convalescent	32	1	-	Tyr	Ser	-	<i>sul1</i> , <i>tet(A)</i> , <i>ant(3'')</i> -Ia, <i>aac(6')</i> -Iaa
165/18	2018	patient	32	0.5	-	Tyr	Ser	-	<i>sul1</i> , <i>tet(A)</i> , <i>ant(3'')</i> -Ia, <i>aac(6')</i> -Iaa
277/18	2018	patient	32	0.5	-	Tyr	Ser	-	<i>sul1</i> , <i>tet(A)</i> , <i>ant(3'')</i> -Ia, <i>aac(6')</i> -Iaa
37/19	2019	carrier	32	0.5	-	Tyr	Ser	-	<i>sul1</i> , <i>tet(A)</i> , <i>ant(3'')</i> -Ia, <i>aac(6')</i> -Iaa
68/19	2019	ND	32	0.5	-	Tyr	Ser	-	<i>sul1</i> , <i>tet(A)</i> , <i>ant(3'')</i> -Ia, <i>aac(6')</i> -Iaa
102/19	2019	patient	32	0.5	Tyr	-	Ser	-	<i>bla</i> <sub>TEM-1C</sub> , <i>sul1</i> , <i>sul2</i> , <i>tet(A)</i> , <i>floR</i> , <i>ant(3'')</i> -Ia, <i>aac(6')</i> -Iaa
150/19	2019	ND	32	0.5	Tyr	-	Ser	-	<i>sul1</i> , <i>tet(A)</i> , <i>ant(3'')</i> -Ia, <i>aac(6')</i> -Iaa
52/18	2018	patient	32	0.38	-	Tyr	Ser	-	<i>sul1</i> , <i>tet(A)</i> , <i>ant(3'')</i> -Ia, <i>aac(6')</i> -Iaa
69/18	2018	patient	32	0.38	-	Tyr	Ser	-	<i>sul1</i> , <i>tet(A)</i> , <i>ant(3'')</i> -Ia, <i>aac(6')</i> -Iaa
111/18	2018	convalescent	32	0.38	-	Tyr	Ser	-	<i>sul1</i> , <i>tet(A)</i> , <i>ant(3'')</i> -Ia, <i>aac(6')</i> -Iaa
124/18	2018	convalescent	32	0.38	-	Tyr	Ser	-	<i>sul1</i> , <i>tet(A)</i> , <i>ant(3'')</i> -Ia, <i>aac(6')</i> -Iaa
127/18	2018	convalescent	32	0.38	-	Tyr	Ser	-	<i>sul1</i> , <i>tet(A)</i> , <i>ant(3'')</i> -Ia, <i>aac(6')</i> -Iaa
190/18	2018	patient	32	0.38	-	Tyr	Ser	-	<i>sul1</i> , <i>tet(A)</i> , <i>ant(3'')</i> -Ia, <i>aac(6')</i> -Iaa
215/18	2018	patient	32	0.38	-	Tyr	Ser	-	<i>sul1</i> , <i>tet(A)</i> , <i>ant(3'')</i> -Ia, <i>aac(6')</i> -Iaa
271/18	2018	patient	32	0.38	-	Tyr	Ser	-	<i>sul1</i> , <i>tet(A)</i> , <i>ant(3'')</i> -Ia, <i>aac(6')</i> -Iaa
275/18	2018	patient	32	0.38	-	Tyr	Ser	-	<i>sul1</i> , <i>tet(A)</i> , <i>ant(3'')</i> -Ia, <i>aac(6')</i> -Iaa
473/18	2018	patient	32	0.38	-	Tyr	Ser		<i>sul1</i> , <i>tet(A)</i> , <i>ant(3'')</i> -Ia, <i>aac(6')</i> -Iaa
58/19	2019	patient	32	0.38	-	Tyr	Ser	-	<i>sul1</i> , <i>tet(A)</i> , <i>ant(3'')</i> -Ia, <i>aac(6')</i> -Iaa
136/19	2019	ND	32	0.38	Tyr	-	Ser	-	<i>sul1</i> , <i>tet(A)</i> , <i>ant(3'')</i> -Ia, <i>aac(6')</i> -Iaa
137/19	2019	patient	32	0.38	Tyr	-	Ser	-	<i>sul1</i> , <i>tet(A)</i> , <i>ant(3'')</i> -Ia, <i>aac(6')</i> -Iaa
162/19	2019	patient	32	0.38	Tyr	-	Ser	-	<i>sul1</i> , <i>tet(A)</i> , <i>ant(3'')</i> -Ia, <i>aac(6')</i> -Iaa
224/19	2019	patient	32	0.38	Tyr	-	Ser	-	<i>sul1</i> , <i>tet(A)</i> , <i>ant(3'')</i> -Ia, <i>aac(6')</i> -Iaa
343/19	2019	patient	32	0.38	Tyr	-	Ser	-	<i>sul1</i> , <i>tet(A)</i> , <i>ant(3'')</i> -Ia, <i>aac(6')</i> -Iaa

368/19	2019	carrier	32	0.38	Tyr	-	Ser	-	<i>sul1, tet(A), ant(3'')-Ia, aac(6')-Iaa</i>
518/19	2019	carrier	32	0.38	Tyr	-	Ser	-	<i>sul1, tet(A), ant(3'')-Ia, aac(6')-Iaa</i>
158/18	2018	patient	32	0.25	-	Tyr	Ser	-	<i>sul1, tet(A), ant(3'')-Ia, aac(6')-Iaa</i>
181/19	2019	contact	32	0.25	Tyr	-	Ser	-	-
221/19	2019	patient	32	0.25	Tyr	-	Ser	-	<i>sul1, tet(A), ant(3'')-Ia, aac(6')-Iaa</i>

MIC – minimum inhibitory concentration; CIP – ciprofloxacin; PMQR – plasmid-mediated quinolone resistance; AMR – antimicrobial resistance;

**Table S5.** The results of ciprofloxacin minimum inhibitory concentration (MIC), MLST type and resistance genotype by WGS for clinical ciprofloxacin-resistant *S. Newport*

Isolate ID	Year of isolation	Patient status	MLST type	CIP MIC (mg/L)	Fluroquinolone resistance mechanisms			Other AMR gene	
					QRDR mutations in:		PMQRs		
					GyrA				
					Ser 83	Asp 87			Thr 57
93/19	2019	carrier	166	0.75	-	-	Ser	<i>qnrB19</i>	<i>aac(6')-Iaa</i>
84/19	2019	patient	166	0.38	-	-	Ser	<i>qnrB19</i> , <i>qnrB36</i>	<i>aac(6')-Iaa</i>
116/19	2019	patient	166	0.19	-	-	Ser	<i>qnrB19</i> , <i>qnrB36</i>	<i>bla</i> <sub>TEM-1B</sub> , <i>tet(A)</i> , <i>aac(6')-Iaa</i>
118/19	2019	patient	166	0.19	-	-	Ser	<i>qnrB19</i>	<i>bla</i> <sub>TEM-1B</sub> , <i>tet(A)</i> , <i>aac(6')-Iaa</i>
382/19	2019	patient	166	0.19	Tyr	-	Ser	-	<i>sul2</i> , <i>tet(A)</i> , <i>ant(3'')</i> -Ia, <i>aac(6')-Iaa</i>

MIC – minimum inhibitory concentration; CIP – ciprofloxacin; PMQR – plasmid-mediated quinolone resistance; AMR – antimicrobial resistance;

**Table S6.** The results of ciprofloxacin minimum inhibitory concentration (MIC), MLST type and resistance genotype by WGS for clinical ciprofloxacin-resistant *S. Virchow*

Isolate ID	Year of isolation	Patient status	MLST type	CIP MIC (mg/L)	Fluroquinolone resistance mechanisms			Other AMR gene	
					QRDR mutations in:		PMQRs		
					GyrA				
					Ser 83	Asp 87			Thr 57
10/19	2019	patient	16	0.25	-	Asn	-	-	<i>aac(6')-Iaa</i>
9/19	2019	patient	16	0.19	-	Asn	-	-	<i>aac(6')-Iaa</i>
11/18	2018	patient	16	0.125	-	Tyr	-	-	<i>aac(6')-Iaa</i>

MIC – minimum inhibitory concentration; CIP – ciprofloxacin; PMQR – plasmid-mediated quinolone resistance; AMR – antimicrobial resistance;

**Table S7.** The results of ciprofloxacin minimum inhibitory concentration (MIC), MLST type and resistance genotype by WGS for clinical ciprofloxacin-resistant *S. Enteritidis*

Isolate ID	Year of isolation	Patient status	MLST type	CIP MIC (mg/L)	Fluroquinolone resistance mechanisms				Other AMR gene
					QRDR mutations in:			PMQRs	
					GyrA		ParC		
					Ser 83	Asp 87	Thr 57		
232/19									
314/19	2019	convalescent	11	0.5	Tyr	-	-	-	<i>aac(6')-Iaa</i>
335/19	2019	convalescent	11	0.5	Tyr	-	-	-	<i>aac(6')-Iaa</i>
228/18	2018	patient	11	0.38	Tyr	-	-	-	<i>aac(6')-Iaa</i>
248/18	2018	patient	11	0.38	-	-	-	<i>qnrB19</i>	<i>aac(6')-Iaa</i>
315/18	2018	patient	11	0.38	Tyr	-	-	-	<i>aac(6')-Iaa</i>
1/19	2019	patient	11	0.25	Tyr	-	-	-	<i>aac(6')-Iaa</i>
18/19	2019	patient	11	0.25	Tyr	-	-	-	<i>aac(6')-Iaa</i>
24/19	2019	patient	11	0.25	Tyr	-	-	-	<i>aac(6')-Iaa</i>
60/19	2019	patient	11	0.25	Tyr	-	-	-	<i>aac(6')-Iaa</i>
105/19	2019	patient	11	0.25	Tyr	-	-	-	<i>aac(6')-Iaa</i>
156/19	2019	patient	11	0.25	Tyr	-	-	-	<i>aac(6')-Iaa</i>
259/19	2019	patient	11	0.25	Tyr	-	-	-	<i>aac(6')-Iaa</i>
102/18	2018	patient	11	0.19	Tyr	-	-	-	<i>aac(6')-Iaa</i>
108/18	2018	patient	11	0.19	Tyr	-	-	-	<i>aac(6')-Iaa</i>
276/18	2018	patient	11	0.19	Tyr	-	-	-	<i>aac(6')-Iaa</i>
242/18	2018	patient	11	0.19	Tyr	-	-	-	<i>aac(6')-Iaa</i>
123/19	2019	patient	11	0.19	Tyr	-	-	-	<i>aac(6')-Iaa</i>
139/19	2019	patient	11	0.19	Tyr	-	-	-	<i>aac(6')-Iaa</i>
167/19	2019	patient	11	0.19	Tyr	-	-	-	<i>aac(6')-Iaa</i>
169/19	2019	patient	11	0.19	Tyr	-	-	-	<i>aac(6')-Iaa</i>
200/19	2019	patient	11	0.19	Tyr	-	-	-	<i>aac(6')-Iaa</i>
274/19	2019	convalescent	11	0.19	Tyr	-	-	-	<i>aac(6')-Iaa</i>

286/19	2019	patient	11	0.19	Tyr	-	-	-	<i>aac(6')-Iaa</i>
308/19	2019	convalescent	11	0.19	Tyr	-	-	-	<i>aac(6')-Iaa</i>
318/19	2019	convalescent	11	0.19	Tyr	-	-	-	<i>aac(6')-Iaa</i>
324/19	2019	convalescent	11	0.19	-	Tyr	-	-	<i>aac(6')-Iaa</i>
357/19	2019	patient	11	0.19	Tyr	-	-	-	<i>aac(6')-Iaa</i>
358/19	2019	patient	11	0.19	Tyr	-	-	-	<i>aac(6')-Iaa</i>
353/19	2019	patient	11	0.125	Tyr	-	-	-	<i>aac(6')-Iaa</i>
355/19	2019	patient	11	0.125	Tyr	-	-	-	<i>aac(6')-Iaa</i>
364/19	2019	patient	11	0.125	Tyr	-	-	-	<i>aac(6')-Iaa</i>

MIC – minimum inhibitory concentration; CIP – ciprofloxacin; PMQR – plasmid-mediated quinolone resistance; AMR – antimicrobial resistance;