

Supplementary Information

Molecular Analysis of Antibiotic Resistance Development in *Shigella flexneri* isolated from Pediatric Diarrheal Patients

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Table S1: List of antibiotics

No	Name of Antibiotics	Abbreviations	Concentration (ng)	Generation	Group of antibiotics
1.	Ceftriaxone	CTR/CRO	30	3 rd	B-lactam
2.	Ciprofloxacin	CIP	5	2 nd	Fluoroquinolone
3.	Cotrimoxazole	SXT	25	-	Sulfonamide
4.	Levofloxacin	LEV	5	3 rd	Fluoroquinolone
5.	Cefepime	FEP	5	4 th	B-lactam
6.	Azithromycin	AZM	15	2 nd	B-lactam
7.	Ampicillin	AM	30	3 rd	B-lactam
8.	Chloramphenicol	C	30	-	Phenicol
9.	Nalidixic Acid	NA	30	1 st	Fluoroquinolone

Table S2: Raw Data of antibiograms. (The zone of inhibition was measured in millimeter scale)

Sample ID	CTR/CRO	CIP	SXT	LEV	FEP	AZM	AM	C	NA
MZS-2	0	0	0	0	0	0	0	0	0
MZS-5	0	0	0	10.67	0	13.67	0	13.67	0
MZS-9	11.67	0	10.33	0	0	0	0	0	0
MZS-31	25	11.67	11	15.67	15	17	0	30	0
MZS-39	0	0	0	11.33	0	0	0	0	0
MZS-40	0	0	0	11.67	0	0	0	0	0
MZS-47	0	19.33	24.33	20	0	0	0	20.67	0
MZS-48	0	0	0	10.33	0	0	0	22.67	0
MZS-76	22	24	25.67	24.67	20.67	8.67	10	28	20
MZS-93	0	0	0	9.33	0	0	0	24	0
MZS-94	0	8.33	26.57	12.33	10.67	0	0	29	0
MZS-95	0	0	0	10	0	0	0	24.33	0
MZS-110	0	0	24	14	0	0	0	25.67	0
MZS-112	0	0	0	11	0	0	0	24.33	0
MZS-116	0	0	21.67	9.67	0	0	0	22.33	0
MZS-121	0	0	27.33	9.67	0	0	0	25	0
MZS-135	29.67	21.33	23.33	23.33	22.33	0	18.67	26.33	18.33
MZS-138	30.67	20.67	23.33	22.33	23.33	0	19	26.67	18.67
MZS-141	11.33	14.33	0	15.67	10.67	0	0	29	0
MZS-142	12.67	13	0	14.67	11	0	0	26	0
MZS-144	8.67	14	0	16.33	0	0	0	25.67	0
MZS-155	0	0	0	12	0	0	0	20.67	0
MZS-156	0	0	0	11	0	0	0	24.33	0
MZS-157	0	0	0	12	0	0	0	26.67	0
MZS-170	23.67	19.33	0	20.67	19.67	18.33	0	30	20
MZS-174	0	0	0	11.33	0	14.67	0	26.33	0
MZS-191	0	0	0	11.33	0	17.33	0	25.67	0
MZS-194	0	0	0	11.33	0	16	0	26	0
MZS-196	30	0	0	14	0	0	0	28	0

Table S3: Growth of *S. flexneri* within selective antibiotics

SL. No.	<i>S. flexneri</i> isolates	Antibiotics (10 µg/mL)
1	MZS-2, MZS-39 and MZS-40	Ciprofloxacin, Co-trimoxazole, Nalidixic acid, Chloramphenicol and Cefepime
2	MZS-5, MZS-31, MZS48, MZS-95, MZS-112, MZS-155, MZS-156, MZS-157, MZS-174, MZS-191 and MZS-196	Ciprofloxacin, Co-trimoxazole, Nalidixic acid and Cefepime.
3	MZS-141 and MZS-142	Co-trimoxazole and Nalidixic acid
4	MZS-110	Ciprofloxacin, Nalidixic acid and Cefepime.
	MZS-144	Co-trimoxazole, Nalidixic acid and Cefepime
	MZS-135 and MZS 138	No antibiotics