

SM-bacteria Summary Data

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Load packages:

```
pacman::p_load(  
  pacman,  
  knitr,  
  summarytools,  
  tidyverse  
)
```

Set knitr chunk options:

```
opts_chunk$set(results = 'asis')
```

Set parameters to output Summary file in PDF:

```
st_options(  
  plain.ascii = FALSE,  
  style = "rmarkdown",  
  dfSummary.style = "grid",  
  dfSummary.varnumbers = FALSE,  
  dfSummary.valid.col = FALSE,  
  dfSummary.graph.magnif = .52,  
  tmp.img.dir = "/tmp"  
)
```

```
setwd("~/Documents/Active_projects/non-CP-CRE_MDACC_wave2/")  
df1 <- read_csv("SM-bacteria_dataSet_v2.csv")
```

```
## Parsed with column specification:  
## cols(  
##   .default = col_character(),  
##   record_id = col_double(),  
##   contig_count = col_double(),  
##   N50 = col_double(),  
##   largest_contig = col_double(),  
##   total_size = col_double(),  
##   esbl_pos_1st_cre = col_double(),  
##   carba_pos_1st_cre = col_double(),  
##   ert_mic_1st_cre = col_double(),  
##   mer_mic_1st_cre = col_double(),
```

```

## ceftaz_mic_1st_cre = col_double(),
## cefe_mic_1st_cre = col_double(),
## tzp_mic_1st_cre = col_double(),
## cef_avi_mic_1st_cre = col_double(),
## mer_vab_mic_1st_cre = col_double(),
## our_ert_MIC = col_double(),
## virulence_score = col_double(),
## resistance_score = col_double(),
## num_resistance_classes = col_double(),
## num_resistance_genes = col_double(),
## SmST = col_double()
## # ... with 1 more columns
## )


## See spec(...) for full column specifications.
define_keywords(title.dfSummary = "Data Frame Summary of SM-Bacteria")

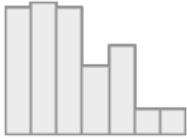


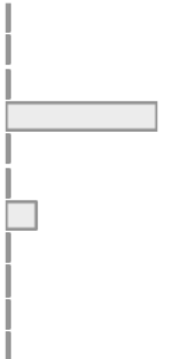
## Operation successful
dfSummary(df1)

```

Data Frame Summary of SM-Bacteria




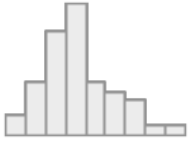
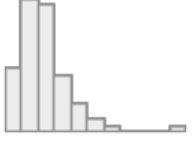
df1 Dimensions: 94 x 131
 Duplicates: 0

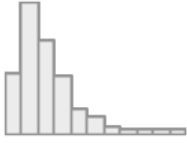
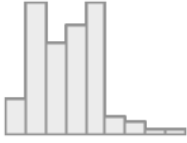



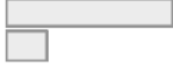
Variable	Stats / Values	Freqs (% of Valid)	Graph	Missing
sample [character]	1. MB10143 2. MB10257V 3. MB10493 4. MB2446 5. MB2489 6. MB2617 7. MB2791 8. MB2843 9. MB2855 10. MB2910 [84 others]	1 (1.1%) 1 (1.1%) 1 (1.1%) 1 (1.1%) 1 (1.1%) 1 (1.1%) 1 (1.1%) 1 (1.1%) 1 (1.1%) 1 (1.1%) 84 (89.4%)		0 (0.0%)























Variable	Stats / Values	Freqs (% of Valid)	Graph	Missing
record_id [numeric]	Mean (sd) : 51.5 (33.4) min < med < max: 1 < 46.5 < 124 IQR (CV) : 47.5 (0.6)	88 distinct values		0 (0.0%)
duplicate_serial [character]	1. no 2. yes	87 (92.6%) 7 (7.4%)		0 (0.0%)
analyze [character]	1. no 2. yes	15 (16.0%) 79 (84.0%)		0 (0.0%)
service [character]	1. General Internal Medicine 2. General Medicine 3. leukemia 4. Leukemia 5. Lymphoma/Myeloma 6. Solid Tumor 7. Stem Cell 8. Stem Cell Transplant 9. Stem Cell Transplant and 10. Thoracic Medicine 11. Urology	1 (1.1%) 2 (2.1%) 1 (1.1%) 68 (72.3%) 1 (1.1%) 1 (1.1%) 14 (14.9%) 1 (1.1%) 1 (1.1%) 2 (2.1%) 2 (2.1%)		0 (0.0%)

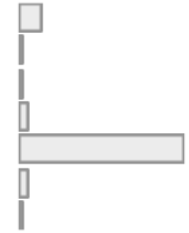

Variable	Stats / Values	Freqs (% of Valid)	Graph	Missing
collectiondate_1st_cre [character]	1. 1/10/19	2 (2.2%)		3 (3.2%)
	2. 10/22/17	2 (2.2%)		
	3. 11/7/19	2 (2.2%)		
	4. 6/2/19	2 (2.2%)		
	5. 7/20/18	2 (2.2%)		
	6. 1/13/17	1 (1.1%)		
	7. 1/13/18	1 (1.1%)		
	8. 1/20/19	1 (1.1%)		
	9. 1/23/19	1 (1.1%)		
	10. 1/28/18	1 (1.1%)		
	[76 others]	76 (83.5%)		
mbnum_1st_cre [character]	1. MB4528	2 (2.2%)		5 (5.3%)
	2. MB10143	1 (1.1%)		
	3. MB10257	1 (1.1%)		
	4. MB10493	1 (1.1%)		
	5. MB2446	1 (1.1%)		
	6. MB2489	1 (1.1%)		
	7. MB2617	1 (1.1%)		
	8. MB2791	1 (1.1%)		
	9. MB2843	1 (1.1%)		
	10. MB2855	1 (1.1%)		
	[78 others]	78 (87.6%)		
mb_num_issues [character]	1. no	85 (90.4%)		0 (0.0%)
	2. yes	9 (9.6%)		

Variable	Stats / Values	Freqs (% of Valid)	Graph	Missing
species_mlst [character]	1. cfreundii	2 (2.1%)		0 (0.0%)
	2. ecloacae	15 (16.0%)		
	3. ecoli	39 (41.5%)		
	4. kaerogenes	2 (2.1%)		
	5. Klebsiella	1 (1.1%)		
	quasipneumonia	2 (2.1%)		
	6. koxytoxa	32 (34.0%)		
	7. kpneumoniae	1 (1.1%)		
8. smarcescens				
mlst [character]	1. 307	11 (11.7%)		0 (0.0%)
	2. 131	9 (9.6%)		
	3. -	4 (4.3%)		
	4. 15	4 (4.3%)		
	5. 190	4 (4.3%)		
	6. 405	4 (4.3%)		
	7. 90	4 (4.3%)		
	8. 167	3 (3.2%)		
	9. 29	3 (3.2%)		
	10. 44	3 (3.2%)		
	[40 others]	45 (47.9%)		
Genera [character]	1. Citrobacter	2 (2.1%)		0 (0.0%)
	2. Enterobacter	15 (16.0%)		
	3. Escherichia	39 (41.5%)		
	4. Klebsiella	37 (39.4%)		
	5. Serratia	1 (1.1%)		

Variable	Stats / Values	Freqs (% of Valid)	Graph	Missing
				
species_kleborate [character]	1. Escherichia coli / Shigel 2. Klebsiella pneumoniae 3. Enterobacter hormaechei 4. Klebsiella aerogenes 5. Citrobacter freundii 6. Citrobacter portucalensis 7. Enterobacter asburiae 8. Enterobacter cloacae 9. Klebsiella michiganensis 10. Klebsiella oxytoca [2 others]	39 (41.5%) 32 (34.0%) 13 (13.8%) 2 (2.1%) 1 (1.1%) 1 (1.1%) 1 (1.1%) 1 (1.1%) 1 (1.1%) 1 (1.1%) 2 (2.1%)		0 (0.0%)
species_match [character]	1. strong	94 (100.0%)		0 (0.0%)
contig_count [numeric]	Mean (sd) : 93.5 (35.2) min < med < max: 23 < 87 < 187 IQR (CV) : 49 (0.4)	66 distinct values		0 (0.0%)
N50 [numeric]	Mean (sd) : 168227.7 (72789.9) min < med < max: 70553 < 154577 < 552271 IQR (CV) : 73252.8 (0.4)	94 distinct values		0 (0.0%)


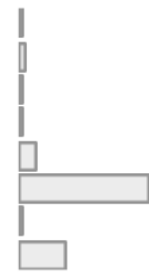


Variable	Stats / Values	Freqs (% of Valid)	Graph	Missing
largest_contig [numeric]	Mean (sd) : 466758.1 (198938.8) min < med < max: 203994 < 425747 < 1297781 IQR (CV) : 215405 (0.4)	90 distinct values		0 (0.0%)
total_size [numeric]	Mean (sd) : 5232536 (322854.1) min < med < max: 4662369 < 5248459 < 6344856 IQR (CV) : 516293.2 (0.1)	94 distinct values		0 (0.0%)
OmpC intact [character]	1. No 2. Yes	14 (37.8%) 23 (62.2%)		57 (60.6%)
OmpF intact [character]	1. No 2. Yes	22 (59.5%) 15 (40.5%)		57 (60.6%)
esbl_pos_1st_cre [numeric]	Min : 0 Mean : 0.9 Max : 1	0 : 14 (14.9%) 1 : 80 (85.1%)		0 (0.0%)
carba_pos_1st_cre [numeric]	Min : 0 Mean : 0.2 Max : 1	0 : 74 (80.4%) 1 : 18 (19.6%)		2 (2.1%)

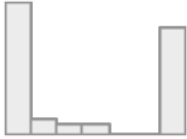

Variable	Stats / Values	Freqs (% of Valid)	Graph	Missing
esbl [character]	1. CTX-M-15	41 (51.9%)		15 (16.0%)
	2. none	17 (21.5%)		
	3. SHV-12	4 (5.1%)		
	4. CTX-M-14	3 (3.8%)		
	5. CTX-M-27	3 (3.8%)		
	6. CTX-M-55	3 (3.8%)		
	7. CTX-M-1	1 (1.3%)		
	8. CTX-M-15; OXY-1-1	1 (1.3%)		
	9. CTX-M-27-V	1 (1.3%)		
	10. CTX-M-55; SHV-12	1 (1.3%)		
	[4 others]	4 (5.1%)		
ampC-like [character]	1. none	41 (51.9%)		15 (16.0%)
	2. AmpC1-V	18 (22.8%)		
	3. ACT-V	3 (3.8%)		
	4. AmpC1	3 (3.8%)		
	5. AmpC1-V; CMY-V	2 (2.5%)		
	6. CMY-V	2 (2.5%)		
	7. DHA-1	2 (2.5%)		
	8. ACT-1	1 (1.3%)		
	9. ACT-17	1 (1.3%)		
	10. ACT-27	1 (1.3%)		
	[5 others]	5 (6.3%)		

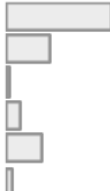


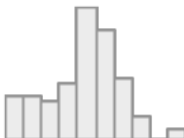
Variable	Stats / Values	Freqs (% of Valid)	Graph	Missing
carbapenemase [character]	1. KPC-2	8 (10.1%)		15 (16.0%)
	2. NDM-1	1 (1.3%)		
	3. NDM-1;OXA-48	1 (1.3%)		
	4. NDM-5	3 (3.8%)		
	5. none	62 (78.5%)		
	6. OXA-181	3 (3.8%)		
	7. OXA-232	1 (1.3%)		
bla_amplification_2X [character]	1. none	30 (38.0%)		15 (16.0%)
	2. CTX-M-15 (2.0)	2 (2.5%)		
	3. CTX-M-15 (2.1)	2 (2.5%)		
	4. CTX-M-15 (2.3)	2 (2.5%)		
	5. CTX-M-15 (2.4)	2 (2.5%)		
	6. CTX-M-15 (5.0)	2 (2.5%)		
	7. CMY-42 (2.2)	1 (1.3%)		
	8. CMY-61-like (2.7)	1 (1.3%)		
	9. CTX-M-1 (5.8)	1 (1.3%)		
	10. CTX-M-14 (3.2)	1 (1.3%)		
	[35 others]	35 (44.3%)		

Variable	Stats / Values	Freqs (% of Valid)	Graph	Missing
CRE_mechanism [character]	1. AmpC + porin 2. AmpC + porin (?) 3. carbapenemase 4. ESBL 5. ESBL + AmpC 6. ESBL + AmpC + porin (?) 7. ESBL + porin 8. ESBL + porin (?) 9. porin	2 (2.5%) 6 (7.6%) 17 (21.5%) 11 (13.9%) 1 (1.3%) 3 (3.8%) 33 (41.8%) 1 (1.3%) 5 (6.3%)		15 (16.0%)
meet_CRE_defintion [character]	1. no 2. yes	8 (8.8%) 83 (91.2%)		3 (3.2%)
ert_mic_1st_cre [numeric]	Mean (sd) : 7.3 (11.1) min < med < max: 0.2 < 2 < 32 IQR (CV) : 3.5 (1.5)	13 distinct values		15 (16.0%)
mer_mic_1st_cre [numeric]	Mean (sd) : 4.8 (5) min < med < max: 0.1 < 3 < 16 IQR (CV) : 7.5 (1)	14 distinct values		7 (7.4%)

Variable	Stats / Values	Freqs (% of Valid)	Graph	Missing
imi_mic_1st_cre [character]	1. 0.25	13 (20.0%)		29 (30.9%)
	2. 2	9 (13.8%)		
	3. 1	8 (12.3%)		
	4. 0.5	7 (10.8%)		
	5. 0.38	6 (9.2%)		
	6. 16	6 (9.2%)		
	7. 0.75	4 (6.2%)		
	8. 4	4 (6.2%)		
	9. 1.5	3 (4.6%)		
	10. 0.19	2 (3.1%)		
	[3 others]	3 (4.6%)		
ceftaz_mic_1st_cre [numeric]	Mean (sd) : 46 (30.9)	2 : 2 (2.4%)		12 (12.8%)
	min < med < max:	3 : 1 (1.2%)		
	2 < 32 < 256	8 : 1 (1.2%)		
	IQR (CV) : 32 (0.7)	16 : 9 (11.0%)		
		32 : 31 (37.8%)		
		64 : 37 (45.1%)		
	256 : 1 (1.2%)			




Variable	Stats / Values	Freqs (% of Valid)	Graph	Missing
cefe_mic_1st_cre [numeric]	Mean (sd) : 52.5 (54) min < med < max: 1 < 32 < 256 IQR (CV) : 32 (1)	1 : 3 (3.3%) 2 : 4 (4.4%) 3 : 1 (1.1%) 4 : 1 (1.1%) 8 : 2 (2.2%) 16 : 5 (5.6%) 32 : 34 (37.8%) 64 : 35 (38.9%) 256 : 5 (5.6%)		4 (4.3%)
tzp_mic_1st_cre [numeric]	Mean (sd) : 145.3 (68.8) min < med < max: 4 < 128 < 256 IQR (CV) : 0 (0.5)	4 : 1 (1.2%) 8 : 2 (2.5%) 16 : 1 (1.2%) 32 : 1 (1.2%) 64 : 7 (8.6%) 128 : 50 (61.7%) 245 : 1 (1.2%) 256 : 18 (22.2%)		13 (13.8%)
cef_avi_mic_1st_cre [numeric]	Mean (sd) : 20.1 (66.1) min < med < max: 0 < 1.5 < 256 IQR (CV) : 2.2 (3.3)	15 distinct values		38 (40.4%)
mer_vab_mic_1st_cre [numeric]	Mean (sd) : 11.7 (44.7) min < med < max: 0 < 1.5 < 256 IQR (CV) : 2.2 (3.8)	15 distinct values		61 (64.9%)



Variable	Stats / Values	Freqs (% of Valid)	Graph	Missing
our_ert_MIC [numeric]	Mean (sd) : 14.7 (14.2) min < med < max: 0.1 < 6 < 32 IQR (CV) : 30.5 (1)	16 distinct values		4 (4.3%)
notes [character]	<ol style="list-style-type: none"> 1. MB6022, MB6116, and MB598 2. AmpC-like (ACT-17 variant) 3. AmpC-like (ACT-27 - conti) 4. AmpC-like (DHA-1) w/ ampl 5. AmpC-like SRT-2 variant (6. AmpC-like variant amplifi 7. AmpC1-V (contig 4; p.A163 8. Carbapenemase (KPC-2 - co 9. carbapenemase (NDM-5) w/ 10. CMH-1 variant (contig 21 [76 others] 	2 (2.3%) 1 (1.1%) 1 (1.1%) 1 (1.1%) 1 (1.1%) 1 (1.1%) 1 (1.1%) 1 (1.1%) 1 (1.1%) 76 (87.4%)		7 (7.4%)



Variable	Stats / Values	Freqs (% of Valid)	Graph	Missing
virulence_score [numeric]	Mean (sd) : 1.3 (1.7) min < med < max: 0 < 0.5 < 5 IQR (CV) : 3 (1.3)	0 : 47 (50.0%) 1 : 20 (21.3%) 2 : 2 (2.1%) 3 : 6 (6.4%) 4 : 16 (17.0%) 5 : 3 (3.2%)		0 (0.0%)
resistance_score [numeric]	Mean (sd) : 1 (0.6) min < med < max: 0 < 1 < 3 IQR (CV) : 0 (0.6)	0 : 15 (16.0%) 1 : 61 (64.9%) 2 : 17 (18.1%) 3 : 1 (1.1%)		0 (0.0%)
num_resistance_classes [numeric]	Mean (sd) : 6.6 (2.1) min < med < max: 1 < 7 < 9 IQR (CV) : 2.8 (0.3)	1 : 2 (2.1%) 2 : 7 (7.4%) 3 : 2 (2.1%) 4 : 7 (7.4%) 5 : 6 (6.4%) 6 : 6 (6.4%) 7 : 21 (22.3%) 8 : 34 (36.2%) 9 : 9 (9.6%)		0 (0.0%)
num_resistance_genes [numeric]	Mean (sd) : 9.2 (4.1) min < med < max: 1 < 10 < 19 IQR (CV) : 5 (0.4)	17 distinct values		0 (0.0%)

Variable	Stats / Values	Freqs (% of Valid)	Graph	Missing
Yersiniabactin [character]	1. -	54 (57.4%)		0 (0.0%)
	2. ybt 1; ICEKp10	2 (2.1%)		
	3. ybt 10; ICEKp4	3 (3.2%)		
	4. ybt 13; ICEKp2	4 (4.3%)		
	5. ybt 14; ICEKp5	4 (4.3%)		
	6. ybt 17; ICEKp10	2 (2.1%)		
	7. ybt 9; ICEKp3	3 (3.2%)		
	8. ybt unknown	22 (23.4%)		
YbST [character]	1. 0	76 (80.9%)		0 (0.0%)
	2. 151	3 (3.2%)		
	3. 299-2LV	2 (2.1%)		
	4. 47	2 (2.1%)		
	5. 120-6LV	1 (1.1%)		
	6. 145-1LV	1 (1.1%)		
	7. 162	1 (1.1%)		
	8. 174	1 (1.1%)		
	9. 183	1 (1.1%)		
	10. 183-1LV	1 (1.1%)		
[5 others]	5 (5.3%)			
Colibactin [character]	1. -	89 (94.7%)		0 (0.0%)
	2. clb 2	2 (2.1%)		
	3. clb 3	3 (3.2%)		

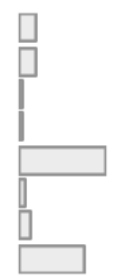


Variable	Stats / Values	Freqs (% of Valid)	Graph	Missing
CbST [character]	1. 0 2. 13 3. 13-1LV 4. 17-2LV 5. 29	89 (94.7%) 1 (1.1%) 1 (1.1%) 1 (1.1%) 2 (2.1%)		0 (0.0%)
Aerobactin [character]	1. - 2. iuc 1 3. iuc 5 4. iuc unknown	69 (73.4%) 2 (2.1%) 10 (10.6%) 13 (13.8%)		0 (0.0%)
AbST [character]	1. 0 2. 1 3. 59 4. 61 5. 61-1LV 6. 62-2LV	82 (87.2%) 2 (2.1%) 4 (4.3%) 2 (2.1%) 2 (2.1%) 2 (2.1%)		0 (0.0%)
Salmochelin [character]	1. - 2. iro 1 3. iro unknown	77 (81.9%) 2 (2.1%) 15 (16.0%)		0 (0.0%)
SmST [numeric]	Min : 0 Mean : 0 Max : 2	0 : 92 (97.9%) 2 : 2 (2.1%)		0 (0.0%)
RmpADC [character]	1. - 2. rmp 1; KpVP-1	92 (97.9%) 2 (2.1%)		0 (0.0%)
RmST [numeric]	Min : 0 Mean : 0.6 Max : 26	0 : 92 (97.9%) 26 : 2 (2.1%)		0 (0.0%)


Variable	Stats / Values	Freqs (% of Valid)	Graph	Missing
rmpA2 [character]	1. -	92 (97.9%)		0 (0.0%)
	2. rmpA2_6*-47%	2 (2.1%)		
wzi [character]	1. -	61 (64.9%)		0 (0.0%)
	2. wzi173	11 (11.7%)		
	3. wzi19	3 (3.2%)		
	4. wzi1	2 (2.1%)		
	5. wzi24	2 (2.1%)		
	6. wzi93	2 (2.1%)		
	7. wzi130	1 (1.1%)		
	8. wzi137	1 (1.1%)		
	9. wzi2	1 (1.1%)		
	10. wzi22	1 (1.1%)		
	[9 others]	9 (9.6%)		
K_locus [character]	1. KL156-D1	20 (21.3%)		0 (0.0%)
	2. KL113	17 (18.1%)		
	3. KL102	11 (11.7%)		
	4. KL54	9 (9.6%)		
	5. KL19	3 (3.2%)		
	6. KL24	3 (3.2%)		
	7. KL1	2 (2.1%)		
	8. KL112	2 (2.1%)		
	9. KL23	2 (2.1%)		
	10. KL25	2 (2.1%)		
	[22 others]	23 (24.5%)		

Variable	Stats / Values	Freqs (% of Valid)	Graph	Missing
K_locus_problems [character]	1. -	4 (4.3%)		0 (0.0%)
	2. -	2 (2.1%)		
	3. ?	1 (1.1%)		
	4. ?-	11 (11.7%)		
	5. ?-	30 (31.9%)		
	6. ?-+	2 (2.1%)		
	7. ?-+	15 (16.0%)		
	8. ?	1 (1.1%)		
	9. *	4 (4.3%)		
	10. none	24 (25.5%)		
K_locus_confidence [character]	1. Good	12 (12.8%)		0 (0.0%)
	2. High	6 (6.4%)		
	3. None	51 (54.3%)		
	4. Perfect	1 (1.1%)		
	5. Very high	24 (25.5%)		



Variable	Stats / Values	Freqs (% of Valid)	Graph	Missing
K_locus_identity [character]	1. 99.27%	11 (11.7%)		0 (0.0%)
	2. 100.00%	6 (6.4%)		
	3. 91.24%	6 (6.4%)		
	4. 74.03%	4 (4.3%)		
	5. 89.04%	4 (4.3%)		
	6. 78.22%	3 (3.2%)		
	7. 94.91%	3 (3.2%)		
	8. 72.92%	2 (2.1%)		
	9. 96.31%	2 (2.1%)		
	10. 98.65%	2 (2.1%)		
	[51 others]	51 (54.3%)		
K_locus_missing_genes [character]	1. KL113_02_cpsACP,KL113_08I	13 (20.3%)		30 (31.9%)
	2. KL156-D1_06_wzx,KL156-D1_05_rmlC,KL156-D1	9 (14.1%)		
	3. KL156-D1_05_rmlC,KL156-D1	9 (14.1%)		
	4. KL54_02_cpsACP,KL54_03_1w(z)	3 (4.7%)		
	5. KL113_02_cpsACP,KL113_08I	2 (3.1%)		
	6. KL25_09_wfeD	2 (3.1%)		
	7. KL9_02_cpsACP,KL9_13_wzx	1 (1.6%)		
	8. KL101_02_cpsACP	1 (1.6%)		
	9. KL102_07_wbaP	1 (1.6%)		
	10. KL113_02_cpsACP,KL113_03_	1 (1.6%)		
[12 others]	12 (12.5%)			


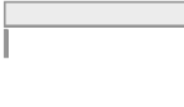

Variable	Stats / Values	Freqs (% of Valid)	Graph	Missing
O_ locus [character]	1. O12	1 (1.1%)		0 (0.0%)
	2. O1v1	7 (7.4%)		
	3. O1v2	5 (5.3%)		
	4. O2v1	2 (2.1%)		
	5. O2v2	13 (13.8%)		
	6. O3/O3a	13 (13.8%)		
	7. O3b	3 (3.2%)		
	8. O4	2 (2.1%)		
	9. O5	6 (6.4%)		
	10. OL102	39 (41.5%)		
	11. OL104	3 (3.2%)		
O_ type [character]	1. O1	12 (12.8%)		0 (0.0%)
	2. O12	1 (1.1%)		
	3. O2	15 (16.0%)		
	4. O3/O3a	13 (13.8%)		
	5. O3b	3 (3.2%)		
	6. O4	2 (2.1%)		
	7. O5	6 (6.4%)		
	8. OL102	39 (41.5%)		
	9. OL104	3 (3.2%)		



Variable	Stats / Values	Freqs (% of Valid)	Graph	Missing
O_locus_problems [character]	1. -	7 (7.4%)		0 (0.0%)
	2. -	8 (8.5%)		
	3. -+	1 (1.1%)		
	4. ?	1 (1.1%)		
	5. ?-	39 (41.5%)		
	6. ?-	3 (3.2%)		
	7.	5 (5.3%)		
	8. none	30 (31.9%)		
O_locus_confidence [character]	1. Good	6 (6.4%)		0 (0.0%)
	2. High	6 (6.4%)		
	3. None	53 (56.4%)		
	4. Perfect	3 (3.2%)		
	5. Very high	26 (27.7%)		
O_locus_identity [character]	1. 98.45%	11 (11.7%)		0 (0.0%)
	2. 73.25%	7 (7.4%)		
	3. 71.77%	4 (4.3%)		
	4. 98.52%	4 (4.3%)		
	5. 100.00%	3 (3.2%)		
	6. 70.14%	3 (3.2%)		
	7. 70.25%	3 (3.2%)		
	8. 71.93%	2 (2.1%)		
	9. 74.11%	2 (2.1%)		
	10. 87.64%	2 (2.1%)		
	[51 others]	53 (56.4%)		

Variable	Stats / Values	Freqs (% of Valid)	Graph	Missing
O_locus_missing_genes [character]	1. OL102_01_rfbB,OL102_02_	31 (53.4%)		36 (38.3%)
	2. OL102_01_rfbB,OL102_02_	8 (13.8%)		
	3. O3/O3a_01_manC,O3/O3a_02_	1 (1.7%)		
	4. OL102_05_wbbL,OL102_06_	1 (1.7%)		
	5. O1/O2v1_03_wbbM,O1/O2v1_	1 (1.7%)		
	6. O1/O2v2_06_wbbO	1 (1.7%)		
	7. O12_01_rfbB,O12_02_rfbA,	3 (5.2%)		
	8. O3/O3a_03_wzm,O3/O3a_04_w			
	9. O3/O3a_03_wzm,O3/O3a_04_w			
	10. O3b_01_manC,O3b_02_manB			
	[3 others]			

Variable	Stats / Values	Freqs (% of Valid)	Graph	Missing
AGly_acquired [character]	1. aac(3)-IIa.v1^;aac(6')-Ib 2. - 3. ant(2')-Ia 4. strA.v1;strB.v1 5. aac(6')-Ib-cr.v2;strA.v1^ 6. aadA5;strA.v1^;strB.v1 7. strA.v1;strB.v1 8. aac(3)-IIa.v1 9. aac(3)-IIa.v1^;aac(6')-Ib 10. aac(3)-IIa.v1^;aac(6')-Ib [41 others]	13 (13.8%) 11 (11.7%) 4 (4.3%) 4 (4.3%) 3 (3.2%) 3 (3.2%) 3 (3.2%) 2 (2.1%) 2 (2.1%) 2 (2.1%) 47 (50.0%)		0 (0.0%)
Col_acquired [character]	1. - 2. mcr-9.1 3. mcr-9.1?	88 (93.6%) 5 (5.3%) 1 (1.1%)		0 (0.0%)
Fcyn_acquired [character]	1. - 2. fosA2 3. fosA7	79 (84.0%) 14 (14.9%) 1 (1.1%)		0 (0.0%)


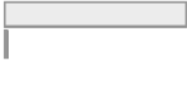

Variable	Stats / Values	Freqs (% of Valid)	Graph	Missing
				
Flq_acquired [character]	1. - 2. qnrB1.v2^ 3. qnrS1 4. qnrA1^ 5. qnrB17^ 6. qnrB19^ 7. qepA2* 8. qnrB1.v2^;qnrS1 9. qnrB2.v1^ 10. qnrB38^ [4 others]	46 (48.9%) 20 (21.3%) 8 (8.5%) 6 (6.4%) 3 (3.2%) 3 (3.2%) 1 (1.1%) 1 (1.1%) 1 (1.1%) 1 (1.1%) 4 (4.3%)		0 (0.0%)
				
MLS_acquired [character]	1. - 2. mphA 3. mphB.v2 4. mphA?;mphB.v2 5. mphA 6. ermB.v1;lnuF.v1;mphA?;mp 7. ermB.v1;mphA 8. ermB.v1;mphA? 9. lnuF.v1 10. mphA;mphB.v2* [2 others]	58 (61.7%) 19 (20.2%) 6 (6.4%) 2 (2.1%) 2 (2.1%) 1 (1.1%) 1 (1.1%) 1 (1.1%) 1 (1.1%) 2 (2.1%)		0 (0.0%)


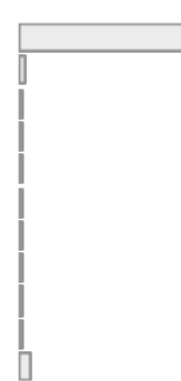
Variable	Stats / Values	Freqs (% of Valid)	Graph	Missing
				
Phe_acquired [character]	1. - 2. CatB4.v1? 3. catB3.v2 4. catA1^ 5. CatB4.v1?;catII.2;cmlA5; 6. catII.2 7. catA1^;catB3.v2;floR.v2 8. CatB4.v1?;catII.2 9. catII.2;floR.v1 10. cmlA1;floR.v1 [2 others]	44 (46.8%) 34 (36.2%) 4 (4.3%) 2 (2.1%) 2 (2.1%) 2 (2.1%) 1 (1.1%) 1 (1.1%) 1 (1.1%) 1 (1.1%) 2 (2.1%)		0 (0.0%)
Rif_acquired [character]	1. - 2. arr-2	92 (97.9%) 2 (2.1%)		0 (0.0%)
Sul_acquired [character]	1. - 2. sul2 3. sul1 4. sul1;sul2 5. sul1;sul1 6. sul1;sul2 7. sul3^ 8. sul1;sul1;sul2 9. sul2 10. sul1? [3 others]	25 (26.6%) 22 (23.4%) 17 (18.1%) 13 (13.8%) 3 (3.2%) 3 (3.2%) 3 (3.2%) 2 (2.1%) 2 (2.1%) 1 (1.1%) 3 (3.2%)		0 (0.0%)




Variable	Stats / Values	Freqs (% of Valid)	Graph	Missing
Tet_acquired [character]	1. -	43 (45.7%)		0 (0.0%)
	2. tet(A).v1	30 (31.9%)		
	3. tet(A).v1	4 (4.3%)		
	4. tet(A).v2	1 (1.1%)		
	5. tet(B).v2	12 (12.8%)		
	6. tet(B).v2;tetM.v1	1 (1.1%)		
	7. tet(D)	3 (3.2%)		
Tmt_acquired [character]	1. dfrA14.v1^	30 (31.9%)		0 (0.0%)
	2. -	23 (24.5%)		
	3. dfrA17	15 (16.0%)		
	4. dfrA12	9 (9.6%)		
	5. dfrA19*	6 (6.4%)		
	6. dfrA1.v1	2 (2.1%)		
	7. dfrA1.v1;dfrA12	1 (1.1%)		
	8. dfrA1.v1;dfrA14.v1^	1 (1.1%)		
	9. dfrA1.v2	1 (1.1%)		
	10. dfrA12;dfrA14.v1^	1 (1.1%)		
[5 others]	5 (5.3%)			

Variable	Stats / Values	Freqs (% of Valid)	Graph	Missing
Bla_acquired [character]	1. OXA-1;TEM-1D.v1 ^ 2. - 3. AmpC1 4. TEM-1D.v1 ^ 5. AmpC1;OXA-1 6. OXA-1 7. ACT-35 8. ACT-27 9. AmpC1;OXA-1;TEM-1D.v1 ^ 10. AmpC1;TEM-1D.v1 ^ [18 others]	16 (17.0%) 14 (14.9%) 9 (9.6%) 8 (8.5%) 7 (7.4%) 6 (6.4%) 5 (5.3%) 4 (4.3%) 3 (3.2%) 3 (3.2%) 19 (20.2%)		0 (0.0%)
Bla_ESBL_acquired [character]	1. CTX-M-15 2. - 3. SHV-12 4. CTX-M-14 5. CTX-M-27 6. CMY-42 7. CTX-M-15;CTX-M-15 8. CTX-M-55 9. CTX-M-1 10. CTX-M-15;OXY-1-1 [9 others]	43 (45.7%) 18 (19.1%) 10 (10.6%) 3 (3.2%) 3 (3.2%) 2 (2.1%) 2 (2.1%) 2 (2.1%) 1 (1.1%) 1 (1.1%) 9 (9.6%)		0 (0.0%)
Bla_ESBL_inhR_acquirdd - [character]		94 (100.0%)		0 (0.0%)



Variable	Stats / Values	Freqs (% of Valid)	Graph	Missing
Bla_Carb_acquired [character]	1. - 2. KPC-2 3. NDM-1 4. NDM-1;OXA-48 5. NDM-5 6. OXA-181 7. OXA-232	76 (80.9%) 9 (9.6%) 1 (1.1%) 1 (1.1%) 3 (3.2%) 3 (3.2%) 1 (1.1%)		0 (0.0%)
Bla_chr [character]	1. - 2. SHV-28.v1^ 3. SHV-11.v1^ 4. SHV-106 5. SHV-187 6. OKP-A-3 7. SHV-1 8. SHV-1* 9. SHV-1^ 10. SHV-168^ [2 others]	63 (67.0%) 13 (13.8%) 5 (5.3%) 3 (3.2%) 3 (3.2%) 1 (1.1%) 1 (1.1%) 1 (1.1%) 1 (1.1%) 1 (1.1%) 2 (2.1%)		0 (0.0%)
SHV_mutations [character]	1. - 2. 146V 3. 156D 4. 238S;240K 5. 238S;240K;35Q 6. 35Q	72 (76.6%) 1 (1.1%) 1 (1.1%) 2 (2.1%) 12 (12.8%) 6 (6.4%)		0 (0.0%)

Variable	Stats / Values	Freqs (% of Valid)	Graph	Missing
				
Omp_mutations [character]	1. - 2. OmpK35-59%;OmpK36GD 3. OmpK36-10% 4. OmpK36-23% 5. OmpK36-84% 6. OmpK36-86% 7. OmpK35-17% 8. OmpK35-25% 9. OmpK35-59%;OmpK36-23% 10. OmpK35-64%;OmpK36-10% [8 others]	71 (75.5%) 3 (3.2%) 2 (2.1%) 2 (2.1%) 2 (2.1%) 1 (1.1%) 1 (1.1%) 1 (1.1%) 1 (1.1%) 8 (8.5%)		0 (0.0%)
				
Col_mutations [character]	1. - 2. MgrB-0%	93 (98.9%) 1 (1.1%)		0 (0.0%)
				
Flq_mutations [character]	1. - 2. GyrA-83F 3. GyrA-83F;GyrA-87A;ParC-80 4. GyrA-83I;GyrA-87N;ParC-80 5. GyrA-83I;ParC-80I 6. GyrA-83Y;GyrA-87G;ParC-80 7. GyrA-87G	74 (78.7%) 1 (1.1%) 4 (4.3%) 4 (4.3%) 8 (8.5%) 1 (1.1%) 2 (2.1%)		0 (0.0%)

Variable	Stats / Values	Freqs (% of Valid)	Graph	Missing
truncated_resistance_hits	-	66 (70.2%)		0 (0.0%)
[character]	2.	1 (1.1%)		
	aac(3)-Ib?-0%;aph3-Ia.v1	1 (1.1%)		
	3. CMY-61?-0%;mphB.v2?-0%	1 (1.1%)		
	4. CTX-M-15?-0%	2 (2.1%)		
	5. CTX-M-55?-0%	17 (18.1%)		
	6. ereA2?-0%	2 (2.1%)		
	7. mphB.v2?-0%	1 (1.1%)		
	8. OXA-9.v1-42%	1 (1.1%)		
	9. OXA-9.v1-42%;TEM-122?-8	1 (1.1%)		
	10. OXA-9.v1-42%;TEM-79*?-0%			
	11. strB.v1?-0%			
spurious_resistance_hits	1. -	75 (79.8%)		0 (0.0%)
[character]	2. fosA7?-0%	3 (3.2%)		
	3. OXA-1?-78%	2 (2.1%)		
	4. sul1?-0%;sul1?-64%	2 (2.1%)		
	5. tet(D)?-73%	2 (2.1%)		
	6. aadA2?-0%	1 (1.1%)		
	7. aadA23?-0%	1 (1.1%)		
	8.	1 (1.1%)		
	aadA25?-47%;aadA2?-0%	1 (1.1%)		
	9.	1 (1.1%)		
	aph(6)-Id.v1?-0%;aph(6)-I	5 (5.3%)		
	10. arr-2*?-55%			
	[5 others]			



Variable	Stats / Values	Freqs (% of Valid)	Graph	Missing
gapA [character]	1. -	61 (64.9%)		0 (0.0%)
	2. 1	5 (5.3%)		
	3. 17	1 (1.1%)		
	4. 2	13 (13.8%)		
	5. 2*	1 (1.1%)		
	6. 3	1 (1.1%)		
	7. 4	12 (12.8%)		
infB [character]	1. -	61 (64.9%)		0 (0.0%)
	2. 1	24 (25.5%)		
	3. 19	1 (1.1%)		
	4. 3	4 (4.3%)		
	5. 4	1 (1.1%)		
	6. 6	2 (2.1%)		
	7. 60	1 (1.1%)		
mdh [character]	1. -	61 (64.9%)		0 (0.0%)
	2. 1	12 (12.8%)		
	3. 11	1 (1.1%)		
	4. 2	17 (18.1%)		
	5. 5	1 (1.1%)		
	6. 62	1 (1.1%)		
	7. 79	1 (1.1%)		



Variable	Stats / Values	Freqs (% of Valid)	Graph	Missing
pgi [character]	1. -	61 (64.9%)		0 (0.0%)
	2. 1	16 (17.0%)		
	3. 2	3 (3.2%)		
	4. 20	1 (1.1%)		
	5. 3	1 (1.1%)		
	6. 52	11 (11.7%)		
	7. 6	1 (1.1%)		
phoE [character]	1. -	61 (64.9%)		0 (0.0%)
	2. 1	19 (20.2%)		
	3. 10	3 (3.2%)		
	4. 108	1 (1.1%)		
	5. 147	1 (1.1%)		
	6. 26	1 (1.1%)		
	7. 4	2 (2.1%)		
	8. 6	3 (3.2%)		
	9. 7	1 (1.1%)		
	10. 9	2 (2.1%)		
rpoB [character]	1. -	61 (64.9%)		0 (0.0%)
	2. 1	20 (21.3%)		
	3. 114	1 (1.1%)		
	4. 4	10 (10.6%)		
	5. 55	1 (1.1%)		
	6. 8	1 (1.1%)		



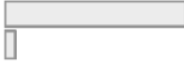
Variable	Stats / Values	Freqs (% of Valid)	Graph	Missing
				
tonB [character]	1. - 2. 7 3. 4 4. 1 5. 12 6. 110 7. 13 8. 142 9. 2 10. 31 [3 others]	61 (64.9%) 11 (11.7%) 6 (6.4%) 5 (5.3%) 3 (3.2%) 1 (1.1%) 1 (1.1%) 1 (1.1%) 1 (1.1%) 1 (1.1%) 3 (3.2%)		0 (0.0%)
				
ybtS [character]	1. - 2. 6 3. 27 4. 36 5. 27 6. 4 7. 34 8. 5 9. 2 10. 2* [6 others]	53 (56.4%) 6 (6.4%) 5 (5.3%) 5 (5.3%) 4 (4.3%) 4 (4.3%) 3 (3.2%) 3 (3.2%) 2 (2.1%) 2 (2.1%) 7 (7.4%)		0 (0.0%)

Variable	Stats / Values	Freqs (% of Valid)	Graph	Missing
ybtX [character]	1. -	53 (56.4%)		0 (0.0%)
	2. 26	6 (6.4%)		
	3. 26	6 (6.4%)		
	4. 4	6 (6.4%)		
	5. 33	5 (5.3%)		
	6. 25	4 (4.3%)		
	7. 12	3 (3.2%)		
	8. 11	2 (2.1%)		
	9. 15	2 (2.1%)		
	10. 2	2 (2.1%)		
	[4 others]	5 (5.3%)		
ybtQ [character]	1. -	54 (57.4%)		0 (0.0%)
	2. 41	7 (7.4%)		
	3. 5	6 (6.4%)		
	4. 110	5 (5.3%)		
	5. 42	4 (4.3%)		
	6. 20	3 (3.2%)		
	7. 46	3 (3.2%)		
	8. 6	3 (3.2%)		
	9. 2	2 (2.1%)		
	10. 4	2 (2.1%)		
	[4 others]	5 (5.3%)		




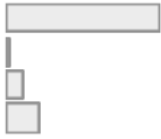

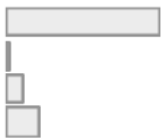
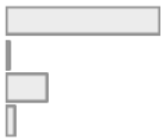
Variable	Stats / Values	Freqs (% of Valid)	Graph	Missing
ybtP [character]	1. -	53 (56.4%)		0 (0.0%)
	2. 43	7 (7.4%)		
	3. 4	6 (6.4%)		
	4. 68	5 (5.3%)		
	5. 48	4 (4.3%)		
	6. 5	3 (3.2%)		
	7. 14	2 (2.1%)		
	8. 2	2 (2.1%)		
	9. 43	2 (2.1%)		
	10. 11*	1 (1.1%)		
	[9 others]	9 (9.6%)		
ybtA [character]	1. -	54 (57.4%)		0 (0.0%)
	2. 1	11 (11.7%)		
	3. 26	7 (7.4%)		
	4. 1*	6 (6.4%)		
	5. 27	5 (5.3%)		
	6. 11	2 (2.1%)		
	7. 2	2 (2.1%)		
	8. 24	2 (2.1%)		
	9. 3	2 (2.1%)		
	10. 25	1 (1.1%)		
	[2 others]	2 (2.1%)		


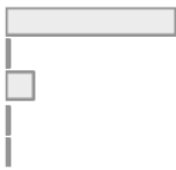
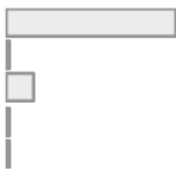
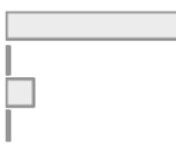
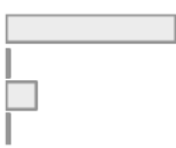

Variable	Stats / Values	Freqs (% of Valid)	Graph	Missing
irp2 [character]	1. -	54 (57.4%)		0 (0.0%)
	2. 62	6 (6.4%)		
	3. 128	3 (3.2%)		
	4. 64	3 (3.2%)		
	5. 69	3 (3.2%)		
	6. 126	2 (2.1%)		
	7. 128*	2 (2.1%)		
	8. 25	2 (2.1%)		
	9. 6	2 (2.1%)		
	10. 119	1 (1.1%)		
	[16 others]	16 (17.0%)		
irp1 [character]	1. -	54 (57.4%)		0 (0.0%)
	2. 56	6 (6.4%)		
	3. 56	5 (5.3%)		
	4. 131	3 (3.2%)		
	5. 62	3 (3.2%)		
	6. 67	3 (3.2%)		
	7. 74	3 (3.2%)		
	8. 223	2 (2.1%)		
	9. 26	2 (2.1%)		
	10. 37	2 (2.1%)		
	[10 others]	11 (11.7%)		

Variable	Stats / Values	Freqs (% of Valid)	Graph	Missing
ybtU [character]	1. -	53 (56.4%)		0 (0.0%)
	2. 2	13 (13.8%)		
	3. 24	7 (7.4%)		
	4. 9	7 (7.4%)		
	5. 9	3 (3.2%)		
	6. 24	2 (2.1%)		
	7. 3	2 (2.1%)		
	8. 31	2 (2.1%)		
	9. 16	1 (1.1%)		
	10. 34	1 (1.1%)		
	[3 others]	3 (3.2%)		
ybtT [character]	1. -	53 (56.4%)		0 (0.0%)
	2. 27	7 (7.4%)		
	3. 4	7 (7.4%)		
	4. 1	3 (3.2%)		
	5. 11	3 (3.2%)		
	6. 5	3 (3.2%)		
	7. 1	2 (2.1%)		
	8. 10	2 (2.1%)		
	9. 2	2 (2.1%)		
	10. 21	2 (2.1%)		
	[8 others]	10 (10.6%)		

Variable	Stats / Values	Freqs (% of Valid)	Graph	Missing
				
ybtE [character]	1. - 2. 4 3. 35 4. 35 5. 34 6. 5 7. 2 8. 36 9. 52 10. 16 [6 others]	54 (57.4%) 8 (8.5%) 6 (6.4%) 6 (6.4%) 4 (4.3%) 3 (3.2%) 2 (2.1%) 2 (2.1%) 2 (2.1%) 1 (1.1%) 6 (6.4%)		0 (0.0%)
				
fyuA [character]	1. - 2. 11 3. 137 4. 2 5. 2 6. 20 7. 41 8. 43 9. 43 10. 84*	54 (57.4%) 3 (3.2%) 1 (1.1%) 13 (13.8%) 9 (9.6%) 3 (3.2%) 7 (7.4%) 2 (2.1%) 1 (1.1%) 1 (1.1%)		0 (0.0%)
				
clbA [character]	1. - 2. 2	89 (94.7%) 5 (5.3%)		0 (0.0%)

Variable	Stats / Values	Freqs (% of Valid)	Graph	Missing
clbB [character]	1. - 2. 10 3. 10* 4. 2	89 (94.7%) 2 (2.1%) 1 (1.1%) 2 (2.1%)		0 (0.0%)
clbC [character]	1. - 2. 2	89 (94.7%) 5 (5.3%)		0 (0.0%)
clbD [character]	1. - 2. 2 3. 2*	89 (94.7%) 4 (4.3%) 1 (1.1%)		0 (0.0%)
clbE [character]	1. - 2. 2	89 (94.7%) 5 (5.3%)		0 (0.0%)
clbF [character]	1. - 2. 2	89 (94.7%) 5 (5.3%)		0 (0.0%)
clbG [character]	1. - 2. 2	89 (94.7%) 5 (5.3%)		0 (0.0%)
clbH [character]	1. - 2. 3 3. 8*	89 (94.7%) 4 (4.3%) 1 (1.1%)		0 (0.0%)
clbI [character]	1. - 2. 2	89 (94.7%) 5 (5.3%)		0 (0.0%)
clbL [character]	1. - 2. 2	89 (94.7%) 5 (5.3%)		0 (0.0%)
clbM [character]	1. - 2. 2	89 (94.7%) 5 (5.3%)		0 (0.0%)
clbN [character]	1. - 2. 2	89 (94.7%) 5 (5.3%)		0 (0.0%)

Variable	Stats / Values	Freqs (% of Valid)	Graph	Missing
clbO [character]	1. - 2. 2	89 (94.7%) 5 (5.3%)		0 (0.0%)
clbP [character]	1. - 2. 2	89 (94.7%) 5 (5.3%)		0 (0.0%)
clbQ [character]	1. - 2. 2	89 (94.7%) 5 (5.3%)		0 (0.0%)
iucA [character]	1. - 2. 1 3. 45 4. 45*	69 (73.4%) 2 (2.1%) 8 (8.5%) 15 (16.0%)		0 (0.0%)
iucB [character]	1. - 2. 1 3. 12 4. 12* 5. 22 6. 24	69 (73.4%) 2 (2.1%) 1 (1.1%) 14 (14.9%) 4 (4.3%) 4 (4.3%)		0 (0.0%)
iucC [character]	1. - 2. 1 3. 33 4. 33*	69 (73.4%) 2 (2.1%) 8 (8.5%) 15 (16.0%)		0 (0.0%)
iucD [character]	1. - 2. 1 3. 35 4. 35*	70 (74.5%) 2 (2.1%) 18 (19.1%) 4 (4.3%)		0 (0.0%)

Variable	Stats / Values	Freqs (% of Valid)	Graph	Missing
iutA [character]	1. -	70 (74.5%)		0 (0.0%)
	2. 1	2 (2.1%)		
	3. 48	4 (4.3%)		
	4. 61	5 (5.3%)		
	5. 61	9 (9.6%)		
	6. 61-0%	4 (4.3%)		
iroB [character]	1. -	77 (81.9%)		0 (0.0%)
	2. 1	2 (2.1%)		
	3. 22	12 (12.8%)		
	4. 23	1 (1.1%)		
	5. 9	2 (2.1%)		
iroC [character]	1. -	77 (81.9%)		0 (0.0%)
	2. 33-0%	2 (2.1%)		
	3. 33-4%	12 (12.8%)		
	4. 4	2 (2.1%)		
	5. 49*	1 (1.1%)		
iroD [character]	1. -	78 (83.0%)		0 (0.0%)
	2. 1	2 (2.1%)		
	3. 12	12 (12.8%)		
	4. 18	2 (2.1%)		
iroN [character]	1. -	77 (81.9%)		0 (0.0%)
	2. 1	2 (2.1%)		
	3. 15*	14 (14.9%)		
	4. 19	1 (1.1%)		
rmpA [character]	1. -	92 (97.9%)		0 (0.0%)
	2. 2	2 (2.1%)		

Variable	Stats / Values	Freqs (% of Valid)	Graph	Missing
rmpD [character]	1. - 2. 2	92 (97.9%) 2 (2.1%)		0 (0.0%)
rmpC [character]	1. - 2. 2	92 (97.9%) 2 (2.1%)		0 (0.0%)
spurious_virulence_hits [character]	1. - 2. clbJ_19-72%;clbK_11-59% 3. irp1_32-0%;irp2_125-51% 4. iucD_35-59%;iucD_35-0%	89 (94.7%) 3 (3.2%) 1 (1.1%) 1 (1.1%)		0 (0.0%)